

VOLUME I

**INYO COUNTY RENEWABLE ENERGY
GENERAL PLAN AMENDMENT**

FINAL PROGRAM ENVIRONMENTAL IMPACT REPORT

RESPONSES TO COMMENTS

Prepared By:
County of Inyo
168 N. Edwards Street
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In Consultation With:
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March 2015

VOLUME I
INYO COUNTY RENEWABLE ENERGY GENERAL PLAN AMENDMENT
FINAL PROGRAM ENVIRONMENTAL IMPACT REPORT
RESPONSES TO COMMENTS

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A. INTRODUCTION

Final PEIR Contents

The Final Program Environmental Impact Report (PEIR) for the proposed Renewable Energy General Plan Amendment (REGPA) for the County of Inyo (County), California has been compiled into two volumes as described below:

- **Volume I** consists of (A) this Introduction; (B) a listing of frequently stated comments raised in several comment letters and associated topical responses; (C) a list of commenters on the Draft PEIR; (D) individual comment letters received during the public comment period and the County's responses to comments; and, (E) a final Mitigation Monitoring and Reporting Program (MMRP) with modified PEIR mitigation measures. The MMRP has been printed in final format and supersedes the version included in the Appendix section of the Draft PEIR.
- **Volume II** consists of the modified PEIR produced in "track changes" format for ease of reference by the reader. It should be noted that the Appendix has not been reproduced along with the Final PEIR as it has not been amended from the Draft PEIR (with the exception of the MMRP as outlined above).

PEIR Public Review and Certification Processes

The public comment period for the Draft PEIR opened on November 5, 2014 and was originally slated to close on December 19, 2014, meeting the mandated 45-day comment period per Section 15105 of the State CEQA Guidelines. However, the County received multiple requests from potential reviewers of the document to extend the comment period. Accordingly, on December 4, 2014 the County approved an extension of the public comment period to January 14, 2015 (a total comment period of 71 days).

The Draft PEIR was circulated to responsible agencies and other public agencies having legal jurisdiction over the environment that could potentially be affected by the proposed project via the State Clearinghouse (SCH No. 2014061039), along with the required Notice of Completion (NOC) and Environmental Document Transmittal form. Simultaneously, notices of availability of the Draft PEIR were published in the local newspaper and on the County's website. This Final PEIR is available for review on the County's web site at: [<http://www.inyoplanning.org/projects/REGPA.htm>].

The County of Inyo Board of Supervisors (Planning Commission) will consider whether to recommend approval of the Final PEIR to the County Board of Supervisors (Board) as complete and in compliance with CEQA and State CEQA Guidelines; the Board must consider the PEIR in approving or denying the proposed REGPA. Public input is allowed at the Planning Commission and Board meetings that will be held to consider this PEIR and the project's related discretionary actions. In the final review of the proposed project, environmental, economic and social factors will be considered to determine the most appropriate course of action. After consideration of the PEIR and public input, the Board may decide to certify the PEIR and

approve the REGPA. If the REGPA is approved, a Notice of Determination (NOD) will be filed by the County with the County Clerk.

B. FREQUENTLY STATED COMMENTS AND TOPICAL RESPONSES

The County has prepared topical responses to frequently stated comments stemming from the comment letters. These comments and corresponding responses are presented below.

Frequently Stated Comment 1: Request for Draft PEIR Public Comment Period Extension

Topical Response 1: The public comment period for the Draft PEIR opened on November 5, 2014 and was originally slated to close on December 19, 2014, meeting the mandated 45-day comment period per Section 15105 of the State CEQA Guidelines. However, the County received multiple requests from potential reviewers of the document to extend the comment period. Accordingly, on December 4, 2014 the County approved the extension of the public comment period to January 14, 2015 (a total comment period of 71 days).

Frequently Stated Comment 2: Future Project Specific Environmental Analysis

Topical Response 2: The REGPA PEIR addresses the types of impacts and mitigation measures that will be implemented as part of an update to the County's General Plan and the SEDAs as defined in the PEIR. All future projects under the REGPA would be subject to project-specific environmental review. This process will use the types of impacts and mitigation measures outlined in the PEIR as guidelines. Depending on the size and location of the development and the technology used, a Subsequent EIR may be required. However, the REGPA also encourages small scale, photovoltaic (PV) solar facilities to be constructed which may not require a full EIR. As stated in Section 1.2 of the PEIR:

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

It should be noted that under Title 21 of the Inyo County Code concerning renewable energy development, any person who proposes to construct an electric transmission line, solar thermal renewable energy facility or a PV renewable energy facility in the County must first obtain a Renewable Energy Permit, a Renewable Energy Development Agreement or a Renewable Energy Impact Determination. A Renewable Energy Impact Determination applies to projects over which the County has limited authority because the project is located on federal or state land or is subject to the permitting jurisdiction of the California Energy Commission.

Under Title 21, the issuance of a Renewable Energy Permit is subject to CEQA, and the County Planning Commission must conduct a noticed public hearing before considering approval of such a permit. The Planning Commission must find that there has been compliance with CEQA before a permit can be issued. In addition, "as a condition to the issuance of such a permit, the Planning Commission may impose such reasonable and feasible mitigation measures as it finds

to be necessary to protect the health, safety, and welfare of the county's citizens, the county's environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project." Finally, the Planning Commission is required to impose as a condition of approval, a plan for the reclamation/revegetation of the project site at the time of decommissioning of the project and the Planning Commission shall require financial assurances from the applicant to ensure that the reclamation plan will be fully implemented.

Concerning Renewable Energy Development Agreements, Title 21 provides that such agreements may be entered into by the County and a project applicant in lieu of obtaining a Renewable Energy Development Permit. Renewable Energy Development Agreements are subject to CEQA and must be approved by an ordinance adopted by the Board of Supervisors following a noticed public hearing. Prior to approving such an agreement, the Board must find that there has been compliance with CEQA. Renewable Energy Development Agreements must include a reclamation plan, acceptable financial assurances to ensure full implementation of the reclamation plan, be consistent with the county general plan and be enforceable by injunctive relief or other enforcement mechanisms under law. In the Renewable Energy Development Agreement, the Board of Supervisors may require such mitigation measures or modifications of the project as it finds necessary to protect the health, safety, and welfare of the county's citizens, the county's environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.

Frequently Stated Comment 3: Identification of Significant and Unavoidable Impacts as a Result of the PEIR

Topical Response 3: Potentially significant impacts that could occur as a result of renewable energy projects being developed in the identified SEDAs were identified at a programmatic level and all feasible mitigation is prescribed in the PEIR; however, without project-specific information coupled with a project-level analysis under CEQA, it can't be stated with certainty that these potential impacts would be reduced to below a level of less than significant at a programmatic level. That is why the PEIR reaches the conservative conclusion that impacts from future projects remain potentially significant and unavoidable.

As described in Section 2.4, the Renewable Portfolio Standards (RPS) is the primary driver for new utility scale renewable energy development in California, where implementation of the REGPA would effectively help California achieve its renewable energy targets set forth by the California Public Utilities Commission. The County will prepare a Statement of Overriding Considerations per Section 15093 of the State CEQA Guidelines that identifies the significance and influence of the RPS on the REGPA as well as the economic, legal, social, and/or technological benefits of implementing the proposed project in light of the unavoidable impacts identified in the PEIR. This Statement will be considered along with the Draft PEIR by the County Board of Supervisors in late March 2015.

Frequently Stated Comment 4: How were the SEDA MW caps calculated?

Topical Response 4: The SEDA boundaries depicted in the Draft PEIR have been identified based on the Opportunities and Constraints Technical Study (OCTS) (Appendix D of the PEIR),

and further refined based on feedback received through the agency scoping and public planning process (refer to Section 3.1.1 of the PEIR). Information from the OCTS considered resource and infrastructure requirements for renewable energy development, identifying areas within the County most suitable for future renewable energy development as well as available or most easily upgraded transmission and distribution lines that may be used to connect the renewable energy facilities to the power grid. This information is reflected in Table 3-1 of the PEIR which describes total allowable megawatts and developable area per solar energy group by each SEDA, and Table 3-2 which further summarizes the available renewable energy technologies and requirements. The megawatt and acreage caps for the proposed solar energy group areas would apply to both existing and future project proposals after adoption of the REGPA by the County.

Frequently Stated Comment 5: Explain the role of the DRECP in the REGPA

Topical Response 5: The REGPA is a County planning effort that involves identifying new and modified goals, policies, and implementation measures for addressing solar energy development in the Inyo County General Plan. The REGPA is intended to help achieve coordinated solar energy development in the County by creating a vision for landholders, solar energy developers, and investors in the County while taking into account regional policies and plans, as well as the development goals and policies of the County. The REGPA is intended to regulate solar energy development by focusing potential development in identified SEDA and capping energy production levels and associated acreage footprints of individual solar energy projects.

The DRECP is a multi-jurisdictional regional planning effort to conserve and manage plant and wildlife communities in the Colorado and Mojave Deserts of California while facilitating the timely permitting of compatible renewable energy projects. The DRECP is currently under review, and although the County is not currently a signatory of the DRECP and is under no obligation to implement the DRECP principles and policies, the County has considered the DRECP in development of the REGPA. Because the DRECP was in draft form during the preparation of the PEIR, the SEDAs were not further constrained based on information contained in the DRECP. However, if the DRECP and the REGPA are adopted, the County would coordinate with the DRECP agencies to avoid priority conservation areas and future projects in the County would be developed consistent with the requirements of the DRECP. Under REGPA Policy MER-2.6, the County would coordinate with renewable energy solar developers and other agencies to avoid, minimize, or mitigate impacts. If the County becomes a signatory of the DRECP, future development under the REGPA within the DRECP area could be expedited by the “take” coverage under Section 10 of the Endangered Species Act of 1973 and state take coverage under Section 2835 of the California Fish and Game Code for species listed under the California Endangered Species Act as threatened, endangered, or candidates.

Frequently Stated Comment 6: The SEDAs Contain Sensitive Resources

Topical Response 6: The PEIR recognizes that some SEDAs include areas of sensitive resources; however, the SEDAs are considered to be general planning areas where some areas within the SEDA boundaries may not be suitable for any type of development. It is one of the primary goals of the REGPA that sensitive resources identified within the SEDA will be avoided or impacts will be minimized to the extent practicable and mitigated pursuant of the Final PEIR.

Frequently Stated Comment 7: Consideration of Cultural Resources

Topical Response 7: The goal of the REGPA is avoid and minimize impacts to cultural resources; and when applicable, the PEIR prescribes multiple program-level mitigation measures which would help reduce potential project-specific impacts to cultural resources. As previously discussed in Section 4.5.3.3 of the Draft PEIR, general types of mitigation have been prescribed; this section has been moved to Section 4.5.5 of the Final PEIR and identified as Mitigation Measure CUL-1. Mitigation Measures CUL-1a through CUL-1g mandate a series of prescribed actions that future solar energy developers must follow prior to seeking approval of their individual project. These mitigation measures include data collection and resource inventory by qualified experts. A subsequent project-level CEQA analyses would include the evaluation of potential project-specific effects, including effects on archeological and other cultural resources; these project-level analyses would occur in advance of decisions about whether to approve or reject a proposed project.

Frequently Stated Comment 8: Future Renewable Energy Solar Facility Projects and Cultural Resources Sensitivity

Topical Response 8: As described in Section 4.5.5 of the PEIR, all individual solar energy facility project applications shall be reviewed by the County for their potential to impact cultural resources. Individual small, community scale, or commercial scale solar developments may be determined by a qualified County planner to have no potential effect on cultural resources (i.e., roof top solar projects may not affect cultural resources). For utility scale and smaller projects with the potential to affect cultural resources that are proposed to be located in a “Low to Moderate,” “Moderate,” “Moderate to High” or “High” cultural resources sensitivity zone on Table 4.5-2 of the PEIR (titled Cultural Resources Sensitivity by Location), the applicant shall conduct and submit an inventory and evaluation of all cultural resources within the project area to the County and other relevant agencies for review and approval. The inventory and evaluation shall be conducted as provided under the subsection titled Preliminary Project Specific Resource Identification which is a part of Section 4.5.3.2 of the Final PEIR. Based upon the results of the inventory and evaluation, appropriate conditions on the project and mitigation measures, as identified in the subsection titled General Types of Mitigation which is a part of Section 4.5.3.3, Impacts, and Section 4.5.5, Mitigation Measures, of the Final PEIR, will be imposed upon the project.

Frequently Stated Comment 9: Inclusion of the Owens Valley Study Area (OVSA)

Topical Response 9: The Owens Valley is not a SEDA but instead was identified as a study area (OVSA) demarcated by the boundary of the general valley area which does not correlate with a proposed development area. Any potential future solar energy project proposed for this area would be subject to a General Plan Amendment and further CEQA analysis and public comment as outlined in the PEIR. The reason for evaluation of the area is because the Owens Valley is where the majority of the County’s citizens live, and therefore, where the majority of the communities are – but the area is also under multiple jurisdictions and is highly managed. Since it is known the LADWP has interest in solar energy development on some of its lands in the Owens Valley, it would benefit the County to have policy in place with regard to that potential development. As described in Section 1.1 of PEIR, potential solar projects in the OVSA would

be considered in a subsequent planning process, separate from the REGPA, which will meet a set of criteria for identifying and mapping areas appropriate within the OVSA for solar energy development. Although the OVSA will be considered in a future planning process, limitations on the size of projects and transmission policies pertaining to the OVSA are established in the REGPA.

As identified in Section 3.3.2 of the PEIR, a separate set of potential criteria for development in the OVSA have been formulated: (1) only utilize existing transmission facilities and corridors; (2) guide the development to disturbed lands, including over and along the Los Angeles Aqueduct; (3) consider encouraging development at solid waste and wastewater treatment facilities, on private lands, in small scale (e.g., roof tops) and commercial scale (20 MW or less) arrays, and around communities in smaller arrays (6 MW or less); (4) mitigate potential impacts to the environment, society, culture, and economy of the County; (5) work to avoid significant alterations to visual resources; and (6) minimize intertie facilities.

Frequently Stated Comment 10: Inyo County Long Term Water Agreement

Topical Response 10: Future solar energy projects under the REGPA will undergo project specific analysis, which will include an evaluation of consistency with existing plans and regulatory framework such as the 1991 LADWP/Inyo County Long Term Water Agreement (Agreement), the 1997 Memorandum of Understanding (MOU), and the Owens Valley Land Management Plan. The Agreement is discussed in Sections 2.4.3.3, 4.2.1.4 and 4.9.1.3 (under the description of the County's Groundwater Extraction Permit Ordinance [Ord. 394 § 1, 1980]). The Agreement was developed to manage ground and surface water resources while maintaining healthy groundwater dependent vegetation communities found in the Owens Valley and while providing a reliable supply of water for export to Los Angeles and for use in Inyo County. To accomplish this, the Agreement contains management strategies for preventing long term groundwater mining from the aquifers, as well as avoiding of minimizing impacts to vegetation as a result of groundwater pumping or changes in surface water management practices. Vegetation is used as the principal indicator of environmental quality associated with ground and surface water activities in the Owens Valley. As part of this effort, vegetation in the Owens Valley has been classified (as described in Section 2.4.3.3 of the PEIR), and the County maintains maps of the classified vegetation. The management strategies are intended to avoid significant decreases in live vegetation cover of vegetation classified for management under the Agreement. Individual projects would be subject to all applicable federal, state, and local regulations including the Agreement. The Agreement maps from the Inyo County Water Department would be used in the future during project-level analyses, which would ensure that proposed projects would not be located in an area that would conflict with the Agreement. Future solar projects on LADWP-owned lands or management areas in the OVSA would be subject to the terms and conditions of the Agreement and MOU.

Frequently Stated Comment 11: The SEDAs Contain Federal and State Lands

Topical Response 11: The County is solely responsible for the lands under its own jurisdiction. Any future development in the SEDAs or OVSA involving public, state, and LADWP-owned lands would require coordination with the appropriate land managing agency and would be subject to environmental review and land use constraints consistent with the regulations

applicable to that jurisdiction. As part of the coordination, though the Renewable Energy Impact Determination process, the County will inform the appropriate land management agency of the conditions that the County would place on a proposed project if the County were the permitting agency. It is acknowledged that much of the land within the County (approximately 92 percent) consists of federal land managed by federal agencies (refer to Table 4.1-2 in the PEIR). Solar energy projects proposed on federal lands within the SEDAs or the OVSA would be regulated by the federal agency with jurisdiction of the specific project site.

Frequently Stated Comment 12: County Should Eliminate Certain SEDAs

Topical Response 12: Section 6 of the PEIR discusses five alternatives to the proposed project that could feasibly accomplish a majority of the proposed project objectives. Several of the identified alternatives would result in reduced impacts when compared against the proposed project. Alternative 4 (Reduced SEDA Alternative) would eliminate the Laws, Rose Valley, Pearsonville, and Chicago Valley SEDAs from REGPA implementation. The County Board of Supervisors will consider approval of the proposed project (or a project alternative) along with consideration of PEIR certification at a public meeting scheduled for March 2015.

Frequently Stated Comment 13: Definitions of Renewable Energy Solar Facility Types

Topical Response 13: The Draft PEIR identifies Distributed Generation Renewable Energy Solar Facilities as renewable energy solar facilities that produce 20 MW or less of electricity for off-site use, consumption and/or sale. This definition does not precisely match the definition of Distributed Generation commonly used throughout the state of California, in which Distributed Generation, or localized energy, has been generally defined as solar energy facilities that produce 20 MW or less of electricity, are interconnected on-site or close to the load, can be constructed quickly with no new transmission lines and typically with no environmental impact. Because the solar energy facility described in the Draft PEIR as Distributed Generation is specifically identified as being developed for off-site use, and would therefore connect into the transmission grid, references to Distributed Generation in the REGPA and Draft PEIR have been changed to Commercial Scale in the Final PEIR to avoid inconsistency between the REGPA and the more commonly used definition.

The Draft PEIR defines Community Scale Renewable Energy Solar Facilities as facilities that use renewable solar resources to generate energy for a specific community's use and that are located near the community they serve. The definition in the Draft PEIR did not specify the size of the facility that could be considered community scale; therefore, the definition has been updated to specify that Community Scale Renewable Energy Solar Facilities are limited to facilities that produce 6 MW or less of electricity for a specific community's use and that are located near the community they serve.

C. LIST OF COMMENTERS

During the public review period, verbal comments and comment letters were received on the Draft PEIR from the following agencies, governments, organizations, and individuals and at the public meetings listed below.

LETTER	NAME	ADDRESS/DATE
PUBLIC AGENCIES		
101	California Governor’s Office of Planning and Research	1400 10 th Street, PO Box 3044 Sacramento, CA 95812-3044
102	California Department of Fish and Wildlife	Inland Deserts Region 3602 Inland Empire Blvd., Suite C-220 Ontario, CA 91764
103	California Department of Transportation	District 9 500 South Main Street Bishop, CA 93514
104	California Regional Water Quality Control Board, Lahontan Region	1440 Civic Drive Suite 200 Victorville, CA 92392
105	US National Park Service Pacific West Region	333 Bush Street Suite 500 San Francisco, CA 94104
106	US Fish and Wildlife Service Ecological Services Palm Springs Fish and Wildlife Office	777 East Tahquitz Canyon Way Suite 208 Palm Springs, CA 92262
107	State Lands Commission	100 Howe Avenue, Suite 100-South Sacramento, CA 95825
NON-GOVERNMENTAL ORGANIZATIONS		
201	Amargosa Conservancy	PO Box 63 Shoshone, CA 92384
202	Amargosa Conservancy	PO Box 63 Shoshone, CA 92384
203	Center for Biological Diversity	8033 Sunset Blvd, #447 Los Angeles, CA 90046
204	California Native Plant Society Defenders of Wildlife Natural Resources Defense Council The Wilderness Society	
205	California Native Plant Society	2707 K Street Suite 1 Sacramento, CA 95816
206	California Unions for Reliable Energy	520 Capitol Mall Suite 350 Sacramento, CA 95814-4721

LETTER	NAME	ADDRESS/DATE
NON-GOVERNMENTAL ORGANIZATIONS (cont.)		
207	Defenders of Wildlife Natural Resources Defense Council The Wilderness Society	
208	Friends of the Inyo	819 N Barlow Ln Bishop, CA 93514
209	Manzanar Committee	1566 Curran Street Los Angeles, CA 90026-2036
210	Owens Valley Committee	PO Box 77 Bishop, CA 93515
211	The Nature Conservancy	201 Mission Street 4 th Floor San Francisco, CA 94105
212	Center for Biological Diversity Range of the Light Group Toiyabe Chapter Sierra Club	PO Box 1973 Mammoth Lakes, CA 93546
TRIBAL GOVERNMENTS		
301	Bishop Paiute Tribe Bishop Tribal Council	Paiute Professional Building 50 Tu Su Lane Bishop, CA 93514
302	Bishop Tribal Council	Paiute Professional Building 50 Tu Su Lane Bishop, CA 93514
303	Big Pine Paiute Tribe of the Owens Valley	PO Box 700 825 South Main Street Big Pine, CA 93513
304	Timbisha Shoshone Tribe	621 W. Line St., Suite 109 Bishop CA, 93514
305	Lone Pine Paiute-Shoshone Reservation	PO Box 747 1103 South Main Street Lone Pine, CA 93545
306	Bishop Paiute Tribe	
PRIVATE CITIZENS		
401	Kristen Luetkemeier	331 N Washington Independence, CA 93526
402	Michael Prather	Lone Pine, CA
403	Daniel Pritchett	Bishop, CA
404	Earl Wilson	PO Box 830 Lone Pine, CA
405	Katherine Little	563 Hammond St Bishop, CA 93514
406	David Wagner, Lynn Johnson, and Dr. Mark Basgall	336 Rosedale Dr. Independence, CA 93526

LETTER	NAME	ADDRESS/DATE
PRIVATE CITIZENS (cont.)		
407	Kathy Goss	PO Box 9 Darwin CA 93522 760-876-8313
408	Suzi Dennett, Brian Brown, Susan Sorrells, Amy Noel, Nancy Good, Karin Pine	
409	Elizabeth Perluss	Big Pine and Grass Valley, CA
410	Petra Lentz-Snow	Office of Lost Borders school@lostborders.org
411	Sally Miller	The Wilderness Society P.O. Box 22 Lee Vining, CA 93541
412	Gigi Coyle	
413	Cody Hanford	Joshua Tree, California
414	Kevin Emmerich Laura Cunningham	Basin and Range Watch 102551 Cedar Canyon Road Cima, CA 92323
415	Meredith Little	Big Pine
416	Nancy Good	P.O. Box 103, Tecopa, CA 92389
417	Kevin Nelson	
418	Sara J. “Sally” Manning, Ph.D.	401 E. Yaney St. Bishop CA 93514
419	Beth Porter	Olancho, CA
420	Philip Anaya	
421	Phyllis Murakawa	
422	Gann Matsuda	
423	April Zrelak	aoz@qnet.com
424	James M. Stroh	
425	Ryan Carle	
426	Daniel Pritchett	Bishop, CA
427	Catherine Kravitz,	PO Box 881 Lone Pine, CA 92545
UTILITIES/OTHER		
501	Southern California Edison	PO Box 7329 Mammoth Lakes, CA 93546
502	Los Angeles Department of Water and Power	300 Mandich Street Bishop, CA 93514
503	CPG Independence LLC	6032 Shelter Bay Ave Mill Valley, CA 94941

LETTER	NAME	ADDRESS/DATE
PEIR PUBLIC MEETING COMMENTS		
601	Bishop Public Workshop	December 2, 2014
602	Planning Commission Meeting	December 3, 2014
603	Lone Pine Public Workshop	December 3, 2014
604	Tecopa Public Workshop	December 4, 2014
605	Planning Commission Meeting	December 3, 2014
606	Natural Resource Advisory Committee	December 18, 2014

D. COMMENT LETTERS AND RESPONSES

Where responses to comments warrant modifications to the PEIR, the reader is referred to modifications to the text within the body of the PEIR. Modifications to the PEIR occur where it is necessary to correct or clarify information in the document. In some cases, comments and responses provide additional information, which then also becomes a part of the Final PEIR.



COMMENTS FROM PUBLIC AGENCIES
Series 100 Responses to Comments





EDMUND G. BROWN JR.
GOVERNOR

STATE OF CALIFORNIA
GOVERNOR'S OFFICE of PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT



KEN ALEX
DIRECTOR

January 15, 2015

Cathreen Richards
Inyo County
P.O. Drawer L
Independence, CA 93526

Subject: Renewable Energy General Plan Amendment
SCH#: 2014061039

Dear Cathreen Richards:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on January 14, 2015, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

101-1

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

**Document Details Report
State Clearinghouse Data Base**

SCH# 2014061039
Project Title Renewable Energy General Plan Amendment
Lead Agency Inyo County

Type EIR Draft EIR
Description Note: Extended Review

The County is proposing to amend its General Plan to include policies for solar energy development within the County. The proposed Renewable Energy General Plan Amendment (REGPA) involves identifying new and modified General Plan goals, policies, and implementation measures, including provisions for actual sites identified in the County that may be appropriate for renewable energy development (SEDAs). The overall purpose of the proposed project is to regulate and constrain the type, siting, and size of future renewable energy (solar) development within the County through adoption of land use policies that are consistent with and meet the broader goals and visions for the County as expressed in the Inyo County General Plan.

Lead Agency Contact

Name Cathreen Richards
Agency Inyo County
Phone (760) 878-0263 **Fax**
email
Address P.O. Drawer L
City Independence **State** CA **Zip** 93526

Project Location

County Inyo
City
Region
Lat / Long
Cross Streets Entirety of Inyo County
Parcel No. Various
Township **Range** **Section** **Base**

Proximity to:

Highways Hwy 395/136/190/168/178
Airports Various
Railways Various
Waterways Owens River
Schools Various
Land Use State and Federal; Tribal; Residential; Commercial; Industrial; Open Space; Natural Resources

Project Issues Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Economics/Jobs; Fiscal Impacts; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects; Aesthetic/Visual

Reviewing Agencies Resources Agency; Department of Conservation; Department of Fish and Wildlife, Region 6 (Inyo & Mono Region); Cal Fire; Department of Parks and Recreation; Office of Emergency Services, California; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 9; Air Resources Board, Major Industrial Projects; Regional Water Quality Control Bd., Region 6 (Victorville); California Energy Commission; Native American Heritage Commission; Public Utilities Commission

Note: Blanks in data fields result from insufficient information provided by lead agency.

**Document Details Report
State Clearinghouse Data Base**

Date Received 11/05/2014 *Start of Review* 11/05/2014 *End of Review* 01/14/2015

Note: Blanks in data fields result from insufficient information provided by lead agency.

Response to Letter 101 – The Governor’s Office of Planning and Research

Response 101-1: The letter acknowledges that the Draft PEIR was circulated for public review in accordance with the State CEQA Guidelines. No additional response is necessary.



State of California – Natural Resources Agency
 DEPARTMENT OF FISH AND WILDLIFE
 Inland Deserts Region
 3602 Inland Empire Blvd., Suite C-220
 Ontario, CA 91764
 www.wildlife.ca.gov

Letter 102
 EDMUND G. BROWN JR., Governor
 CHARLTON H. BONHAM, Director



January 15, 2015

Ms. Cathreen Richards
 Inyo County Planning Department
 P.O. Drawer L
 Independence, CA 93526

**Subject: Inyo County Draft Renewable Energy General Plan Amendment-Program Environmental Impact Report
 State Clearing House (SCH) No. 2014061039**

Dear Ms. Richards,

The California Department of Fish and Wildlife (CDFW) has reviewed the Draft Renewable Energy General Plan Amendment (DREGPA)-Program Environmental Impact Report (PEIR), prepared by Inyo County (Lead Agency).

102-1

Project Description

The proposed DREGPA involves identifying new and modified General Plan goals, policies, and implementation measures, including provisions for actual sites identified in Inyo County that may be appropriate for renewable (solar) energy development. The overall purpose of the proposed DREGPA is to regulate and constrain the type, siting, and size of future renewable energy development within the County.

CDFW appreciates the opportunity to comment on the PEIR for the DREGPA. CDFW is responding to the PEIR as a Trustee Agency for fish and wildlife resources (California Fish and Game Code Sections 711.7 and 1802, and the California Environmental Quality Act [CEQA] Guidelines Section 15386), and as a Responsible Agency regarding any discretionary actions (CEQA Guidelines Section 15381), such as the issuance of a Lake or Streambed Alteration Agreement (California Fish and Game Code Sections 1600 et seq.) and/or a California Endangered Species Act (CESA) Permit for Incidental Take of Endangered, Threatened, and/or Candidate species (California Fish and Game Code Sections 2080 and 2080.1).

CDFW's comments and recommendations:

General comments/request for clarification

- Mitigation Measures (MM) in the DREGPA, states that a "qualified" biologist/botanist will conduct surveys, assess habitat, etc. However, CDFW recommends that any biologist is approved by CDFW prior to initiating any surveys.

102-2

Conserving California's Wildlife Since 1870

- Throughout the document, there are references to “temporary” impacts and “temporarily” disturbed areas. CDFW considers disturbances in the desert that leads to any vegetation removal to be permanent. | 102-3
- Table 3-1 (p. 3-11) outlines the total allowable megawatts and developable area per solar energy group. Please clarify whether this acreage cap includes all construction-related activities and infrastructure (e.g., substations, transmission infrastructure, access roads, maintenance and storage facilities, staging areas, etc.). | 102-4
- Page 4.4-3 incorrectly identifies the desert kit fox as a state listed threatened species. Desert kit fox is a protected species as a fur-bearing mammal (as it is correctly identified in Table 4.4-1) pursuant to Title 14 of the California Code of Regulations section 460. | 102-5
- MM BIO-2 (Floristic Protocol-Level Surveys, p. 4.4-106): To effectively determine presence or infer absence of botanical resources, CDFW recommends full-coverage botanical surveys in all habitats following the November 24, 2009 Protocols for Surveying and Evaluating Impacts to Special Status Native Plant and Populations and Natural Communities. | 102-6
- MM BIO-2 (p. 4.4-107) states that “The special status plant transplantation plan shall involve...moving the plant material and seedbank to the transplant site...and monitoring the transplant sites to document recruitment and survival rates.” Please note that sometimes projects leave the plants on site for an onsite nursery. In addition, CDFW recommends that monitoring should be done for five years, and the survival rate should be around 80 percent in order for this method to be deemed successful. | 102-7
- MM BIO-3 (p. 4.4-108-109) mentions the 2004 Protocol for Evaluating Bald Eagle Habitat and Populations in California. Please note that while CDFW uses this protocol, this is a United States Fish and Wildlife Service (USFWS) document. This MM also lists the San Joaquin kit fox among the special status species which could be impacted by project activities. San Joaquin kit fox does not occur in Inyo County and desert kit fox is the correct species. Please make this correction in the document. | 102-8
- MM BIO-3 (p. 4.4-11) requires inspection of pipes with diameter greater than 3 inches for desert tortoise or other special status species. Please note that juvenile tortoises can be smaller than 3 inches. Please also add measures regarding inspecting materials on site (within the fenced area) as some species including desert kit fox might enter the project site at any time. | 102-9
- MMs BIO-10, 11, and 13 (p. 4.4-120-122) Please note that western yellow-billed cuckoo, Inyo California towhee, bank swallow, willow flycatcher, and least Bell’s | 102-10

- vireo are state-listed species. An Incidental Take Permit (ITP) from CDFW may be warranted if a project or any project-related activity during the life of the project will result in “take” (as defined by the Fish and Game Code) of any species protected by the California Endangered Species Act (CESA) (Fish & G. Code, §§86, 2080, 2081, subd. (b), (c)).

102-10
(cont'd)
- MM 18 (4.4-127): For projects that include the use of open evaporation ponds, CDFW will require an evaporation pond management plan to be written by the project applicant and submitted to CDFW for approval.

102-11
- MM BIO-22 (p. 4.4-131) “Minimize impacts to invasive species or noxious weeds” should be “Minimize spread of...”

102-12

Biological Resources

- Important Bird Areas Mitigation Measure BIO-21 states that “Solar development authorized under the DREGPA should not be sited in or within 1,000 feet of any areas determined...to be Important Bird Areas...” Important Bird Areas are areas that are vital to the conservation of birds and other biodiversity, and where extra effort should be made to reduce the impacts of habitat loss and degradation. The Owens Lake Solar Energy Development Area (SEDA) is within the Pacific Flyway and is classified as an Important Bird Area. To reduce or eliminate impacts to Important Bird Areas, CDFW recommends creating buffers on an individual project-by-project basis and designing the SEDAs to exclude Important Bird Areas.

102-13
- Bird and Bat Conservation Strategy (BBCS) A BBCS shall be submitted to CDFW for approval prior to the start of ground disturbing activities. The BBCS may include but is not limited to: buffer distances for specific bird species, a minimum of weekly monitoring for mortality and immediate necropsy to determine cause of death, both during construction and throughout the life of the project. Biologists performing this work would be required to have a scientific collecting permit (SCP) from CDFW. Standardized and systematic data on bird and bat mortalities will improve our understanding of both baseline and PV related mortality that occurs in the desert and is needed in order to identify improved methods to minimize adverse effects on migrating birds and bats. Systematic data collection and reporting of bird mortality should include data on the following: species, date, time, how the animal died (e.g., exhaustion, trauma), as well as any information on what might be attracting animals to the PV cells (light, insects, etc.).

102-14
- Desert tortoise The most recent USFWS protocols should be used for determining presence/absence and conducting clearance surveys. Clearance shall be done by conducting two sets of surveys over the entire project area in a perpendicular pattern. Any Desert Tortoise Translocation Plan should follow the

102-15

general guidance of the most recent USFWS protocol. Project applicant also needs to contact CDFW before the start of the project and prior to the start of any ground disturbance activities.

102-16

- Impacts to wildlife movement or corridors CDFW has concerns about bottomland-upland movements that elk and deer routinely and seasonally make between the Owens Valley floor and the Inyo Mountains throughout the Owens Valley Study Area. A utility scale solar facility could potentially eliminate a large east-west ungulate corridor in the Owens Valley. Annual forbs are an extremely important forage base for deer and elk in the spring and early summer. The movement of elk from the valley floor into the canyons and foothills of the Inyo Mountains to graze these forbs has been documented (McCullough 1969). CDFW requests that the DREGPA include analysis of proposed projects' impacts on elk and deer movement patterns.

102-17

- Fully Protected Species
Fully protected species, including golden eagle and big horn sheep are protected pursuant to Fish and Game Code Sections 3511 (b) (7), 4700 (b) (2) and no permits may be issued for their.

102-18


Other Recommendations

- A Scientific Collecting Permit (SCP) is required to take, collect, capture, mark, or salvage, for scientific, educational, and non-commercial propagation purposes, mammals, birds and their nests and eggs, reptiles, amphibians, fishes and invertebrates (Fish and Game Code Section 1002 and Title 14 Sections 650 and 670.7). A SCP will be required if any live or dead animals will be handled during construction or operation of a project.

102-19

Thank you for the opportunity to provide comments on the DREGPA-PEIR. Please contact Wendy Campbell with questions regarding this letter and further coordination on project permitting needs at (760) 258-6921 or Wendy.Campbell@wildlife.ca.gov.

Sincerely,


Leslie MacNair
Acting Regional Manager
Inland Deserts Region

cc: CORR
State Clearinghouse

References

McCullough, D.R. 1969. The Tule Elk—Its History, Behavior, and Ecology. University of California Press Zoology, Vol. 88, p. 209.

Responses to Letter 102 – California Department of Fish and Wildlife

Response 102-1: The introduction to the letter summarizes the project description, acknowledges the County’s public planning efforts, and describes the CDFW’s role in the project. No additional response is necessary.

Response 102-2: Mitigation Measure BIO-1 of the PEIR has been modified to include a requirement that the qualifications of any biologists conducting special status species surveys or focused habitat assessments will be submitted to CDFW prior to conducting fieldwork.

Qualified biologist has been defined in Mitigation Measure BIO-1 as “a biologist with documented experience or training related to the subject species.”

Response 102-3: The PEIR does not contain any specific impact quantification because no projects have been proposed at this time under the REGPA; the document is entirely programmatic in nature. The terms “temporary” and “temporarily disturbed areas” are used in reference to impacts to biological habitats because of the broad range of habitats (in the SEDAs and the OVSA) where projects could be proposed; in many areas temporary impacts could be a valid categorization of the potential impacts. Because of the programmatic nature of this PEIR and the broad range of potential habitats in which projects could be proposed, the document does not make a determination regarding whether or not projects in the desert resulting in areas of temporary impact or temporarily disturbed areas would result in “temporary” or “permanent” impacts. Such a determination will be made when site-specific impact analysis is conducted as required by Mitigation Measure BIO-01 (an excerpt from the first paragraph of Mitigation Measure BIO-1 is included below):

Prior to the approval of any solar development projects or related infrastructure under the REGPA with the potential to impact biological resources as determined by a qualified biologist (defined as a biologist with documented experience or training related to the subject species), a project level biological resource evaluation shall be prepared by a qualified biologist for the project. The biological resource evaluation shall include field reconnaissance and focused surveys as determined necessary by a qualified biologist to identify special status species and natural communities present or having the potential to occur on the site, an evaluation of the extent of those habitats, an evaluation of the potential for impacts to each special status species and/or habitat, and shall prescribe specific mitigation measures to avoid ~~or reduce~~ impacts to biological resources to the maximum extent practicable. The qualifications of any biologists conducting special status species surveys or focused habitat assessments will be submitted to CDFW prior to conducting fieldwork. The level of biological resource analysis will be based on factors such as the size of the proposed project-, ~~the~~ and extent of impacts to biological resources, and the sufficiency of existing data to determine impacts.

Response 102-4: The caps identified in Table 3-1 present the total allowable capacity and developable land area per solar energy group for future installation of solar energy production infrastructure. The land area would include the footprint of solar energy infrastructure, access roads, storage facilities, maintenance areas, and other related areas required for the ongoing operations and maintenance of future solar energy developments.

Response 102-5: The PEIR has been updated with regards to the species' listing status on page 4.4-3:

The state listed as protected furbearing mammal desert kit fox (*Vulpes macrotis*), the state and federally listed as threatened desert tortoise (*Gopherus agassizii*), and state listed as threatened desert kit fox (*Vulpes macrotis*) and Mohave ground squirrel (*Xerospermophilus mohavensis*) occur in this habitat type.

Response 102-6: Mitigation Measure BIO-2 has been updated to include a requirement for a CDFW-approved botanist to evaluate the potential for special status plant species to occur on the site and conduct surveys, if necessary, to determine presence or infer absence of special status plants on the site following the November 24, 2009 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* or the most current guidelines.

Response 102-7: The bullet from Mitigation Measure BIO-2 (page 4.4-140) has been updated as follows:

If transplanting is proposed, the botanist shall coordinate with the appropriate resource agencies and local experts to determine whether transplantation is feasible. If the agencies concur that transplantation is a feasible mitigation measure, the botanist shall develop and implement a transplantation plan through coordination with the appropriate agencies. The special status plant transplantation plan shall involve identifying a suitable transplant site; moving some or all of the plant material and seed bank to the transplant site; collecting seed material and propagating it in a nursery (in some cases it is appropriate to keep plants onsite as nursery plants and sources for seed material); and monitoring the transplant sites to document recruitment and survival rates. Monitoring shall be conducted for a period of five years and transplantation shall be considered successful if an 80 percent survival rate has been achieved by the end of the five-year monitoring period.

Response 102-8: The reference to the Bald Eagle habitat assessment protocol has been modified to indicate that it is a USFWS document, rather than a CDFW and USFWS document. The reference to San Joaquin kit fox has been changed to desert kit fox.

Response 102-9: Mitigation Measure BIO-3 has been updated to require inspection of pipes greater than 1 inch in diameter (rather than 3 inches in diameter or larger) to prevent impacts to juvenile desert tortoises. The following bullet was also added to the biological monitor's responsibilities listed in Mitigation Measure BIO-3:

- Periodically inspect stockpiled material and other construction material and equipment (including within the fenced areas) throughout the day as some species such as desert kit fox may enter the project site at any time.

Response 102-10: The following language was added to Mitigation Measures BIO-10, 11, and 13 to address state-listed bird species:

An Incidental Take Permit from CDFW will also be required if a project or any project-related activity during the life of the project is determined to have the potential to result in "take" of these species (as defined by the Fish and Game Code).

Response 102-11: The following measure has been added to Mitigation Measure BIO-18:

Minimize Impacts from Open Evaporation Ponds

The following mitigation measures shall be implemented for projects that require the use of open evaporation ponds:

- An evaporation pond management plan shall be prepared and submitted to CDFW for approval prior to project approval.
- If the use of open evaporation ponds is permitted for the project and especially if the water would be considered toxic to wildlife, ponds shall be designed to discourage bird and other wildlife use by properly netting or otherwise covering the pond.

Response 102-12: The title of Mitigation Measure BIO-22 was updated as follows:

MM BIO-22: ~~Minimize impacts spread of~~ invasive plant species or noxious weeds.

Response 102-13: As suggested in comment 102-14, a *Bird and Bat Conservation Strategy* section has been added to Mitigation Measure BIO-18. The bird and bat conservation strategy (BBCS) would include actions to avoid, minimize, and mitigate adverse effects to migratory birds protected under the MBTA during construction and operations of the proposed project, would address buffer distances for specific bird species, and would include monitoring protocol to document mortality and habitat effects to birds. The BBCS is described in detail in Response No. 102-14.

The *Minimize Impacts from Solar Flux* section in Mitigation Measure BIO-18 has been revised as follows to address the issue of potential impacts from solar thermal technology on Important Bird Areas within the SEDAs:

Minimize Impacts from Solar Flux

The following mitigation measures shall be implemented in order to minimize avian impacts from solar flux:

- ~~Solar thermal developments utilizing solar power tower technologies shall not be sited in or within a minimum of 1,000 feet of from Important Bird Areas (as determined by the County in consultation with Responsible and Trustee agencies), the OVSA, or riparian or other aquatic habitats including lakes, ponds, rivers, streams, and perennial wetland habitats unless potentially significant impacts are avoided, although the appropriate buffer distance shall be determined on a project-by-project basis as determined by the County in consultation with responsible and trustee agencies.~~ This requirement generally does not apply to seasonal or ephemeral wetland habitats unless deemed necessary by a qualified biologist in light of the wetland's specific habitat value for bird species.
- The County shall require developers proposing solar power tower technology to coordinate with the USFWS during project planning. As part of that coordination process, and in conjunction with the project's next tier of CEQA review, the USFWS will advise the County whether a Bird and Bat Conservation Strategy would be

necessary for the project, and if required, would adequately reduce the effects of the project on migratory birds and bats.

The first bullet in Mitigation Measure BIO-21 has been modified as follows:

- Solar development authorized under the REGPA ~~should~~ shall not be sited in or within 1,000 feet of any areas determined by the County in consultation with responsible and trustee agencies to be Important Bird Areas, essential connectivity areas or linkages identified in the 2001 Missing Links in California's Landscape Project (Penrod et al. 2001), ~~or USFWS identified desert tortoise priority connectivity areas or tule elk and mule deer movement corridors~~ unless potentially significant impacts are avoided. The appropriate buffer distance shall be determined on a project-by-project basis as determined by the County in consultation with responsible and trustee agencies.

The comment suggests that the SEDAs should be designed to exclude Important Bird Areas, specifically in the Owens Lake SEDA. The PEIR recognizes that some SEDAs include areas of sensitive resources; however, the SEDAs are considered to be general planning areas where some areas within the SEDA boundaries may not be suitable for solar development based on the sensitive resources present. With implementation of the BBCS, and the measures described above, the Important Bird Areas would be adequately avoided.

Response 102-14: The requirement for preparation of a BBCS was added to Mitigation Measure BIO-18 as follows:

Bird and Bat Conservation Strategy

A bird and bat conservation strategy (BBCS) shall be prepared to reduce potential project impacts on migratory birds. The BBCS shall describe proposed actions to avoid, minimize, and mitigate adverse effects to migratory birds protected under the MBTA during construction and operations of the proposed project. The BBCS shall be submitted to USFWS and CDFW for approval prior to the start of ground disturbing activities. The BBCS shall address buffer distances for specific bird species and include a robust, systematic monitoring protocol to document mortality and habitat effects to birds. The monitoring protocol should incorporate the following objectives at a minimum: (1) a minimum of weekly monitoring for mortality and immediate necropsy to determine cause of death, both during construction and throughout the life of the project; (2) systematic data collection and reporting of bird mortality including data on the following: species, date, time, how the animal died (e.g., exhaustion, trauma), as well as any information on what might be attracting animals to the photovoltaic cells (light, insects, etc.); (3) a method to estimate the overall annual avian mortality rate associated with the facility, including mortality associated with all the features of the project that are likely to result in injury and mortality (e.g., fences, ponds, solar panels); and (4) methods to determine whether there is spatial differentiation within the solar field in the rates of mortality (i.e., panels on the edge of the field versus interior of the field). Biologists performing this work would be required to have a Scientific Collecting Permit from CDFW. Standardized and systematic data on bird and bat mortalities will be collected to contribute to the improvement of the scientific communities' understanding of both baseline and photovoltaic related mortality that occurs in solar projects in the desert and is needed in order to identify improved methods to minimize adverse effects on migrating birds and bats.

In the absence of a permit from the USFWS, the temporary or permanent possession of protected migratory birds and their carcasses is a violation of the MBTA. Because of the need for carcass collection to adequately monitor avian impacts during BBCS implementation and to reduce the food subsidy that carcasses may provide to common ravens (*Corvus corax*) and other predators, developers shall be required to obtain a special purpose utility permit from the USFWS allowing the collection of migratory birds and/or their carcasses prior to implementation of the monitoring protocol.

Response 102-15, 16: Mitigation Measure BIO-6 includes language requiring use of the most recent USFWS guidance for presence/absence and clearance surveys for desert tortoise as well as for preparation of a desert tortoise translocation plan. In addition, the following bullet was added to Mitigation Measure BIO-6:

- The project applicant shall notify the USFWS and CDFW prior to the commencement of any ground-disturbing activities.

Response 102-17: Language was added to the OVSA setting section to include a discussion of movement corridors for tule elk and mule deer. Also, Mitigation Measure BIO-21 was updated as follows:

MM BIO-21: Minimize impacts to movement or migratory corridors or native wildlife nursery sites.

The following mitigation measures will be implemented to minimize impacts to movement or migratory corridors or native wildlife nursery sites:

- Solar development authorized under the REGPA ~~should~~ shall not be sited in or within 1,000 feet of any areas determined by the County in consultation with Responsible and Trustee agencies to be Important Bird Areas, essential connectivity areas or linkages identified in the 2001 Missing Links in California's Landscape Project (Penrod et al. 2001), ~~or USFWS identified desert tortoise priority connectivity areas~~ or tule elk and mule deer movement corridors unless potentially significant impacts are avoided. The appropriate buffer distance shall be determined on a project-by-project basis as
- Any proposed solar development projects in the OVSA shall be required to study the potential impact of the project on tule elk and mule deer movement corridors prior to project approval. If a proposed project is determined to be located within an important tule elk and mule deer movement corridor, the applicant shall be responsible for the preparation of a plan to avoid and/or minimize impacts to such corridors in coordination with CDFW.
- As stated in MM BIO-6, projects shall not be sited within areas identified for desert tortoise recovery or conservation according to the Draft Revised Recovery Plan for the Mojave Population of the Desert Tortoise (*Gopherus agassizii*) (USFWS 2011) (such as designated critical habitat, ACECs, DWMA, priority connectivity areas, and other areas or easements managed for desert tortoises).

Response 102-18: Mitigation Measure BIO-12 has been updated to remove references to golden eagle take permits. References to obtaining take permits for bighorn sheep were removed from Mitigation Measure BIO-14.

Response 102-19: The following bullet was added to Mitigation Measure BIO-3:

- A Scientific Collecting Permit is required to take, collect, capture, mark, or salvage, for scientific, educational, and non-commercial propagation purposes, mammals, birds and their nests and eggs, reptiles, amphibians, fishes and invertebrates (Fish and Game Code Section 1002 and Title 14 Sections 650 and 670.7). All biologists must possess a Scientific Collecting Permit in order to handle any live or dead animals during construction or operation of a project.

DEPARTMENT OF TRANSPORTATION
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DPEIR
SCH: #2014061039

November 21, 2014

Ms. Cathreen Richards
Inyo County Planning Department
P.O. Drawer L
Independence, California 93526

Renewable Energy General Plan Amendment (REGPA) – Draft Programmatic Environmental Impact Report (DPEIR)

Dear Ms. Richards:

The California Department of Transportation (Caltrans) District 9 appreciates being able to review the DPEIR for possible renewable energy facility locations in Inyo County. Our Notice of Preparation concerns seem to be addressed in the DPEIR. We offer the following comments at this time:

- Page 4.17-5, section 4.14 State Regulations, California Department of Transportation – for clarification, consider altering the 2nd paragraph to read: “In addition to requiring an encroachment permit for highway access points (i.e. driveways, private roadway connections) Caltrans also requires an encroachment permit for non-transportation ...” 103-1
- Also be aware that Caltrans policy is to allow utilities (e.g. transmission lines) within conventional highway right-of-way (R/W), but exclude them from within access controlled R/W to the extent practicable. Further information on Utility Permits may be found in the Encroachment Permit Manual: 103-2

http://www.dot.ca.gov/hq/traffops/developserv/permits/pdf/manual/Chapter_6.pdf

We value our cooperative working relationship concerning project related transportation issues for the State Highway System. Please contact me at (760) 872-0785, with any questions.

Sincerely,

GAYLE J. ROSANDER
IGR/CEQA Coordinator

c: State Clearinghouse
Mark Reistetter, Caltrans

*"Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability"*

Responses to Letter 103 – California Department of Transportation

Response 103-1: The suggested clarification has been made on page 4.17-5 in the Transportation and Circulation chapter of the PEIR:

In addition to requiring an encroachment permit for highway access points (i.e., driveways, private roadway connections), Caltrans also requires an encroachment permit for non-transportation activities, including utility construction, occurring within ROWs of the state highway system. Caltrans also requires transportation permits for the movement of vehicles or loads exceeding the size and weight limitations of the California Vehicle Code.

Response 103-2: Specific projects requiring the access to utilities (e.g., transmission lines) within Caltrans ROW will adhere to Caltrans' access requirements and policy.



Lahontan Regional Water Quality Control Board

December 15, 2014

File: Environmental Doc Review
Inyo County

Cathreen Richards, Senior Planner
Inyo County
P.O. Drawer L
Independence, CA 93526
Email: crichards@inyocounty.us

COMMENTS ON THE DRAFT PROGRAMMATIC ENVIRONMENTAL IMPACT REPORT FOR THE RENEWABLE ENERGY GENERAL PLAN AMENDMENT, INYO COUNTY, STATE CLEARINGHOUSE NO. 2014061039

The California Regional Water Quality Control Board, Lahontan Region (Water Board) staff received the Draft Programmatic Environmental Impact Report (DPEIR) for the above-referenced Renewable Energy General Plan Amendment (REGPA) on November 7, 2014. The DPEIR was prepared by Inyo County (County) in consultation with HELIX Environmental Services, and submitted in compliance with the provisions of the California Environmental Quality Act (CEQA). The County is proposing to update its General Plan to include policies for solar energy development within the County. The purpose of the proposed REGPA is to regulate and direct the type, siting, and size of potential future renewable energy development within the County through adoption of land use policies that are consistent with and meet the broader goals and visions for the County expressed in the Inyo County General Plan.

104-1

Water Board staff, acting as a responsible agency, is providing these comments to specify the scope and content of the environmental information germane to our statutory responsibilities pursuant to CEQA Guidelines, California Code of Regulations, title 14, section 15096. Based on our review of the information provided, we encourage the County to: 1) promote watershed management; 2) support "Low Impact Development" (LID); 3) reduce the effects of hydromodification; 4) encourage development on previously disturbed lands; and 5) encourage recycled water uses. Our comments on the DPEIR are outlined below.

WATER BOARD'S AUTHORITY

All groundwater and surface waters are considered waters of the State. Surface waters include streams, lakes, ponds, and wetlands, and may be ephemeral, intermittent, or perennial. All waters of the State are protected under California law. State law assigns responsibility for protection of water quality in the Lahontan Region to the Lahontan Water Board. Some waters of the State are also waters of the U.S. The Federal Clean Water Act (CWA) provides additional protection for those waters of the State that are also waters of the U.S.

AMY L. HORN, PHD, CHAIR | PATTY Z. KOUYOUMDJIAN, EXECUTIVE OFFICER

14440 Civic Drive, Suite 200, Victorville, CA 92392 | www.waterboards.ca.gov/lahontan



The *Water Quality Control Plan for the Lahontan Region* (Basin Plan) contains policies that the Water Board uses with other laws and regulations to protect the quality of waters of the State within the Lahontan Region. The Basin Plan sets forth water quality standards for surface water and groundwater of the Region, which include designated beneficial uses as well as narrative and numerical objectives which must be maintained or attained to protect those uses. The Basin Plan can be accessed via the Water Board's web site at http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.shtml.

104-1
(cont'd)

SPECIFIC COMMENTS

We recommend that the following issues be considered in the final PEIR and in project-specific environmental evaluations.

1. Landfills were identified as a potential location that may be appropriate for renewable energy development. Should this be considered on a project level, site-specific considerations such as loading, settlement, increased impervious surfaces and runoff impacts on the cap of the closed landfills must be evaluated. Additionally, the Closure and Post-Closure Plans and the Waste Discharge Requirements (WDRs) for the specific landfill would need to be revised to reflect the change in land use.
2. Section 4.9.1.3, Regulatory Framework section, lists permits that may be required for renewable energy projects. However, Section 3.3.6.4, Development Process, Operations section, discusses treatment of cooling water and blowdown water, with the potential for on-site disposal. This disposal may be considered a waste discharge to land, and may require construction of a Class II surface impoundment (at a minimum) to contain designated waste, and WDRs pursuant to California Code of Regulations (CCR), title 27. As such, project proponents must work with Water Board staff to ensure water quality is protected well in advance of project implementation.
3. Section 4.9.3.1, Western Solar Energy Group, Laws Solar Energy Development Area (SEDA), Groundwater Supplies/Recharge section, indicates that Project implementation would not be expected to result in substantial areas of new impervious surfaces. Water Board staff **disagree** with this conclusion as the solar panels provide a large impervious surface area. The increased velocity of runoff from these impervious panels must be managed with Low Impact Development (LID) strategies to the extent feasible to prevent hydromodification and help sustain a healthy watershed.
4. Section 4.9.3.1 also discusses the potential need for dewatering, should shallow groundwater be encountered. Water diversion and/or dewatering activities may be subject to discharge and monitoring requirements under either National Pollutant Discharge Elimination System (NPDES) General Permit, Limited Threat Discharges to Surface Waters, Board Order R6T-2014-0049, or General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality, WQO-2003-0003, both issued by the Lahontan Water Board.

104-2

104-3

104-4

104-5

5. Throughout Section 4.9, the potential impacts from construction-related pollutants are considered to be less than significant because the projects will comply with the requirements of the NPDES Construction General Permit. However, mitigation, monitoring, and reporting are required as part of the National Pollutant Discharge Elimination System (NPDES) General Construction Storm Water Permit, Water Quality Order (WQO) 2009-0009-DWQ. Therefore, the description should be "potentially significant unless mitigation incorporated." Additionally, those mitigation measures should be included in the Impacts and Proposed Mitigation Table. 104-6
6. Projects need to first consider how to avoid impacting stream channels, including ephemeral channels. If unavoidable, specific mitigation measures must be identified that, when implemented, minimize unavoidable impacts to a less than significant level to ensure that no net loss of function and value will occur as a result of Project implementation. We request that natural drainage patterns be maintained to the extent practical to avoid and minimize impacts. 104-7
7. The Water Board requires that impacts to water resources be avoided where feasible and minimized to the extent practical. Compensatory mitigation will be required for all unavoidable permanent impacts to surface water resources including ephemeral channels. Water Board staff coordinate all mitigation requirements with staff from other federal and state regulatory agencies, including the USACE and the California Department of Fish and Wildlife. In determining appropriate mitigation ratios for impacts to waters of the State, Water Board staff considers Basin Plan requirements, which include, at minimum, a 1.5 to 1 mitigation ratio for impacts to wetlands. Water Board staff uses *12501-SPD Regulatory Program Standard Operating Procedure for Determination of Mitigation Ratios*, published December 2012 by the USACE, South Pacific Division, to enable us to determine a mitigation ratio for Projects that impact waters in our region. 104-8
8. The beneficial uses of water resources in the Lahontan Region are listed either by watershed (for surface waters) or by groundwater basin (for groundwater) in Chapter 2 of the Basin Plan. The environmental document should identify and list the beneficial uses of the water resources within the Project area and include an analysis of the potential impacts to water quality and hydrology with respect to those beneficial uses. Biological Resources Mitigation Measure Bio-1 describes impacts to biological species with respect to depletion or degradation of groundwater. Please be aware there are beneficial uses specified in Chapter 2 of the Basin Plan that are specifically protected with respect to preservation of biological habitats; rare, threatened and endangered species; and wildlife habitat among others. 104-9
9. Water quality objectives and standards, both numerical and narrative, for **all** waters of the State within the Lahontan Region, including surface waters and groundwater, are outlined in Chapter 3 of the Basin Plan. Water quality objectives and standards are intended to protect the public health and welfare, and to maintain or enhance water quality in relation to the existing and/or 104-10

potential beneficial uses of the water. It is these objectives and standards that should be used when evaluating thresholds of significance for Project impacts.

104-10
(cont'd)

10. To ensure that no net loss of function and value will occur as a result of Project implementation, we request that site facilities, equipment staging areas, and excavated soil stockpiles be microsited outside stream channels and floodplain areas. Buffer areas should be identified and exclusion fencing used to protect the water resource and prevent unauthorized vehicles or equipment from entering or otherwise disturbing the surface waters. Equipment should use existing roadways to the extent feasible.

104-11

Thank you for the opportunity to comment on the DPEIR. If you have any questions regarding this letter, please contact me at (760) 241-7305 (bbergen@waterboards.ca.gov) or Patrice Copeland, Senior Engineering Geologist, at (760) 241-7404 (patrice.copeland@waterboards.ca.gov).



Brianna Bergen, PG
Engineering Geologist

cc: Daniel Swenson, US Army Corps of Engineers
(Daniel.P.Swenson@usace.army.mil)
California Department of Fish and Wildlife, Region 6
(AskRegion6@wildlife.ca.gov)
State Clearinghouse (SCH No. 2014061039) (state.clearinghouse@opr.ca.gov)
USEPA Region 9, Wetlands Regulatory Office (R9-WTR8-Mailbox@epa.gov)

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Responses to Letter 104 – Lahontan Regional Water Quality Control Board

Response 104-1: The County recognizes the RWQCB's role as a CEQA responsible agency, and the PEIR provides associated information regarding RWQCB regulatory standards.

As described in Section 4.9.5, *Mitigation Measures*, detailed hydrology and water quality analyses will be required prior to implementation of all utility-scale (greater than 20 MW) solar facility development, and potentially for smaller solar projects (i.e., if determined appropriate after County review of individual applications). The associated requirements specifically include measures to: (1) appropriately manage local watersheds through efforts such as locating applicable facilities/activities outside of surface drainage courses and drainage channels, and using drainage structures to convey flows within/through development areas and maintain existing drainage patterns; (2) implement LID site design and treatment best management practices (BMPs) to the extent feasible; (3) maintain pre-development runoff rates and amounts (and thereby avoid potential hydromodification impacts); and (4) minimize developed/disturbed areas from proposed solar development to the maximum extent feasible.

With respect to the potential use of recycled (reclaimed) water at proposed solar sites, the discussion of County General Plan policies in Section 3.3, *Project Characteristics*, identifies a *New Water Resources Policy* (Policy WR-3.5) in the Conservation/Open Space Element. This policy specifically states (emphasis added):

The County shall require Renewable Energy Solar Facility development to incorporate measures to minimize water consumption and use of potable water and *encourage the use of reclaimed water and/or practices that do not require water during construction, the life of the facility, and during reclamation.*

Section 4.9.1.3, *Regulatory Framework*, of the PEIR also describes applicable federal and state regulatory standards related to jurisdictional waters, including the Clean Water Act, National Pollutant Discharge Elimination System, and Lahontan Region Basin Plan, along with associated beneficial uses and water quality objectives (with additional information on regulatory requirements for jurisdictional waters provided in Section 4.4.1.12). As indicated in this analysis and the discussion of related mitigation measures (Section 4.9.5), solar system development under the proposed project would include conformance with applicable requirements per the noted regulatory standards.

Response 104-2: As noted above in Response No. 104-1, Section 4.9, *Hydrology and Water Quality*, of the PEIR identifies applicable federal, state and local regulatory standards, including existing or proposed waste discharge requirements associated with site-specific development proposals. As such, any applicable solar development proposed under the REGPA would include conformance with all pertinent requirements, including waste discharge requirements associated with closed landfill sites. Specifically, the mitigation measures identified in Section 4.9.5 include requirements to assess effects related to surface drainage and water quality considerations for applicable development sites, including the installation of impervious surfaces and associated runoff generation, erosion, and pollutant loading/control. In addition, the issue of potential settlement associated with solar development under the proposed project is specifically addressed in Section 4.6, *Geology and Soils*, with related mitigation for settlement monitoring in applicable areas described in Section 4.6.5.

Response 104-3: As indicated above in Response No. 104-2, any applicable solar development proposed under the REGPA would include conformance with all pertinent regulatory requirements, including WDRs. This would specifically include all applicable waste discharges, with the mitigation measures in

Section 4.9.5 including a requirement to assess all pertinent effects related to surface drainage and water quality considerations for applicable development sites. Part of these efforts, as noted in Section 4.9, would include coordination with associated regulatory agencies.

Response 104-4: While solar panels would represent “impervious surfaces”, per se, as noted in this comment, the panels are typically elevated and mounted on support posts, with substantial areas of pervious surface retained beneath and/or adjacent to the panels/posts (refer to Figure 3-1 of the Draft PEIR). Accordingly, runoff from the panels would initially drain to these areas, with the referenced statement from Section 4.9.3.1 regarding anticipated impervious surfaces considered appropriate and applicable to most or all potential solar facilities. As indicated above in Response No. 104-1, however, detailed hydrology and water quality analyses will be required prior to implementation of all utility-scale (greater than 20 MW) solar facility development, and potentially for smaller solar projects. The associated requirements specifically include measures to preserve existing drainage characteristics, maintain pre-development runoff rates and amounts, and implement LID site design and treatment best management practices to the extent feasible. The implementation of such measures would serve to protect/preserve local watersheds and avoid potential hydromodification impacts.

Response 104-5: The issue of dewatering and associated regulatory requirements related to the potential discharge of extracted groundwater (and other applicable potential discharges) is described in Section 4.9.1.3 of the Draft PEIR. This discussion has been updated, however, to reflect the associated Permits/Orders identified in this comment.

Response 104-6: The discussions of regulatory requirements related to the National Pollutant Discharge Elimination Systems (NPDES) Construction General Permit in Sections 4.9.1.3 and 4.9.3 of the PEIR specifically call out the fact that associated BMPs, along with related monitoring and reporting, are required for permit conformance. The analyses also: (1) note that construction-related water quality effects would be addressed through standard best management practices (BMP) for associated pollutant categories/activities; (2) identify a number of related standard BMPs from applicable sources; and (3) document that the final measures would be determined during the permit process based on site-specific considerations. Because this represents mandatory conformance with existing/adopted regulatory standards, the associated potential impacts are considered by the County, as CEQA Lead Agency, to be less than significant. That is, such conformance must be provided for construction-related water quality impacts under existing regulatory standards. Accordingly, these potential impacts have not been reclassified as “potentially significant unless mitigation incorporated” as suggested in this comment, with the phrase “unless mitigation incorporated” not considered applicable based on the fact that standard BMPs (and potentially other measures as described in the analysis) are mandatory to provide conformance with the Construction General Permit as indicated in the PEIR.

Response 104-7: The County shares your perspective that proposed solar development under the REGPA should first attempt to avoid impacts to stream channels/drainage patterns, with mitigation to be implemented to address unavoidable impacts as required. To this end, Section 4.9.5 of the PEIR specifically identifies requirements to: (1) locate applicable facilities/activities outside of surface drainage courses and drainage channels; (2) re-route surface drainage around applicable facilities, with such re-routing to be limited to the smallest area feasible and re-routed drainage to be directed back to the original drainage course at the closest feasible location (i.e., the closest location to the point of diversion); and (3) use drainage structures to convey flows within/through development areas and maintain existing drainage patterns.

Response 104-8: Refer to Response No. 104-7 for information regarding efforts to avoid project-related impacts to water resources. With respect to impacts and associated mitigation requirements related to federal and State jurisdictional waters, please refer to “Impacts to Federally Protected Wetlands and Other Waters of the US as defined by Section 404 of the Clean Water Act” in Section 4.4.3.1 and Mitigation Measure BIO-20 “Minimize impacts to waters of the US/State, including wetlands.”

Response 104-9: The discussion of the Lahontan Region Basin Plan in Section 4.9.1.3 of the PEIR identifies the Basin Plan’s beneficial uses for surface and groundwater resources within the individual SEDAs and the OVSA, with these criteria included in the discussions of associated potential impacts and related mitigation requirements.

The following language has been added to Mitigation Measure BIO-1 requiring an evaluation of any potential impacts to beneficial uses for groundwater as specified in the Basin Plan:

The biological resources evaluation shall include a project specific evaluation of potential impacts to beneficial uses for groundwater, as specified in the Basin Plan. Chapter 2 of the Basin Plan protects beneficial uses for groundwater with respect to groundwater recharge and freshwater replenishment and beneficial uses for wildlife habitats and flora and fauna including cold freshwater habitat, warm freshwater habitat, wildlife habitat, rare, threatened, or endangered species, spawning, reproduction, and development, preservation of biological habitats of special significance, and migration of aquatic organisms (RWQCB 1995).

Response 104-10: The discussion of the Lahontan Region Basin Plan in Section 4.9.1.3 of the PEIR includes an overview of narrative and numerical water quality objectives for applicable areas and surface waters within the County. These criteria, along with other applicable standards, are included in the discussion of potential water quality impacts and associated mitigation measures (either directly, or indirectly through related requirements such as NPDES permits). Applicable mitigation measures in Section 4.9.5 have been modified, however, to specifically include the Basin Plan in the list of associated regulatory requirements.

Response 104-11: Please refer to Response No. 104-7 for information regarding proposed measures to avoid impacts to drainage courses, with the associated mitigation measures in Section 4.9.5 modified to specifically include potential project activities (e.g., staging and stockpiling), as well as facilities. The mitigation in Section 4.9.5 also includes requirements related to locating applicable facilities/activities outside of 100-year floodplain boundaries, and minimizing disturbance (e.g., through use of existing roads).

Mitigation Measure BIO-20 includes the following bullets to ensure no net loss of wetland functions and values:

- The project shall be redesigned or modified to avoid direct and indirect impacts on waters of the U.S./State, if feasible.
- If wetlands are filled or disturbed as part of the solar energy facility project, compensation will be implemented for the loss of wetland habitat to ensure no net loss of habitat functions and values. Compensation ratios shall be based on site-specific information and determined through coordination with state and federal agencies (including CDFW, USFWS, and USACE). The compensation shall be at a

minimum 1:1 ratio (1 acre restored or created for every 1 acre filled) and may be a combination of on-site restoration/creation, off-site restoration, or mitigation credits. A restoration and monitoring plan shall be developed and implemented if onsite or offsite restoration or creation is chosen. The plan shall describe how wetlands shall be created and monitored for the duration established by the regulatory agency.

With respect to buffer areas and exclusion fencing, Mitigation Measures BIO-19 and BIO-20 include requirements for the installation of fencing for riparian habitats and waters of the U.S./State, including wetlands, respectively.

The following bullet was added to Mitigation Measure BIO-20:

- All construction vehicles and equipment shall use existing roadways to the extent feasible to avoid or reduce impacts to waters of the U.S./State.



United States Department of the Interior



Letter 105

NATIONAL PARK SERVICE
Pacific West Region
333 Bush Street, Suite 500
San Francisco, California 94104 2828

January 14, 2015

Joshua Hart
Planning Commission
Inyo County Planning Department
P.O. Drawer L
Independence, CA 93526

Dear Mr. Hart:

We are writing to provide comments on Inyo County's Renewable Energy General Plan Amendment (REGPA) and Environmental Impact Report (EIR). The National Park Service (NPS) supports the efforts of Inyo County to define where and how renewable energy would be permitted in the County. We appreciate being invited to participate in the planning process as a stakeholder. We are also appreciative of the responsiveness of the County to NPS and other comments in the earlier public meetings and comment periods.

The NPS fully supports renewable energy projects so long as such projects 1) do not adversely affect National Park units, 2) can be constructed and operated in an environmentally responsible manner, 3) protect natural and cultural resources and 4) protect our treasured landscapes. It is the role of the NPS to contribute to the planning process and to help ensure that renewable energy projects are "Smart from the Start." Our goal is to provide expertise and practical and specific feedback in order to avoid significant adverse impacts to the resources and visitor experiences of Death Valley National Park, the Old Spanish National Historic Trail, and Manzanar National Historic Site. Comments are organized as general comments and NPS unit-specific comments below. Please contact Lara Rozzell at (415) 623-2205 for further clarification or information.

105-1

Sincerely,

Jay Goldsmith
Chief, Natural Resources
Pacific West Region, National Park Service

General Comments

We look forward to commenting in more detail throughout the stakeholder involvement process and the Programmatic Environmental Impact Report (PEIR) process. The NPS team is continuing analysis of the proposed policies and designations, and welcomes opportunities to work with staff and decision makers throughout the process.

105-1
(cont'd)

The NPS thanks the County for its responsiveness to public concern over the earlier proposed versions of the REGPA. In particular, we commend the county for proposing new visual resource policies that reflect the importance of tourism and recreation in continuing economic development of the County, and for recognizing the national and international significance of the Death Valley National Park night skies.

Planning and Land Use

The currently proposed Plan Amendment contains a Land Use Implementation Measure as follows:

105-2

“The County shall coordinate with agencies managing lands within the County’s boundary to avoid, minimize, or mitigate potential impacts from Renewable Energy Solar Facilities to an acceptable level as determined by the County.”

The NPS appreciates coordination from the County, and suggests the following more specific language:

“The County shall coordinate with the National Park Service, Death Valley National Park, Manzanar National Historic Site, and Old Spanish National Historic Trail personnel on the siting of renewable energy facilities in a manner that does not significantly impact resources of congressionally designated units of the National Park System. Issues to be addressed in the coordination include but are not limited to: wildlife habitat and corridor impacts, invasive species, light and glare, air quality, night sky resources, and visual resource impacts including proposed development heights, traffic impacts, and renewable energy construction personnel training regarding preservation of natural and cultural resources.”

Earlier guidance for the REGPA included only wilderness lands within NPS units as “Areas to be Considered for Exclusion”. Please add NPS units, in their entirety, as “Areas to be Considered for Exclusion” from Solar Energy Development Areas (SEDA’s). Of particular concern, page 4.10-6 refers to the Owens Valley Study Area as a “SEDA managed by several agencies...including the National Park Service”. Please clarify whether there is a SEDA envisioned that will include land managed by the NPS.

The NPS commends the County for recognition and protection of the unique visual resources of the landscapes under study. The NPS recommends recognition in the EIR of the differing visual impacts specific to choice of solar technology, and identification of appropriate technologies within individual SEDA’s or portions of SEDA’s; for instance, currently proposed power towers

for concentrated solar power projects (located outside of Inyo County) range up to 750 feet in height. Areas within the proposed SEDA's may be appropriate for photovoltaic development with its lower profile and visual impact, but could be inappropriate for power tower construction due to visual impacts. The NPS can provide viewshed analysis for areas of particular visual sensitivity and encourages the County to use viewshed analysis for other visual resources within the County.

105-2

Water Use

The Project contains a Water Resource Policy as follows:

“Policy WR-3.5 (Sustainable Renewable Energy Solar Development) – The County shall require Renewable Energy Solar Facility development to incorporate measures to minimize water consumption and use of potable water and encourage the use of reclaimed water and/or practices that do not require water during construction, the life of the facility, and during reclamation.”

105-3

The NPS commends the County for establishing policy to protect increasingly constrained water resources and for continuing to refine and expand on the language for water protection. The NPS suggests further information will be useful on the specifics of how water consumption will be minimized, and recommends the adoption of best practices from the BLM Solar PEIS in the PEIR.

Solar PEIS Variance Areas

The current draft REPGA includes a commitment from the County to encourage renewable energy development on BLM Solar PEIS variance areas, which were characterized in an earlier staff report as “fully studied and vetted as optimal for renewable energy.” In contrast, the BLM Solar PEIS Record of Decision (ROD) states that “A variance process was established to allow development outside of SEZs on an exceptional basis” and also states that:

105-4

“The BLM will consider ROW applications for utility-scale solar energy development in variance areas on a case-by-case basis based on environmental considerations; coordination with appropriate Federal, state, and local agencies and tribes; and public outreach. The responsibility for demonstrating to the BLM and other coordinating parties that a proposal in a variance area will avoid, minimize, and/or mitigate, as necessary, sensitive resources will rest with the applicant. The modification of variance areas would involve planning-level decisions and require the BLM to amend applicable land use plans.”

The NPS recommends that Inyo County maintain the distinctions applied by BLM between lands recommended for renewable energy development (disturbed lands, DRECP development focus areas, etc.) and the variance lands. The variance lands, as stated in the Solar PEIS ROD, require considerable study, interagency cooperation, tribal consultation, and BLM land use planning amendment before an application can be approved.

The NPS suggests discussion in the EIR of the specific measures to be used in the permitting process to encourage development within SEDA's. In particular, please identify how development would be encouraged within the SEDA's in contrast to the incentives for development that may be applied to Solar PEIS variance areas.

105-4
(cont'd)

Cultural and Ethnographic Studies

The sites and landscapes under consideration in Inyo County for solar development may contain a variety of natural and cultural resources that American Indian peoples define as heritage or traditional resources, as well as cultural resources important to recent American history. The NPS encourages a robust cultural analysis of the area of consideration in the REGPA and recommends ethnographic study, particularly for the Owens Valley area. Ethnographic study should include participation by the tribes affiliated with areas under study.

105-5

Cumulative Effects

The BLM Las Vegas/Pahrump Draft Resource Management Plan and Environmental Impact Statement proposes intensive renewable energy development areas in Nevada directly adjacent to the Inyo County Planning area. Cumulative effects from the proposed Nevada developments will need to be considered in the Inyo County PEIR. Cumulative effects of groundwater withdrawals, air quality impacts, and visual resource impacts are of particular concern to the NPS. The NPS recommends early analysis of cumulative effects to inform the designation of SEDA's along the Nevada state line.

105-6

Death Valley National Park

The formerly proposed Death Valley Junction SEDA was located within the Amargosa Desert, the location of the detached Devils Hole unit of Death Valley National Park that provides the sole habitat for the federally listed Devils Hole pupfish. Courts have ruled that NPS has a federally reserved water right in Devils Hole. The 1976 Supreme Court ruling in Cappaert v. United States led to a curtailment of ground water pumping near Devils Hole. This resulted in some recovery of the Devils Hole water level, but the water level remains well below the "pre-Cappaert" level. Water in the Amargosa Desert Hydrographic Basin is over-appropriated and over-pumped. Many concerns were raised over similar groundwater issues in the 2011 scoping report for the California BLM Desert Renewable Energy Conservation Plan (DRECP). For these reasons, the NPS gratefully supports the County's decision to remove Death Valley Junction from the list of proposed SEDAs.

105-7

The formerly proposed Panamint Valley SEDA is located in an area that is highly visible from Surprise Canyon, Telescope Peak, and other very popular visitor use destinations in Death

105-8

Valley National Park. Utility-scale renewable energy development would vastly alter the viewshed, the scenic resources, and the experience of visitors to that part of Park. The NPS supports the decision of the County to apply its criteria for exclusions from renewable energy development, in particular criterion I identified in stakeholder worksheets: “Scenic Resources.” Moreover, the preferred alternative in the most recent draft of the DRECP proposes designating the Panamint Valley SEDA as an ACEC and a National Conservation Land. We support these protective designations and appreciate the County’s acknowledgement of the visual resource impacts that would accompany commercial development.

105-8
(cont'd)

The formerly proposed Centennial Flat/Darwin SEDA, particularly in the larger designation of the more intense development alternative, raised concerns about the potential depletion of Death Valley National Park’s groundwater resources. Groundwater withdrawal in this area would potentially reduce the discharge of the springs which support Darwin Falls, a highly popular visitor destination and a unique perennial waterfall occurrence in this arid setting. The NPS commends the County for removing the proposed Centennial Flat/Darwin SEDA.

105-9

Comments on specific text and maps in the document are included in Table 1 below.

Manzanar National Historic Site

The formerly proposed Owens Valley REDA and Sierra Wind: Owens Valley REDA were of particular concern for potential impacts to the Manzanar National Historic Site (Manzanar). The NPS commends the County for removing these proposed development areas from REGPA consideration, and requests further clarity on likely treatment of these areas for future development. The development of a utility-scale solar facility within the viewshed of Manzanar will have irreversible negative impacts to the authentic cultural experience for visitors and the cultural landscape associated with Manzanar. The uncertainty in the current REGPA process around potential wind and solar development raises questions about CEQA analysis of cumulative effects. Future projects in the Owens Valley and in the Sierra Winds area would have cumulative effects relevant to the REGPA. The NPS requests that the County link the process for renewable energy planning in these areas concurrent with the REGPA development, so that cumulative effects can be fully analyzed by the County and commented upon by the public and other agency stakeholders.

105-10

Manzanar is a California Registered Historic Landmark (1972), Los Angeles Historic-Cultural Monument (1976), listed on the National Register of Historic Places (1979), and a National Historic Landmark (1985). It was designated a National Historic Site by Congress in 1992. In 2004 the National Park Service opened a visitor center in the adaptively restored historic high school auditorium. Annual visitation averages 82,000 per year.

105-11

Manzanar was established to preserve the stories of the internment of nearly 120,000 Japanese Americans during World War II and to serve as a reminder to this and future generations of the

*National Park Service scoping comments on the Inyo County Renewable Energy General Plan Amendment
Page 5 of 11*

fragility of American civil liberties. As the Japanese American internees discovered, Manzanar feels like the middle of nowhere. Although Manzanar is only 814 acres, Manzanar is surrounded by some of the largest tracts of public lands in the country. This allows for the preservation of an important and invaluable cultural landscape appearing largely as it did when 11,070 Japanese Americans were confined here between 1942–1945.

105-11
(cont'd)

Natural systems were historically important characteristics in the initial selection and development of the Manzanar War Relocation Center in 1942. At the largest scale, the natural landforms defining the valley—the Sierra Nevada, White, and Inyo Mountains—were the dominant structuring features that physically and perceptually contained the valley. They provide a strong visual context for the camp and all of the views and vistas from the camp. The topography of the valley and the low-growing vegetation allowed for expansive views of the mountain ranges on either side of the camp—reasons that the U. S. Army selected this site in 1942.

Sue Kunitomi Embrey (1923-2006), Former Internee, Founder of the Manzanar Committee and Chair of the Congressionally established Manzanar Advisory Commission, reflecting about the power of this place stated:

“As the rock gardens, the pleasure parks and the ponds brought solace to the internees beneath the high majestic Sierras, so can the Manzanar National Historic Site be a healing source for the devastation of the human spirit which we all experienced, not only for the Japanese American community, but for America as well.”

Since 1969 the Manzanar Committee, a non-profit educational organization, has sponsored an annual pilgrimage to Manzanar. Former internees, their families, friends, and a growing number of young people gather at the Manzanar cemetery to remember, to honor, and to carry the lessons of this experience into the future. The event takes place on the last Saturday of April each year. For the 44th Annual Manzanar Pilgrimage, an estimated 1,500 participants made the Pilgrimage. Many of the pilgrims remarked that the 2013 Pilgrimage was the most inspirational that they could recall.

If utility-scale energy generation projects were built in the Owens Valley REDA and/or Sierra Winds: Owens Valley REDA, there would be significant adverse impacts to the scenic vistas and the culturally significant views from Manzanar. The setting, feel, and association of the area are of remote isolation. The construction of a utility-scale solar facility that will employ the use of large photovoltaic (PV) panels will add industrial intrusions to the natural landscape, impacting the cultural landscape and visual resources. In addition, facility lighting and the potential for glint and glare from the panels have a high potential for significant adverse impacts to Manzanar’s visual resources, visitor experience and night sky resources.

105-12

Air quality in the Owens Valley is very good except in the category of inhalable particulates, where there are major deficiencies because of dust generated in the Owens Lake area. Owens

105-13

Valley is subject to frequent high winds and inclement weather conditions that are dependent on the season. Fugitive dust as a result of construction activities and grading is a significant concern for human health and visual resource impacts. Utility-scale solar projects that utilize large-scale land clearing activities for the installation of PV panels severely damage existing vegetation cover and the fragile biological crust that stabilizes surface soils, creating problematic fugitive dust conditions.

105-13
(cont'd)

The junction of U.S. Highway 395 and Manzanar Reward Road is not a signalized intersection. The addition of significant construction traffic volume to the existing traffic volume at that intersection is likely to increase the hazards for all motorists and bicyclists passing through that intersection. Signalizing the intersection would drastically affect the historic landscape, changing its character from rural to urban. Even if no adjacent focused development areas are identified in this REGPA, the NPS recommends consultation with the California Department of Transportation District 9 staff to analyze and to suggest mitigations for potential highway traffic hazards associated with future utility-scale development in the Owens Valley.

105-14

Old Spanish National Historic Trail

The NPS is concerned about the potential designation of the Charleston View SEDA, the Chicago Valley SEDA and the Sandy Valley SEDA in close proximity to the cultural corridor that constitutes the Old Spanish National Historic Trail (NHT). Proposed energy zones across the Nevada state line could also contribute to significant cumulative effects. In particular, there are High Potential Segments of the trail at Stump Springs and Emigrant Pass that could be affected by solar developments in the Charleston View SEDA. “High Potential Segments” are defined in the National Trails System Act of 1968 (as amended) as “those segments of a trail which would afford high quality recreation experience in a portion of the route having higher than average scenic values or affording an opportunity to vicariously share the experience of the original users of a historic route.” The quality and integrity of trail segments, associated sites, and the trail setting provide the visitor with the opportunity “to vicariously share the experience of the original users of a historic route” (National Trails System Act of 1968) make this one of the premier trail experiences anywhere along the Old Spanish NHT. The potential scope of renewable energy development in this area would adversely affect the trail viewshed and significantly degrade the visitor experience. The Chicago Valley and Sandy Valley SEDAs would likely only affect trail resources if tall structures such as power tower technology were employed, or if transmission lines associated with those areas were constructed near the Old Spanish NHT. In addition to the Old Spanish NHT, other cultural resources that could be affected include the Mormon Road, the Salt Song Trail, and the Pahrump Metapatch Mesquite Woodland-Coppice Dune Archaeological Landscape.

105-15

Designation of a NHT is a rigorous process. The NPS conducted exhaustive research—both documentary and in the field—to document the significance, integrity, and location of the Old Spanish NHT as part of the feasibility study for its designation. The language of the National

Trails System Act of 1968 (as amended) states: (To be designated as a National Historic Trail...) "It must be a trail or route established by historic use and must be historically significant as a result of that use. The route need not currently exist as a discernible trail to qualify, but its location must be sufficiently known to permit evaluation of public recreation and historical interest potential." The trail was determined to be nationally significant (NPS 2001:23) in terms of National Historic Trail criteria. Congress agreed, designating the Old Spanish NHT in 2002. The California Desert Renewable Energy Conservation Plan (DRECP), which will factor into future permitting decisions for renewable energy development on lands in Inyo County, also will address National Historic Trail protection. Lands with proximity and potential effects on NHT resources may be designated as National Conservation Lands, depending on the eventual chosen Plan alternative. The NPS encourages Inyo County to approach trail resource protection in alignment with the DRECP process.

105-15
(cont'd)

In response to the County request for relevant references to inform the EIR, the NPS has included a list of references which pertain to Old Spanish NHT trail use and remnants in Inyo County. The NPS is available to continue discussions with Inyo County regarding the potential impacts to the visitor experience on this nationally significant Historic Trail, and to find the best ways to avoid, minimize, or offset impacts to the visitor experience.

Old Spanish National Historic Trail references

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Hafen, Leroy and Hafen, Ann 1993 The Old Spanish Trail. Lincoln, NE, and London: University of Nebraska Press. [originally published 1954]

Lawrence, Eleanor, 1932. Mexican Trade between Santa Fe and Los Angeles, 1830-1848. California Historical Society Quarterly 10: 27-39.

Lyman, E., 2004. The overland journey from Utah to California: Wagon travel from the City of Saints to the City of Angels. Reno & Las Vegas: University of Nevada Press.

Myhrer, Keith, White, William G., and Rolf, Stanton D. 1990. Archaeology of the

Old Spanish Trail/Mormon Road from Las Vegas, Nevada to the California border. U.S. Department of the Interior, Bureau of Land Management Contributions to the Study of Cultural Resources: Technical Report 17.

Steiner, Harold 1999. The Old Spanish Trail across the Mojave Desert. Las Vegas, NV: the Haldor Co.

Warren, Elizabeth von Till, 1974. Armijo's trace revisited. A new interpretation of the impact of the Antonio Armijo route of 1829-1830 on the development of the Old Spanish Trail. Unpublished M.A. thesis, University of Nevada, Las Vegas.

105-15
(cont'd)

Table 1 – Comments specific to text and maps in the Inyo County REGPA DEIR

Section #	Page #	Paragraph	Comments
Table ES-1	27	AE5-3	The NPS recommends the use of the Bureau of Land Management’s environmental colors. Projects on BLM lands would likely be required to use the colors, and their effectiveness has been studied in multiple landscape types. If the County does not wish to require the use of BLM environmental colors, it may be useful to provide the recommendation for proponents for informational purposes.
Sec. 4.4	312	Table 4.4-9	Please move this table so it directly follows information on the Trona SEDA. It may be confusing to the reader to see this Trona summary with the text of the Chicago Valley description
Sec.4.4	314	1 st paragraph	This paragraph describes special status species within the Trona SEDA, but is in the body of text regarding the Charleston SEDA.
Sec.4.4	113	2 nd	Will water be trucked in or taken from groundwater to spray roads and wash mirrors?
Fig. 4.4-3	194	2 nd	This paragraph describes the BLM visual resource management system, including the management objective of preserving the existing character of the landscape in Class I wilderness areas. The proposed Charleston View, Chicago Valley, Sandy Valley may impact visual resources in adjacent wilderness areas. Please analyze how this impact relates to Class I visual resource management objectives.
Sec. 4-5	414	Federal Regulations	The NPS suggests inclusion of the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA).
Sec. 4.5	Figure 4.5-1	Map	The NPS suggests greater scrutiny of the Chicago Valley SEDA, specifically in regard to the proximity of historically used obsidian quarries.
Sec. 4.15	663	Death Valley NP	The extent of Death Valley NP is 3.4 million acres.
Sec. 4.9	534	Watershed and Drainage Characteristics	The plan states, “Principal drainage in the noted hydrologic designations is through the Amargosa River and a number of associated ephemeral washes, with these flows internal and terminating in Death Valley.” Because of this hydrologic connectivity, any utility scale development in the vicinity of the southeastern portion of the park may have adverse hydrologic impacts. Please address how potential impacts will be analyzed and any protective measures that would be used to avoid, minimize, or compensate for impacts.
Sec. 5.2.2	765	Biological Resources	Death Valley NP is concerned about potential impacts from the Chicago Valley SEDA on migratory birds that utilize the Amargosa River drainage. Mitigation measures should involve an adaptive process of biological surveys to reveal previously unrecorded species of concern, and to track effects over time from development. The 1,000 foot avoidance corridor proposed on page ES-59 is not accompanied by a reference or scientific explanation regarding bird avoidance

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105-25 (cont'd)

<p>Section 4.9</p>	<p>Hydrology and Water Resources</p>		<p>distances. Please provide information regarding the protection level expected from this avoidance corridor. Development in the Chicago Valley SEDA has potential to impact water resources along the Amargosa River (a Wild and Scenic River). The SEDA is up gradient from Death Valley National Park resources such as Saratoga Springs, which is home to the Saratoga Springs Pupfish and an additional five rare invertebrate species also occur at Saratoga Spring and include: the Amargosa tryonia snail, the Amargosa spring snail, the Saratoga Springs belostoma bug, the Amargosa naucorid bug, and the Death Valley June beetle (Bedinger, M. S., and J. R. Harrill. 2012. Groundwater geology and hydrology of Death Valley National Park, California and Nevada. Natural Resource Technical Report NPS/NRSS/WRD/NRTR—2012/652. National Park Service, Fort Collins, Colorado). Please address potential groundwater impacts to Saratoga Springs related to utility-scale renewable development in the Chicago Valley SEDA.</p>
<p>Section 4.8.1.2</p>	<p>Hazardous Materials</p>	<p>492</p>	<p>This section states that there are three DTSC listed sites at Camp Manzanar. The NPS administers the Manzanar National Historic Site, and is unsure what extent is referred to by "Camp Manzanar". The NPS is unaware of DTSC sites within Manzanar National Historic Site. Please identify the mapped extent of Camp Manzanar, and also the location and details of these DTSC sites. The NPS is concerned about the inclusion of Manzanar sites in this section regarding disturbed lands, as the disturbed lands are generally prioritized for utility scale development. For reasons covered well in other sections of the document, Manzanar NHS and surroundings are not appropriate for utility scale development. Please remove reference to the Manzanar sites in this section. Alternatively, please include a statement that due to the presence of Manzanar NHS, these disturbed sites are not prioritized for development. Please add this sentence to the paragraph: "The NPS also administers the congressionally designated Old Spanish National Historic Trail in portions of the County."</p>
<p>Section 4.1-9</p>	<p>National Park Service</p>	<p>195</p>	<p>Please remove the unjustified and inaccurate statement "the focus of visitors of the national historic site is generally inward and on the facilities within the site rather than on the surrounding areas and visual landscape. For this reason, viewers from this location would, in general, not be highly sensitive to changes in the visual environment resulting from solar energy projects in close proximity to the national historic site within the OVSAs." The focus of visitors is not limited to the site and its features. The landscape setting and cited sense of isolation are important aspects of the overall visitor experience. Viewers would be sensitive to visual intrusions that could diminish those experiences.</p>
<p>Section 4.1-17</p>	<p>National Park Service</p>	<p>203</p>	<p>intrusions that could diminish those experiences.</p>

105-26

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105-28

105-29

Responses to Letter 105 – National Park Service

Response 105-1: The letter acknowledges the County’s public planning efforts and summarizes the NPS’s interest and role in the project. No response is necessary.

Response 105-2: The referenced implementation measure, as written, will require coordination with the NPS (as well as the entities referenced in the comment), and other resource agencies, when future solar energy projects are proposed. Because the REGPA EIR is a PEIR, it is intended to establish a framework and process for future implementation of solar energy projects that fall within the parameters evaluated in the PEIR. Individual projects will be required to prepare a project-specific environmental analysis and associated CEQA document to evaluate the project’s potential impacts, including the issues noted. Project-specific analysis will address the types of impacts and mitigation measures outlined in the PEIR as guidelines. Project specific CEQA-compliance documents will be subject to public and resource agency review.

The Manzanar National Historic Site is located in the OVSA. The text on page 4.10-6 has been updated to clarify that the remaining land in the OVSA is managed by several agencies, including the NPS. No SEDAs contain NPS land.

With regard to the use of viewshed analysis, as discussed above, individual projects will be required to prepare a project-specific environmental analysis and associated CEQA document to evaluate potential impacts, including visual impacts. The method that will be utilized during project-specific visual analysis includes the identification of the existing visual setting for the specific project and an associated analysis to determine the potential visual impacts of the proposed project on that setting.

Response 105-3: With respect to specific measures to reduce water requirements, Section 3.3.6.1 of the PEIR notes the potential to use solar PV rather than solar thermal systems (with solar PV systems requiring substantially less water, refer to Table 3-2 of the PEIR), as well as the use of dry-cooling or hybrid wet-dry cooling for solar thermal systems (which can reduce water by up to 97 percent based on system design and location). In addition, the BLM’s Solar PEIS has been incorporated by reference along with the related BMPs outlined in that document as they pertain to water reduction measures.

Response 105-4: Refer to the discussion of the Bureau of Land Management Solar Energy Program in Section 2.4.3.1 for a discussion of the variance areas in the County. In the last paragraph, variance areas are described as those areas that have been identified as possibly appropriate for development, but would require a variance from the BLM prior to any construction. In addition, Land Use Implementation Measure #5 of the REGPA has been revised as follows:

54. The County shall encourage renewable energy solar facility development projects (~~1a~~) on disturbed lands such as solid waste and wastewater treatment facilities, brown fields, including abandoned mine sites; (~~2~~) within Desert Renewable Energy Conservation Plan Development Focus Areas; (~~3~~) within Variance Areas identified by the Solar Programmatic Environmental Impact Statement, and (~~b4~~) that are distributed generation projects commercial scale renewable energy solar facilities instead of utility scale renewable energy solar facilities.

Response 105-5: As a programmatic document, it is beyond the scope of this PEIR to include in-depth ethnographic studies of the different SEDAs.

In Section 4.5.3.2, under “Preliminary Project Specific Resource Identification,” consultation with Native American tribes is called out as a method to identify resources during future preliminary project-specific analyses.

Response 105-6: As outlined in Section 5.1, *Cumulative Effects*, the analysis of cumulative effects in the PEIR “...also considered...proposed major utility and transportation infrastructure improvements, and proposed projects on land governed by the NPS, USFS, and BLM.” Specifically, as noted in Table 5-1 of the PEIR, this would include consideration of applicable potential cumulative effects associated with proposed solar development on BLM lands in the State of Nevada. Potential cumulative, as well as project-level direct and indirect, impacts will be a consideration in the decisions regarding the approval of individual solar development project under the REGPA, both in the PEIR and, as applicable, in the individual project-specific environmental analyses.

Response 105-7: The County acknowledges and appreciates the positive feedback from the NPS regarding the removal of the Death Valley Junction SEDA from consideration as part of the REGPA.

Response 105-8: The County acknowledges and appreciates the positive feedback from the NPS regarding the status of the Panamint Valley Junction SEDA.

Response 105-9: The County acknowledges and appreciates the positive feedback from the NPS regarding the removal of the Centennial Flat/Darwin SEDA from consideration as part of the REGPA.

Response 105-10: The County acknowledges and appreciates the positive feedback from the NPS regarding the removal of the Owens Valley and Sierra Wind: Owens Valley REDAs from consideration as part of the REGPA.

Please note that, in response to extensive input from the public, wind energy was also removed from consideration in mid-2014, prior to the completion of the DPEIR. With respect to potential cumulative impacts associated with the REGPA process, please refer to Response No. 105-6 above. As noted therein and in Section 5.1, an extensive list of cumulative projects was considered in the PEIR’s cumulative analysis, with these (and/or other appropriate projects) to also be used for project-specific environmental analyses under the REGPA, as applicable. All relevant environmental reviews would be subject to appropriate public /agency review, pursuant to associated State CEQA and County guidelines.

Response 105-11: The County acknowledges and understands the importance of historical and related intangible values associated with the Manzanar National Historic Site. The site is specifically included in the assessment of cultural resources provided in Section 4.5 of the PEIR. Because this comment does not raise specific issues related to the adequacy of the PEIR, no further response is required.

Response 105-12: The commenter is correct that significant visual impacts could occur to resources. This is discussed in Section 4.5.3.3 of the PEIR.

Response 105-13: Section 4.3, *Air Quality*, of the PEIR identifies and evaluates potential construction-related air quality impacts, including dust generation, from development under the REGPA. These impacts have been determined to be potentially significant and associated mitigation for dust control is identified in Section 4.3.5, including efforts such as regular watering and/or used of non-toxic chemical stabilizers, covering transport vehicles, street (and other appropriate area) sweeping, and restrictions on grading activity (i.e., during high winds) and construction vehicle speeds. The analysis in Section 4.3

concludes that the use of these and other applicable measures would reduce potential construction-related dust generation impacts from potential REGPA development to below a level of significance.

Response 105-14: The potential impact from construction traffic stemming from utility-scale solar energy development was identified and analyzed in Section 4.17 of the PEIR. Mitigation Measures TRA-1 and TRA-2 require the preparation of site-specific traffic control plans and implementation of recommendations from such plans on the surrounding roadways and intersections. Although no site-specific solar energy development is proposed through the REGPA, these measures would apply to any utility-scale solar energy development proposed in the Owens Valley and consultation with Caltrans may be required at that time.

Response 105-15: The County acknowledges and understands the importance of National Historic Trail resources, and Section 4.5 of the PEIR identifies and describes associated sites, including the Old Spanish National Historic Trail, Mormon Road, Salt Song Trail, and Pahrump Metapatch Mesquite Woodland-Coppice Dune Archaeological Landscape. Potentially significant impacts are identified in association with these and other applicable cultural resources, with associated mitigation provided in Section 4.5.5 to address these potential impacts to the extent feasible.

The County appreciates the inclusion of relevant references associated with the Old Spanish National Historic Trail, as well as the NPS offer to provide continued input on this trail. These resources will be utilized as applicable for all related subsequent environmental analyses.

Response 105-16: The County will consider the recommendation to use “BLM environmental colors” for related visual mitigation efforts, and/or to provide associated information to project development proponents. These recommendations will be considered in all applicable subsequent development proposals.

Response 105-17: Table 4.4-9 has been moved so it is located on the page following the first mention of the table in the text.

Response 105-18: The referenced text has been modified according to the comment.

Response 105-19: While specific details regarding potential solar development under the REGPA are not currently available (i.e., as no specific development proposals have been submitted and the proposed sources of water are not yet known), it is anticipated that water used for purposes such as dust control and mirror washing would be minimized and restricted to non-potable sources to the maximum extent feasible. Section 3.3, *Project Description*, of the PEIR identifies the following related policy from the County General Plan Conservation/Open Space Element:

New Water Resources Policy

- Policy WR-3.5: Sustainable Renewable Energy Solar Development. The County shall require Renewable Energy Solar Facility development to incorporate measures to minimize water consumption and use of potable water and encourage the use of reclaimed water and/or practices that do not require water during construction, the life of the facility, and during reclamation.

Response 105-20: As stated on page 4.1-8 in the PEIR, the BLM Visual Resource Management Class I objective is “to preserve the existing character of the landscape. The level of change to the

characteristic landscape should be very low and must not attract attention.” The PEIR states that some of the SEDAs are located partially within BLM-managed lands and are therefore designated with various BLM VRI classifications (refer to Figure 4.1-1). The PEIR concludes that solar energy projects proposed on BLM-managed lands within areas of a SEDA designated as Class I or II would not achieve the management directives because the project would result in a substantial change to the visual environment. Proposed installation of solar energy projects on BLM-managed land would require coordination and compliance with BLM visual guidelines. Given the designated high value of visual resources within these areas, proposed solar energy developments within BLM VRI Class I and II areas would potentially result in significant visual impacts.

Response 105-21: The Native American Graves Protection and Repatriation Act of 1990 has been added to the discussion of federal regulations in Section 4.5.1.3.

Response 105-22: Individual projects (including those in the Chicago Valley SEDA) will be required to prepare a project-specific environmental analysis and associated CEQA document to evaluate potential impacts to sensitive resources, including cultural. This process will address the types of impacts and utilize the mitigation measures outlined in the PEIR as guidelines. Project specific documents will be subject to public and resource agency review.

Response 105-23: The listed acreage for Death Valley National Park in Section 4.15, *Recreation*, has been modified accordingly.

Response 105-24: As outlined in Section 4.9.3, potential impacts related to issues including drainage alteration and groundwater resources (including groundwater-dependent surface features such as springs and marshes) were determined to be potentially significant. A number of associated mitigation measures are provided in Section 4.9.5, including requirements to conduct detailed drainage and groundwater studies for applicable proposed developments under the REGPA.

Response 105-25: The requirement for project proponents to prepare a Bird and Bat Conservation Strategy (BBCS) was added to Mitigation Measure BIO-18. The BBCS will describe proposed actions to avoid, minimize, and mitigate adverse effects to migratory birds protected under the Migratory Bird Treaty Act (MBTA) during construction and operation of a proposed project (see response to comment 102-14 for the BBCS measure).

The following bullets were added to the *General Bird Mortality Avoidance Measures* section in Mitigation Measure BIO-18 to further reduce impacts to migratory birds:

- The most current science regarding visual cues to birds that the solar panel is a solid structure shall be implemented. This may include but is not limited to UV-reflective or solid, contrasting bands spaced no further than 28 centimeters from each other. An adaptive management approach for reducing bird collisions with solar panels shall be implemented in coordination with the USFWS so that measures used are systematically tested and modified as appropriate. ~~This may include but is not limited to UV-reflective or solid, contrasting bands spaced no further than 28 centimeters from each other.~~
- Projects with documented avian mortality shall work with the USFWS to conduct additional research to test measures for reducing avian mortality. Such measures

could include, but are not limited to, experimental lighting within the solar field and use of detection and deterrent technologies.

- Developers of Ppower tower operations shall be suspended during peak migration times for indicated species. implement adaptive management in consultation with the USFWS should mortality monitoring indicate that suspension of power tower operations during certain periods is necessary to reduce impacts on local or regional bird populations. Such measures may include, but are not limited to, suspending or reducing project operations during peak migration seasons.

The Mitigation Measure BIO-18 section entitled *Minimize Impacts from Solar Flux* was revised as follows

The following mitigation measures shall be implemented in order to minimize avian impacts from solar flux:

- Solar thermal developments utilizing solar power tower technologies shall not be sited in or within a minimum of 1,000 feet of from Important Bird Areas (as determined by the County in consultation with Responsible and Trustee agencies), the OVSA, or riparian or other aquatic habitats including lakes, ponds, rivers, streams, and perennial wetland habitats unless potentially significant impacts are avoided, although the appropriate buffer distance shall be determined on a project-by-project basis as determined by the County in consultation with responsible and trustee agencies. This requirement generally does not apply to seasonal or ephemeral wetland habitats unless deemed necessary by a qualified biologist in light of the wetland's specific habitat value for bird species.
- The County shall require developers proposing solar power tower technology to coordinate with the USFWS during project planning. As part of that coordination process, and in conjunction with the project's next tier of CEQA review, the USFWS will advise the County whether a Bird and Bat Conservation Strategy would be necessary for the project, and if required, would adequately reduce the effects of the project on migratory birds and bats.

Response 105-26: As described above in Response No. 105-25, mitigation measures are identified in Section 4.9 of the PEIR to address potential impacts to groundwater resources and groundwater-dependent surface features such as springs and marshes.

Response 105-27: Information in Section 4.8, *Hazards and Hazardous Materials*, regarding the three noted Department of Toxic Substances Control (DTSC) sites (Manzanar Retention Center, Camp Manzanar and Manzanar Rec Area) was derived from the DTSC Envirostor Database. Links to the associated sites are provided below, with these sites providing additional information regarding the nature and location (including mapping) of these listings. While disturbed lands may be "generally prioritized for utility scale development" as noted in this comment, the Manzanar National Historic site is included in the analysis of cultural resources provided in Section 4.5 of the PEIR, and the associated cultural resource values will be considered in any decisions regarding the location and suitability of applicable utility scale solar development under the REGPA.

Manzanar Retention Center

http://www.envirostor.dtsc.ca.gov/public/search.asp?CMD=search&city=&zip=&county=&case_number=&business_name=manzanar+retention+center&FEDERAL_SUPERFUND=True&STATE_RESPONSE=True&VOLUNTARY_CLEANUP=True&SCHOOL_CLEANUP=True&CORRECTIVE_ACTION=True&tiered_permit=True&evaluation=True&operating=True&post_closure=True&non_operating=True&inspections=True.

Camp Manzanar

http://www.envirostor.dtsc.ca.gov/public/search.asp?CMD=search&city=&zip=&county=&case_number=&business_name=camp+manzanar&FEDERAL_SUPERFUND=True&STATE_RESPONSE=True&VOLUNTARY_CLEANUP=True&SCHOOL_CLEANUP=True&CORRECTIVE_ACTION=True&tiered_permit=True&evaluation=True&operating=True&post_closure=True&non_operating=True&inspections=True.

Manzanar Rec Area

http://www.envirostor.dtsc.ca.gov/public/mapfull.asp?global_id=80001062.

Response 105-28: The recommended text has been added to the discussion of the NPS in Section 4.1, Aesthetics.

Response 105-29: The text has been updated to clarify that the existing visual setting of the Manzanar National Historic Site could be adversely affected by solar energy development.



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Palm Springs Fish and Wildlife Office
777 East Tahquitz Canyon Way, Suite 208
Palm Springs, California 92262



In Reply Refer To:
FWS-INY-15B0091-15CPA0095

JAN 14 2015

Joshua Hart
Inyo County Planning Department
168 North Edwards Street
Post Office Drawer L
Independence, California 93526

Subject: Comments on the Draft Program Environmental Impact Report for the Inyo County Renewable Energy General Plan Amendment, Inyo County, California

Dear Mr. Hart:

We have reviewed the referenced, draft Program Environmental Impact Report (PEIR) and offer the following comments for your consideration. The County of Inyo is proposing to update its General Plan to include policies for solar energy development and has identified areas (i.e., Solar Energy Development Areas [SEDAs] and the Owens Valley Study Area [OVSA]) where such development may be appropriate. The SEDAs and the OVSA are located in the areas of responsibility for both the Nevada and Palm Springs Fish and Wildlife Offices, and the following represents comments from both field offices. We are providing these comments under the authorities of the Federal Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*), the Migratory Bird Treaty Act (16 U.S.C. 703, MBTA), and other authorities of the Department of the Interior.

106-1

General Comments

Endangered Species Act

Section 9 of the Act, as amended, prohibits the “take” of listed species. Under the Act, “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. “Harm” is further defined as significant habitat modification or degradation that actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering (50 Code of Federal Regulations 17.3). “Harass” is defined as an intentional or negligent act or omission that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly impair normal behavior patterns which include breeding, feeding, or sheltering (50 Code of Federal Regulations 17.3).

106-2

The U.S. Fish and Wildlife Service (Service) may provide an exemption from the take prohibitions through the issuance of a biological opinion for Federal actions (section 7 of the Endangered Species Act) or of an incidental take permit for non-federal actions

(section 10(a)(1)(B)). The County should be aware that the process of applying for an incidental take permit under the authorities of section 10(a)(1)(B) of the Act would require up to a year or longer to complete, given our current staffing levels.

106-2
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We would also like to make the following correction regarding interagency consultation as discussed under section 4.4.1.12 of the PEIR. The draft PEIR states that interagency consultation would take place when federal actions may adversely affect listed species. This is incorrect. A federal agency must consult with the Service if it determines that its action “may affect” a federally listed species or its designated critical habitat. The Federal agency may determine that its proposed action “may affect, but is not likely to adversely affect” the listed species or critical habitat and request the Service’s concurrence; alternatively, the Federal agency may determine that the action “may affect, and is likely to adversely affect” a federally listed species or its designated critical habitat and request formal consultation with the Service.

106-3

Migratory Bird Treaty Act

Migratory birds are a public trust resource of the Service and are protected by the Migratory Bird Treaty Act. The MBTA is the cornerstone of migratory bird conservation and protection in the United States. The MBTA implements four treaties that provide for international protection of migratory birds. The MBTA protects most native species of birds in the United States, including those likely to occur in the proposed SEDAs and OVSA. You can find a list of species protected by the MBTA at 50 Code of Federal Regulations 10.13. The MBTA prohibits the “take” or possession of migratory birds; “take” under this law means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempts to do so (50 Code of Federal Regulations 10.12).

106-4

The MBTA is a strict liability statute, meaning that proof of intent, knowledge, or negligence is not an element of an MBTA violation. The statute’s language is clear that an action resulting in a “taking” of a protected species is a violation of the MBTA. The MBTA does not specifically authorize the incidental take of migratory birds and the Service does not currently issue permits authorizing the incidental take of migratory birds. To reduce potential project impacts on migratory birds, the Service recommends that developers prepare a Bird and Bat Conservation Strategy (BBCS) to describe proposed actions to avoid, minimize, and mitigate adverse effects to migratory birds protected under the MBTA during construction and operations of the proposed project. The BBCS should include a robust, systematic monitoring protocol to document mortality and habitat effects to birds that incorporates the following three objectives: 1) estimate the overall annual avian mortality rate associated with the facility, including mortality associated with all the features of the project that are likely to result in injury and mortality (e.g., fences, ponds, solar panels); 2) determine which species are impacted at the facility during daylight hours and which species are being impacted after nightfall; and 3) determine whether there is spatial differentiation within the solar field in the rates of mortality (i.e., panels on the edge of the field versus interior of the field). This type of information will be helpful in developing best management practices to minimize impacts to birds and bats and address concerns on the potential for cumulative effects.

In our review of the draft PEIR, we noted a measure requiring project developers to prepare a Bat and Avian Protection Plan. As we indicate below in our specific comments on this measure, we recommend that the County require developers to engage with the Service early during project planning, so we can provide guidance on the development of adequate monitoring, minimization, and mitigation strategies for their Bat and Avian Protection Plans. We recommend that these plans follow the guidance we provide for the preparation of a Bird and Bat Conservation Strategy. Ultimately, neither the Bat and Avian Protection Plan or the Bird and Bat Conservation Strategy are a substitute for complying with the Act or MBTA, but a well-developed plan will reduce adverse effects to migratory birds.

106-4
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Regardless of the measures that would be implemented to reduce habitat loss and mortality of birds, some residual impacts would remain. Additionally, the development of numerous renewable energy projects in California and Nevada has cumulatively resulted in the loss of tens of thousands of acres of bird habitat and has the potential to affect their populations. For these reasons, we recommend that Inyo County mitigate for the loss of habitat by funding activities to restore, enhance, or conserve important habitat for migratory birds or to remove other mortality sources from the Pacific Flyway. Such funding may be directed to the Sonoran Joint Venture (<http://sonoranjv.org>), Central Valley Joint Venture (<http://www.centralvalleyjointventure.org>), or Intermountain West Joint Venture (<http://iwjv.org>), or other groups able to implement conservation of migratory birds within the Pacific Flyway. Joint ventures are interagency Federal, State, and non-governmental partnerships with the mission of conserving the priority bird species and other wildlife characteristic of their geographic areas.

106-5

In the absence of a permit from the Service, the temporary or permanent possession of protected migratory birds and their carcasses is also a violation of the MBTA. Because of the need for carcass collection to adequately monitor avian impacts during BBCS implementation and to reduce the food subsidy that carcasses may provide to common ravens (*Corvus corax*) and other predators, we encourage the County to require developers to obtain a special purpose utility permit from the Service. Application for this permit should occur early in project planning to allow issuance of a permit prior to the onset of construction.

106-6

Specific Comments

Recommendations Regarding the Draft PEIR's Analysis of Effects to Federally Listed Species and Migratory Birds

106-7

We provide the following recommendations for improvement in the draft PEIR's analysis of effects to federally listed species and migratory birds. These comments focus on section 4.4.1 and 4.4.3 of the draft PEIR.

- On page 4.4-15, the draft PEIR indicates that there is critical habitat for the western distinct population segment of the yellow-billed cuckoo (yellow-billed cuckoo; *Coccyzus americanus*) in the OVSA. The Service has proposed critical habitat for this species in the OVSA, but changes could occur prior to the final rule.

- Beginning on page 4.4-17, we noted several mistakes regarding species status. The draft PEIR identifies the Sierra Nevada yellow-legged frog (*Rana sierrae*) as a Federal candidate and the western snowy plover (*Charadrius alexandrinus nivosus*) as federally threatened. However, the Sierra Nevada yellow-legged frog is listed as federally endangered with proposed critical habitat. The Pacific Coast population of the western snowy plover is federally threatened, but the inland population of western snowy plovers that the draft PEIR would address is not listed under the Act.
- On page 4.4-23, the draft PEIR indicates that the Laws SEDA is located outside but near designated critical habitat for the endangered Fish Slough milk-vetch (*Astragalus lentiginosus* var. *piscinensis*). While construction activities may not directly affect the species or its critical habitat, we recommend that the draft PEIR consider potential indirect effects to the species and its critical habitat and operational effects associated with groundwater pumping. For example, groundwater pumping could indirectly affect the alkaline soils or hydrology of Fish Slough, which could in turn affect Fish Slough milk-vetch.
- On page 4.4-58, the discussion of habitat connectivity and wildlife corridors does not address the desert tortoise linkage that contains the Chicago Valley SEDA. We recommend that the draft PEIR address the location of the SEDA in relation to this linkage. We also recommend that the draft PEIR analyze impacts to this linkage from development in the Chicago Valley SEDA in section 4.4.3.2.
- On page 4.4-58 and 4.4-61, the draft PEIR indicates that no critical habitat is associated with the environmental setting for the Chicago Valley or Charleston View SEDAs. Due to the proximity and hydrologic connection of Chicago Valley and Charleston View to Amargosa vole (*Microtus californicus scirpensis*) critical habitat and the operational need for groundwater to support solar energy projects, we recommend that the draft PEIR include it in the environmental setting for these SEDAs and analyze impacts to it in Section 4.4.3.2.
- Tables 4.4-10 and 4.4-11 do not identify several federally listed species whose habitat relies on groundwater with hydrologic connections to the Charleston View and Chicago Valley SEDAs. Because of the need for groundwater to support solar energy projects, we recommend that the following species be included in the environmental setting for these SEDAs: Amargosa vole, southwestern willow flycatcher (*Empidonax traillii extimus*), least Bell's vireo (*Vireo bellii pusillus*), Ash Meadows Amargosa pupfish (*Cyprinodon nevadensis mionectes*), Ash Meadows speckled dace (*Rhinichthys osculus nevadensis*), Devil's Hole pupfish (*Cyprinodon diabolis*), Warm Springs pupfish (*Cyprinodon nevadensis pectoralis*), Ash Meadows naucorid (*Ambrysus amargosus*), Amargosa niterwort (*Nitrophila mohavensis*), Ash Meadows gumplant (*Grindelia fraxino-pratensis*), spring-loving centaury (*Centaurium namophilum*), Ash Meadows ivesia (*Ivesia kingii* var. *eremica*), Ash Meadows milk-vetch (*Astragalus phoenix*), Ash Meadows sunray (*Enceliopsis nudicaulis* var. *corrugata*), and Ash Meadows blazing star (*Mentzelia leucophylla*). We also recommend

106-7
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that the draft PEIR analyze impacts to these species and their habitat associated with project-related groundwater pumping in section 4.4.3.2.

106-7
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- In section 4.4.3.1, the draft PEIR does not address the potential for burrowing owls or golden eagles to occur in several SEDAs. We recommend that the draft PEIR consider impacts to these species in all SEDAs.
- In section 4.4.3.1, the draft PEIR generally described the potential impacts to groundwater-dependent vegetation. However, the draft PEIR does not describe the indirect effects associated with groundwater pumping. Groundwater pumping could potentially affect the habitat of federally listed species located within and outside the SEDAs and OVSA. For example, the analysis of impacts does not address potential indirect effects of groundwater pumping on riparian, wetland, and aquatic habitat along the Amargosa River or the species that rely on these habitats. We recommend that the draft PEIR address the indirect effects that groundwater pumping may have on federally listed species and critical habitat. At minimum, we would recommend analysis of impacts from groundwater pumping on federally listed species and critical habitat at Ash Meadows, sections of the Amargosa River near Shoshone and Tecopa, Fish Slough, and riparian, wetland and aquatic habitats occupied by federally listed species in Owens Valley.
- On page 4.4-91, the second full paragraph indicates that studies are currently underway to minimize impacts from solar panels on avian species. Researchers are currently evaluating reducing impacts associated with solar flux at the Ivanpah Solar Electric Generating System, but the Service is unaware of any ongoing research that targets minimization of impacts from solar panels.

Recommended Changes to the Draft PEIR's Habitat Conservation Plan Section

106-8

We provide the following recommendations for improvement in the draft PEIR's discussion of the status of habitat conservation plans within the County in section 4.4.1.13.

- Beginning on page 4.4-75, the draft PEIR presents information on the various habitat conservation plans within the County. In the discussion of the West Mojave Plan, the draft PEIR indicates that the habitat conservation plan portion of the plan is not completed and therefore the plan only applies to lands managed by the Bureau of Land Management. The draft PEIR also indicates that the plan will require a greater level of specificity for local governments to obtain incidental take coverage. The counties, cities, Service, California Department of Fish and Wildlife (CDFW), and stakeholders ceased work on this draft habitat conservation plan many years ago; it is no longer a "proposed" habitat conservation plan, as described in the draft PEIR. We recommend that the County note this correction in the final PEIR.

The draft PEIR also describes four habitat conservation plans within the County, including the Owens Valley Land Management Habitat Conservation Plan. Under section 10(a)(1)(B)

of the Act, a conservation plan must be prepared and meet certain requirements to obtain an incidental take permit for federally listed species from the Service. According to the Service's implementing regulations, if a habitat conservation plan is approved by the Service along with completing other requirements, the Service may then issue an incidental take permit, which covers "take" that may occur if it is incidental to, but not the purpose of, the carrying out of an otherwise lawful activity. As worded, the language in the draft PEIR suggests that the Los Angeles Department of Water and Power has an existing habitat conservation plan with the Service. The Los Angeles Department of Water and Power is working with the Service and CDFW to develop a habitat conservation plan in support of an application for an incidental take permit for listed species. However, it is a preliminary draft and has yet to be released for public comment. We recommend that the County clarify the difference between a general habitat conservation plan such as the Owens Valley Land Management Plan and a habitat conservation plan that meets the requirements of the Act.

106-8
(cont'd)

Recommendations Regarding the Draft PEIR's Mitigation Measures

We provide the following recommendations for improvement in the draft PEIR's proposed mitigation measures in Section 4.4.5.

106-9

- On page 4.4-107, the third bullet identifies a project requirement for a 20-foot avoidance buffer for special status plant populations. We recommend that projects be re-sited or re-configured to provide an avoidance buffer of at least 0.25 mile from special status plant populations to account for the physical and biological processes that provide these species with their habitat and pollinator needs.
- On page 4.4-125, the last bullet states that CDFW and/or the Service must provide concurrence with avian survey findings prior to the start of construction. We recommend you clarify this bullet to indicate what stage of the approval process that developers need to engage with CDFW and/or the Service. We recommend that developers engage us early, so we can assist with appropriate survey designs.
- On page 4.4-126, the second to last sentence of the first paragraph under "Bat and Avian Protection Plan" states that plans shall be approved by three agencies, including the Service. As a matter of practice, the Service does not approve plans of this type. However, we are currently working on guidance that developers can use in writing these plans. The 2005 plan development guidance that you reference in the text is out of date. We recommend that the County require developers to use the most up-to-date guidance in development of these plans and ask that you require them to coordinate with the Service early, so we can provide recommendations and guidance to ensure development of an adequate plan that incorporates robust, statistically sound monitoring of avian mortality.
- On page 4.4-126, the bulleted items under "Bat and Avian Protection Plan" are recommendations for avian mortality monitoring from the Service's Forensics Laboratory

106-10

106-11

that are targeted at power tower technologies. We recommend that the County require developers to coordinate with the Service early during development of their plans, so we can provide guidance on the project-specific applicability of these monitoring techniques.

106-11
(cont'd)

- On page 4.4-126, we recommend that you remove the text “(at all 3 facilities)” from the second bullet. This wording is from the Service’s Forensics Laboratory Report, and this phrase refers to the three phases of the Ivanpah Solar Electric Generating System project.
- On page 4.4-126, the third bullet discusses using search dogs during surveys for dead or injured birds as recommended by the Service’s Forensics Laboratory Report. We recommend that you require developers to seek project-specific survey recommendation from the Service prior to use of search dogs for surveys, as other survey methods may be more efficient, effective, and cost effective depending on the type of project and amount of project-site vegetation. This pre-survey coordination with developers would allow us to review monitoring protocols to ensure that they include seasonally appropriate searcher efficiency and carcass persistence trails, consideration of dog/handler team search efficiency, and other factors that would affect the accuracy of avian mortality estimates.

- On page 4.4-127, the second bullet under “General Bird Mortality Avoidance Measures” requires the use of visual cues to reduce the potential for bird collisions with solar panels. This bullet identifies a specific cue from the Service’s Forensics Laboratory Report for consideration. At this point, we have no information to indicate whether these types of measures would be effective at reducing avian collisions with solar panels. Therefore, we recommend that the County require developers to implement an adaptive management approach in coordination with the Service so that measures used for reducing collisions are systematically tested and modified as appropriate. In addition, we recommend that you require projects with documented mortality to work with the Service to conduct additional research to test measures for reducing avian mortality. Such measures could include, but should not be limited to, experimental lighting within the solar field and use of detection and deterrent technologies.

106-12

- On page 4.4-127, under “Minimizing Impacts from Solar Flux,” you indicate that solar power tower technologies will not be sited in or within 1,000 feet of Important Bird Areas, the OVSA, or riparian or other aquatic habitat. We recommend that the County prohibit power tower development in the Pearsonville, Rose Valley, and Owens Lake SEDAs in addition to the OVSA given the close proximity of these SEDAs to important migratory stopover sites (e.g., Owens Lake, Owens River, Haiwee Lake, and Little Lake). We would also recommend that the County require developers in other SEDAs to coordinate with the Service during project planning for power towers, so we can review the results of pre-project bird surveys and advise the County on whether a Bird and Bat Conservation Strategy can adequately reduce the effects of the project.

106-13

- On page 4.4-127, the third bullet under “General Bird Mortality Avoidance Measures” requires that power tower operation be suspended during peak migration times for indicated species. The Service has not determined whether suspension of power tower operations to reduce impacts to birds would be warranted in all situations; a power tower’s effect on birds may depend on factors such as the project location in relation to water sources, topographic relief, or food sources. We recommend that the County require developers to implement an adaptive management approach in consultation with the Service that would include an option to suspend or reduce project operations during peak migration seasons, should mortality monitoring indicate that such measures are necessary to reduce impacts on local or regional bird populations.

106-14
- On page 4.4-128, the first bullet at the top of the page refers to APLIC’s *Mitigating Bird Collisions with Power Lines: the State of the Art in 1994*. We recommend that you replace this with the more recent guidance on reducing bird collisions with power lines – *Reducing Avian Collisions with Power Lines: The State of the Art in 2012* (Edison Electric Institute 2012).

106-15
- On page 4.4-114, MM BIO-4 requires that developers consult with the Service to determine the potential for their project to “take” special status fish species. The County should require developers to perform a project-specific groundwater impact analysis that specifically addresses impacts to occupied habitat for special status fish, so the Service will have adequate information to fully assess a project’s potential for “take.”

106-16
- Beginning on page 4.4-115, MM BIO-6 addresses minimization measures for the federally threatened desert tortoise (*Gopherus agassizii*). We recommend that the County include an additional measure requiring all project developers in SEDAs within the range of the desert tortoise to provide funds for regional management of common ravens. Renewable energy sites provide subsidies to common ravens in the form of shelter and perching sites; common ravens also visit the sites to eat birds killed by collisions with solar panels and food left by workers. Common ravens are effective predators of desert tortoises and will fly long distances to obtain food and water. Common ravens that perch and shelter within the boundaries of the proposed projects would be able to forage in areas where desert tortoises reside. We consider this potential augmentation of the number of common ravens and increased predation pressure on desert tortoises to be a significant impact. The Service has worked with the Bureau of Land Management, the California Energy Commission, and other permitting agencies to require funding of regional raven management through the payment of a per-acre fee, in addition to the implementation of site-specific raven management measures. All fees collected under this program are used by the Desert Managers Group to manage common ravens in the California desert with the goal of reducing their predation on desert tortoises.

106-17
- Because monarch butterflies (*Danaus plexippus*) migrate through the Owens Valley and the Shoshone area, the County should consider potential impacts to the monarch butterfly in the

106-18

Mr. Joshua Hart (15B0091-15CPA0095)

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final PEIR. The Service is currently conducting a status review of the monarch butterfly to determine if listing is warranted under the Act. Current threats to the monarch butterfly include the loss of milkweed (its sole larval food source), herbicide application, use of insecticides, and severe weather events.

106-18
(cont'd)

We appreciate the opportunity to participate in your planning process. If you have any questions regarding these comments, please contact Brian Croft (Carlsbad Fish and Wildlife Office; (760) 322-2070, extension 210) or Erin Nordin (Nevada Fish and Wildlife Office; (760) 872-5020).

Sincerely,



Kennon A. Corey
Assistant Field Supervisor

Responses to Letter 106 – US Fish and Wildlife Service

Response 106-1: The introductory statement summarizes the proposed project and identifies the regulatory role of the USFWS for the proposed project. No response is necessary.

Responses 106-2, 3: The *Federal Endangered Species Act* sub-section in Section 4.4.1.12, *Regulatory Framework* has been updated as follows:

Federal Endangered Species Act (16 USC Section 1531 et seq.; 50 CFR 17.1 et seq.)

Administered by the USFWS, the FESA provides the legal framework for the listing and protection of species (and their habitats) identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered a ‘take’ under the FESA. Section 9 of the FESA, as amended, prohibits the “take” of listed species. Under the Act, “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. “Harm” is further defined as significant habitat modification or degradation that actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering (50 CFR 17.3). “Harass” is defined as an intentional or negligent act or omission that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly impair normal behavior patterns which include breeding, feeding, or sheltering (50 Code of Federal Regulations 17.3).

The USFWS may provide an exemption from the take prohibitions through the issuance of a biological opinion for federal actions (Section 7 of the FESA) or of an incidental take permit for non-federal actions (Section 10 (a)(1)(B) of the FESA). Section 9(a) of the FESA defines take as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” “Harm” and “harass” are further defined in federal regulations and case law to include actions that adversely impair or disrupt a listed species’ behavioral patterns.

Sections 7 and 10(a) of the FESA regulate actions that could harm or harass endangered or threatened species. Section 10(a) allows issuance of permits for “incidental” take of endangered or threatened species. The term “incidental” applies if the taking of the listed species is secondary to, and not the purpose of, an otherwise lawful activity. A conservation plan demonstrating how the take would be minimized and what steps taken would ensure the listed species’ survival must be submitted for the issuance of Section 10(a) permits. A federal agency must consult with the USFWS under Section 7 of the FESA if it determines that its action “may affect” a federally listed species or its designated critical habitat. The federal agency may determine that its proposed action “may affect, but is not likely to adversely affect” the listed species or critical habitat and request the USFWS’s concurrence; alternatively, the federal agency may determine that the action “may affect, and is likely to adversely affect” a federally listed species or its designated critical habitat and request formal consultation with the USFWS. Section 7 describes a process of federal interagency consultation for use when federal actions may adversely affect listed species. A biological assessment is required for any major activity if it may affect listed species.

Response 106-4: The Migratory Bird Treaty Act discussion in Section 4.4.1.12 of the PEIR has been modified as follows:

Migratory Bird Treaty Act (16 USC Section 703-712)

The MBTA of 1918, implemented by the USFWS, is an international treaty that makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird species listed in 50 CFR Section 10.13, including feathers or other parts, nests, eggs or products, except as allowed by implementing regulations (50 CFR 21). Project related disturbances must be reduced or eliminated during critical phases of the nesting cycle. A list of species protected by the MBTA can be found at 50 CFR 10.13. The MBTA prohibits the “take” or possession of migratory birds; “take” under this law means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempts to do so (50 CFR 10.12).

The Bat and Avian Protection Plan mitigation requirement has been updated to incorporate comments from USFWS and CDFW: this plan is now referred to as a “Bird and Bat Conservation Strategy.” The new language was inserted into Mitigation Measure BIO-18 (see Response No. 102-14 for the BBCS measure).

Response 106-5: The following measure was added to Mitigation Measure BIO-18:

Compensatory Mitigation for the Cumulative Loss of Migratory Bird Habitat along the Pacific Flyway

The County shall require solar development projects implemented under the REGPA to mitigate for the loss of habitat by funding activities to restore, enhance, or conserve important habitat for migratory birds or to remove other mortality sources from the Pacific Flyway. Such funding may be directed to the Sonoran Joint Venture (<http://sonoranjv.org>), Central Valley Joint Venture (<http://www.centralvalleyjointventure.org>), or Intermountain West Joint Venture (<http://iwjv.org>), or other groups able to implement conservation of migratory birds within the Pacific Flyway. The amount of funding will be determined by the County in coordination with USFWS and shall be commensurate with the level of impact.

Response 106-6: The following language was added to the *Bird and Bat Conservation Strategy* section of Mitigation Measure BIO-18:

In the absence of a permit from the USFWS, the temporary or permanent possession of protected migratory birds and their carcasses is a violation of the MBTA. Because of the need for carcass collection to adequately monitor avian impacts during BBCS implementation and to reduce the food subsidy that carcasses may provide to common ravens (*Corvus corax*) and other predators, developers shall be required to obtain a special purpose utility permit from the USFWS allowing the collection of migratory birds and/or their carcasses prior to implementation of the monitoring protocol.

Response 106-7: As recommended, the following changes have been made in Sections 4.4.1 and 4.4.3 of the PEIR:

- The OVSA also contains proposed critical habitat for western yellow-billed cuckoo (*Coccyzus americanus*) along the Owens River (Unit 5: CA-5 Owens River).

- The status of the Sierra Nevada yellow-legged frog was updated to reflect its listing status as Endangered.
- The federal status of Threatened for western snowy plovers was deleted as this inland population is not listed under FESA.

The following updates have been made to the discussion of impacts in the Laws SEDA in Section 4.4.3.2:

Table 4.4-3 identifies ~~four~~one special status species of ~~insect~~two fish, two amphibians, ~~one~~two reptiles, ~~four~~14 birds, ~~five~~eight mammals, and ~~five~~18 plants that are either known to occur or have the potential to occur within the Laws SEDA and be impacted by development activities within the SEDA. Special status species may be directly or indirectly affected by future solar projects in the Laws SEDA if the development would encroach on that species habitat or movement corridors. Impacts to special status species would not be expected to be limited to those species with documented occurrences in the CNDDDB. The CNDDDB relies on reported sightings of special status species, and is not a complete inventory of special status species habitat.

Special status species identified as having the potential to be impacted by development within alkali desert scrub and other upland habitats (cropland, anthropogenically modified habitats) within the valley floor of the Laws SEDA include desert tortoise, burrowing owl, golden eagle, Swainson’s hawk, Owens Valley vole, special status bats, and rare plants including coyote gilia, July gold, and Booth’s hairy evening-primrose. If development activities were to impact aquatic habitats in the Owens River drainage, special status fish species including Owens sucker, ~~Owens pupfish~~and Owens speckled dace, and ~~Owens tui chub~~ could be impacted. If development activities were to occur along the west or east sides of the Laws SEDA near the foothills of the Inyo or White Mountains, additional semi-aquatic species such as Inyo Mountains slender salamander and northern leopard frog could be impacted along with species such as southwestern willow flycatcher and prairie falcon. If solar projects implemented in the Laws SEDA require groundwater pumping, the alkaline soils and hydrology of Fish Slough could potentially be affected, which could potentially impact Fish Slough milk-vetch.

Based on the comment, the following text was added to Mitigation Measure BIO-2:

- If any solar development projects are proposed in the Laws SEDA that would require groundwater pumping, a hydrologic study shall be conducted to determine the potential for impacts to the hydrology of Fish Slough and/or populations of Fish Slough milk-vetch, pursuant to Mitigation Measure HYD-2 in Section 4.9, Hydrology and Water Quality. If any solar development projects are proposed in the Chicago Valley or Charleston View SEDAs that would require groundwater pumping, a hydrologic study shall be conducted to determine the potential for down-watershed impacts to the habitats for special status plants in the Amargosa Watershed including the portion of the Amargosa River that has been designated by Congress as “Wild and Scenic.” If such studies conclude that any project has the potential to result in indirect impacts to the hydrology of off-site habitat for special status plant species (e.g., Fish Slough, marshes, riparian areas, alkaline flats in the Amargosa Watershed and the portion of the Amargosa River that has been designated by Congress as “Wild and Scenic”), a management plan will be prepared in coordination with the County and submitted to the appropriate resource agency with oversight for the species or habitat in question. The plan shall describe any appropriate

monitoring, such as vegetation and/or water table monitoring, and prescribe mitigation to offset the impacts of the project on off-site habitat for special status plants such as preservation of suitable habitat or funding of activities to restore, enhance or conserve habitat within the County.

The presence of a desert tortoise linkage in the Chicago Valley SEDA was mentioned in the discussion of habitat connectivity and wildlife corridors for the Chicago Valley SEDA, and in the discussion of potential impacts within the Chicago Valley SEDA in Section 4.4.3.2.

The potential for down-watershed connectivity to Amargosa vole critical habitat via groundwater was mentioned in the environmental setting for the Chicago Valley and Charleston View SEDAs. The potential for down-watershed impacts to Amargosa vole critical habitat was included in the Chicago Valley and Charleston View SEDA discussions in Section 4.4.3.2.

As requested, the following federally-listed species were added to the environmental setting discussions for the Chicago Valley and Charleston View SEDAs:

Amargosa vole, southwestern willow flycatcher (*Empidonax traillii extimus*), least Bell's vireo (*Vireo bellii pusillus*), Ash Meadows Amargosa pupfish (*Cyprinodon nevadensis mionectes*), Ash Meadows speckled dace (*Rhinichthys osculus nevadensis*), Devil's Hole pupfish (*Cyprinodon diabolis*), Warm Springs pupfish (*Cyprinodon nevadensis pectoralis*), Ash Meadows naucorid (*Ambrysus amargosus*), Amargosa niterwort (*Nitrophila mohavensis*), Ash Meadows gumplant (*Grindelia fraxino-pratensis*), spring-loving centaury (*Centaureum namophilum*), Ash Meadows ivesia (*Ivesia kingii* var. *eremica*), Ash Meadows milk-vetch (*Astragalus phoenix*), Ash Meadows sunray (*Enceliopsis nudicaulis* var. *corrugata*), and Ash Meadows blazing star (*Mentzelia leucophylla*).

The following mitigation measure was added to clarify measures to reduce potential indirect impacts due to groundwater pumping:

MM BIO-25: Minimize potential indirect impacts due to groundwater pumping

Mitigation measures for potential indirect impacts due to groundwater pumping are included in Mitigation Measure BIO-1, Mitigation Measure BIO-2, Mitigation Measure BIO-3, and Mitigation Measure BIO-4. Prior to approval of any project under the REGPA requiring groundwater pumping, the potential effects of the groundwater pumping on biological resources will be evaluated during preparation of the project-specific biological resources evaluation and will be based on the results of the hydrologic study conducted as a requirement of Mitigation Measure HYD-2 in Section 4.9, Hydrology and Water Quality. If groundwater pumping is determined to have the potential to result in off-site impacts to biological resources, measures will be included in the project-specific biological resources mitigation and monitoring plan to avoid, minimize, and mitigate for any such impacts. The measures will be commensurate with the resource and level of impact and may include but are not limited to vegetation and/or water table monitoring, preservation of suitable habitat or funding of activities to restore, enhance or conserve habitat within the County, and a requirement for the project applicant to purchase and retire currently exercised water rights along the same flowpath as the water being used by the facility at a minimum 1:1 ratio.

A discussion of golden eagle and burrowing owl was added to all SEDAs where not already discussed.

The statement that studies are currently being conducted to find ways to minimize collisions with solar panels is cited in the document as follows:

Kagan, R.A., T.C. Viner, P.W. Trail, E.O. Espinoza. unpubl. Avian Mortality at Solar Energy Facilities in Southern California: A Preliminary Analysis. National Fish and Wildlife Forensics Laboratory.

Response 106-8: The discussions of the West Mojave Plan and the Owens Valley Land Management Plan were clarified to distinguish that these plans are not intended to provide incidental take coverage under FESA.

Response 106-9: The following language was added to Mitigation Measure ~~BIO-0~~BIO-2:

- If feasible, when special status plants are found on a site, the project shall be redesigned or modified to avoid direct and indirect impacts on special status plants, as determined by the County. In order to avoid direct and indirect impacts to special status plants, the projects should be re-sited or re-configured to provide an avoidance buffer of at least 0.25 mile from special status plant populations to account for the physical and biological processes that provide these species with their habitat and pollinator needs.

Response 106-10: The following bullet was added to the *Pre-construction Bird Surveys and Avoidance Measures* section in Mitigation Measure BIO-18:

- CDFW and/or USFWS (depending on the avian species in question) shall be contacted to obtain approval of pre-construction survey methodology prior to commencement of the surveys.

Response 106-11: The requirement for developers to prepare a Bat and Avian Protection Plan has been deleted and replaced with the requirement to prepare a Bird and Bat Conservation Strategy (BBCS) following USFWS guidance (see Response No. 102-14 for the BBCS mitigation language). All bulleted items under the Bat and Avian Protection Plan have been deleted from the document.

Response 106-12: The following bullets were added/modified under the *General Bird Mortality Avoidance Measures* section in Mitigation Measure BIO-18:

- The most current science regarding visual cues to birds that the solar panel is a solid structure shall be implemented. This may include but is not limited to UV-reflective or solid, contrasting bands spaced no further than 28 centimeters from each other. An adaptive management approach for reducing bird collisions with solar panels shall be implemented in coordination with the USFWS so that measures used are systematically tested and modified as appropriate. ~~This may include but is not limited to UV-reflective or solid, contrasting bands spaced no further than 28 centimeters from each other.~~
- Projects with documented avian mortality shall work with the USFWS to conduct additional research to test measures for reducing avian mortality. Such measures could include, but are not limited to, experimental lighting within the solar field and use of detection and deterrent technologies.

- Developers of Ppower tower operations shall be suspended during peak migration times for indicated species. implement adaptive management in consultation with the USFWS should mortality monitoring indicate that suspension of power tower operations during certain periods is necessary to reduce impacts on local or regional bird populations. Such measures may include, but are not limited to, suspending or reducing project operations during peak migration seasons.

Response 106-13: The following revisions were made to the *Minimize Impacts from Solar Flux* section in Mitigation Measure BIO-18:

The following mitigation measures shall be implemented in order to minimize avian impacts from solar flux:

- Solar thermal developments utilizing solar power tower technologies shall ~~not~~ be sited ~~in or within~~ a minimum of 1,000 feet of from Important Bird Areas ~~(as determined by the County in consultation with Responsible and Trustee agencies),~~ the OVSA, or riparian or other aquatic habitats including lakes, ponds, rivers, streams, and perennial wetland habitats unless potentially significant impacts are avoided, although the appropriate buffer distance shall be determined on a project-by-project basis as determined by the County in consultation with responsible and trustee agencies. This requirement generally does not apply to seasonal or ephemeral wetland habitats unless deemed necessary by a qualified biologist in light of the wetland's specific habitat value for bird species.
- The County shall require developers proposing solar power tower technology to coordinate with the USFWS during project planning. As part of that coordination process, and in conjunction with the project's next tier of CEQA review, the USFWS will advise the County whether a Bird and Bat Conservation Strategy would be necessary for the project, and if required, would adequately reduce the effects of the project on migratory birds and bats.

Response 106-14: The third bullet under in the *General Bird Mortality Avoidance Measures* section in Mitigation Measure BIO-18 has been deleted and replaced with the following measure:

- Developers of Ppower tower operations shall be suspended during peak migration times for indicated species. implement adaptive management in consultation with the USFWS should mortality monitoring indicate that suspension of power tower operations during certain periods is necessary to reduce impacts on local or regional bird populations. Such measures may include, but are not limited to, suspending or reducing project operations during peak migration seasons.

Response 106-15: The second bullet under the *Avoid Impacts from Electric Lines and Lights* section in Mitigation Measure BIO-18 has been updated as follows:

- Transmission lines and electrical components shall be installed and maintained in accordance with the APLIC's ~~*Mitigating Bird-Reducing Avian Collisions with Power Lines: The State of the Art in 1994-2012*~~ (Edison Electric Institute ~~2004~~2012) or the most recent guidance to reduce the likelihood of bird collisions.

Response 106-16: The first paragraph under Mitigation Measure BIO-4 has been modified as follows:

Prior to the approval of any solar development projects or related infrastructure under the REGPA that is determined during the project level biological resource evaluation (Mitigation Measure BIO-1) to have the potential to affect special status fish, a project-specific groundwater impact analysis will be conducted to address potential impacts to habitat for special status fish. In addition, consultation with USFWS shall be conducted for projects with the potential to impact federally listed species including Owens pupfish or Owens tui chub and coordination with CDFW will be conducted for projects with the potential to impact state listed species or CDFW species of special concern including Owens sucker and Owens speckled dace. For projects that are determined to have the potential to result in “take” of state or federally listed fish species, consultation shall be conducted with CDFW or USFWS respectively and take authorization obtained prior to project commencement.

Response 106-17: The following bullet was added under Mitigation Measure BIO-6, *Minimize impacts to desert tortoise*:

The project developer shall provide funds for regional management of common ravens through the payment of a per-acre fee as determined in consultation with the USFWS. The fee shall be commensurate with current per-acre fees (at the time of project approval) required by the BLM and the CEC for development projects in the desert with the potential to provide subsidies to common ravens such as shelter, perching sites, and food. The fee shall be used by the Desert Managers Group to manage common ravens in the California desert with the goal of reducing their predation on desert tortoises.

Response 106-18: The tables in Section 4.4 and the body of the section were amended to include monarch butterfly, as outlined below:

Section 4.4.1.6

...The County is largely undeveloped and contains large blocks of protected natural areas and various landforms. The Sierra Nevada, Owens River, and various mountain ranges and valleys in the County provide critical habitat opportunities on a County-wide and regional scale. Birds are likely to migrate longitudinally through the Owens Valley, between water bodies. Monarch butterfly (*Danaus plexippus plexippus*) is known to migrate northward through the Owens Valley and Shoshone area in spring and return southward in the fall. Large mammals, such as ~~Lone Pine~~ tule elk (*Cervus elaphus nannodes*) and bighorn sheep (*Ovis canadensis nevadensis*) would be likely to disperse between mountain ranges.

The landscapes of the SEDAs and the OVSA are generally flat or gentle slopes, in undeveloped areas with limited constraints. SEDAs in the Western Solar Energy Group and the OVSA are located between mountain ranges, and all SEDAs are located between habitat blocks in the County. Typical wildlife species expected to move through the SEDAs and OVSA include mule deer, tule elk, mountain lion, coyote, monarch butterfly, small mammals, reptiles, and birds. Birds and flying insects would be able to move freely over the sites, while the terrestrial species would be more constrained by the existing land uses of the individual site.

Table 4.4.1-The following text has been added to the table:

Table 4.4-1 SENSITIVE WILDLIFE SPECIES KNOWN TO OCCUR OR POTENTIALLY OCCURRING IN THE SEDAS OR OWENS VALLEY STUDY AREA				
Scientific Name	Common Name	Status		
		Federal	State	Other*
Insects				
<i>Danaus plexippus</i> <i>plexippus</i>	monarch butterfly	Under review for Federal listing as of 12/29/2014	--	--

Section 4.4.1.11 -

Laws SEDA: Special Status Species

One special status species of insect, four fish, two amphibians, one reptile, four birds, five mammals, and five plants were identified during the desktop analysis as either being known to occur or having the potential to occur within or adjacent to the Laws SEDA and be impacted by development activities (Table 4.4-3).

Owens Lake SEDA: Special Status Species

One special status species of insect, two fish, one amphibian, three reptiles, seven birds, four mammals, and three plants were identified during the desktop analysis as either being known to occur or having the potential to occur within or adjacent to the Owens Lake SEDA and be impacted by development activities (Table 4.4-4).

Rose Valley SEDA: Special Status Species

One special status species of insect, two reptiles, eight birds, two mammals, and four rare plants were identified during the desktop analysis as either being known to occur or having the potential to occur within or adjacent to the Rose Valley SEDA and be impacted by development activities (Table 4.4-5).

Pearsonville SEDA: Special Status Species

Desert tortoise, Mohave ground squirrel, and monarch butterfly are the only special status species that were identified during the desktop analysis as either being known to occur or having the potential to occur within or adjacent to the Pearsonville SEDA and be impacted by development activities (Table 4.4-6).

Owens Valley Study Area: Habitat Connectivity and Wildlife Corridors

As previously mentioned in the description of the Owens Lake SEDA, the Owens River and the entire Owens Lake lakebed are designated as Important Bird Areas, largely due to its importance to waterfowl, shorebirds, and wading birds that use it as a stopover in spring and fall as they migrate (Audubon California 2014). The Important Bird Area extends along the river for its entire length through the

County. In addition, the segment of the Los Angeles Aqueduct where it generally follows the Owens River is designated as an Important Bird Area. The Owens Valley is a seasonal migration route for monarch butterfly in spring and fall movement between the California coast and the Great Basin. A missing link corridor extends across the valley, connecting the Sierra Nevada to the Inyo Mountains at the valley's narrowest point. Another missing link corridor extends from that point southward along the Owens River, to Owens Lake. Tule elk and mule deer routinely and seasonally make bottomland-upland movements between the Owens Valley floor and the Inyo Mountains throughout the OVSA. Annual forbs are an extremely important forage base for tule elk and mule deer in the spring and early summer. The movement of tule elk from the valley floor into the canyons and foothills of the Inyo Mountains to graze these forbs has been documented (McCullough 1969).

Trona SEDA: Special Status Species

Table 4.4-9 presents the regionally occurring special status species that were identified during the desktop analysis as either being known to occur or having the potential to occur in the Trona SEDA (CNDDDB 2014). Desert tortoise, prairie falcon, Mohave ground squirrel, and monarch butterfly have the potential to occur in the SEDA.

Table 4.4-3-The following text has been added to the table

Table 4.4-3
SENSITIVE WILDLIFE SPECIES KNOWN TO OCCUR OR POTENTIALLY OCCURRING IN THE LAWS SEDA

Scientific Name	Common Name	Status		General Habitat Requirements	Rationale
		Federal/ State/Rare Plant Rank*	Other**		
Insects					
<u>Danaus plexippus</u> <u>plexippus</u>	<u>monarch butterfly</u>	<u>Under review</u> <u>for Federal</u> <u>listing as of</u> <u>12/29/2014</u>	--	<u>Milkweeds (Asclepias spp.) are the</u> <u>obligate larval host plants. Also</u> <u>requires sheltered roosting sites</u> <u>and moderate temperatures.</u>	<u>Migrates through western Inyo</u> <u>County during spring and fall</u> <u>movements between the</u> <u>California coast and the Great</u> <u>Basin.</u>

Table 4.4-4- The following text has been added to the table:

Table 4.4-4
SPECIAL STATUS SPECIES KNOWN TO OCCUR OR POTENTIALLY OCCURRING IN THE OWENS LAKE SEDA

Scientific Name	Common Name	Status		General Habitat Requirements	Rationale
		Federal/ State/Rare Plant Rank**	Other***		
Insects					
<u>Danaus plexippus</u> <u>plexippus</u>	<u>monarch butterfly</u>	<u>Under review</u> <u>for Federal</u> <u>listing as of</u> <u>12/29/2014</u>	--	<u>Milkweeds (Asclepias spp.) are the</u> <u>obligate larval host plants. Also</u> <u>requires sheltered roosting sites</u> <u>and moderate temperatures.</u>	<u>Migrates through western Inyo</u> <u>County during spring and fall</u> <u>movements between the</u> <u>California coast and the Great</u> <u>Basin.</u>

Table 4.4-5-The following text has been added to the table:

**Table 4.4-5
SPECIAL STATUS SPECIES KNOWN TO OCCUR OR POTENTIALLY OCCURRING IN THE ROSE VALLEY SEDA**

Scientific Name	Common Name	Status		General Habitat Requirements	Rationale
		Federal/ State/Rare Plant Rank**	Other***		
Insects					
<i>Danaus plexippus plexippus</i>	monarch butterfly	Under review for Federal listing as of 12/29/2014	--	Milkweeds (<i>Asclepias</i> spp.) are the obligate larval host plants. Also requires sheltered roosting sites and moderate temperatures.	Migrates through western Inyo County during spring and fall movements between the California coast and the Great Basin.

Table 4.4-6-The following text has been added to the table:

**Table 4.4-6
SPECIAL STATUS SPECIES KNOWN TO OCCUR OR POTENTIALLY OCCURRING IN THE PEARSONVILLE SEDA**

Scientific Name	Common Name	Status		General Habitat Requirements	Rationale
		Federal/ State	Other**		
Insects					
<i>Danaus plexippus plexippus</i>	monarch butterfly	Under review for Federal listing as of 12/29/2014	--	Milkweeds (<i>Asclepias</i> spp.) are the obligate larval host plants. Also requires sheltered roosting sites and moderate temperatures.	Migrates through western Inyo County during spring and fall movements between the California coast and the Great Basin.

Table 4.4-7- The following text has been added to the table:

Table 4.4-7
SPECIAL STATUS WILDLIFE SPECIES KNOWN TO OCCUR OR POTENTIALLY OCCURRING
IN THE OWENS VALLEY STUDY AREA

Scientific Name	Common Name	Status		General Habitat Requirements	Rationale
		Federal/ State	Other*		
<u>Danaus plexippus</u> <u>plexippus</u>	<u>monarch butterfly</u>	<u>Under review</u> <u>for Federal</u> <u>listing as of</u> <u>12/29/2014</u>	<u>--</u>	<u>Milkweeds (Asclepias spp.) are the</u> <u>obligate larval host plants. Also</u> <u>requires sheltered roosting sites</u> <u>and moderate temperatures.</u>	<u>Migrates through western Inyo</u> <u>County during spring and fall</u> <u>movements between the California</u> <u>coast and the Great Basin.</u>

Table 4.4-9- The following text has been added to the table:

Table 4.4-9
SENSITIVE SPECIES KNOWN TO OCCUR OR POTENTIALLY OCCURRING IN THE TRONA SEDA

Scientific Name	Common Name	Status		General Habitat Requirements	Rationale
		Federal/ State	Other*		
<u>Danaus plexippus</u> <u>plexippus</u>	<u>monarch butterfly</u>	<u>Under review</u> <u>for Federal</u> <u>listing as of</u> <u>12/29/2014</u>	<u>--</u>	<u>Milkweeds (Asclepias spp.) are the</u> <u>obligate larval host plants. Also</u> <u>requires sheltered roosting sites and</u> <u>moderate temperatures.</u>	<u>Migrates through western Inyo</u> <u>County during spring and fall</u> <u>movements between the California</u> <u>coast and the Great Basin.</u>

Specific Wildlife Impacts and Considerations

Following are potential impacts to specific species or wildlife that could occur as a result of implementation of the REGPA based on their life form, status, known potential to occur in the project area, and regulatory considerations.

Impacts to Special Status Insects

Monarch butterfly is known to migrate through western Inyo County during seasonal movements between the California coast and the Great Basin. This species relies on species of milkweeds (*Asclepias* spp.) as its obligate larval host plant, and migrations span multiple generations. Adult migrating monarchs require sheltered roost sites where temperatures remain cool but above freezing. Reductions in the extent and abundance of milkweeds would reduce larval host plant availability during migrations, and removal of trees could reduce suitable roosting sites if the affected trees were in suitable climatic microsites. In addition, solar thermal projects can promote butterfly mortality both through extreme heat and by attracting avian predators. The USFWS announced on December 29, 2014 that it has begun a review of monarch butterfly for listing under the Endangered Species Act. This listing might also include a designation of critical habitat, which could include habitats found within SEDAs.

Migrating monarch butterflies have potential to occur in SEDAs in the Western and Southern Solar Energy Groups and the OVSA, but are not expected in the Eastern Solar Energy Group SEDAs, as they lie outside of reported migration corridors. CNDDDB includes three records of overwintering monarch butterfly, all in canyons on the eastern side of the Inyo Mountains, in Saline Valley. These locations would not be affected by projects in any SEDA or the OVSA.

STATE OF CALIFORNIA

EDMUND G. BROWN JR., Governor

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202



Established in 1938

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from Voice Phone 1-800-735-2922

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January 21, 2015

File Ref: SCH #2014061039

Cathreen Richards
Inyo County
P.O. Drawer L
Independence, CA 93526

Subject: Draft Program Environmental Impact Report (PEIR) for the Renewable Energy General Plan Amendment, Inyo County

Dear Ms. Richards.:

The California State Lands Commission (CSLC) staff has reviewed the subject draft PEIR for the Renewable Energy General Plan Amendment (REGPA), which is being prepared by Inyo County (County). The County, as a public agency proposing to carry out a project, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). The CSLC is a trustee agency for projects that could directly or indirectly affect sovereign lands and their accompanying Public Trust resources or uses (see State CEQA Guidelines, § 15386, subd. (b)). Additionally, to the extent the REGPA contemplates projects on sovereign lands, the CSLC will act as a responsible agency.

107-1

CSLC Jurisdiction

The CSLC has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The CSLC also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6301, 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the Common Law Public Trust.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the State for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On navigable non-tidal waterways, including lakes, the State holds fee ownership of the bed of the waterway landward to the ordinary low

water mark and a Public Trust easement landward to the ordinary high water mark, except where the boundary has been fixed by agreement or a court. Such boundaries may not be readily apparent from present day site inspections.

107-1
(cont'd)

Additionally, in 1853, the United States Congress granted to California nearly 5.5 million acres of land for the specific purpose of supporting public schools. In 1984, the State Legislature passed the School Land Bank Act (Act), which established the School Land Bank Fund (SLBF) and appointed the CSLC as its trustee (Pub. Resources Code, § 8700 et seq.). The Act directed the CSLC to develop school lands into a permanent and productive resource base for revenue generating purposes. The CSLC manages approximately 462,830 acres of school lands still held in fee ownership by the State and the reserved mineral interests on an additional 790,000± acres where the surfaces estates have been sold. Revenue from school lands is deposited in the State Treasury for the benefit of the Teachers' Retirement Fund (Pub. Resources Code, § 6217.5).

The bed of Owens Lake is comprised of sovereign land and school lands, both under the jurisdiction of the CSLC. Any proposed projects involving lands under the jurisdiction of CSLC (both sovereign and school) would require a lease. Please also be advised, as explained in more detail below, that the CSLC has not made a determination as to the consistency of renewable energy projects on public trust lands.

Project Description

The County proposes to update its General Plan to contain policies for solar energy development, including identifying new and modified General Plan goals, policies, and implementation measures, and identifying eight Solar Energy Development Areas (SEDAs) where solar energy would be targeted. The REGPA is intended to be consistent with the Desert Renewable Energy Conservation Plan (DRECP); the County is participating in the DRECP pursuant to a 2013 memorandum of understanding with the California Energy Commission. The REGPA includes new land use definitions and includes policies for distributed generation, small-scale, and utility scale generation as well as for transmission.

107-2

By regulating the type, location, and size of future renewable energy projects through the REGPA, the County intends to:

- Provide for solar energy development opportunities in Inyo County to generate electricity from solar resources in accordance with the goals established by California State legislation and local policies regarding renewable energy;
- Focus future solar energy development projects to designated development areas that have been selected through an analysis of geographic, physical, political, cultural, environmental, and socioeconomic opportunities and constraints;
- Minimize direct and indirect impact from future solar energy development on the physical, biological, cultural, political, and socioeconomic environments;
- Collaborate effectively with other public resource agencies, tribal governments, nongovernmental organizations, and citizens/residents of Inyo County, and to

- utilize best available scientific information to aid impact assessment of future solar energy development;
- Locate future solar development near existing electrical conveyance facilities;
 - Identify the total allowable capacity and developable acreages per solar energy group and SEDA; and
 - Provide for small scale, community scale, and/or distributed generation solar energy production opportunities throughout the County.

The draft PEIR identifies five alternatives, including the "no project" alternative, and concludes that the no project alternative would lead to greater impacts, and that each of the other four alternatives would be "environmentally superior" to the proposed project but would not meet the project objectives to the same extent as the proposed project.

Environmental Review

CSLC staff requests that the County consider the following comments on the project's draft PEIR.

General Comments

1. List of Agencies: Section 1.3 of the Introduction discusses potential lead, responsible, and trustee agencies that may have jurisdiction over specific projects proposed under the REGPA. As noted above, the CSLC has jurisdiction over sovereign and school lands located in Inyo County, as well as retaining mineral rights where surface estates have been sold. Please add the CSLC to the list of agencies on page 1-3.

107-3

Owens Lake

2. Solar Demonstration Project: As stated above, most of the Owens Lake bed is sovereign land under CSLC jurisdiction. Los Angeles Department of Water and Power (LADWP) implements dust control projects on approximately 42 square miles of the Lake bed, most of which is subject to a lease from the CSLC. Additionally, there are a number of grazing and mineral leases issued for use of the Lake bed. The draft PEIR notes that LADWP completed environmental documentation for a 5.3-acre solar demonstration project to be located on the Phase 8 gravel cover dust mitigation area; the CSLC approved a lease amendment to LADWP for this project on December 2, 2013 (Item C77). In recommending approval of the lease amendment, CSLC staff noted that although solar projects are not, *per se*, consistent with the Public Trust, the proposed project was not inconsistent with the Public Trust needs as they currently existed at the proposed project site, in that the project would not interfere with the recognized Public Trust values at Owens Lake (Item C77, p. 4). This approval for a specific project should not be construed to mean that the CSLC would always find Public Trust consistency on sovereign lands in other cases. With this in mind, CSLC staff recommends a statement be added to the Owens Lake SEDA section of the draft PEIR explaining that renewable energy projects are not, *per se*, consistent with the Public Trust but that CSLC staff will continue to

107-4

evaluate each proposed renewable energy project on sovereign lands on a case-by-case basis for consistency with Public Trust principles, values and needs specific to that location.

107-4
(cont'd)

Cultural Resources

3. Title to Resources: Artifacts originating on CSLC lands, including those from archaeological sites and historic or cultural resources on or in school lands or the tide and submerged lands of California, are vested in the State and under the jurisdiction of the CSLC. CSLC staff requests that the County add a discussion of CSLC jurisdiction to Section 4.5 – Cultural Resources, and require that individual project proponents notify and consult with CSLC staff should any cultural resources on State lands be discovered during construction of a proposed project.

107-5

4. Artifact Evaluation and Curation: Please note that cultural resource surveys (including non-ground-disturbing surveys as well as archaeological testing and evaluation activities) require a permit from the CSLC. In addition, the written approval of the CSLC is required for the permanent curation of archaeological and paleontological artifacts from lands under the jurisdiction of the CSLC. Written requests should be submitted to CSLC staff as specified in the applicable permits. Please modify MM CUL-1g to reflect the CSLC's jurisdiction in this regard.

107-6

Land Use and Planning

5. CSLC School Lands: As noted above in the Jurisdiction section, in addition to Owens Lake, the CSLC owns and manages school lands for the benefit of California's public school system. Approximately 83,000 acres of school lands are located in Inyo County; in addition, the CSLC may have retained a mineral interest in additional parcels where the surface estate has been sold. Any development proposal should be screened to determine both the surface ownership and potential subsurface mineral rights. Please add this information to the "State of California" paragraph on page 4.10-1.

107-7

6. Figure 4.10-1: CSLC staff has recently completed a comprehensive geographic information systems (GIS) mapping update for school lands. These can be found at http://www.slc.ca.gov/GIS/GIS_Downloads.html. CSLC staff recommends using these data to update Figure 4.10-1. Additionally, Owens Lake should be identified as CSLC-owned land using the color designation on the Figure's legend.

107-8

Mineral Resources

7. Please consider adding, under "State Regulations" on page 4.11-7, a paragraph describing the CSLC's mineral jurisdiction, which is generally found in sections 6401-6407 of the Public Resources Code. In general, Public Resources Code section 6401 reserves California's mineral resources to the State. Unless a sale

107-9

or exchange is with the federal government, the State is prohibited from relinquishing its rights to geothermal resources, oil, gas, oil shale, coal, phosphate, sodium, gold, silver, and all other mineral deposits in all lands owned or acquired by the State. State land sales are subject to a reservation of all mineral rights, and a reservation of right of entry to prospect for and extract mineral deposits, fluids, or geothermal resources. In addition, the draft PEIR should identify and describe the CSLC's jurisdiction under sections 6901-6925.2 of the Public Resources Code, known as the Geothermal Resources Act.

107-9
(cont'd)

MM MIN-1 would require individual project proponents to undertake a mineral resource investigation prior to project design approval. Please note that the CSLC's Mineral Resources Management Division can assist with such mineral investigations on sovereign and school lands as well as on lands where the CSLC owns the mineral estate but the surface has been sold.

Thank you for the opportunity to comment on the draft PEIR for the project. As a responsible and trustee agency, the CSLC will need to rely on the Final PEIR or project-specific document tiered from the PEIR for the issuance of any amended/new lease as specified above and, therefore, we request that you consider our comments prior to certification of the PEIR.

107-10

Please send copies of future project-related documents, including electronic copies of the Final PEIR, Mitigation Monitoring and Reporting Program (MMRP), Notice of Determination (NOD), CEQA Findings and, if applicable, Statement of Overriding Considerations when they become available, and refer questions concerning environmental review to Jennifer DeLeon, Environmental Program Manager, at (916) 574-0748 or via e-mail at Jennifer.DeLeon@slc.ca.gov. For questions concerning archaeological or historic resources under CSLC jurisdiction, please contact Assistant Chief Counsel Pam Griggs at (916) 574-1854 or via email at Pamela.Griggs@slc.ca.gov. For questions concerning CSLC leasing jurisdiction, please contact Drew Simpkin, Public Land Management Specialist, at (916) 574-2275, or via email at Drew.Simpkin@slc.ca.gov.

Sincerely,

 Cy R. Oggins, Chief
 Division of Environmental Planning
 and Management

cc: Office of Planning and Research
 Drew Simpkin, CSLC
 Jennifer DeLeon, CSLC
 Pam Griggs, CSLC

Responses to Letter 107 – California State Lands Commission

Response 107-1: The introductory statement summarizes the jurisdiction of the California State Lands Commission (SLC) in regards to the proposed project. The County agrees that the bed of Owens Lake contains lands under jurisdiction of the SLC, and any future development affecting those lands would require coordination with the SLC and a lease from the SLC. The list of lead, trustee, and responsible agencies on page 1-3 has been updated to include the SLC.

Response 107-2: The County agrees with the CSLC's summary of the project description and findings of the alternatives evaluation.

Response 107-3: As indicated above in Response No. 107-1, the list of lead, trustee, and responsible agencies on page 1-3 has been updated to include CLC.

Response 107-4: The following updates have been made to the PEIR:

Discussion of Owens Lake in Section 2.2.1

In 1991, LADWP and the County approved the Inyo County/Los Angeles Long Term Water Agreement (Agreement) that provides environmental protection of the Owens Valley, including Owens Lake, from the effects of groundwater pumping while still allowing water to be exported from the County. Pursuant to the Agreement, the Lower Owens River Project (LORP) was initiated in 2006, in which the County and LADWP are responsible for rewatering a 62-mile-long stretch of the river and adjacent floodplain that had been previously dewatered by the Los Angeles Aqueduct. In 2008, the Great Basin Unified Air Pollution Control District (GBUAPCD) and LADWP agreed on a plan for dust mitigation measures on the lake to minimize fugitive dust from the dry lake bed. Pursuant to that agreement, LADWP implemented shallow flooding and vegetation management on over 45 square miles of the lake, much of which is subject to a lease from the SLC. Gravel cover was applied to a lesser extent. Phase 7a of the dust mitigation efforts on the lake began in early 2014, in which 3 square miles not already treated for dust control will receive new dust control measures, and an additional 3 square miles of lake bed that currently has some form of dust control in place will be redone using "hybrid" combinations of shallow flooding, managed vegetation, contoured gravel cover and tillage (GBUAPCD 2013).

Discussion of Owens Lake in Section 3.3.3

In 2009, LADWP announced that it would be pursuing a 550-kW PV solar demonstration project on a 5.3-acre area located within the 2.03-square mile Owens Lake Phase 8 dust mitigation area on the northwest section of the lake bed, south of Lone Pine. This area has been treated with gravel as part of the dust mitigation efforts. The LADWP completed a Mitigated Negative Declaration (2013) on the solar demonstration project. General construction subsequently began in mid-August 2014 and plans for project completion are set for early 2016. The demonstration project is being implemented to determine whether Owens Lake is a suitable location for larger-scale energy production. The solar demonstration project is on SLC-leased lands, in which the SLC approved a lease amendment to LADWP for the demonstration project. However, renewable energy projects are not, per se, consistent with the Public Trust but SLC staff will continue to evaluate each proposed renewable energy project on sovereign lands on a case-by-case

basis for consistency with Public Trust principles, values, and needs specific to that location.

Response 107-5: The commenter is correct that artifacts that may be found on State Lands would be handled in accordance with State processes and requirements.

Text has been added to the regulatory setting section to draw attention to regulatory and policy issues of ownership.

Response 107-6: The commenter is correct that surveys on State Lands would be handled in accordance with State processes and requirements.

Text has been added to the regulatory setting section and to Mitigation Measure CUL-1g to draw attention to regulatory and policy issues of ownership.

Response 107-7: The text on page 4.10-1 has been updated as follows:

State of California

The State of California manages and/or has jurisdiction of public lands that total about 3.5 percent of land within the County (Inyo County 2001, as amended). These lands include the SLC, and the CDFW. The SLC jurisdiction includes approximately 83,000 acres of school lands in Inyo County; in addition, the SLC may have retained a mineral interest in additional parcels where the surface estimate has been sold. To determine SLC mineral interests, individual parcels would need to be screened for both the surface ownership and potential subsurface mineral rights. ~~includes a~~ Nearly all of Owens Lake is under jurisdiction of the SLC.

Response 107-8: Figure 4.10-1 has been updated to include SLC school lands and show Owens Lake under the jurisdiction of the SLC.

Response 107-9: A discussion of the SLC's mineral jurisdiction, pursuant to Sections 6401-6407 and 6901-6925.2 of the California Public Resources Code, has been added to Section 4.11.1.3, Regulatory Framework.

With respect to the requirement to prepare individual mineral resource investigations under Mitigation Measure MIN-1 in Section 4.11.5, the County acknowledges the offer by SLC to assist with mineral resource investigations on applicable lands. If, during the course of the proposed project design/approval process, the County identifies one or more circumstances where the noted input from SLC would be pertinent, appropriate contact(s) would be made.

Response 107-10: The County has prepared written responses to comments received on the Draft PEIR per Section 15088 of the State CEQA Guidelines. Accordingly, the County, as Lead Agency, shall provide a written proposed response to the SLC at least 10 days prior to the public hearing held for consideration and potential certification of the PEIR.



COMMENTS FROM NON-GOVERNMENTAL
ORGANIZATIONS
Series 200 Responses to Comments





PO Box 63
Shoshone, CA 92384
760.852.4339
www.amargosaconservancy.org

December 11, 2014

Inyo County Planning Department
P.O. Drawer L
168 N. Edwards St.
Independence, CA 93526

To Josh Hart, Cathreen Richards, et al.:

On behalf of the Board of Directors and members of the Amargosa Conservancy, I would like to extend our thanks to Inyo County for holding the December 4th meeting on the Programmatic EIR in Tecopa and engaging in an open, transparent, and genuinely participatory public review process for the REGPA's PEIR.

It's clear that the county responded to issues raised in the Scoping Process, which the Amargosa Conservancy participated in. The PEIR appears to comprehensively cover all 17 CEQA issue areas, with the addition of socioeconomic impacts. The public meetings involved a genuine interaction with the county staff and biological consultant responsible for the EIR. The people of the Amargosa region were able to comment and get responses to their queries. While a longer meeting may have resulted in more detailed interchanges, the open and constructive dialogue which occurred last Thursday in Tecopa was a model of the type of participation mandated by CEQA.

201-1

We applaud you for these efforts. While we do not agree with some of the findings of the PEIR, and will be submitting detailed written comments for your consideration, we recognize the lengths that the county has gone to in order to comply with CEQA and engage with the citizens of Inyo County.

Sincerely,

Patrick Donnelly
Executive Director

CC: Linda Arcularius, Jeff Griffiths, Rick Pucci, Mark Tillemans, Matt Kingsley

To protect the land, water, and beauty of the Amargosa

Response to Letter 201 – Amargosa Conservancy

Response 201-1: The letter acknowledges the County’s public planning efforts and notes that additional comments will be received from the Amargosa Conservancy.



Letter 202

PO Box 63
Shoshone, CA 92384
760.852.4339
www.amargosaconservancy.org

January 14, 2015

Inyo County Planning Department
Attn: Cathreen Richards, Senior Planner
168 North Edwards St.
PO Drawer L
Independence, CA 93526

Submitted via mail and electronically to inyoplanning@inyocounty.us

Re: Comments of the Amargosa Conservancy on the Draft Programmatic Environmental Impact Report for the Inyo County Renewable Energy General Plan Amendment

The Amargosa Conservancy is a 501(c)(3) organization based in Shoshone, California. We are located in the heart of the Death Valley Region of Eastern Inyo County, and are dedicated to the future of the natural and human communities of the Amargosa Watershed. The Inyo County Renewable Energy General Plan Amendment (REGPA) has the potential to radically transform the landscapes of Eastern Inyo County, and the lives of the people who live there.

As we stated in our letter of December 14, 2014, we commend the Inyo County Planning Department for the exemplary way in which the CEQA public participation process has been conducted during the comment period for the Draft PEIR. It is a model for the robust and inclusive participation processes which CEQA mandates. In this vein, we appreciate the opportunity to provide comment on the Draft PEIR, and hope to work with the county to craft a REGPA which more accurately reflects the realities of the resource conflicts entailed by utility-scale solar development.

For almost nine years now, the New California Gold Rush has conceptualized the desert as a panacea for renewable energy production. In the haste to meet federal- and state-level directives for decreasing the carbon-intensity of our energy system, the significant resource and human conflicts entailed with these projects have been brushed aside in the name of expedient and inexpensive development. Environmental reviews and field resource surveys have been both cursory and inadequate. Massive subsidies have turned out to be poor investments for the tax payer, as the facilities struggle to be permitted and then struggle to live up to the promises made in the project proposal phase. Meanwhile, cohesive planning efforts have both been a day late

202-1

To protect the land, water, and beauty of the Amargosa



and a dollar short: the Programmatic Environmental Impact Statement for Solar Energy in the Six Southwestern States (PEIS) was inadequate and poorly executed; the Desert Renewable Energy Conservation Plan (DRECP) is a step forward but only succeeds in diluting the overall planning strategy; and finally the counties have adopted a rather ad hoc and cavalier stance toward permitting on private land, as will be evidenced in this comment.

The Draft PEIR upon which we are commenting continues the trend of improperly and/or inadequately documenting and evaluating the impacts of utility-scale solar in the desert. The very structure of environmental review under the REGPA as established demands questions as to the Draft PEIR's veracity and legitimacy. This comments seeks to highlight the resource impacts that the Draft PEIR overlooked or understated and to make specific recommendations for land designations. Our particular focus is in Eastern Inyo County and the Charleston View and Chicago Valley Solar Energy Development Areas (SEDAs), because it is the area we know best, and because of all eight SEDAs, they are the ones most obviously inappropriate for solar development.

202-1
(cont'd)

The ultimate goal of this comment is to make clear the most pertinent point about the REGPA: regardless of the findings of the Final PEIR, every single future proposed project needs to be subject to a full EIR. The impacts, both those revealed by the Draft PEIR and those overlooked, are significant and unmitigable, and need thorough site-specific review to determine their extent. Accordingly, the impacts revealed by these reviews will dictate how significant any potential remedies need to be. Given the preciousness of the resources in Eastern Inyo County, mitigation would have to be very substantial in order to properly compensate the environment for these losses.

Groundwater Resources

The Amargosa Watershed is one of the most unique hydrological systems in the world. From its beginnings in the Oasis Valley north of Beatty to its ultimate evaporation on the salt flats of Badwater Basin, the Amargosa's water provides the vital resource which sustains life throughout the Watershed. It is a complex and misunderstood hydrological system, which has only been thoroughly studied and documented in the past twenty years or so. One thing that has become apparent over the past several decades of monitoring, however, is that it is very sensitive to changes- decreasing or increasing the amount of water flowing through the system at one point in the system will inevitably entail changes at another point.

202-2

The interconnectedness of this system is only now being fully understood. The State of the Basin Report- 2014 (SBR), a report written by Andy Zdon & Associates, Inc. with support from the Amargosa Conservancy, the Nature Conservancy, and the Bureau of Land Management (BLM), adds significantly to our knowledge the system. The SBR itself, which has been included

To protect the land, water, and beauty of the Amargosa



in the comments for this Draft PEIR by the Nature Conservancy, is vital for planners to read and be familiar with. It outlines an extremely complicated hydrological system which relies on subsurface groundwater flows from a variety of sources.

Perhaps most pertinent to our current discussion, the SBR makes clear that a substantial portion of the water in the Amargosa system comes from the Pahrump Valley aquifer. This water flows through carbonate bedrock and alluvial fill aquifers, beneath the Nopah Range, entering into the Amargosa Watershed and emerging at key springs such as Resting Spring, Tecopa Hot Springs, Chappo Spring, and Shoshone Spring, as well as in the flow of the Amargosa River. Therefore, any withdrawals within the Pahrump Valley aquifer, which is an integral part of our unique watershed, could have detrimental effects on groundwater flows within the Amargosa River system itself. Due to the critically imperiled nature of the species which rely upon these groundwater flows, Charleston View is not an appropriate location for the siting of solar thermal projects, which require groundwater pumping for cooling.

202-2
(cont'd)

Similarly, the SBR suggests that the Chicago Valley is another flowpath along the groundwater route from Spring Mountain snowmelt to Amargosa River springs. The Chicago Valley SEDA is located right in the bottom of the drainage basin. Groundwater pumping in the area would threaten downstream riparian habitat and the species which dwell there. Additionally, localized impacts would occur should pumping be permitted in the area, as the dense mesquite bosque which occurs there is composed of groundwater dependent vegetation. As a result, Chicago Valley is inappropriate for any solar thermal projects, which would deplete these vital groundwater resources.

Inyo County has fought hard and long to protect its groundwater resources from exploitation by outside entities. After the County's well documented and extensive struggles with the City of Los Angeles, it is somewhat surprising that the Draft PEIR takes such a cursory look at water consumption within the SEDAs. And indeed, allowing multinational energy companies working at the behest of investor-owned utilities to exploit Eastern Inyo County's groundwater resources in order to produce energy which will then be exported out of the county perpetuates this same paradigm of urban Western California exploiting the resources of rural Eastern California with little recompense or thought toward the long-term environmental effects of such exploitation.

202-3

If Inyo County makes the unwise choice of permitting groundwater use for utility-scale solar anywhere within the Amargosa Watershed, significant compensatory mitigation should be required. Given the imperiled nature of many of the species which rely on groundwater in the area, water rights should be purchased at a ratio of 5 acre-feet of purchased and retired water rights for every 1 acre-foot of water used by the facility. Two conditions are critical for this mitigation to achieve its aims: first, it is essential that these water rights be currently exercised, so that new water will genuinely enter the system; and second, it is essential that these water rights be acquired along the same flowpath as the water which would be used by the solar

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facility. This will likely involve consultation with the data included in the SBR, or potential consultation with hydrogeological experts who have already conducted investigations in the area, such as Wayne Belcher with USGS and Andy Zdon. Maintaining the volume in these flowpaths is an essential part of maintaining critical habitat for imperiled species such as the Amargosa vole and the least Bell's vireo.

202-3
(cont'd)

Riparian and Groundwater Dependent Habitat

As outlined above, the hydrologic system of the Amargosa is extremely complex, and the effects of groundwater pumping in one region may be paradoxical and difficult to predict. As a result, it is incumbent upon the County to perform a thorough program-level analysis in the Final PEIR of the effects of utility-scale solar development upon the riparian and groundwater influenced habitat throughout the Amargosa watershed. As a hypothetical example, since exact flowpaths through the Pahrump Valley aquifer and unknown, it is not inconceivable that groundwater withdrawals at Charleston View could affect spring flow or groundwater levels at locales far distant, for instance at Ash Meadows or Carson Slough. While this may be difficult to imagine, the models currently being worked with suggest that flow patterns are not linear and are not exclusively influenced by gradient. Therefore, a thorough analysis of groundwater pumping would address potential down-watershed consequences for riparian and groundwater dependent habitat, and such an analysis needs to be at the program level. This is a glaring flaw in the Draft PEIR: because the habitat or special status species aren't directly on site in the SEDAs, impacts to them associated with solar development were not evaluated.

202-4

Marshes

The marshes of the Amargosa Region provide some of the richest habitat and densest biodiversity of any area in the desert. These marshes exist because of reliable spring flow from our precious springs. The three most prominent marshes in our area are the Shoshone Marsh, fed by Shoshone Spring, Tecopa Marsh, fed by the Tecopa Hot Springs, and in the Amargosa Canyon, which is fed by a variety of seeps, springs, and surface flow from Tecopa. These marshes provide important habitat for numerous migratory and resident birds, as well as federally designated critical habitat for the Amargosa Vole, and endangered species. Any reduction in groundwater flow in the Amargosa River system has the potential to lower the water levels in these marshes, which could dry up tens or hundreds of acres of this special habitat. We have recently seen this in evidence, as Inyo County improperly installed a culvert at the bottom of Borehole Spring, causing the water level to drop in the marsh, which precipitated a crash in the population of the Amargosa Vole. Groundwater pumping associated with utility-scale solar has the potential to have similar consequences on this most vital of habitats.

202-5

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Mesquite Bosque

Mesquite bosque is considered a special status natural community by CDFW. This habitat is rich in wildlife habitat, important to migratory and resident birds, and holds a treasure trove of archaeological resources. They are considered “very threatened” by the state, and the Draft PEIR itself describes it as a habitat type that is “extremely restricted in California.” Development of any kind in the Chicago Valley SEDA could negatively impact the mesquite bosque there. Even if project footprints were designed to avoid the bosques themselves, changes to runoff patterns and potential water withdrawals would inevitably affect and potentially degrade the quality of the mesquite bosque habitat. Indeed, the Chicago Valley SEDA appears to be sited in the direct hydrographic flow zone at the bottom of the basin- the mesquite bosque there is likely the densest and best habitat in the entire valley.

202-6

Additionally, while the Draft PEIR makes no mention of it, there is limited but existing mesquite bosque habitat in the Charleston View SEDA. This needs to be incorporated into any examination of the SEDA in the Final PEIR. The presence of this rare habitat type on the Charleston View site is exemplary of its remarkable diversity.

Alkali Flats & Halophytic Plants

Alkali flats are a poorly understood and understudied ecosystem. While not home to large range of biodiversity, they are home to some of the most fascinating and hardy species on the planet, particularly the halophytic plants. These halophytic plants have evolved over millennia to tolerate intensely high salt concentrations, and are relatively unique in their ability to adapt to conditions which other plants simply wouldn't tolerate. There are two halophytic plant species of significant concern in the Amargosa Watershed, the federally endangered Amargosa niterwort (*Nitrophila mohavensis*) and the federally threatened Ash Meadows gumplant (*Grindelia fraxino pratensis*). These plants have an extremely limited distribution, occurring only in the Carson Slough area near the California/Nevada border. Little is specifically known about their biology, but the most important factor in their abundance and continued existence is reliable access to shallow groundwater emanating from the Ash Meadows outflow. Given how, as outlined above, groundwater flow patterns in the area are still being studied and understood, it is incumbent upon the County to conduct a full analysis of how potential groundwater withdrawals in Charleston View or the Chicago Valley would impact alkali flat plant communities elsewhere in the Amargosa Watershed.

202-7

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Species of Special Concern

Amargosa Vole

The Amargosa vole (*Microtus californicus scirpensis*) is a perilously endangered species endemic to the Amargosa Watershed, whose current range is limited to the Tecopa Marsh. The exact number of extant individuals is not known, but it is currently estimated to be between 100 and 120, per USGS. This makes it potentially the single most endangered mammal in North America, and likely one of the most endangered mammals in the world. The vole is entirely reliant on the Tecopa Marsh ecosystem for its habitat and survival, and as is described above, it is highly sensitive to changes in the conditions of the marsh. If the water level drops, this will cause some of the bulrush to die back, which exposes the vole to increased predation and thus causes a decline in population, as with the culvert incident.

While the vole doesn't occur within any of the SEDAs, its federally protected status and the fact that the entirety of its habitat occurs down-watershed from Charleston View and Chicago Valley means that it is imperative that potential impacts to the vole be assessed in the Final PEIR. Any actions taken by the County which result in the mortality of even a single vole could push this species to the brink of extinction. Thus we would re-emphasize: no groundwater pumping for utility-scale solar should be permitted in Eastern Inyo County. And if such pumping is unwisely and inadvisably permitted, the water losses in the watershed must be mitigated at a level of 5:1, and the acquired water rights must be currently exercised prior to acquisition. Even then, given the unpredictability of water's movement through the watershed, groundwater loss may spell doom for the Amargosa vole. Any groundwater pumping should require a take permit from the US Fish and Wildlife Service (FWS) for the vole.

202-8

Desert Tortoise

The desert tortoise (*Gopherus agassizi*) is a federally and state listed threatened species which has been the focus of extensive conservation efforts over the past four decades. Direct impacts to individual desert tortoises by construction of solar energy facilities are obvious and unmitigatable. Translocation has been proven to be ineffective, often resulting in mortality and potentially reduced fertility.ⁱ No mitigation measures will spare those tortoises, and FWS should consider any tortoises found on-site as a form of take. In light of this, the Final PEIR should require vastly increased compensatory mitigation requirements.

202-9

In addition to impacts to specific tortoises, however, solar energy development in Charleston View and Chicago Valley will result in negative impacts to the species as a whole. Both areas have lands within them that have been designated by FWS as priority 1 and 2 desert tortoise connectivity corridors. These designations mean that these areas have "the best chance of sustaining connectivity," and should be considered "priority areas for conservation of desert tortoise population connectivity."ⁱⁱ As a result of this connectivity, MM BIO-21 needs to be

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completely revised to include this information and discuss how it would mitigate for tortoise connectivity. Given the scale of such a facility, the impacts would likely be significant and unmitigable and offer another reason to exclude Charleston View from consideration as a SEDA. Thus, these areas are clearly inappropriate for utility-scale solar development. Sandy Valley is also potential tortoise habitat, and the SEDA boundaries there should be redrawn to exclude undeveloped potential tortoise habitat.

With regard to mitigating impacts to desert tortoises (MM BIO-6), it is unclear that using mitigation money to purchase private inholdings in Wilderness or DWMAs, often very remote to the actual project site, is an effective mitigation measure. Much private land acquired through such mitigation mechanisms is remote and sparsely used or not used at all to begin with. Alternative forms of mitigation should be considered, such as habitat restoration and reintroduction of individuals into previously occupied areas. Additionally, as stated above, translocation is not an effective or adequate means of mitigation. Thus, MM BIO-6 fails to adequately mitigate impacts to the desert tortoise.

202-9
(cont'd)

Burrowing Owls

Recent field investigations by the author of this comment (a qualified biologist) on January 1 and January 10, 2015 revealed the presence of likely active burrowing owl burrows in the Chicago Valley and Charleston View SEDAs. Both of these areas should be regarded as potential burrowing owl habitat, and the same restrictions and mitigation measures which apply in other SEDAs already classified as having burrowing owls. The Draft PEIR makes clear that the impacts to the burrowing owl of solar development would be severe: interrupted reproductive cycles, nest abandonment, increased predation, and increased mortality. Thus, the requirements of MM BIO-9 to build exclusionary fence around occupied burrows during nesting season is inadequate mitigation—those owls will likely not survive long-term. Additionally, for creatures that are as reliant on their burrows as burrowing owls are, the translocation proposed in MM BIO-9 would likely not be sufficient mitigation. Increased compensatory mitigation should be required, and the lands should be purchased in imperiled burrowing owl habitat of similar quality.

202-10

Least Bell's Vireo

The least Bell's vireo (*Vireo bellii pusillus*) is a federally and state listed endangered species, which occupies willow and mesquite bosque habitat in the wetlands along the Amargosa River. The area is well-known as a breeding ground for the birds, and recent counts have found dozens of nesting pairs throughout the Amargosa River area from Shoshone down to the Amargosa Canyon. This species, like others described thus far, is entirely reliant on riparian and groundwater dependent vegetation for its habitat. Changes to groundwater flow in the area as a result of pumping for utility-scale solar energy production could result in a catastrophic loss of

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habitat for the vireo. As a result, while not occurring within the SEDAs, impacts to the vireo in the Amargosa Watershed need to be evaluated programmatically, within the PEIR. The treatment given the vireo in MM BIO-13 does not adequately address these impacts. Should vireo habitat be impacted, significant compensatory mitigation, including the possibility of captive breeding and habitat restoration projects, would need to be implemented.

202-11
(cont'd)

Birds in General

There are several emergent concerns about birds and utility-scale solar. The first is the lethal effects of an encounter with the solar flux. Solar flux can reach temperatures of thousands of degrees Fahrenheit. Birds may simply incinerate in the flux, but a potentially more common occurrence is for them to be severely injured by the concentrated light, and then to die off-site. As a result, it is unlikely that surveys for injured and deceased birds at Ivanpah or other power tower sites have accurately reflected the level of mortality that is occurring.

Problems with flux are now well known and well documented. And yet the Draft PEIR gives only cursory treatment to attempting to mitigate these problems in MM BIO-18. Locating a power tower 1,000 feet from an Important Bird Area or other bird habitat will not prevent those birds from coming into contact with the flux. Additionally, the requirements for flux mitigation should apply to all wetland habitats, including seasonal and ephemeral wetlands: in our water-poor county, every wetland is critical to local and migrating bird populations, no matter how ephemeral it is. If these impacts are indeed significant and unmitigable, as the Draft PEIR states, then such a project should be disallowed. Inyo County is world renowned for its birds, and any project which poses such a threat should not be permitted here.

202-12

The second emergent concern is about the “lake effect.” Shimmering mirrors on the ground give a very similar appearance to a body of water in the desert. Migrating or resident birds come in for a landing on what appears to be a refreshing lake, and collide with the panels, usually killing the birds. Again, the Draft PEIR acknowledges these impacts, but gives no valid attempt to mitigate for them. It is unknown if UV-reflective coating or solid contrasting bands would mitigate the “lake effect.” Until such remedies can be fully tested and determined to be effective, these impacts should be considered significant and unmitigable. The “lake effect” has already caused direct mortality of threatened and endangered birds at Genesis Solar. This impact is so severe, and Inyo County is such an important bird area, that the “lake effect” alone should disqualify most of the county from consideration for solar development. In particular, given their proximity to the critically important bird area of the Amargosa River, the Charleston View and Chicago Valley SEDAs should be eliminated from consideration due to the “lake effect.” If projects are permitted, significantly increased compensatory mitigation in equally important bird areas should be required.

202-13

Finally, the matter of toxic evaporation ponds is important to address. These have been documented to kill birds at Genesis Solar, and neither Genesis nor any other facility in the desert

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has installed the netting which MM BIO-18 suggests. The REGPA must take strong steps to insure that netting requirements are rigorously composed and stringently adhered to. If bird deaths are still encountered, these impacts should be considered significant and unmitigable, and increased compensatory mitigation should be required.

202-14
(cont'd)

Special Status Fish

As with the vole and the vireo, the REGPA ignores potential impacts to special status fish in the Amargosa Watershed. Down-watershed impacts from groundwater pumping associated with utility-scale solar has the potential to affect water levels which are critical to special status fish. Special status fish which need consideration in the Final PEIR include the Amargosa pupfish (*Cyprinodon nevadensis amargosae*), the Saratoga Springs pupfish (*Cyprinodon nevadensis nevadensis*), the Shoshone pupfish (*Cyprinodon nevadensis shoshone*), the Ash Meadows pupfish (*Cyprinodon nevadensis mionectes*), the Warm Springs pupfish (*Cyprinodon nevadensis pectoralis*), and the Amargosa speckled dace (*Rhinichthys osculus nevadensis*). This is by no means a comprehensive list. If further evidence is needed regarding the legal obligation to evaluate the impacts of groundwater pumping associated with utility-scale solar on these species, one need look no further than the fate of the Tecopa pupfish (*Cyprinodon nevadensis calidae*) which went extinct in 1970 due at least in part to declines in water levels in the Tecopa Marsh. These special status fish have the distinct possibility of being affected by the REGPA, and these impacts need to be evaluated at the programmatic level in the Final PEIR.

202-15

Special Status Plants

Little is firmly known about the botanical diversity in the Eastern SEDAs. Prior to the environmental surveys associated with the Hidden Hills proposal, few people knew the extent of Charleston View's rare plant communities. With what we know now though, it can be said with certainty that Charleston View is a place of rare botanical diversity and uniqueness. Seventeen special status plants exist on site. Of these seventeen, ten are known to occur in California only in the southern portion of the Amargosa Watershed. Of these ten, three are known to occur in California only in the Charleston View SEDA, and one only in the Charleston View and Sandy Valley SEDAs. This is clearly not an appropriate place for utility-scale solar development. The wholesale grading of these lands for construction and installation will forever alter the only habitat in California for these plants, decreasing the chance of species survival in California long-term. Indeed, based on botanical diversity, it seems that Charleston View may be one of the least appropriate places one could possibly put a utility-scale solar facility.

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Plants unique in California to the southern Amargosa Watershed:

- desert wing-fruit - *Acleisanthes nevadensis*
- Tidestrom's milk-vetch - *Astragalus tidestromii*
- Ash Meadows buckwheat - *Eriogonum contiguum*
- wing-seed blazing star - *Mentzelia pterosperma*
- Goodding's phacelia - *Phacelia pulchella* var. *gooddingii*
- Johnson's beehive cactus - *Sclerocactus johnsonii*

Plants unique in California to Charleston View and/or Sandy Valley SEDAs:

- Nye milk-vetch - *Astragalus nyensis*
- Preuss' milkvetch - *Astragalus preussii* var. *preussii*
- Torrey's Mormon-tea - *Ephedra torreyana*
- spine-noded milk-vetch - *Peteria thompsoniae*

202-16
(cont'd)

We have included rough distribution maps pulled from the CalFlora database for most of the special status species in the Eastern SEDAs in Attachment A.

The botanical comment has focused on Charleston View thus far because it is assumed that neither the county, the present commenters, nor the landowners know the exact nature of the rare plant populations are in Chicago Valley and Sandy Valley. While the Draft PEIR lists four special status plants in each of those two SEDAs, the experience in Charleston View makes clear that there are doubtless more special status species in these areas. Until thorough botanical surveys are done, it is impossible to make informed decisions about land use planning in these areas.

The impacts to native, rare, and regionally endemic plants from the proposed REGPA are so severe that they are unmitigable. The mitigation measures proposed in MM BIO-2 are completely inadequate to the type of damage that a project such as one in Charleston View might do to the botanical diversity of the southern Amargosa Watershed. Transplanting native plants, particularly wildflowers (which most of these plants are), has an extremely low success rate and is not a viable method of species conservation. Additionally, environmentally sensitive area fencing on-site is not a viable form of mitigation. These plants are left stranded in the middle of the industrial energy production zone will never reach their biological potential, and their ability to reproduce will be significantly impaired by the lack of suitable nearby habitat. Therefore, every plant occurrence within any proposed project needs to be mitigated for, regardless of its ultimate fate.

202-17

Given the extremely sensitive nature of these rare plant species, mitigation should involve the acquisition of five off-site occurrences of each impacted special status plant for every one occurrence on the project site *whether it is destroyed by construction of the facility or not.*

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Impacts to Cultural Resources

The cultural impacts of potential development in the Charleston View SEDA are well documented in the Hidden Hills Solar Electric Generating Systems – California Energy Commission Ethnographic Report. The report makes clear that Charleston View is a vital component of three ethnographic landscapes: the Salt Song Landscape, of central spiritual and cultural importance to all Southern Paiute peoples; the Pahrump Paiute Home Landscape; and the Ma-have Landscape. The report concludes that the Hidden Hills proposal would have significant and unmitigable impacts on the Pahrump Paiute. The fact that the Pahrump Paiute remain federally unrecognized only exacerbates these impacts, as they enjoy no statutory protection against the destruction of their cultural landscapes. These impacts are unacceptable, and alone should be cause enough to remove Charleston View as a SEDA. The aforementioned ethnographic report has been attached to this comment in Attachment B.

202-18

With regard to archaeological resources, Chicago Valley is well-known to be rich in cultural artifacts. A cursory visit by the author of this comment on January 10, 2015 revealed likely cultural artifacts simply lying on the surface within the bounds of the SEDA. The dense mesquite bosque of the area has both attracted use by Native Americans for hundreds or potentially thousands of years, and collected artifacts as they washed down the Chicago Valley. The destruction of these resources which would occur with solar development would be significant, unmitigable, and unacceptable. Additionally, the mitigation measures outlined in CUL-1(a-g) and CUL-2 are completely inadequate. The Draft PEIR establishes no specifics regarding data recovery, nor in-situ preservation. There are also very limited mechanisms for proper treatment of human remains. Giving tribes a matter of hours to locate nearest descendants and for them to take appropriate action is compliant with the National Historic Preservation Act (NHPA) in name only.

202-19

The subject of tribal consultation on utility-scale solar projects has recently been the subject of much rancor across the California desert. Several lawsuits in recent years have alleged that the federal government has done an inadequate job of engaging tribes in government-to-government consultation, and in consulting tribes upon the location of significant artifacts or human remains. Most recently, the Colorado River Indian Tribes (CRIT) filed a lawsuit against BLM (among others), criticizing the degree and form of tribal consultation in the permitting of the Blythe Solar Power Project. This complaint has been attached to this comment as Attachment C. It is important that Inyo County develop a tribal consultation protocol for any projects under the REGPA which satisfies the legal and ethical obligations the County has toward Indian Tribes, particularly under CEQA and NHPA. The CRIT complaint can be used as a guideline, as it specifically delineates the ways in which existing consultation practices on utility-scale solar projects fall short of those obligations.

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Finally, the cultural impacts of utility-scale solar development in Eastern Inyo County would not be limited to impacts to Native Americans. The Old Spanish Trail, a federally protected National Historic Trail, runs directly through the Charleston View SEDA. Development of any kind within this SEDA would likely obliterate historic tracks or other archaeological records of the earliest Europeans to visit the area. Even if such tracks and records were scrupulously avoided, the landscape-level impacts which would result from development in the SEDA would irreparably change the cultural landscape through which the Old Spanish Trail runs. Visitors would no longer be able to envisage the courageous journey of early explorers and emigrants; instead this historic cultural area would be converted into an industrial energy production zone. Impacts to the Old Spanish Trail would be impossible to mitigate, and form yet another argument in favor of scrapping the Charleston View SEDA.

202-21

Impacts to Human Communities

Local Economy

The economy of Eastern Inyo County is almost entirely reliant on tourism. Gas stations, motels, restaurants, hot spring resorts, general stores- they all depend on the tourists that come to visit our region from around California, the United States, and the world. Many of these tourists come seeking an escape from their normal lives and routine, and are attracted to the wide open spaces and undeveloped nature of Eastern Inyo County. If portions of the region were turned into industrialized energy production zones, there may be a negative effect on the experience of the tourists, who in turn may choose to take their vacations elsewhere. Business owners throughout the Amargosa River valley have expressed concern about solar energy facilities in the area for this very reason. The foregoing obviously entails a good deal of conjecture. Because the reality is: nobody knows if tourism would be negatively affected. But it would be a dangerous experiment to conduct, with the economy of Eastern Inyo County hanging in the balance. As a result of this potential impact, a full economic study should be conducted in the Final PEIR before any solar development is approved in the Charleston View or Chicago Valley SEDAs.

202-22

The claims made in 4.16.3.3 regarding a boost to the local economy as a result of solar facility construction are dubious at best, particularly when considering the Charleston View and Chicago Valley SEDAs. Workers during the construction phase would just as likely come from Pahrump or Las Vegas as from Eastern Inyo County, and the amount of long-term jobs at these facilities is negligible. These construction workers will likely not partake in the tourism-oriented service economy of our area, thus resulting in no boost to our local economy.

202-23

Business owners and residents of Eastern Inyo County are concerned about the impacts of utility-scale solar development on the local economy. Please refer to the separately submitted comment letters signed by business owners and residents expressing their concern about these

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developments. Tourists have also made their voices heard, that the sort of developments proposed in the REGPA would affect their experience in Eastern Inyo County, and their willingness to return. Please refer to the separately submitted change.org petition and the accompanying list of individual comments and signatories. Each individual comment from the change.org petition should be evaluated as a separate comment letter.

202-23
(cont'd)

Property Values

In the areas both within and surrounding the Charleston View and Chicago Valley SEDAs, property value is low. Water and power are expensive to acquire, and prospects for development are limited. As a result, what property value does exist is largely determined by the remote setting and pastoral views. If solar energy development were to occur in these areas, property values would likely fall. The pastoral views would change to views of an industrialized landscape, thereby bringing down property values.

202-24

In the case of the Chicago Valley, it should be noted that while one property owner did request that his land be evaluated in the REGPA Draft PEIR, at least one other property owner in the valley explicitly did not want her lands considered for solar development. Given that there are only a few landowners in Chicago Valley, actions taken on one person's private land would dramatically affect the value of another person's private land.

Dust

Both the Charleston View and Chicago Valley SEDAs have people living within them. These people may or may not desire to live directly adjacent to a huge construction site and industrial energy production complex. Of paramount concern to local citizens would be the effects of blowing dust. Blowing dust is a broader issue, which affects air quality metrics and the lives of people for tens or even hundreds of miles downwind. And the REGPA does appear to address the dust problem during construction. However, MM AQ-3 is a completely farcical attempt at mitigation for operational air quality impacts. "Wind deflectors," whatever those are, and the orientation of the panels will do nothing to reduce operational dust issues. Basin & Range Watch and others have provided extensive documentation on the massive amounts of windblown dust which will continue to be stirred up during high wind events from an operational utility-scale solar site.ⁱⁱⁱ MM AQ-3 needs to be completely revised. Its current incarnation is an insult to those residents whose lives may be affected by operational dust impacts.

202-25

Unanticipated Consequences

As discussed in the beginning of this comment, the rush to cash in on various government incentives has led to cursory and inadequate reviews of environmental impacts. Indeed, the very

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point of an EIR is to anticipate potential impacts. And yet it seems that with each new facility built, there are significant unanticipated impacts. At Ivanpah, they grossly undercounted the amount of tortoises present on-site, which means that federal land managers made a decision on the permitting of that facility based on faulty information. At Genesis Solar, a construction worker's dog passed canine distemper to a kit fox colony, killing many of them. The construction of both Desert Sunlight and Genesis Solar revealed previously unidentified Native American remains and artifacts, resulting in the altering of project footprints and the destruction of irreplaceable cultural relics. This is to say nothing of the issues discussed above regarding solar flux/bird incineration and the "lake effect," neither of which were evaluated in EISs for earlier solar facilities. The lesson to learn is that these projects are enormous technological undertakings, warranting the most comprehensive and thorough environmental review process possible. Attempting to tier subsequent projects off of the Final PEIR, and exempting them from a full EIR process, is simply inviting the sorts of unanticipated consequences described here. Likely there are still further environmental and human impacts from these facilities that have yet to be revealed as the technology is still in its infancy. Thus it is imperative that each and every future project proposed in Inyo County be subject to a full Environmental Impact Report process.

202-26
(cont'd)

Existing and Proposed National Conservation Lands

The Amargosa Watershed has been called "the most protected landscape in the world."^{iv} In the California portion of the watershed, it is composed almost entirely of federally designated Wilderness Areas on both BLM and National Park Service lands. And running through the heart of it is the federally designated Amargosa Wild and Scenic River, a 25-mile stretch of perennial and intermittent watercourse which was recognized for its wilderness, scenic, and recreational values in the 2009 Omnibus Bill. The protected areas which are under the administration of BLM are designated National Conservation Lands, which have associated management regimes that prioritize conservation. While it is outside the scope of this comment to examine such policy here, the County is remiss in not examining the impacts of utility-scale solar development on National Conservation Lands. One could potentially argue that, given the level of impacts anticipated on these National Conservation Lands (as described in this comment), the Inyo County REGPA should be subject to obtaining a BLM right-of-way, and therefore a full NEPA analysis by BLM.

202-27

Chief amongst the impacts to National Conservation Lands would be detrimental effects to viewshed. The BLM employs a Visual Resources Inventory (VRI) as a part of their Visual Resources Management (VRM) planning. All of the designated Wilderness Areas are categorized as VRI Class 1, meaning it is a natural viewshed to be managed to "preserve" the character of the landscape. Many of the remaining public lands are categorized as VRI Class 2,

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meaning it is still a largely natural viewshed and should be managed to “maintain” the character of the landscape. BLM’s VRI is notoriously arbitrary, and that is an apt description of the VRI Class 3 and 4 designations. The views in the Amargosa Watershed are known the world over, and as described elsewhere in this comment, they are why tourists come to our area. The idea that the open and completely undeveloped California Valley, nestled between the towering Kingston Range and the brightly colored foot of the Nopah Range, could be a Class 3 viewshed stretches credulity. While poor inventory of Visual Resource characteristics by BLM is not Inyo County’s problem, the County should base its Final PEIR on the realities on-the-ground, not inherently subjective and arbitrary Visual Resource Inventories from many years ago. The impacts of utility-scale solar development on visual resources in the Final PEIR need to be based on a realistic inventory of existing conditions.

202-28
(cont'd)

In addition, there are conflicts between the DRECP preferred alternative and the REGPA preferred alternative. Specifically, lands which Inyo County has proposed to include within the SEDAs, the DRECP has proposed to designate as National Conservation Lands. Indeed, all of the federal lands within both the Charleston View and Chicago Valley SEDAs are proposed for designation as both National Conservation Lands and as Areas of Critical Environmental Concern (ACECs). The disparity between the two planning efforts could not be more stark. This lack of coordination between the two planning efforts only contributes to the dilution of solar energy policy in the California desert.

202-29

In describing the many resources that might be impacted by utility-scale solar development in Charleston View and the Chicago Valley, the reasons that these areas should be designated for conservation purposes have been made apparent. The REGPA should be amended to exclude any areas being proposed for conservation status in the DRECP, at least until such a point when a Record of Decision has been issued for the DRECP. Maps of the conflicted lands drawn up by the California Native Plant Society- Bristlecone Chapter are included with this comment as Attachments D and E.

Other SEDAs

In accordance with the comment letters from other conservation groups in Inyo County, we would like to make the following recommendations about the other proposed SEDAs. Laws SEDA has been the site of restoration efforts and is a key part of the LA/Inyo Water Agreement. Any designation in this area needs to conform to the requirements of that Agreement. As such, the SEDA boundaries need to be redrawn to include only significantly degraded, unwatered, unvegetated ground. The Owens Lake SEDA is home to many special status plants and animals, and any areas which are habitat for these organisms need to be excluded from the SEDA. The SEDA boundaries should be redrawn to include only those parts of the lakebed which are

202-30

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currently unwatered and not habitat for these species, which means largely the eastern part of the lakebed. The Rose Valley and Pearsonville SEDAs should be excluded altogether. There are significant avian conflicts with development in the Rose Valley SEDA, given its proximity to the Haiwee Reservoirs and Little Lakes. And Pearsonville SEDA is prime tortoise and Mohave ground squirrel habitat. Neither of these areas is appropriate for utility-scale solar development of any kind. Finally, very little is known about the Trona SEDA. Before anyone can make an informed decision about development there, more thorough on-the-ground investigations are necessary.

202-30
(cont'd)

As to the Sandy Valley SEDA, which has been noticeably absent from our comment thus far, not enough is known about this area to make a valid judgment on developing utility-scale solar there, either by the County or the conservation community. It is the absolute farthest reaches of our county, and few county residents (including this author) have ever visited it. It is known to have significant occurrences of special status plants. It is also rumored to have organic agriculture. It is tempting to say that the areas currently under center-pivot irrigation for alfalfa would be appropriate areas for utility-scale solar development, particularly if the currently exercised water rights were retired. In principle, the Amargosa Conservancy would have no objection to such development. But a thorough and rigorous site-specific EIR would need to be conducted, to properly assess if this is an appropriate locale for utility-scale solar or not.

202-31

Summary Recommendations

- Charleston View and Chicago Valley are inappropriate locations for utility-scale solar development of any kind. Resource conflicts are too severe to avoid, and no mitigation effort could possibly be sufficient to compensate for the loss of habitat and species in these areas. We urge you to eliminate them from consideration in the Final PEIR
- Inyo County's groundwater is simply too precious to waste on utility-scale solar energy production. If such facilities are to be permitted in Inyo County, they must be PV-only. Solar thermal is not appropriate for Inyo County.
- The PEIR is an inadequate programmatic analysis of the effects of utility-scale solar development in Inyo County.
 - Numerous resource conflicts were excluded from consideration, and need to be evaluated in the PEIR before a decision is reached.
 - "Desktop review" is a completely inadequate way to evaluate resource conflicts in these areas. While comprehensive on-the-ground surveys are not within the purview of a PEIR, some middle ground must be reached wherein accurate assessments of the resources present are available in order for proper decisions to be made at the programmatic level. If desktop review is requisite for this PEIR,

202-32

202-33

202-34

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- relying exclusively on the notoriously incomplete CNDDDB is unsuitable for the task at hand. A wider scope of desktop investigation, including the academic literature, FWS surveys, CNPS surveys, and other sources should be utilized.
- The resource conflicts omitted from consideration in the Draft PEIR are so severe that a Supplemental Draft PEIR should be created to address these impacts.
 - As a result of the deficiencies of the Draft PEIR, each and every proposed project in Inyo County needs to be subject to a full Environmental Impact Report process. Anything less will not give adequate consideration to the substantial resource impacts entailed by utility-scale solar development.
 - Down-watershed impacts of groundwater pumping need to be thoroughly examined. This would include any and all potential flowpaths from a project site, entailing the examination of dozens of special status species and habitats which rely on groundwater for their survival.
 - The REGPA's potential impact on existing and proposed National Conservation Lands in Eastern Inyo County dictates that BLM be involved with the environmental review process, and that these impacts be analyzed at a programmatic level in the Final PEIR.

202-34
(cont'd)

202-35

202-36

202-37

We thank you for providing the opportunity for interested parties to comment on the Draft PEIR. The recommendations we make here are essential to the conservation of the precious and vital resources of Eastern Inyo County. Utility-scale solar development in this area has the potential to radically transform the natural and human landscape of the Amargosa Watershed. If you have further questions or would like to consult about the issues raised in this comment letter, please don't hesitate to contact us. We'd be glad to assist the County in developing a REGPA that better suits the needs of this very special place.

202-38

On behalf of the Amargosa Conservancy,

Patrick Donnelly
Executive Director
patrick@amargosaconservancy.org

Please see next page for Attachment list and endnotes.

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Attachment A: Rare Plant Distribution Maps

Attachment B: Hidden Hills Ethnographic Report

Attachment C: CRIT Tribal Consultation Legal Complaint

Attachment D: Charleson View SEDA and DRECP National Conservation Lands

Attachment E: Chicago Valley SEDA and DRECP National Conservation Lands

ⁱ <http://www.hcn.org/issues/45.13/can-we-save-mojave-desert-tortoises-by-moving-them-out-of-harms-way>

ⁱⁱ PEIS (2011)- http://solareis.anl.gov/documents/fpeis/maps/FWS_Connectivity_Explanation.pdf

ⁱⁱⁱ http://www.energy.ca.gov/sitingcases/hiddenhills/documents/others/2012-05-26_Basin_and_Range_Watch_letter_re_Air_Quality_and_Dust_TN-66063.pdf

^{iv} David Lamfrom, National Parks Conservation Association

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Amargosa Conservancy comment on the Inyo REGPA PEIR

Attachment A:

Rare Plant distribution maps in the Eastern Solar Energy Group of the Inyo County REGPA

These are the only known instances of these plants in California, per the CalFlora database. The squares indicate known occurrences- the closer the color is to red, the more occurrences. This is not meant to be a scientific assessment, but rather an illustration of the botanical uniqueness of Eastern Inyo County.

**Atriplex argentea* var. *longitrichoma*- Pahrump orache



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Eriogonum bifurcatum- Forked buckwheat

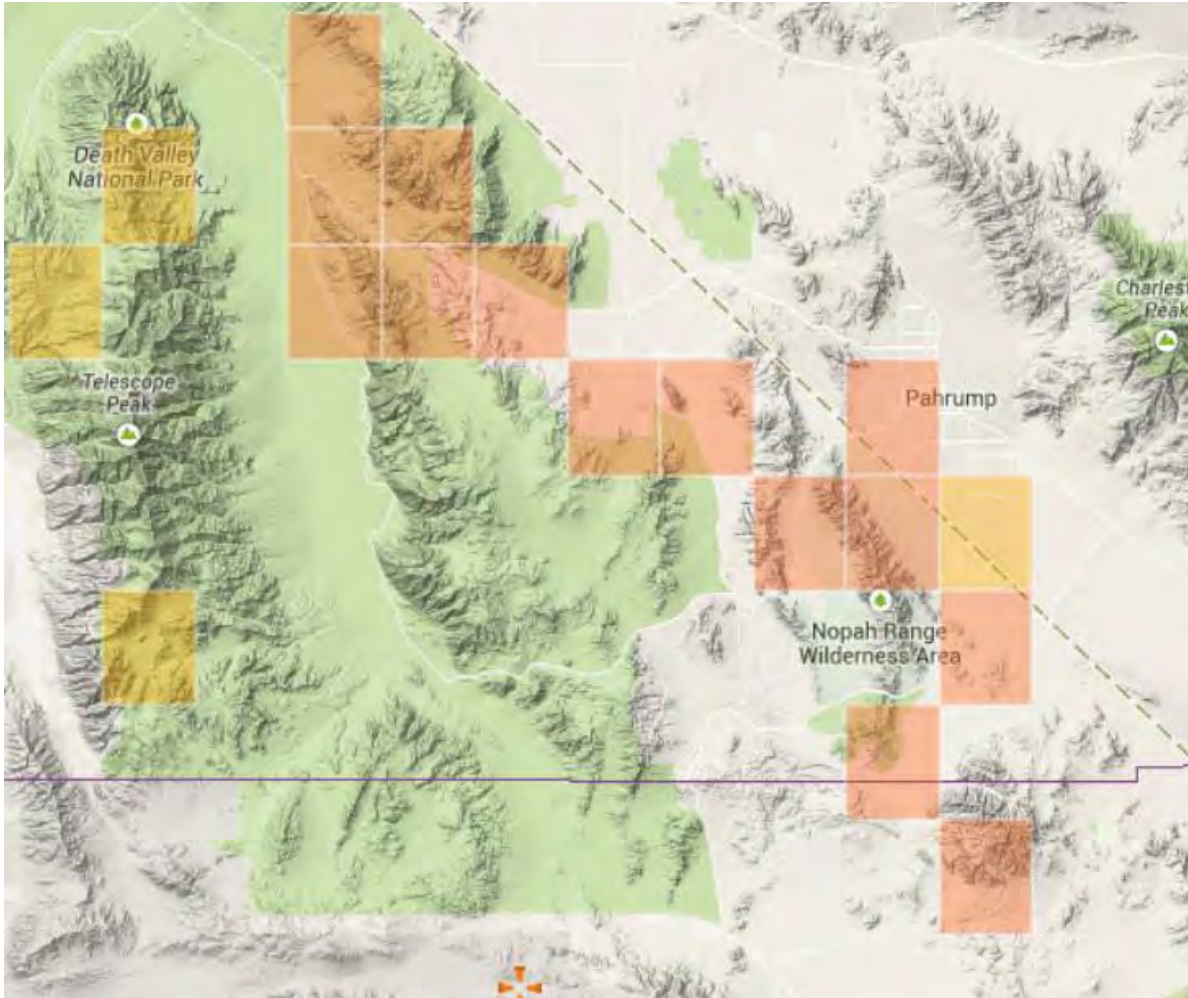


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Eriogonum contiguum- Ash Meadows buckwheat

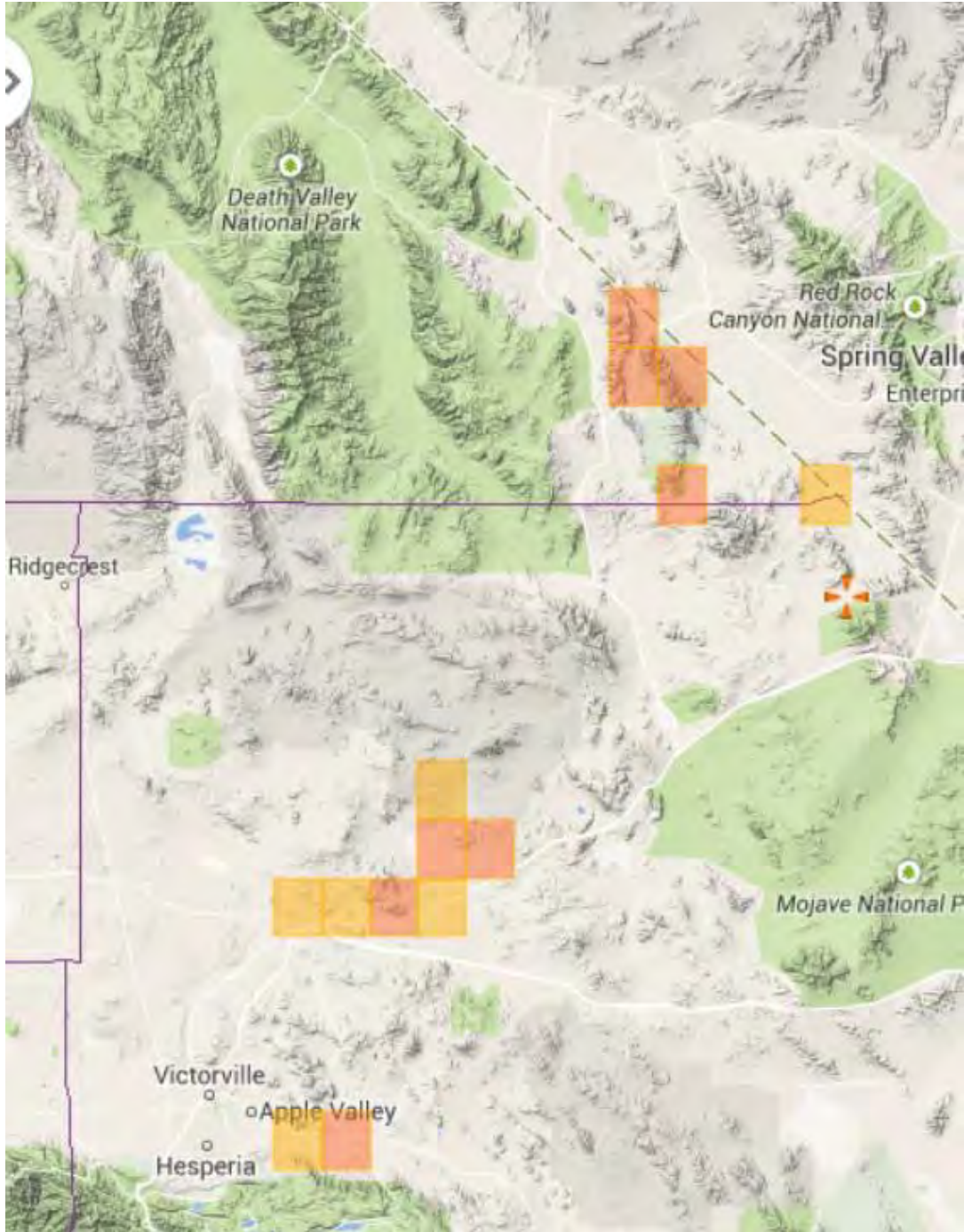


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**Phacelia parishii*- Parish's phacelia

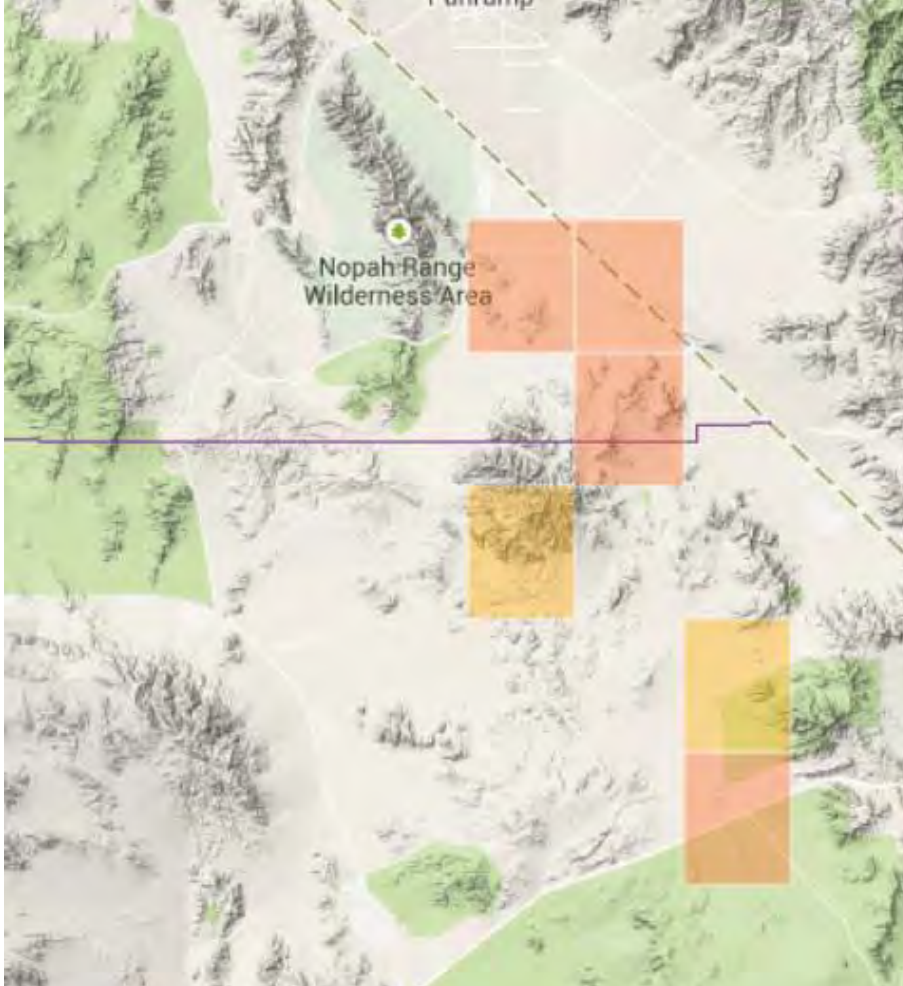


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Acleisanthes nevadensis- desert wing-fruit



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Androstephium breviflorum- small-flowered androstephium

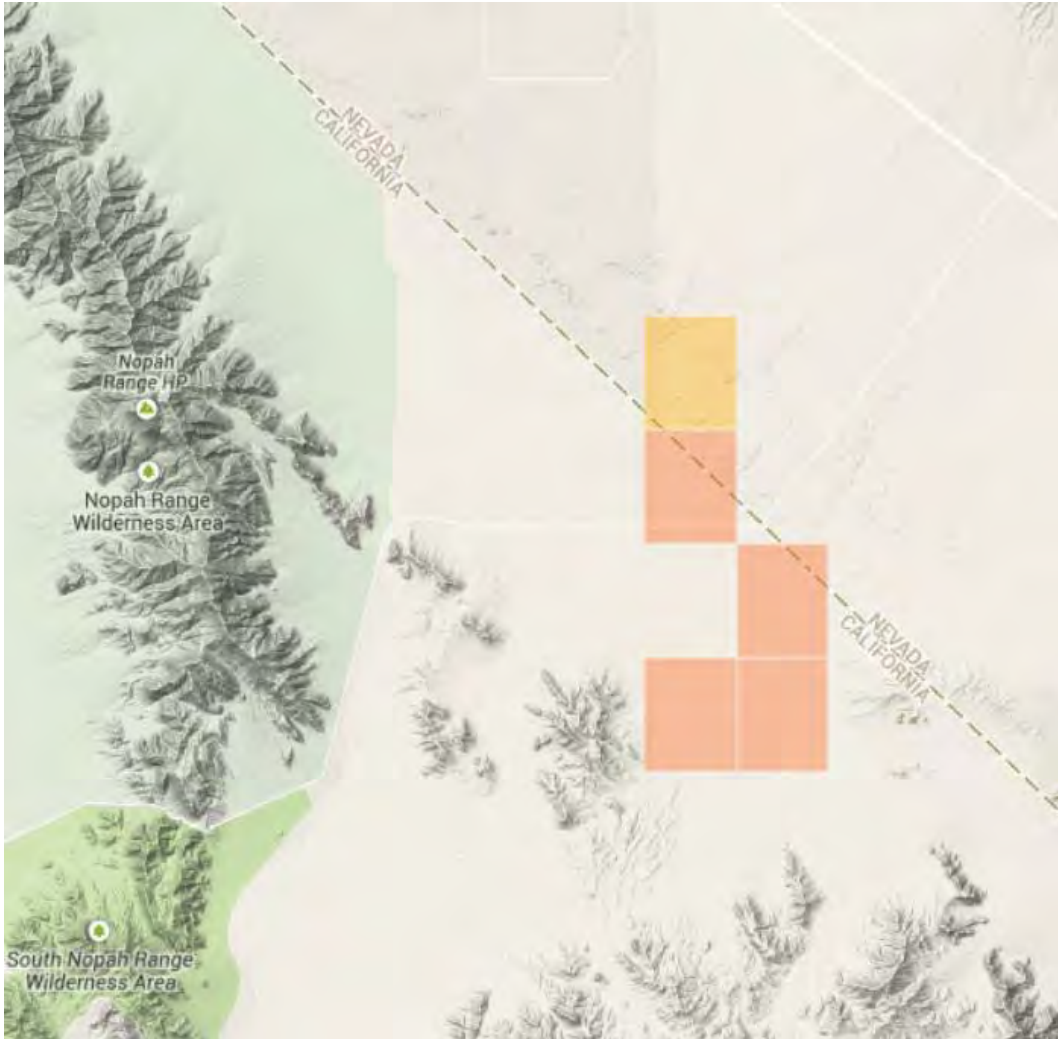


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**Astragalus nyensis*- Nye milk-vetch

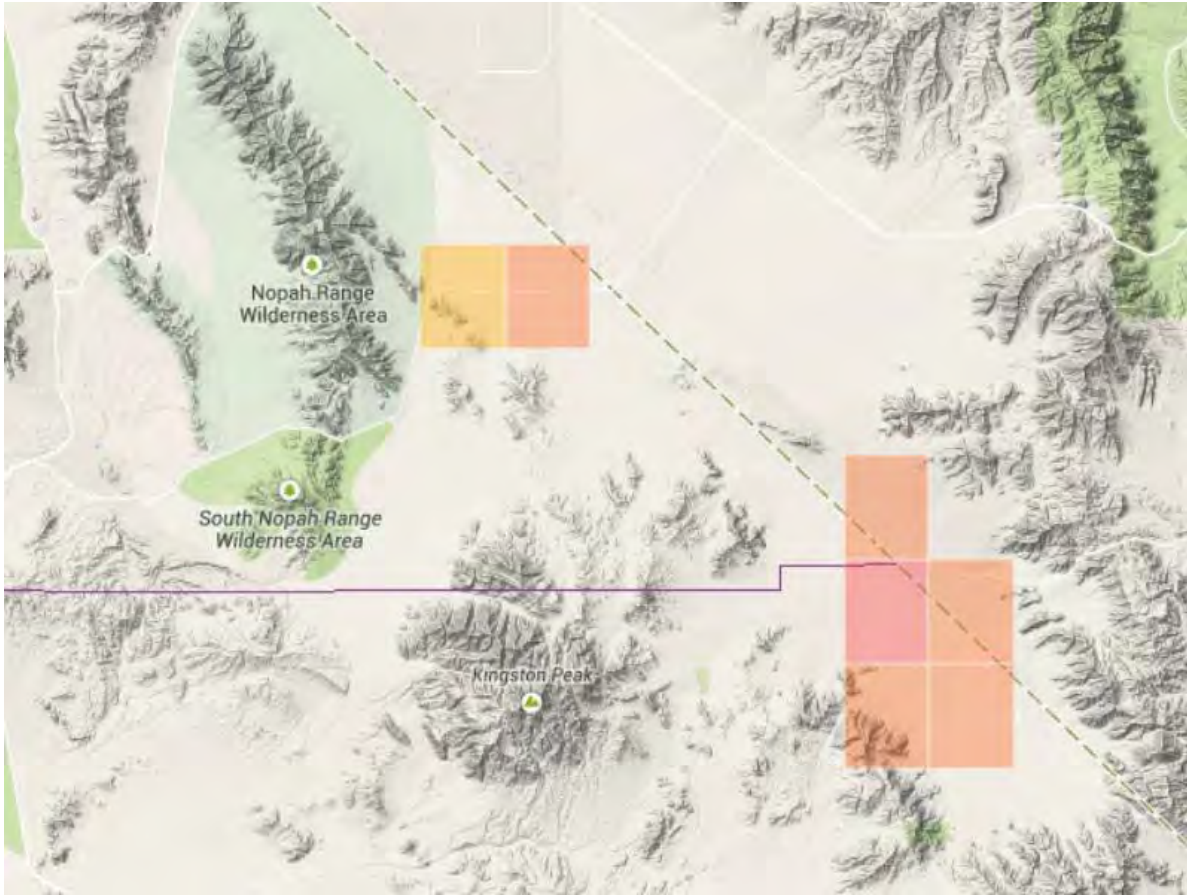


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Astragalus preussii var. *preussii*- Preuss' milkvetch



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Astragalus sabulorum- gravel milk-vetch

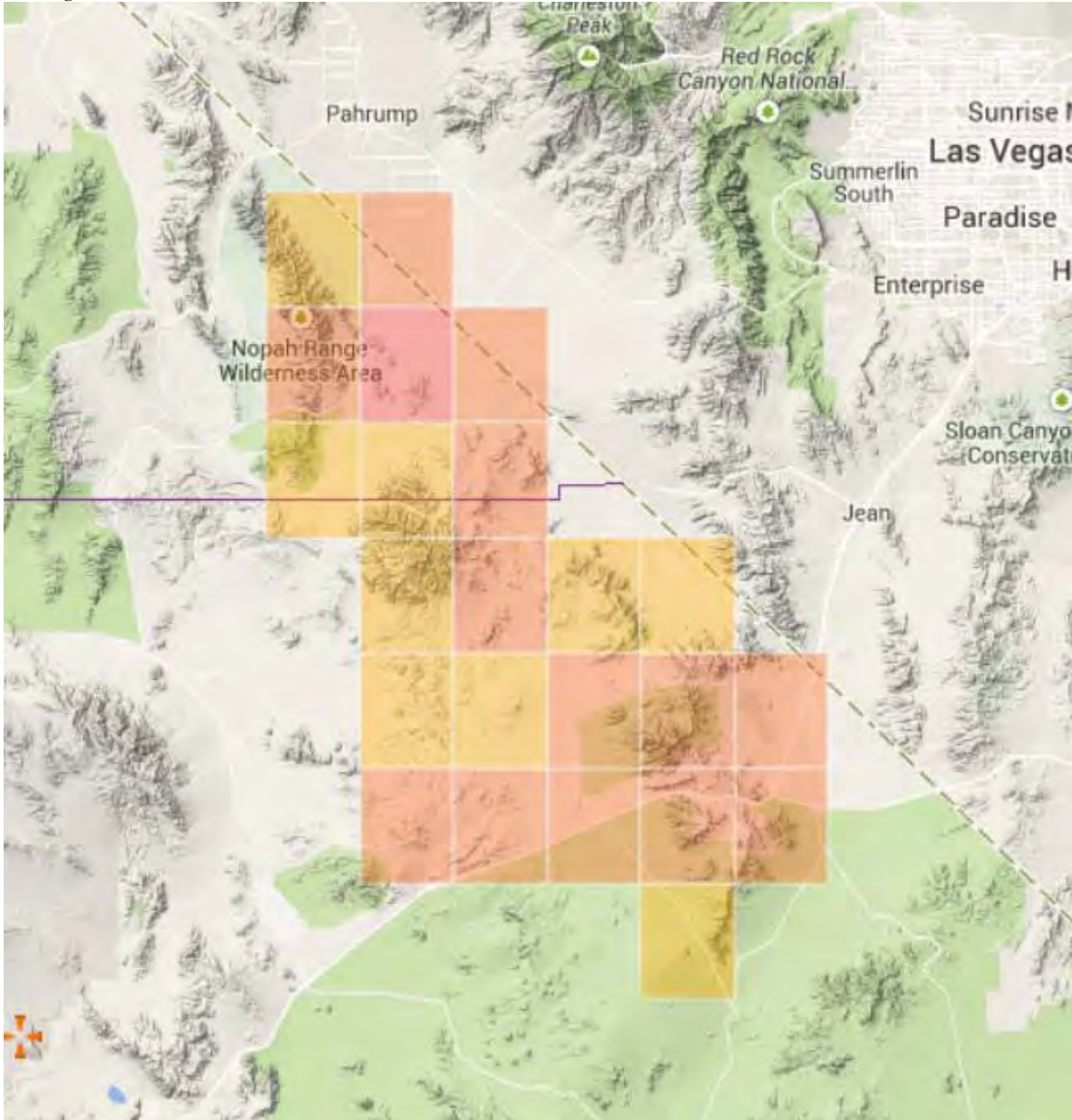


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Astragalus tidestromii- Tidestrom's milk-vetch



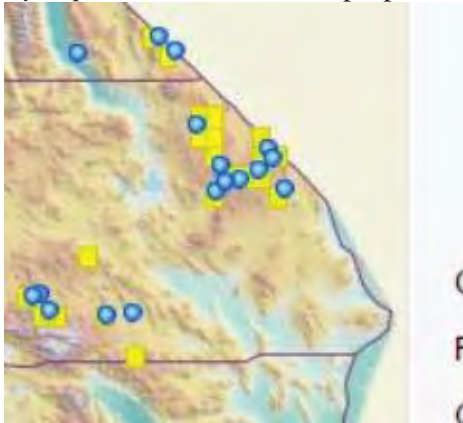
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Chaetadelpa wheeleri- Wheeler's dunebroom



Cymopterus multinervatus- purple-nerve cymopterus

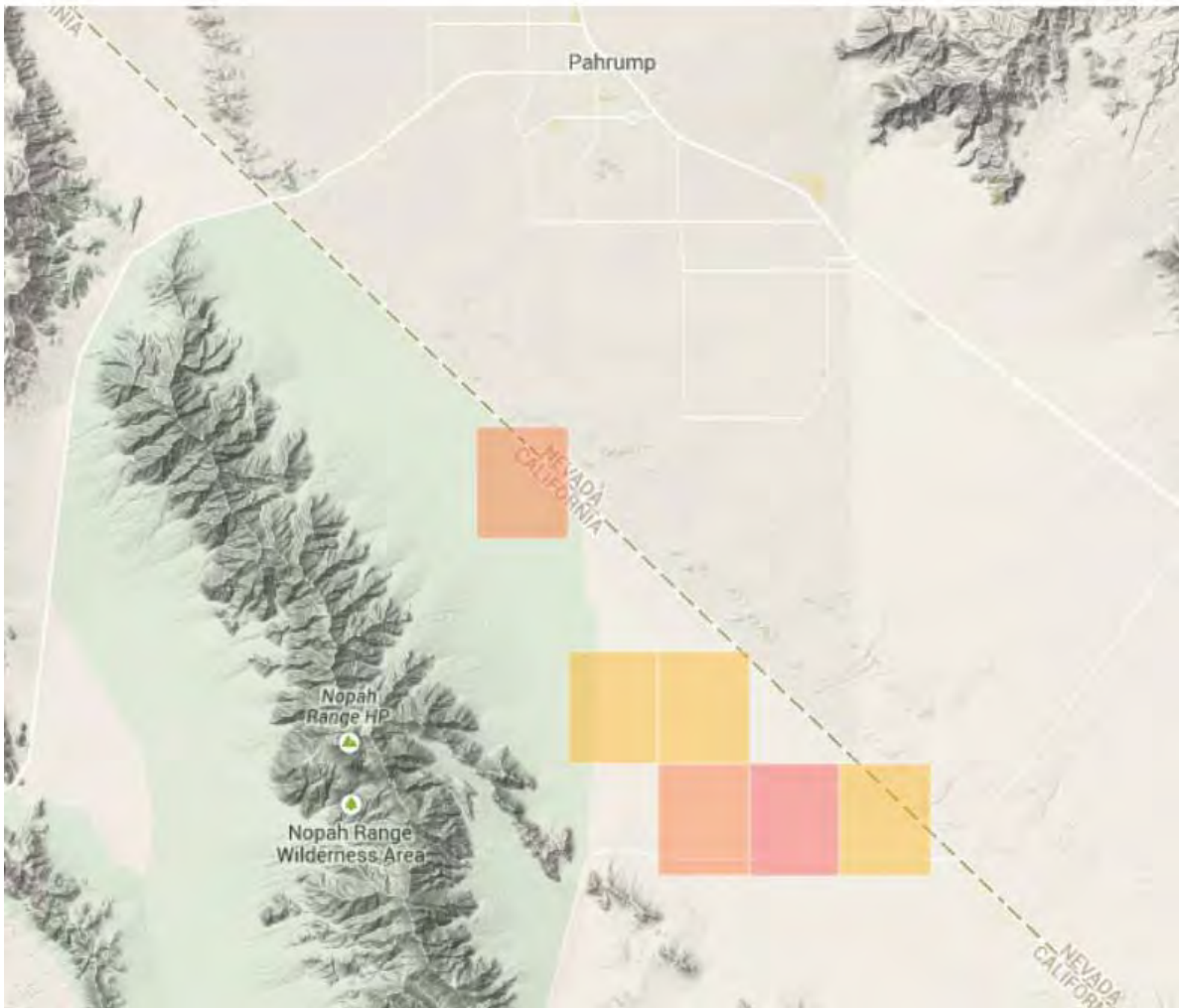


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Ephedra torreyana- Torrey's Mormon-tea

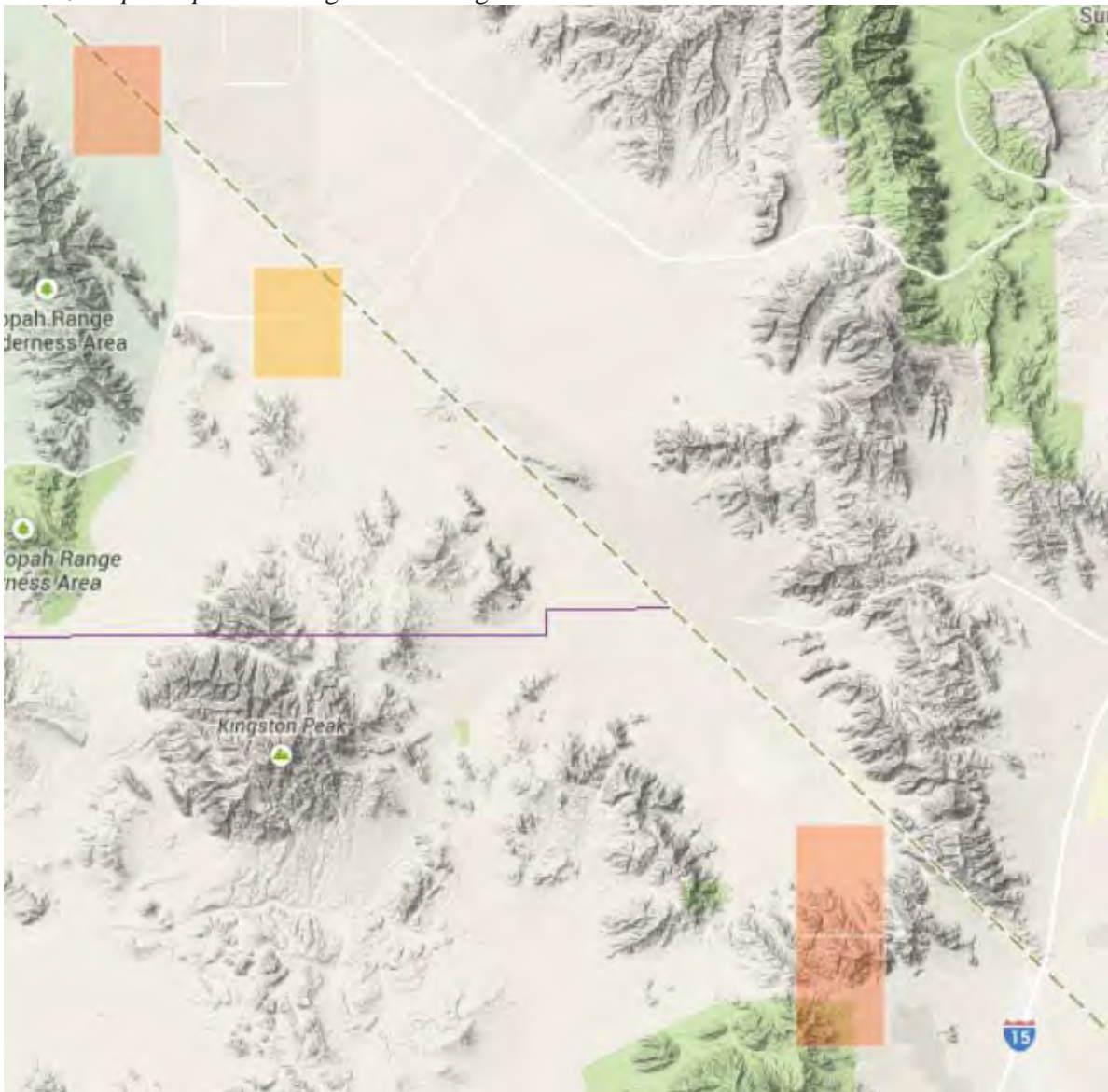


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Mentzelia pterosperma- wing-seed blazing star



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Peteria thompsoniae- spine-noded milk-vetch

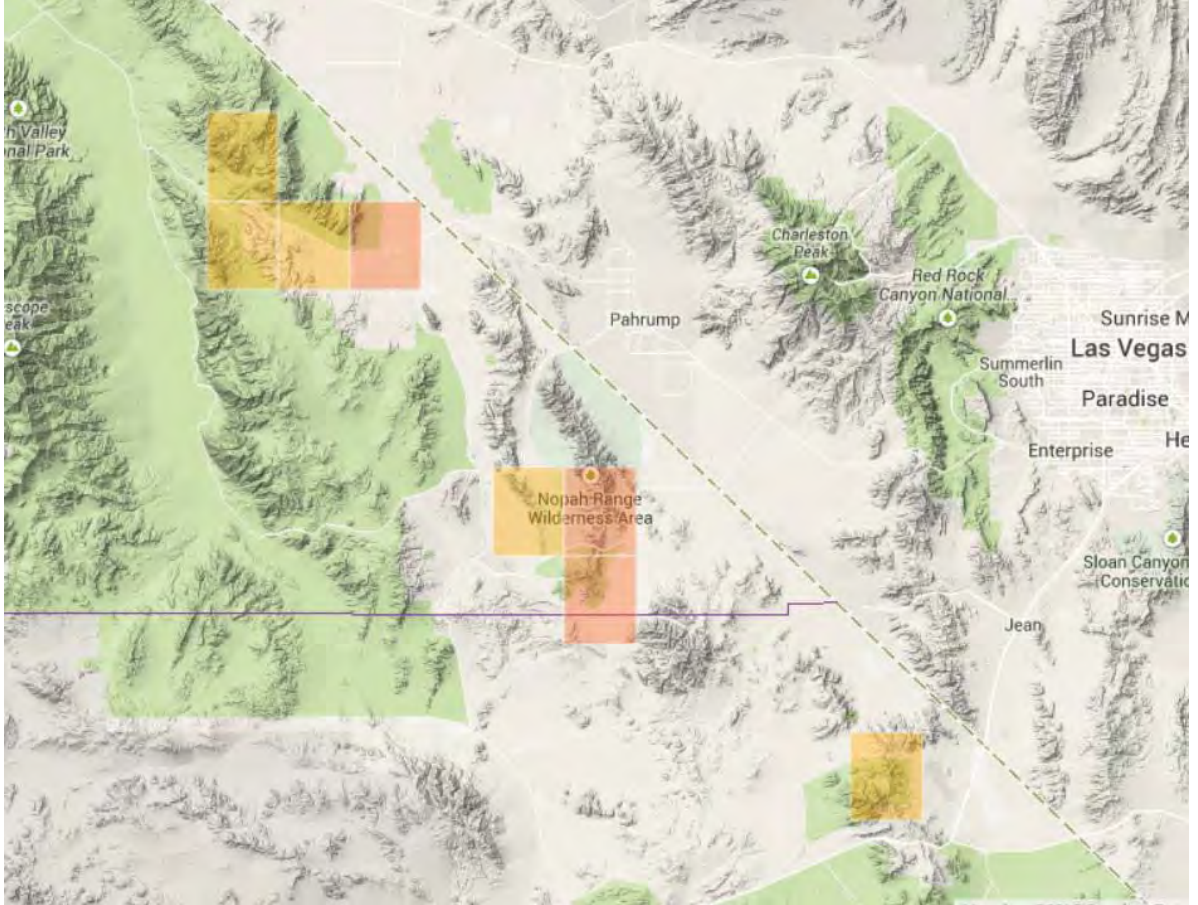


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Sclerocactus johnsonii- Johnson's beehive cactus

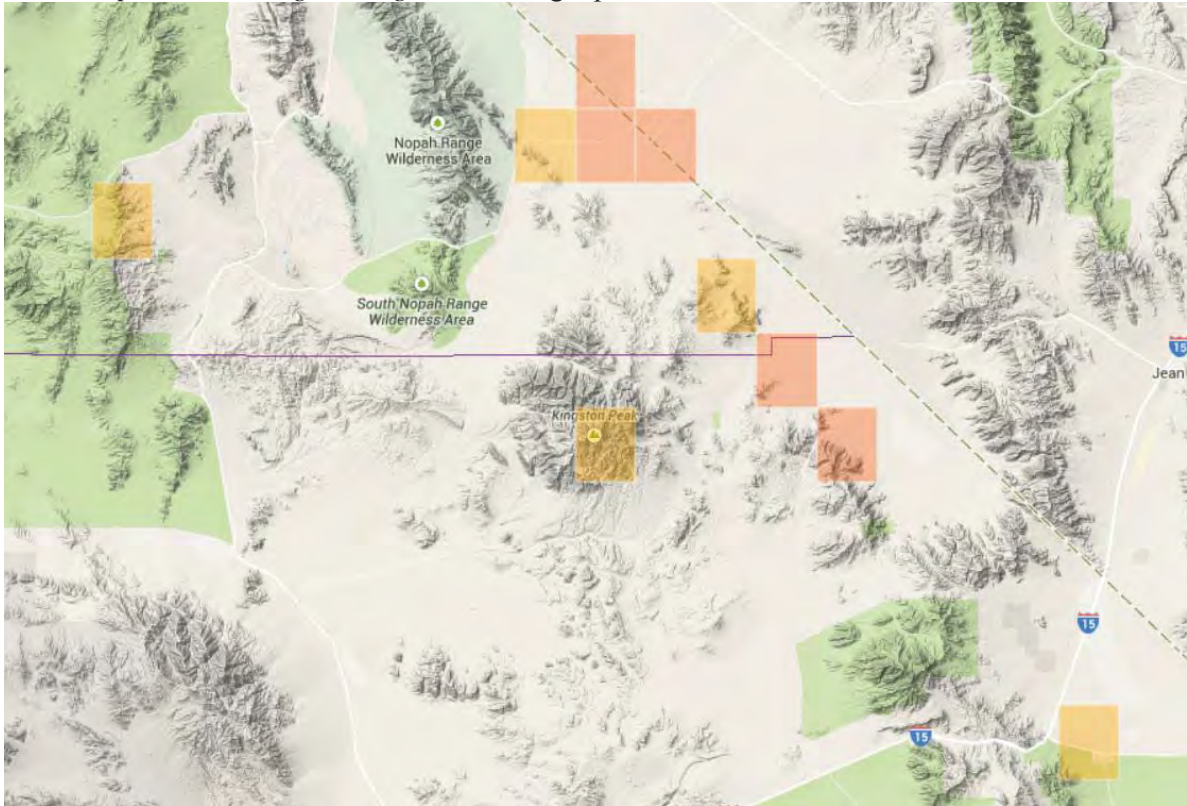


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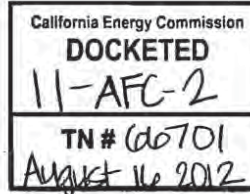


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Phacelia pulchella var. *gooddingii*- Goodding's phacelia



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A portion of the information in this document has been redacted (information related to sensitive historical resource information) as it is exempt from public disclosure as set forth in the Energy Commission's statutes and regulations (Pub. Resources Code, sec. 25300 et seq., Cal. Code Regs., Title 20 secs. 1361 et seq., 2501 et seq. and 2505 et seq.), and the California Public Records Act (Gov. Code, sec. 6250 et seq.)

Redactions have been blocked out where they appear in the document.

PROOF OF SERVICE (REVISED 8/14/12) FILED WITH
ORIGINAL MAILED FROM SACRAMENTO ON 8/17/12
RR

Hidden Hills Solar Electric Generating Systems – California Energy Commission Ethnographic Report

Hidden Hills Solar Energy Generating Systems

Ethnographic Report

This Report is subject to the confidentiality restrictions and informed consent provisions provided at:

Section 304 of the National Historic Preservation Act [16 U.S.C. 470w-3(a-c)],

Section 6254.10 of the California Public Records Act,

46 CFR 101 Use of Human Subjects, and

Section 1798.24 of California Civil Code.



August 2012

BY:

Thomas Gates, Ph.D.
Ethnographer

FOR:

California Energy Commission

EXECUTIVE SUMMARY

This report provides documentation concerning Native American ethnographic resources that could be impacted by the Hidden Hills Solar Electric Generating Systems (HHSEGS) energy generation project, proposed to be developed on 3276 acres of land in the southeastern corner of Inyo County, California. This report provides: 1) a brief description of the project; 2) an explanation of ethnography and the types of resources that ethnographic methods can explain; 3) a review of the ethnographic methods employed for this study; 4) background information on the Paiute tribal governments and other Native Americans that participated in the study; and 5) analysis, findings of fact, and recommendation for seven broad resource categories (including the Sandy Valley Alternative) that contribute to one or several cultural landscapes.

This report's analysis has divided some of the Pahrump Paiute Tribe life-ways, and how those life-ways are intertwined with the surrounding landscape, into seven attributes: water, plants, animals, horticulture, trails, landforms, and ceremonies.

This analysis leads the report author to conclude that there are three ethnographic landscapes that, to varying proximity, are in the vicinity of the project:

1. Salt Song Landscape
2. Pahrump Paiute Home Landscape
3. Ma-hav Landscape

This report documents each of these landscapes' periods of significance, analysis of integrity, and are all found eligible to the California Register of Historical Resources per various criteria.

The impacts of the proposed Hidden Hills Solar Energy Generating Facility project on the three ethnographic landscapes, should it be approved, are anticipated to not be able to be reduced to less than significant. However, California Energy Commission Staff continue to seek ways to lessen impacts in consultation with Native American Tribes affiliated with the proposed project area and the surrounding landscapes.

Hidden Hills Solar Electric Generating Systems – California Energy Commission Ethnographic Report

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INTRODUCTION

This report provides documentation concerning Native American ethnographic resources that could be impacted by the Hidden Hills Solar Electric Generating Systems Solar energy generation project, proposed to be developed on 3276 acres of land in the southeastern corner of Inyo County, California. This report provides: 1) a brief description of the project; 2) an explanation of ethnography and the types of resources that ethnographic methods can explain; 3) a review of the ethnographic methods employed for this study; 4) background information on the Paiute tribal governments and other Native Americans that participated in the study; and 5) analysis, findings of fact, and recommendation for seven broad resource categories (including the Sandy Valley Alternative) that contribute to one or several ethnographic landscapes.

Description of Project

The following project description is adapted from the Hidden Hills Solar Electric Generating Systems Application for Certification (AFC), Chapter 2.0 Project Description.

The Hidden Hills Solar Electric Generating System (HHSEGS) project (Project) is proposed within Inyo County, California, adjacent to the Nevada border, and approximately 18 miles south of Pahrump, Nevada. Pahrump is located about 45 miles west of Las Vegas, Nevada. The proposed project site is located on privately owned land. The land is owned by The Roland John Wiley Trust, The Mary Wiley Trust, and Section 20 LLC, and is currently under options to lease to BrightSource. Specifically, the Project is located within Township 22 North, Range 10 East, Sections 16, 21, 22, 26, 27, and 28 of the San Bernardino Base Meridian.

The HHSEGS, as proposed, would comprise two solar fields. Each solar field would be operated by a separate subsidiary of BrightSource (Hidden Hills Solar I, LLC and Hidden Hills Solar II, LLC, collectively the "Applicant"), and associated facilities would be shared in common by the two subsidiaries. Each solar plant would generate 270 megawatts (MW) gross (250 MW net), for a total net output of 500 MW. Solar Plant 1, proposed to be located on the northern solar field, would occupy approximately 1,483 acres (or 2.3 square miles), and Solar Plant 2, proposed to be located on the southern solar field, would occupy approximately 1,510 acres (or 2.4 square miles). A 103-acre common area would be established on the southeastern corner of the site to accommodate an administration warehouse, maintenance complex and onsite switchyard substation, a parking area, and miscellaneous landscaped areas. A temporary construction laydown area and parking area is proposed to be located on the west side of the project site and would occupy approximately 180 acres. The total proposed project area is 3276 acres.

Each solar plant would use 85,000 heliostats – elevated mirrors (each mirror approximately 12 feet high by 8.5 feet wide), guided by a tracking system, with two heliostats mounted on one pylon – to focus the sun's rays on a solar receiver steam generator (SRSG) that is approximately 130 feet tall and placed atop a 620 foot solar power tower (for a total height of 750 Feet) near the center of each solar field. In each solar plant, one Rankine-cycle steam turbine would receive super heated and pressurized steam (1,085 degrees Fahrenheit) from the solar boiler to generate electricity. As the steam makes its way through a

7

series of turbines, the pressure and temperature are reduced to a level where it can be converted back to water form and then recycled back up to the SRSG. The solar field and power generation equipment would start each morning after sunrise and, unless augmented, would shut down when insolation (solar radiation received) drops below the level required to keep the turbine on-line. Each plant would include a natural gas fired auxiliary boiler, used to augment the solar operation when the solar energy diminishes; a start-up boiler used during the morning start-up cycle; and a night-time preservation boiler, used to maintain system temperatures overnight. During operation, each plant would use a dry-cooling system. Raw water, up to 90 gallons per minute or 140 acre feet per year, would be drawn daily from onsite wells located in each power block and at the administrative complex. However, during construction, 288 acre feet per year would be needed. Each solar field and the common administrative area would have a primary water well and a back-up well, for a total of 6 wells proposed for the entire project. Groundwater would be treated at an on-site treatment system for use as boiler make-up water and to wash the heliostats.

There are two location options for the transmission lines; both options are located in Nevada and outside of the California Energy Commission (Energy Commission) jurisdiction. The project would also require 35.3 miles of 12-16 inch-diameter natural gas pipeline, which will also be located in Nevada and outside of Energy Commission jurisdiction. The transmission and gas lines would be located primarily on Bureau of Land Management (BLM) lands. The BLM is preparing an environmental Impact analysis for those portions of the project proposed within BLM's regulatory jurisdiction.

Vegetation clearing, grubbing, and contour smoothing in the heliostat fields would occur where necessary to allow for equipment access and storm-water management. In areas where these activities are not required for access or construction, the vegetation would not be removed, but would be mowed to a height of approximately 12 to 18 inches. Areas for roads and perimeter fencing would also be cleared and graded.

Several project alternative sites have been proposed, with one of those alternatives, Sandy Valley, perhaps the most viable. This report does not aggressively pursue analysis and findings for the Sandy Valley alternative site. However a specific section, entitled Sandy Valley Alternative, can be found in the Analysis section – Landforms subsection and provides cursory information concerning Pahrump and Moapa ethnographic resource areas and values that relate to the Sandy Valley area.

The project, as proposed, would require between 634 and 1033 employees during construction and up to 120 employees for on-going facility operations. Project maps that portray the project vicinity, site plan, and a diagram of a solar power tower are provided on the next three pages as Figure 1, Figure 2 and Figure 3.

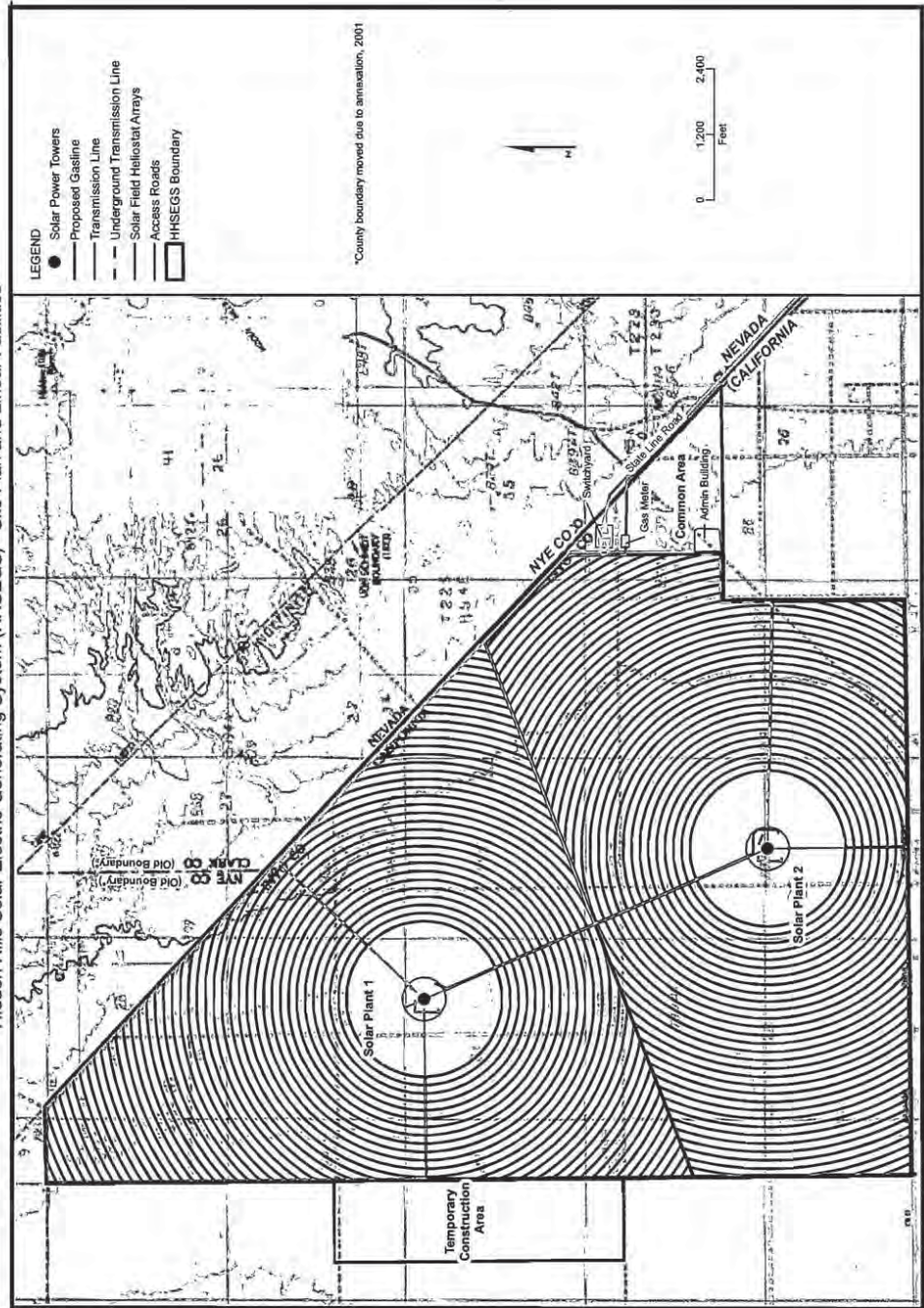
CULTURAL RESOURCES - FIGURE 1
 Hidden Hills Solar Electric Generating System (HHSEGS) - Vicinity Map



CALIFORNIA ENERGY COMMISSION, SITING, TRANSMISSION AND ENVIRONMENTAL PROTECTION DIVISION
 SOURCE: Landsat - NASA (2002), SRTM Shaded Relief - USGS (2005), US Major Highway - Tele Atlas North America, Inc (2010).

CULTURAL RESOURCES

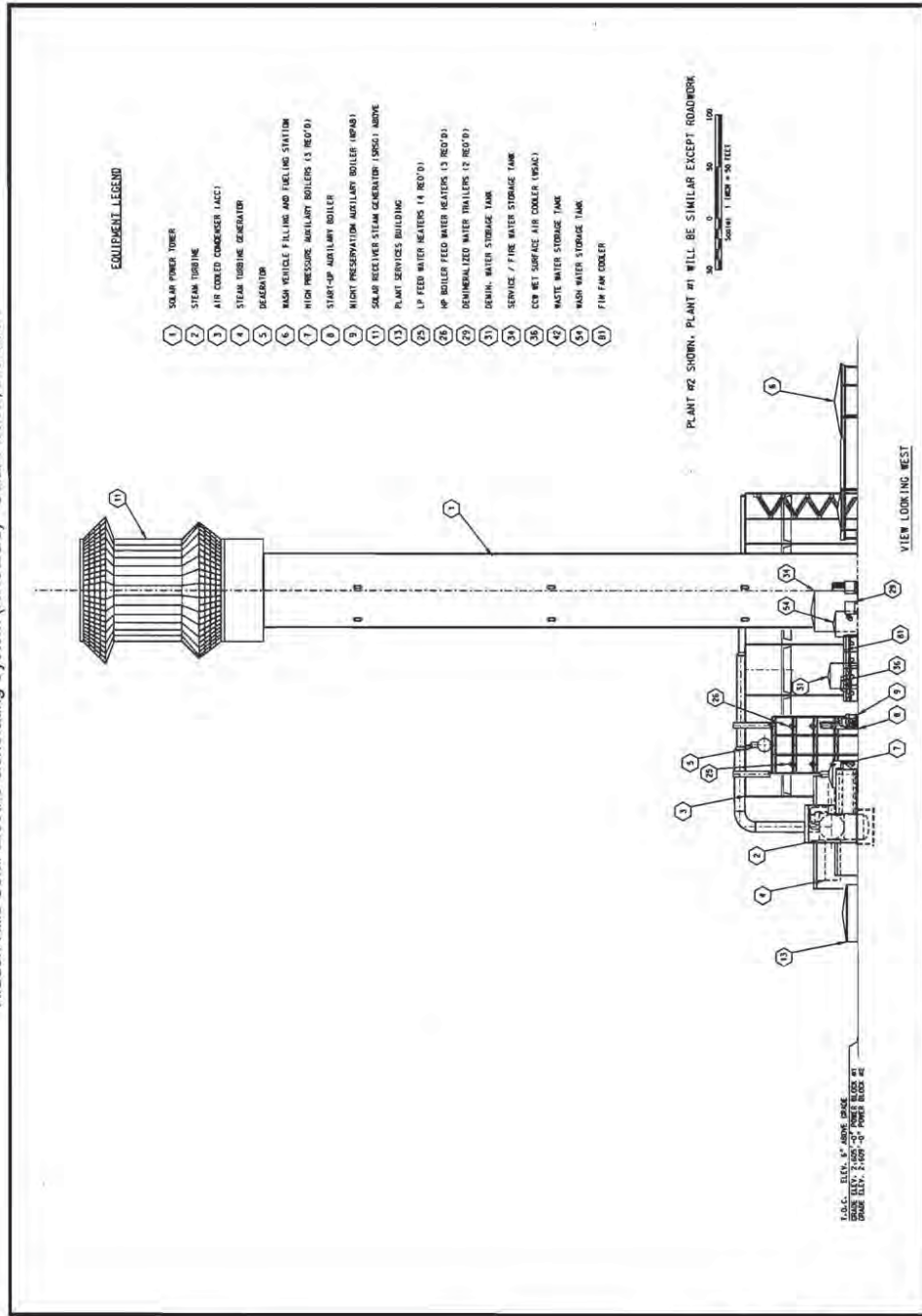
CULTURAL RESOURCES - FIGURE 2
 Hidden Hills Solar Electric Generating System (HHSEGS) - Site Plan and Linear Facilities



CULTURAL RESOURCES

CALIFORNIA ENERGY COMMISSION - SITING, TRANSMISSION AND ENVIRONMENTAL PROTECTION DIVISION
 SOURCE: AFC, August 2011, Figure 2.1-2, CH2MHILL

CULTURAL RESOURCES - FIGURE 3
 Hidden Hills Solar Electric Generating System (HHSEGS) - Solar Plant 2, Elevation



CULTURAL RESOURCES

CALIFORNIA ENERGY COMMISSION - SITING, TRANSMISSION AND ENVIRONMENTAL PROTECTION DIVISION
 SOURCE: AFC, August 2011, Figure 2.2-2b, CH2MHILL

What is Ethnography?

Ethnography is a discipline, a method, and a type of document. As a discipline, ethnography is the prime focus of cultural anthropology. As a method, ethnography is an endeavor to understand other cultural groups from their point of view. In order to understand other cultural groups, ethnographers must first understand their own cultural assumptions, biases, and ways of understanding the world. Cultural self-awareness allows an ethnographer to understand other cultures from the other's point of view. Ethnocentrism is the practice of assessing others only in terms of what we know from our own culture. While most human beings are hardwired to think about the world and others in terms of their own cultural experiences, as one conducts ethnographic investigations, ethnocentrism is to be avoided. As a type of document, ethnography provides readers with a written account that presents an understanding of another culture as the ethnographer came to understand that other culture from its people's perspectives or world view. Ethnology is the comparison of multiple ethnographies either of disparate cultures located throughout the world or located in geographic proximity to one another.

Ethnographers employ some of the following methods to understand other cultures:

- **Ethnographic research:** review of previous ethnographies concerning the culture to be understood
- **Historic research:** a review of historic literature about the people, events, and places of cultural importance
- **Kinship charts:** a method for charting human relations among a culture, clan, community, or family
- **Extended interviews:** representative individual and group interviews that seek responses to a number of research questions concerning the culture as a whole or sub areas of the culture
- **Life history interviews:** documentation of the events that chronicle a person's life story as that person presents their personal history within a broader cultural context.
- **Participant observation:** participating in and observing cultural events as if one were from the culture that one is studying.
- **Journalistic witnessing:** witnessing and documenting a cultural event at face value in descriptive terms without interpretation.

Ethnography fulfills a supporting role for other anthropological disciplines as well as contributions on its own merits. Ethnography provides a supporting role to the discipline of archaeology by providing a cultural and historic context for understanding the people that are associated with the material remains of the past. By understanding the cultural milieu in which archaeological sites and artifacts were manufactured, utilized, or cherished, this additional information can provide greater understanding for identification efforts, making significance determinations per the National Historic Preservation Act (NHPA) or the California Environmental Quality Act (CEQA); eligibility determinations for the National Register of Historic Places (NRHR) or California Register of Historical Resources (CRHR); and for assessing if and how artifacts are subject to other cultural resources laws, such as the Native American Graves Protection and Repatriation Act.

In addition, ethnography has merits of its own by providing information concerning ethnographic resources that tend to encompass physical places, areas, or elements or attributes of a place or area. Ethnographic resources have overlap and affinity to historic property types referred to as cultural landscapes, traditional cultural properties, sacred sites, and heritage resources. Studies that focus on specific ethnographic resource types may also take on names such as ethno-geography, ethno-botany, ethno-zoology, ethno-semantics, ethno-musicology, etc. In general, the ethnographic endeavor attempts to minimize human conflict by facilitating an iterative cross cultural understandings and, by extension, self awareness.

Ethnographic Resources

While several definitions of ethnographic resources can be found in historic preservation literature, the National Park Service provides the most succinct and commonly used definition:

Ethnographic resources are variations of natural resources and standard cultural resource types. They are subsistence and ceremonial locales and sites, structures, objects, and rural and urban landscapes assigned cultural significance by traditional users. The decision to call resources "ethnographic" depends on whether associated peoples perceive them as traditionally meaningful to their identity as a group and the survival of their life-ways.

http://www.cr.nps.gov/history/online_books/nps28/28chap10.htm

The term ethnographic resources can include resources that are also referred to as traditional cultural properties, sacred sites, cultural landscapes, heritage resources, historic properties, or historical resources that are areas or places.

What are Traditional Cultural Properties?

Traditional Cultural Properties, often referred to as "TCPs", were defined in order to provide a layer of meaning, relevancy, or significance from a communal or localized perspective to the cultural resources profession that is otherwise dominated by archaeology and the knowledge and perspectives that archaeologists promote (King 2003:21-33). Thomas King and Patricia Parker authored an innovative and influential National Park Service Bulletin (NPS Bulletin 38) that defined what TCPs are; how to understand, locate and document TCPs; and how to ethnographically interact with communities that wish to see their special places protected. An explanation of "traditional cultural significance" is provided in the following quote from NPS Bulletin 38:

One kind of cultural significance a property may possess, and that may make it eligible for inclusion in the Register, is traditional cultural significance. "Traditional" in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices.

Examples of properties possessing such significance include:

- a location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world;
- a rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long-term residents;
- an urban neighborhood that is the traditional home of a particular cultural group, and that reflects its beliefs and practices;
- a location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice; and
- a location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historic identity.

NPS Bulletin 38 provides the following definition of a TCP:

A traditional cultural property, then, can be defined generally as one that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community. (King 1998: 1)
<http://www.nps.gov/nr/publications/bulletins/nrb38/nrb38%20introduction.htm#tcp>

While the TCP definition provided in NPS Bulletin 38 addresses many types of special places and for diverse communities or ethnicities, some confusion exists with language added during the 1992 amendments to the National Historic Preservation Act at Section 101(d)6 that particularly calls out “properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization may be determined eligible for inclusion on the National Register.” The section further extols agencies to consult with Indian tribes and Native Hawaiians concerning the importance and values that their communities may attach to special places. This has led some to erroneously interpret the Act’s Section 101 language to limit TCPs to only Native Americans and Native Hawaiians. However the specific language of the Act does not prohibit diversity beyond the two specific ethnicities called out; but merely affirms that Native Americans asserting TCPs during the Section 106 process must be considered.

What are Sacred Sites?

The term “Sacred Site” is often used interchangeably and sometimes erroneously with the term Traditional Cultural Property. Sacred Site language stems from the American Indian Religious Freedom Act, the Religious Freedom Restoration Act, and Executive Order 13007. Without providing further information concerning the history and resulting inter-relation of the acts and the order, suffice to say that Executive Order 13007 provides the best guidance and definition. The definition is as follows:

“...any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or

appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site."

Therefore, despite the common practice of failing to differentiate between the two terms, and while there is some overlap between what are called TCPs and what are called sacred sites, the two terms actually have less in common, because sacred sites can only be located on federal lands and the definition calls out the limited geographic extent of sacred sites as "specific, discrete [and] narrowly delineated". However, TCPs are identified as a result of federal undertakings and tend to be geographically more expansive than "specific, discrete and narrowly delineated sacred sites."

Executive Order 13007 calls for the federal government to accommodate access to, and ceremonial use of, sacred sites by Indian religious practitioners and to avoid adversely affecting the integrity of sacred sites through federal land manager actions. (<http://www.achp.gov/eo13007-106.html>)

Cultural Landscapes and Ethnographic Landscapes

TCPs and sacred sites language is often used in overlapping ways that lead to confusion during regulatory processes. Cultural landscapes are another constellation of concepts and historic property types defined prior to the coinage of the term TCP. (See King 2003:39 and Stoffle et al 2005:165-167, for a dialogue on the merits of TCPs versus cultural landscapes as it relates particularly to area size and methods of bounding an area.) The National Park Service Brief 36 provides the following definition of a cultural landscape and its four types. A Cultural Landscape is

"...a geographic area (including both cultural and natural resources and the wildlife or domestic animals therein), associated with a historic event, activity, or person exhibiting other cultural or aesthetic values. There are four general types of cultural landscapes, not mutually exclusive: historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes." (NPS Brief 36 1996: 1)

The four types of cultural landscapes are further defined as follows:

Historic Site: a landscape significant for its association with a historic event, activity, or person. Examples include battlefields and president's house properties.

Historic Designed Landscape: a landscape that was consciously designed or laid out by a landscape architect, master gardener, architect, or horticulturist according to design principles, or an amateur gardener working in a recognized style or tradition. The landscape may be associated with a significant person(s), trend, or event in landscape architecture; or illustrate an important development in the theory and practice of landscape architecture. Aesthetic values play a significant role in designed landscapes. Examples include parks, campuses, and estates.

Historic vernacular landscape: a landscape that evolved through use by the people whose activities or occupancy shaped it. Through social or cultural attitudes of an individual, a family, or a community, the landscape reflects the physical, biological, and cultural character of everyday lives. Function plays a significant role in vernacular landscapes. Examples include mining or ranching complexes.

Hidden Hills Solar Electric Generating Systems – California Energy Commission Ethnographic Report

Ethnographic landscape: a landscape containing a variety of natural and cultural resources that associated people define as heritage resources. Examples are contemporary settlements, religious sacred sites and massive geological structures. Small plant communities, animals, subsistence and ceremonial grounds are often components. Examples include a section of a river where a Native American culture lives, travels, and fishes; or an upland mountain area where tribal people hunt, gather, camp and travel extensively during part of the year.

Landscapes are understood and documented by conducting ethnographic research that identifies the contributing elements or attributes of the landscape. Contributing elements can include both cultural and biological resources, climate and landforms, subsistence, religion, economy and the built environment.

For the purposes of this study, the resource focus is with Native American places and areas otherwise referred to as ethnographic resources and how those resources contribute to a cultural or ethnographic landscape located in and around the proposed project area. Having said this and based upon the discussion provided above, the reader should be aware that there are multiple overlaps of terminology: Traditional Cultural Properties, Sacred sites, Cultural or Ethnographic Landscapes, and specific historic property or historical resources types of sites, objects, buildings, structures, districts, areas or places.

GENERAL TRIBAL GOVERNMENT BACKGROUND

Nine distinct tribal governments were consulted regarding this ethnographic study. Tribes were invited to participate based upon a list of affiliated tribes provided by the Native American Heritage Commission. The nine invited tribal governments represent four different cultural affiliations. From west to east, these affiliations are: Owens Valley Paiute, Timbisha Shoshone, Pahrump Southern Paiute, Las Vegas Southern Paiute, and Moapa Southern Paiute. Of the nine tribal governments, one Tribe participated fully, two tribes participated in supporting roles, and the remaining six tribes provided limited input due to their greater distances and relationships to the project area. Figure 4, located at the end of this section, is a map of the general locations and territories of the participating tribes. The map also includes a historic journey taken by a Pahrump Paiute leader and his son that, in part, helps to define Pahrump Paiute ancestral territory.

Table 1 provides a summary of tribal participation in this ethnographic study.

Table 1. A Summary of Tribal Participation for this Study		
TRIBE	CULTURAL AFFILIATION	STUDY PARTICIPATION
Pahrump Paiute Tribe	Southern Paiute (Pahrump Band)	Full
Moapa Tribe	Southern Paiute (Pahrump Band, Las Vegas Band, Moapa Band)	Support
Las Vegas Paiute Tribe	Southern Paiute (Pahrump Band, Las Vegas Band, Moapa Band)	Limited
Timbisha Shoshone Tribe	Western Shoshone (Panamint and Timbisha)	Support
Lone Pine Paiute and Shoshone	Owens Valley Paiute and Western Shoshone	Limited
Fort Independence Paiute	Owens Valley Paiute	Limited
Big Pine Paiute	Owens Valley Paiute	Limited
Bishop Paiute Tribe	Owens Valley Paiute	Limited
Uta Uta Gwaitu Paiute Tribe (Benton)	Owens Valley Paiute	Limited

Southern Paiute

The “Southern Paiute” represents a population of people that traditionally reside in a large swath of land that has as its general boundaries the eastern side of the Black Mountains and the eastern Mojave Desert as the western end. The Colorado River and the Grand Canyon form the southern extent of Southern Paiute and the southeastern plateaus of the Rocky Mountains form the eastern extent of the Southern Paiute territory. The northern boundary of Southern Paiute territory takes in the southern third of present day Utah and the lower quarter of present day Nevada. The Pahrump and Moapa Tribes are the Southern Paiute residing in the western extent of Southern Paiute territory. The Chemehuevi people to the immediate south of Pahrump and living along the lower Colorado River are also Southern

Paiute and share many cultural traits with those Southern Paiute to the north and east. Chemehuevi did not participate in this ethnographic study because they were not listed by the Native American Heritage Commission and therefore were not invited to participate in this study. In addition, the more eastern Southern Paiute Tribes located in Utah and Northern Arizona were not invited to participate although they recognize the Spring Mountains as their common place of origin and participate in some of the ceremonial practices in common with the Moapa and Pahrump Southern Paiute.

In the Fall of 1873, Major John Wesley Powell and G. W. Ingalls were commissioned by the United States Department of the Interior to determine the extent of Paiute Indians (Numic) dwelling throughout the Great Basin and that had not yet been moved to reservations (Fowler 1971: 97-120). In all, the two commissioners documented 83 separate tribes. Powell made one trip to as far as Las Vegas where he collected information on the Paiutes of that area. Powell documented a “Chief of Alliance”, named To-ko’-pur (Chief Tecopa) who represented one tribe as well as the alliance of seven additional Tribes. Each of the additional tribes had “Chiefs.” The following table provides Powell’s grouping of seven tribes, into one alliance. Powell suggested that all Southern Paiute of Southeastern California, Southern Nevada, Northwestern Arizona and Southern Utah be relocated to the Moapa Reservation (Ibid:116).

Table 2: Seven Tribes Allied Under Chief Tecopa

TRIBE	LOCALITY	CHIEF
<i>No-gwats</i>	Vicinity of Potosi	To-ko’-pur
<i>Pa-room’-pats</i>	Pa-room Springs	Ho-wi’-a-gunt
<i>Mo-quats</i>	Kingston Mountains	Hu-nu’-na-wa
<i>Ho-kwaits</i>	Vicinity of Ivanspaw	Ko-tsi’-an
<i>Tim-pa-shau’-wa-go-tsis</i>	Providence Mountains	Wa-gu’-up
<i>Kau-yai’-chits</i>	Ash Meadows	Nu-a’-rung
<i>Ya’-gats</i>	Armagoza	Ni-a-pa’-ga-rats

Powell’ 1873 Las Vegas journey report counted a total of 240 individual Southern Paiute within the alliance lead by Chief Tecopa (Ibid:104-105). Powell provides further clarification by stating that a number of Indians that acknowledge a common authority and encamp together is a “Tribe” (Ibid: 50). Powell also adds that any collection of “tribes” that acknowledge allegiance to a head chief would be designated as a “nation” (Ibid). Hence, all of the seven tribes with allegiance to Chief Tecopa were considered a nation.

Today, the terminology has changed, with the alliance or nation, now called a “Tribe” and each of the contributing localities referred to as “districts.” The entire alliance is now referred to as the Pahrump Tribe. The nomenclature has been partly confused when anthropologist Isabel Kelly chose to combine the above Tecopa alliance with four other localities, (Las Vegas, Colville, Indian Spring, and Cottonwood Island) and then choose to call the entire group the “Las Vegas Tribe” (Kelly 1964). Some ethnographers have then come to falsely associate the currently recognized Las Vegas Tribe with this larger conglomerate or to consider Pahrump Paiute as Las Vegas Paiute.

That the Pahrump and Las Vegas Southern Paiute are two distinct groups is further confirmed by a document produced by the Inter-Tribal Council of Nevada:

Centered around Las Vegas, Red Rock, and Mt. Charleston were the Pegesits who lived as far east as present-day Hoover Dam. On the western edge of Nevada were the Pahrumpits. They lived in Pahrump Valley and on the western slopes of the Spring Mountains (Inter-tribal 1976:11).

Pahrump Paiute Tribe

The Pahrump Paiute Tribe, located in Pahrump, Nevada, is not a federally recognized tribe, but is recognized as an established tribal entity by the State of California and is informally recognized by federal land managing agencies that operate within the Tribe's traditional territory. Over the years, Pahrump Paiute individuals have been intermittently recognized by the federal government. The Tribe currently consists of approximately 100 tribal members. The membership generally resides in the nearby Las Vegas, Pahrump, Charleston View, and Tecopa/Shoshone areas, although some tribal members live considerable distance beyond the tribal territory. The tribe is lead by a chairperson and is based in Pahrump, Nevada. While the Pahrump Paiute Tribe has no reservation, they do assert an ancestral territory. They are the primary tribe affiliated with the area in which the project is proposed. The tribe's primary focuses are maintaining their unique cultural identity, protecting important cultural resources that are in harm's way of various federal, state and local projects and attaining federal recognition. The Tribe's cultural expertise resides within its membership.

Moapa Paiute Tribe

The Moapa Band of Paiute Indians, located in Moapa, Nevada, is a federally recognized tribe. It currently consists of approximately 300 members. Some tribal members are closely related to Pahrump tribal members or are from the Pahrump Valley and continue to bury those members in the Chief Tecopa Cemetery (formerly known of as the Pahrump Indian Cemetery). The tribe occupies a 71,954 acre reservation near Moapa, Nevada. A reservation of 2 million acres was originally established in 1874. However, two years later, the reservation was reduced to 1000 acres. In the 1980s, the reservation was expanded by an additional 70,000 acres. The reservation is located along the lower flood plains of the Muddy River. The tribe governs per a constitution that was adopted in 1942. An elected tribal council presides over several tribal businesses (travel center, fireworks store and a tribal farm) and various tribal departments and committees, including a cultural committee. The Tribe has been impacted by surrounding development, such as the nearby coal fired Reid Gardner Power Station. Tribal elders and cultural staff also assert that decades of bomb testing at Nellis Air Force Range immediately to the west and northwest of the reservation have contaminated their reservation and ancestral lands (Interviewee – Personal Communication).

(http://www.moapapaiutes.com/about_us.htm)

Las Vegas Paiute Tribe

The Las Vegas Tribe of Paiute Indians of the Las Vegas Indian Colony is a federally recognized tribe. It consists of approximately 71 members who occupy a 3,800 acre reservation generally referred to as “Snow Mountain” and located several miles north of Las Vegas. Pahrump Paiute and Las Vegas Paiute are closely related to one another and to some of the Moapa Tribe membership. Isabel Kelly identified both Pahrump and Las Vegas under the Las Vegas Paiute Tribe, however, each tribe has continuously maintained their distinct identities and function independently. The tribe’s original reservation was a 10 acre plot of land located in downtown Las Vegas and deeded to the tribe in 1911 by a private ranch owner. The 10 acre plot is still part of the reservation. The tribe has a constitution adopted in 1970, and is governed by a tribal council. The tribe has several businesses, including an extensive golf resort, gas station, and two smoke shops. Recent issues that involve the Tribe concern on-going desecration of tribal cultural sites, including graffiti of sacred sites in the Red Rock area, a popular tourist destination for visitors to Las Vegas. The tribal staff cultural expertise resides within the Tribal Environmental Protection Office. (<http://lvpaiutetribe.com> , [http://en.wikipedia.org/wiki/Las Vegas Tribe of Paiute Indians of the Las Vegas Indian Colony](http://en.wikipedia.org/wiki/Las_Vegas_Tribe_of_Paiute_Indians_of_the_Las_Vegas_Indian_Colony))

Shoshone

The Shoshone people reside in swath of land as extent as, and immediately north of, the Southern Paiute territory. Their western-most boundaries are in the Coso Mountains and on the eastern slope of the Inyo Mountains in California. The eastern end of their territories is in the areas of northwestern Utah and southern Idaho. The Shoshone in the western side of this swath of land are referred to as Western Shoshone.

Timbisha Shoshone Tribe

The Timbisha Shoshone Tribe, California, is a federally recognized tribe. It currently has approximately 306 tribal members and occupies a 7,914.0 acre reservation, comprised of several parcels in and around Death Valley National Park, including a 314 acre parcel near Furnace Creek, California. Some reservation parcels are located in Nevada near Lida, Scotty’s Junction and Death Valley Junction. The tribe also has several areas that are co-managed with the National Park Service or the Bureau of Land Management. The tribe’s main office is in Bishop, California. The tribe was originally represented in the 1863 treaty of Ruby Valley. However, that treaty did not result in any specific representation for the Timbisha Shoshone, who fought for and eventually achieved federal recognition in 1983. However, the tribe did not receive a land base until 2000 with the passage of the Timbisha Homeland Act. The tribe holds general elections; it is lead by a chairperson and holds monthly meetings. The Tribe’s cultural programs are managed by a Tribal Historic Preservation Office. The Timbisha’s ancestral territory abuts the Pahrump Paiute Tribe’s ancestral territory in the vicinity of Ash Meadows, Eagle Mountain, and the Black Mountains. (Field Directory, 2004, page 156, <http://www.timbisha.org/index.htm> , Interviewee - Personal Communication).

Owens Valley Paiute

The Owens Valley Paiute are a distinct group of Paiute that reside in the Owens Valley and have the Owens Valley as an ancestral territory, including the valley's defining flanks, the eastern flanks of the Sierra Nevada and the western flanks of the Inyo and White Mountains. The Mono Lake area provides the northern boundary of their territory. The Owens Valley Paiute are represented by five separate tribes. All of the tribes are members of the Owens Valley Indian Water Commission. Of the five tribes, two (Lone Pine and Big Pine) have some tribal members with cultural affiliation to the Timbisha Shoshone and Pahrump Paiute people that historically co-existed in the Ash Meadows area.

Lone Pine Paiute Shoshone Tribe

The Lone Pine Paiute Tribe of Lone Pine, California, is a federally recognized tribe. It currently has approximately 425 tribal members and occupies a 237 acre reservation near Lone Pine, California. The tribe is governed by a general council and holds monthly meetings. Some Lone Pine Paiute Tribal members are of Timbisha Shoshone descent. Cultural Resources affairs are provided by the tribal Environmental Protection Program. (Field Directory 2004: 111, <http://lppsr.org/>)

Fort Independence Paiute Tribe

The Fort Independence Paiute Tribe is a federally recognized tribe. It consists of approximately 136 tribal members and occupies a 580 acre reservation near Independence, California. The Tribe has recently attained tribal historic preservation status. (Field Directory 2004: 94, <http://www.fortindependence.com/native.aspx>)

Big Pine Paiute Tribe

The Big Pine Paiute Tribe of the Owens Valley is a federally recognized tribe. It consists of approximately 403 tribal members and occupies a 279 acre reservation near Big Pine, California. The tribe has a constitution and is governed by a Tribal Council and a General Council. The Tribal Council holds monthly meetings; the General Council meets quarterly. At least one Big Pine Paiute Tribe family shares a tribal affiliation with the Pahrump Paiute. The Big Pine Tribe's cultural resources program is maintained through a Tribal Historic Preservation Office (Field Directory, 2004: 66, <http://www.bigpinepaiute.org>, Interviewee - Personal communication).

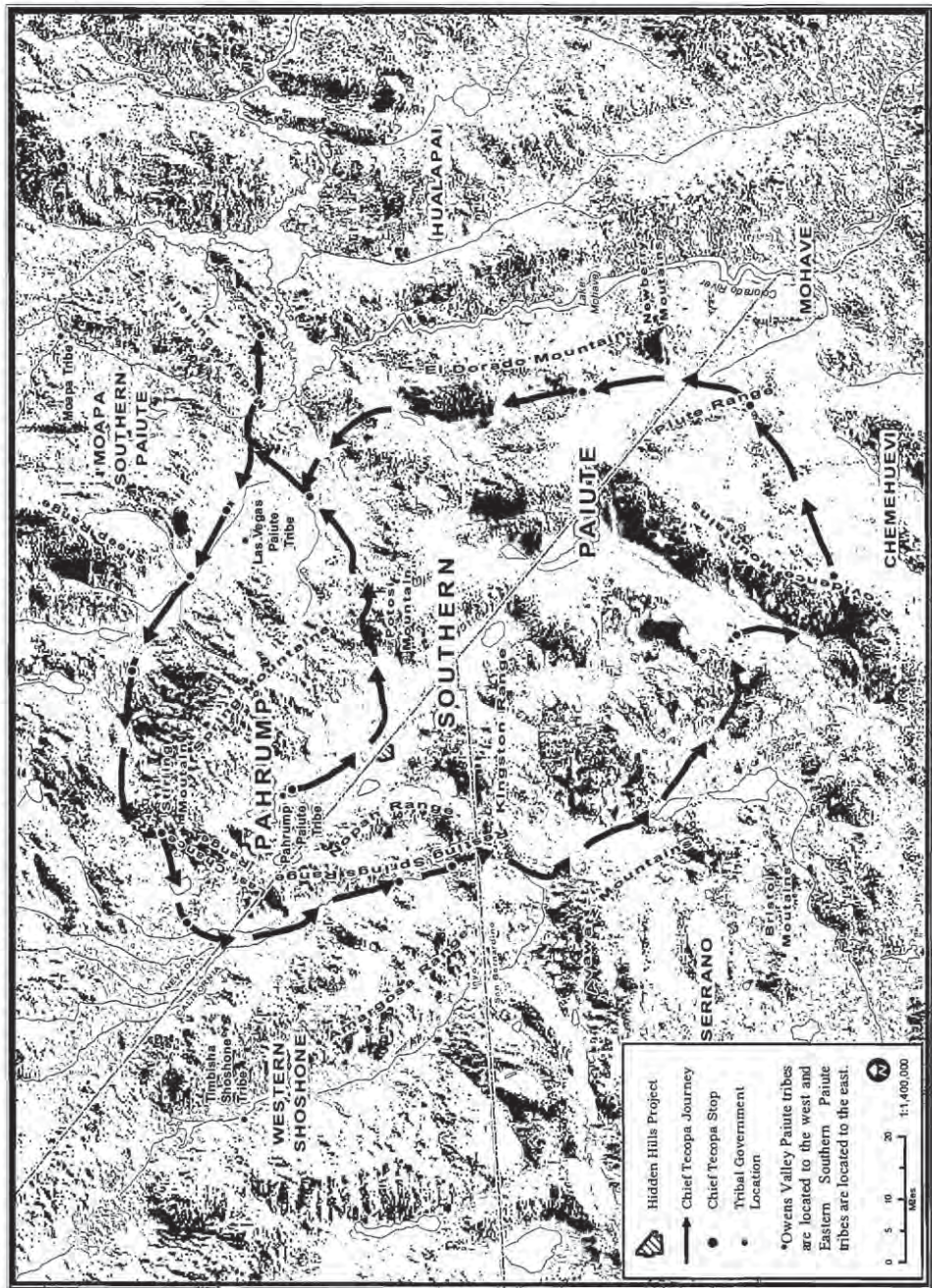
Bishop Paiute Tribe

The Paiute-Shoshone Indians of the Bishop Community is a federally recognized tribe. It consists of approximately 1040 tribal members and occupies an 875 acre reservation near Bishop, California. The tribe meets bi-monthly and is governed by the Bishop Indian Tribal Council. The Paiute-Shoshone Indians of the Bishop Community share a tribal affiliation with the Paiute-Shoshone. The Bishop Tribe's cultural resources program is maintained through a Tribal Historic Preservation Office. (Field Directory, 2004: 69, <http://www.bishoppaiutetribe.com/>)

Utu Utu Gwaitu Paiute Tribe

The Utu Utu Gwaitu Paiute Tribe (formerly the Benton Paiute Tribe), is a federally recognized tribe. It consists of approximately 138 tribal members and occupies a 162 acre reservation near Benton, California. The tribe has a constitution and is governed by the Utu Utu Tribal council. The Tribal Council holds monthly meetings; the General Council meets annually. The Utu Utu Gwaitu Paiute shares a tribal affiliation with the Paiute. (Field Directory, 2004, page 63)

CULTURAL RESOURCES - FIGURE 4
 Hidden Hills Solar Electric Generating System (HHSEGS) - Tribal Ancestral Territories and Tribal Government Locations in and around Pahrump Valley



CULTURAL RESOURCES

CALIFORNIA ENERGY COMMISSION, SITING, TRANSMISSION AND ENVIRONMENTAL PROTECTION DIVISION
 SOURCE: Adapted from Handbook of North American Indian Volumes 8 and 11, and Chief Tecopa and The Hikos by Celeste Lowe

METHODS

General Description of Ethnographic Methods and “REAP”

Ethnography at its best takes years to complete. Ethnographers can spend a lifetime studying another culture and still find that their cross-cultural knowledge of their “second” culture is incomplete. Minimally, it is advised to spend at least one year in studying another culture so that one can learn about the various seasonal variations and adaptations. Academic and self-funded anthropologists may have such luxury. However, the merits of ethnography, when employed to understand project impacts to ethnographic resources, often require less than optimal study durations. One method, called Rapid Cultural Assessment” was developed in the 1930s to assist sociologists’ understanding of American rural agricultural community responses to socioeconomic impacts ensuing from evolving environmental conditions. (<http://www.iisd.org/cas/casguide/rapidruralappraisal.htm>) The National Park Service (NPS) has developed similar methods for understanding ethnographic resources within the shortened time frames related to project review. The NPS method, called Rapid Ethnographic Assessment Procedures (REAP), was generally followed for this project-related ethnographic study.

REAP consists of a selection of ethnographic methods that relies on interview, observation, and research techniques to describe a way of life common to a group of people, that can include their knowledge, customs, beliefs, social habits, technology, arts, values, and institutions. REAP involves active participation of people in a cultural group to render representations of a way of life from a community’s point of view. Unlike traditional ethnography, REAP focuses investigations and resultant descriptions on solving specific problems or issues that may arise as a result of proceeding with a development project.

REAP’s truncated methods are:

1. Group meetings/interviews where the ethnographer explains the project to the group, answers general questions and solicits immediate responses, fears, apprehensions, benefits, or other general perceptions from the participants concerning the project, the area where the project is being proposed, and the general connections of traditional people to the project area. Often issues of confidentiality are discussed. Surmounting the issues of confidentiality, the ethnographer may be successful in scheduling follow-up activities with specific individuals to increase ethnographic understanding.
2. Areas worth further ethnographic inquiry are identified; a research design, including research/interview questions, is developed; and specific people are scheduled by the ethnographer and the group for follow-up interviews. Follow-up interviews should be conducted according to the protocols of documentation and confidentiality identified during the group meeting/interview. Interview notes, however recorded, should be vetted with the source individuals to verify accuracy and to gather additional nuanced information.
3. Follow-up interviews with the same or additional people often occur while both the ethnographer and the community begin to further think about the project, the project effects,

and additional information that is necessary for fully identifying, evaluating, assessing effects, or otherwise considering impacts to ethnographic resources.

4. As Steps 1 through 3 are being conducted, a parallel archival “search, retrieve, and assess” process should be undertaken to provide supporting or conflicting information to what is being discovered through the interview process. In addition to archive, book store, and other informational repositories (e.g., the internet), the people themselves or other ethnographers with previous experiences with the same people, may provide source materials.
5. Field visits will help the ethnographer triangulate between what people currently say, what people have written in the past, and what is actually or perceived to be in the project area as a potential ethnographic resource.

<http://www.nps.gov/ethnography/training/elcamino/phase1.htm#reap>

HHSEGS Ethnographic Study - General Meetings

Several meetings were held to exchange general information with affiliated tribes and to gauge tribal interest in participating in further project-related ethnographic studies. Specific Tribal government representatives and individual traditional Native American practitioners were contacted for initial invitation, based upon a May 2011 listing provided by the Native American Heritage Commission (NAHC) to Energy Commission staff.

General Meeting 1 was held on January 19, 2012 in Shoshone, California and was attended by various Energy Commission staff technical experts in the areas of water, biology, cultural resources, and planning, as well as representatives of upper management. Participating tribes included: Pahrump Paiute Tribe, Moapa Paiute Tribe, Las Vegas Paiute Tribe, Timbisha Shoshone Tribe, and the Lone Pine Tribe of Paiute and Shoshone. The tribal attendees were a combination of tribal cultural resources and environmental protection staff and several tribal elders. Energy Commission staff provided the tribes with an overview of the proposed project and updates on how various natural and cultural resources studies were proceeding. Tribal attendees asked general and clarifying questions and made statements that expressed their concerns for how the project might impact their life-ways. Specific concerns were expressed regarding the proposed project’s water use, impacts to the water-related biomes, such as the local springs that support plants and animals in the nearby coppice dunes mesquite grove complexes, and mention was made that Paiute ceremonies, generally referred to as “Salt Song Trails,” are in, around, and run through the project area. Additional concern was expressed regarding impacts to Indian trails, including the Old Spanish Trail, and possible impacts to on-site plants, animals, and cultural resources, including possible burial or cremation sites. Energy Commission Cultural Resources staff proposed that an ethnographic study be conducted. Tribes agreed that an ethnographic study would be one desired method to pursue and further identified that the Pahrump Paiute Tribe should be central to that study and that the other tribes could provide support to the Pahrump Paiute Tribe. However,

participating tribes also requested exclusive follow-up meetings with Energy Commission cultural resources staff.

General Meetings 2 was held on February 11, 2012 at the Hidden Hills project site and in Pahrump, Nevada. An ethnographer, who is the author of this report, met with various Pahrump tribal members as a group near the project site. The membership had assembled to get clarification and a better general understanding of the proposed project parameters. The ethnographic study and confidentiality of information that the tribe might provide were two topics discussed. Several off-project cultural resource areas were visited, including a looted Pahrump Paiute cemetery.

General Meeting 3 was held on February 12, 2012 at the Hidden Hills project site and at Sandy Valley (an alternative project site). The Energy Commission ethnographer met with the Moapa Tribe cultural resources staff and committee members. One Moapa tribal council person also attended, as did Pahrump tribal representatives. General project parameters were discussed. Some Moapa participants are descendants of Paiute families that originated from the Pahrump Valley vicinity. Cultural values attached to the Sandy Valley area were discussed. Moapa Tribe staff has reiterated their previous statements that the Moapa Tribe would support the Pahrump Tribe and are interested in reviewing the ethnographic report prior to finalization. They also reiterated concerns voiced at the first general meeting about impacts to water, springs, plants and animals, and the salt song ceremonies.

General Meeting 4 was held on February 14, 2012 with the Owens Valley Indian Water Commission. Representatives from the Utu Utu Gwaitu Paiute Tribe, Bishop Paiute Tribe, Big Pine Paiute Tribe, Fort Independence Paiute Tribe, Lone Pine Paiute and Shoshone Tribe, and Timbisha Shoshone Tribe participated. The general project, as proposed, was discussed and the ethnographic study concept was presented. Participants agreed that the project area was within Southern Paiute Territory (as contrasted with Owens Valley Paiute territory) and that the Pahrump Tribe was the most affiliated tribe to work with, but that some Southern Paiute families had ended up as tribal members in Owens Valley Paiute Tribes. Individual families were identified.

General Meeting 5 was held on May 12, 2012 with the Pahrump Paiute Tribe. A draft of this report was generally reviewed and the CEC project review process was discussed.

General Meeting 6 was held on July 14, 2012 with the Pahrump Paiute Tribe. Issues related to confidentiality of sensitive cultural resources information was discussed and an initial review of the report, to identify proposed redactions, was conducted.

Research Design

Based upon these general meetings, an abbreviated research design was developed that generated various research questions or directives. The following research design provided general guidance for preliminary archival research and allowed the ethnographer to prepare for interviews.

- Research specific Pahrump Valley Native American history and culture beyond what is generally provided in the CH2MHill Cultural Resources report prepared for the HHSEGS AFC.

- Determine what plants and animals that have Southern Paiute cultural significance are or may be located in the project area. Plants and animals determined to have attached Southern Paiute cultural values should be further studied to understand ethno-botanical and ethno-zoological details.
- Research the general Southern Paiute cultural relevance and history of Southern Paiute water knowledge and use in the Pahrump Valley and surrounding mountains.
- Research and understand the importance of springs, mesquite groves, and the surrounding coppice dune environs in the project area for the continuance of Southern Paiute life-ways.
- Research and understand the Round dance, Harvest dance, and Cry ceremonies performed in the Pahrump Valley and specifically the ceremony held in 1933 at Hidden Springs Ranch. Determine to what extent these ceremonies are still practiced today and to what extent the proposed project would impact such ceremonies.
- Research and further understand the history, practices, and meaning of the salt song trail; deer and big horn sheep mourning songs; and Coyote and Wolf legends, with emphasis on ethno-geography and specific attention paid to the nature of the trail aspects of these songs and related ceremonies.
- Research the history of Southern Paiute horticulture in the project area from pre-contact to current times.
- Research and map, to the extent feasible, Native American Trails located in and near the project area that are not necessarily "Salt Song Trails"
- Understand to what extent the Old Spanish Trail is also a Native American trail.
- Particularly research the Native American slave traffic that occurred along the Old Spanish Trail
- Inquire and document the importance of Charleston Peak, Spring Mountains, Kingston Mountains, No Pah Mountains, the Last Chance Mountains, and other surrounding landforms in general and as view/auditory sheds in relation to the project area and to other landforms.
- Research traditional and current Southern Paiute burial practices, including cremation.
- Inquire as to the interrelation of Paiute and Shoshone culture in general and specifically in project area.
- Research the history of tribal governments: Moapa, Las Vegas, Pahrump, Timbisha Shoshone, Lone Pine, Independence, Big Pine, Bishop and Benton.

Interviews

It was determined by the Energy Commission ethnographer, based upon limited time, budget constraints, and the general attitude of most Native Americans that participated in the general meetings that an opened question/answer dialogue style of interviewing would be more effective than a formal interview style that would require protracted review of the research questions, the possible need to develop a formal questionnaire, and other methods of recordation. Instead, hand-written notes were taken by the ethnographer. These notes were then typed up within a few days and returned to the person interviewed for further review with instructions to make changes including deletions and additions. The ethnographer also asked interviewees to identify what information in the interviews should remain confidential.

Interviews were conducted with the following Southern Paiute and Shoshone individuals:

Clarabelle Jim, Elder Pahrump Paiute Tribe
Lorraine Jim, Elder Pahrump Paiute Tribe

Cynthia Lynch, Elder Pahrump Paiute Tribe
Richard Arnold, Traditional Religious Practitioner Pahrump Paiute Tribe
George Ross, Elder Pahrump Tribal Member
Vernon Lee, Moapa Tribal Member of Pahrump Paiute ancestry
Juanita Kinlichine, Elder Moapa Tribal Member of Pahrump Paiute ancestry
Lalovi Miller, Elder Moapa Tribal Member of Pahrump Paiute ancestry
Philbert Swain, Elder Moapa Tribal Member
Barbara Durham, Tribal Historic Preservation Officer for the Timbisha Shoshone Tribe and Timbisha Shoshone Tribal member

Follow-up interviews were conducted with Clarabelle Jim, Cynthia Lynch, and Richard Arnold.

Archival Research

Effort was expended to seek, obtain, and assess culturally relevant information from various archival and other sources.

- Documents were obtained via various internet searches and subsequent downloads.
- Books were obtained from used book stores in the project area and from on-line book purchasing venues.
- Books were purchased from the Shoshone Museum and a Nevada Historical Society Museum located in Tonopah.
- Books and manuscripts on file at the Pahrump Public Library were reviewed.
- Books and manuscripts from the California State Archives were obtained and reviewed.
- Books and manuscripts from the Sacramento State University Library were obtained and reviewed.
- Books and manuscripts from the University of California at Berkeley Bancroft Library were obtained and reviewed.
- Historic Photographs from the University of Nevada Las Vegas were obtained and reviewed.
- Photocopied and original documents were provided by the Pahrump Paiute Tribe.

An interview with Don Hendricks was conducted on May 8, 2012 in Pahrump. Don is a retired nuclear physicist, formerly employed by the Atomic Energy Commission and the Environmental Protection Agency. Mr. Hendricks is also a respected local historian, archaeologist and member of various local and state historic societies and associations. The purpose of this interview was to triangulate among conflicting written and oral history dates, people and events.

Ethnographic Method Constraints

There were identified constraints to the ethnographic methods described above. Five constraints are listed and further described:

1. Confidentiality of Sensitive Information
2. Not enough time to conduct thorough ethnography
3. Language barriers in expressing and understanding information
4. Seasonal prohibitions against divulging certain types of information
5. Some seminal archival information not obtainable (Isabel Kelley's 1934 field notes).

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Confidentiality of Native American sensitive cultural information, in the absence of clear Energy Commission policy that is specific to Native American concerns, initially inhibited the author's ability to collect pertinent information.

The Southern Paiute culture, and particularly traditional cultural practices related to epistemology (belief systems), world view, and religion, are too complex to understand within the limits of a three month study. One Pahrump Paiute stated:

Admittedly and with all due respect, the abbreviated ethnographic approach being used in this project appears to be designed to collect only a limited amount of information. The open-ended interviews are good for collecting certain kinds of general data, but cause concern when trying to synthesize the data. (Interviewee - Personal Communication)

Another Moapa Paiute stated a broader concern with language barriers to cross cultural understanding:

English language will never get to the bottom of such things like Salt Song Trails. When we speak our language to one another, we automatically know what the other is saying. Paiute Language gets right to it. In English, we have to say it a bunch of different ways and we still are not sure if the other person understands. With Paiute, it is either yes or no, do or not do. There is no ambiguity. (Interviewee – Personal Communication)

Well documented in the literature and re-stated for this study by various interviewees is a general cultural prohibition against telling culturally significant and traditional stories outside of the winter period (Fowler 1971: 21, Kelly 1964:120, interviewee – Personal Communication, interviewee – Personal Communication). The Pahrump Paiute winter time is generally defined as the months of November, December, and January. Interviews were conducted between the months of February and May of 2012.

Finally, it was determined early in this study that Isabel Kelly conducted ethnographic research among the Southern Paiute in 1932. Her research was partially recorded in her personal field notes. However, only the eastern Southern Paiute, those Paiute residing in Utah and northern Arizona, were discussed in Kelly's seminal work *Southern Paiute Ethnography* published in 1964. While the author was able to incorporate some comparative information from that ethnography into this report; Kelly's information for the western Southern Paiute was not obtainable although effort was expended by Energy Commission staff to obtain copies of her field notes.

Constraints were *surmountable, partially surmountable, or not surmountable* as described below.

1. A personal confidentiality agreement was struck between the Ethnographer and the Pahrump Paiute Tribe representatives that guaranteed confidentiality of information provided. Confidential information included in this report is marked accordingly. *Constraint Surmounted.*
2. The Rapid Ethnographic Assessment Procedures were adapted to this ethnographic study. While REAP cannot replace the quality of long-term ethnography, it does provide some ability to include ethnographic resources in the Energy Commission facility siting process; a process that

only affords Energy Commission staff with a few months, at most, to conduct independent research. *Constraint Partially Surmounted.*

3. The author does not speak or understand Southern Paiute and there are few other non-Southern Paiute that speak the language. Four of the Southern Paiute interviewees spoke English as a second language. However, their English language skills were proficient enough to convey partial understanding and some interviews were followed up with second interviews to verify previously recorded information. However, information conveyed in this report is provided in the English written language only. *Constraint Not Surmountable.*
4. A prohibition prevents traditional stories, many of the stories holding embedded information sought for this study, from being told in entirety during the months that this research was conducted. Interviewees could tell pieces of stories or otherwise provide specific information without breaking the prohibition. In addition, some literature discovered through archival research further substantiated the fragments that were provided through interview. However, an exhaustive review of significant oral history was not obtainable. *Constraint Partially Surmounted.*
5. While previously recorded seminal ethnographic information was not obtained from Kelly's field notes, similar information was gathered from other sources, including a Southern Paiute section included in the Smithsonian Handbook of North American Indians Volume 11 and written by Kelly and Fowler (Kelly 1982: 368-397) that did rely on the field notes in question. *Constraint Partially Surmounted.*

ANALYSIS

Based upon the interview responses and what could be found through archival research, the various themes of the research questions were condensed and reduced to seven broad attribute categories as follows:

- Water
- Plants
- Animals
- Horticulture
- Trails
- Landforms
- Ceremonies

An analysis of Pahrump and Moapa cultural areas and related values concerning the Sandy Valley area is located in the Landforms section.

The following analysis provides what was discovered through archival research and interviews. Document or personal communications citations will cue the reader as to the source that substantiates a statement or assertion.

Water

Water is critical to all life forms; particularly in the desert. Without water, life would not be possible. In fact, the opening statement of Robert McCracken's *Pahrump; A Valley Waiting to Become a City*, exclaims:

"The availability of water has always determined the possibility of life in the arid American West. For untold thousands of years, the magnificent springs located in the Pahrump Valley of Nevada have formed the basis of a community consisting of numerous plant and animal species. For what might be as much as 12,000 years, the springs have served to sustain a variety of cultures and ways of life."
(McCracken1992:1).

In a 1909 United States Geological Services (USGS) sponsored survey, 320 desert watering locations were described and mapped throughout southwestern Nevada and southeastern California. The springs of Pahrump Valley – and between Las Vegas and Tecopa - were particularly known for the "remarkable volume and purity of the water they yield" (Mendenhall 1997:92). A second government sponsored water survey expedition was conducted in 1916 to further ascertain the characteristics of water sources in a number of valleys, including Pahrump Valley, along the California – Nevada border (Waring 1920). The John Yount Ranch was documented as having a spring, a deep well, three shallower wells each pumped by a windmill. The depth of water was variable (Ibid: 65, 77). A Pahrump Paiute Elder exclaimed, "Hidden Hills Spring had the best tasting water" (Interviewee – Personal Communication).

Because water is a life-providing force, Southern Paiute attribute more than mere physicality to water. As an Elder of the Pahrump Paiute Tribe states,

“*Pah* means water. Water is everything, it is the main thing. Every living being drinks water. Without it we would not be alive. Water is alive. It is a spirit no matter where it is or how it comes to us.” (Interviewee - Personal Communication)

Prior to mechanically dug wells and pipelines for transporting water, springs, seeps, and “tanks” guided how people traveled and, therefore, how trails traversed the desert and provided connectivity among these vital water locales. The historian Richard Lingenfelter writes:

“Actual boundaries in this barren land were ill-defined at best; all that mattered was who held the springs... and even these distinctions were blurred by inter-tribal marriages.” (Lingenfelter 1986:16)

For newcomers, the priest, trappers, explorers, military, Mormon settlers, and others, water places are wayward markers of trails and places to pass through on a journey. For the Southern Paiute, water places are also locales for long term or seasonal habitation. In fact, the etymology of the word Pahrump is explained by a Pahrump Paiute elder: “the original word for this place was *Pah-thuh-uhmp* which was the name of a little spring that is now dried up. The word got converted by white men to “Pahrump”. When asked where the spring that Pahrump derived its name from was located, participating Pahrump Paiute elders became very animated.

“It was located on the south end of our old family allotment. Hundreds of acres. They took that from us. They got a gas station, a library, banks and a Walgreens, etc... built on it – where Highway 160 and 372 intersection is. The spring doesn’t run anymore – sometimes in the winter you see a little wet come out from under the parking lot.” (Interviewee – Personal Communication).

Springs with long term habitation tend to have occupational features such as mounds that contain numerous artifacts of daily life, including clay pot fragments used for transporting or storing water in earlier times, and abundant lithic “scatters” (Roberts, et.al 2007:vii). For example, Stump Spring was named after a Pahrump Paiute medicine man named John “Stumper” Pete who got his special powers from the resources and grounds of that area (interviewee - Personal Communication). Stumper had a peculiar method of stomping when he made his medicine and doctored people (Interviewee – Personal Communication). He was a respected medicine man – in the time of my grandmother (circa 1840 – 90’s); he was old so his face was all scrunched up. “Looked like he had a pig face so they called him by Paiute name for pig: *ping-eets*” (Interviewee – Personal Communication). Stump Spring was a major stopping place for the travelers of the Old Spanish Trail. When its waters and the surrounding grass were depleted, travelers went northwest to other springs for respite and to gather resources for the next leg of the journey (Pritchett and Smith 2012, Pritchett 2012:44). Springs throughout the Pahrump Valley were known, named, and occupied. For example, “Manse Spring was originally called *Ma-hanse* which translates as bushes” (Interviewee - Personal Communication). Other Pahrump Valley springs noted as

inhabitation sites are Bolling Mound Springs, Pahrump Springs, Mound Spring, Browns Spring, Hidden Hills Spring, and Stump Spring. The last three mentioned springs were collectively referred to as *Ma-hav*, which translates as “tall brushy area”. Other springs in the vicinity and adjacent to the Pahrump Valley and of importance to the Pahrump Paiute Tribe are numerous springs in Ash Meadows area, including Devils Hole, a spring on the north side of Lizard Mountain (Last Chance Range) named *Poo-bit-si* by the Pahrump Paiute; numerous springs along the flanks of the Spring Mountains, including Horseshutem Springs, Crystal Spring, Wood Canyon Spring, Santa Cruz Spring, Horse Spring, Younts Spring, and Mule Springs; Horse Thief Spring and Beck Spring in the Kingston Range; and Tule Springs, Resting Springs and Tecopa Springs located near the No Pah Range and Resting Spring Ranges. A Shoshone person stated, “We are very concerned about the springs, we have been monitoring a spring called Devils Hole, it has some little fish in it that need water to stay there. That place is very important to us” (Interviewee – Personal Communication, Ash Meadows National Wildlife Refuge Visitor Brochure). A list of all springs that are culturally significant to the Pahrump Paiute can be found at Appendix 1 of this report.

The Pahrump Paiute are knowledgeable of where good springs, medicinal springs, hot springs, and poisonous or bitter tasting springs are located. They are also keenly aware of where springs have dried up or diminished since the 1940s, including but not limited to: Six-mile Springs (*Pah suits*), Pahrump Ranch Spring (used to have pool fish), Brown Spring, Mason Spring, Manse Spring (used to have pool fish), (comes back in the winter), Greasy Wood Springs, Kellog Ranch Springs (located above the Hidden Hills Ranch), Chu Chep Springs ([REDACTED]) (Interviewees - Personal Communication). “We use to swim in some of those springs – not anymore,” said one Pahrump Paiute Elder. The historic trend of springs drying up is attributed by the Pahrump Paiute people to the increased farming, industrial, and residential growth in the valley over the last 70 years.

It is not just springs that are drying up, claim Southern Paiute interviewees, but the entire water cycle. The water cycle is a traditional Southern Paiute concept with words for the various aspects of water. Table 3 provides a list of Southern Paiute words for various forms of water and a translation of the Southern Paiute word into English. The reader should note that the following word list has not been checked for phonetic exactness. Some translations were not provided. This list is derived from Pahrump Paiute personal communications and Powell’s “Las Vegas Vocabulary and Grammatical Notes” located on pages 152 -160 of the Fowlers’ 1971 edited version of Powell’s report.

Table 3. Ethno-semantics: Paiute Words for the Various Forms of Water	
Capitalized words are from Powell’s collected vocabulary and notes.	
Southern Paiute Word	Translation
<i>pah</i>	means “water” and is used in combination with other Paiute words to convey either Paiute place names or other forms of water
<i>pah ce pets</i>	means “spring” as in water spring... not “spring time” or “seed germination” and translates as “coming out of the ground”
<i>Pa-a-tum-pai-a</i>	means “spring opening” or hole from which water wells up
<i>pah ta bi yah</i>	means “spring” but specifically refers to a spring that is running well
<i>ta ma nu gwitch</i>	means water pocket or “tank”
<i>P-ka-vu</i>	means Sink but translates as “where water disappears”

<i>pah who weech</i> <i>Pa-no'-kwint</i>	means "creek" but translates as "water flowing or running".
<i>Pa-a'-na-vat'-so-na'-kwin</i>	mountain stream junction or confluence
<i>Kaivw-o-nu-kwint</i>	mountain stream
<i>ko sah lo wala</i>	Steam rising from rocks after a brief rain when the rocks have been warmed by sun
<i>Pa-gu'-na-ka</i>	Fog
<i>Hu-u'-nu-vwav-l</i>	Frost
<i>Nu wav</i>	Snow
<i>pah la ship</i> <i>Pa-ru'-s-shup</i>	means "ice" but translates as "water turning to ice" or the act of freezing"
<i>pah homp</i>	means "hail"
<i>ho un na va havi</i>	means "dew" but translates as "moisture laying"
<i>Hu-u'-nu-vwav-l</i>	means "frost"
<i>pah sa ta ga</i>	water dripping from roof, tree,
<i>Pa-wu'-mi-ots</i>	water that is whirling
<i>owh la</i> <i>U' wai</i>	means "rain"
<i>pah uv ceah</i>	means "sprinkle"
<i>pah gid</i>	means "flood" but translates as "water moving by fast"
<i>Pa-ro-wa'-tsu-wu-nu-ti-l</i>	Rainbow
<i>o wa pul</i>	means "rainbow" but relates to rainbows considered the canes of Wolf and Coyote. When there is a double rainbow, it is thought that the bottom and brighter rainbow is the cane of Wolf. The upper rainbow, somewhat dimmer than the bottom rainbow, is considered the cane of Coyote, Wolf's younger brother.
<i>pah ga din</i> <i>Pa-ka-riv</i>	means "lake" or "puddle" but refers to water that is still or "resting"
<i>Pa'-pa-gu-ri-nok</i>	Marsh
<i>Pai-hu'-yu</i>	canyon with water
<i>Kai-va'ho-yu</i>	canyon, dry
<i>Pi-ka-vu</i>	cave with water
<i>Tun-kon'</i>	Cave

Since the early 1900s, linguistic anthropologists have understood that there are correlations between language, ways of understanding natural phenomena, and resultant cultural values. Ethno-semantics is one method for assessing another divergent linguistic speaker's cultural world view and associated values. In Western culture and particularly for English speakers, water and its various forms are named as distinct and separate entities. For example 'ice', 'rain', and 'lake' - all words for describing natural variations of water, do not share an etymological linkage, nor do the words have any linkage back to the common factor which is water. Therefore English speakers can easily conceptualize the quantification of water. For example springs are typified as "pool", "barrel" or "bucket" based upon the amount of daily flow. Pool springs can support larger ranches, barrel springs support smaller farms and a bucket spring

may be sufficient for watering a horse or getting a quick drink. Southern Paiute Language tends to preserve the root word 'pah' in other words that describe watery aspects of the world. The various iterations of watery aspects often take the word 'pah' and attach a descriptive string of words that often describe the movement or other active qualities of water. Therefore Paiute speakers when conversing or thinking in their own language, often are much more adept at understanding water as an interconnected phenomenon with varying qualities, and have a more difficult ability to conceive of, or describe the quantification of water. Often times, languages that are robust for describing the qualities of the world, tend to be spoken by people that focus less on ownership (which requires quantification) and focus more on the nuances of rights (which are qualifying human behaviors towards one another, and the natural phenomena). Often non-Indian owners, upon acquiring property with a spring set about "improving" it; which means manipulation in order to get more water from the source. "Farmers often screw it up in the attempt to improve [a spring]. They blast it, or dig it out, or try to connect two nearby springs into one," exclaimed a local historian (Interviewee – Personal Communication).

The Southern Paiute right to inhabit a spring is attributed to specific families. Springs tend to cluster at the base, mid slope, and in the upper reaches of mountains. Likewise, Paiute families who clustered around one or several springs tended to act as economic units in coordinated efforts to hunt, gather, and migrate about a territory that encompasses the extents of all three zones. This is a pan-Southern Paiute practice (Kelly 1964:6-7). Often various families that shared a single water source would not camp exactly on the spring but at a polite distance so that other families would be able to have unfettered access to the common source. Paiute "ownership" of a spring is better described as usufructuary rights; rights that are exercised for the benefits of the user, but that do not convey any ownership precedent (Kelly 1982: 380, Roberts 2007: 93, Jim 2012). There are several Southern Paiute stories of people getting too near to water sources due to greed or carelessness and drowning. When family leaders passed away, the rest of the family might avoid frequenting the spring for up to a year. Characteristically, Southern Paiute consider "resources" to be a function of creation and brought about by events of the creator. Sometimes, with the family departure of a spring, either because of seasonal migration or because of a significant family death, during a family absence, other tribal families may respect the departure and anticipate the grieving family's return. However non-Indians often interpreted the family departure to mean that the family had ceded ownership. There is extensive Southern Paiute knowledge about how to maintain a spring or revive a spring should such a place become overgrown or otherwise cease flowing. The Southern Paiute word *Tong-ai*, expresses the act of cleaning out a spring (Fowler 1971: 158).

As agricultural practices were developed by Paiute, spring water became controlled through ditches and intense management. In some tribal areas, such as the Owens Valley, Paiutes coordinated water use through "irrigation chiefs" (Lawton et.al. 1976). With the rise of Paiute horticulture, there was also a rise in clay storage containers. Particularly interesting is the rise of clay water pots used for household storage and for travel (Kelly 1962:77).

In the Pahrump Valley, it is not just a matter of water availability versus water demand that has resulted in less water, but also, as a Pahrump Paiute explains, the disrespectful manner by which the water is taken:

Water is a spirit or being and it is alive throughout its cycle. The being travels through the cycle... the cycle is a journey or travel circuit. Rain to soil or rock, then to seeps, to springs, to creeks, to basins above or below ground, that collect water. The Paiute story of World Creation concerns water. The world was flooded and Charleston Peak was an island where animals congregated. Animal deities were responsible for how waterways are shaped. Some beings are hiding and waiting for water to provide for a re-emergence. All things have spirits that need to be talked to/listened to. Plants and animals, just like humans, have feelings and emotions. Water also has feelings and emotions: One should not be loud when approaching water. Water needs to be awakened. One takes a stick and gently stirs the surface to wake it up. It is important how one approaches and leaves water. These beings are responsible for keeping balance in the environment and can cause havoc if disrespected or if they anticipate impending harm. Further, the beings are identified in certain prayers and songs that cannot be adjusted (Interviewee - Personal Communication).

Further Pahrump Paiute explain that the mountains are responsible for “calling” the rains. Knowledgeable Paiute can also call the rain through prayer. When a calling is successful, the playa comes to life. While playas are considered by non-Paiute to be places devoid of water, the water spirits are considered by Southern Paiute to be ever present, and therefore require similar consideration and respect as Paiute would require of any users of spring areas.

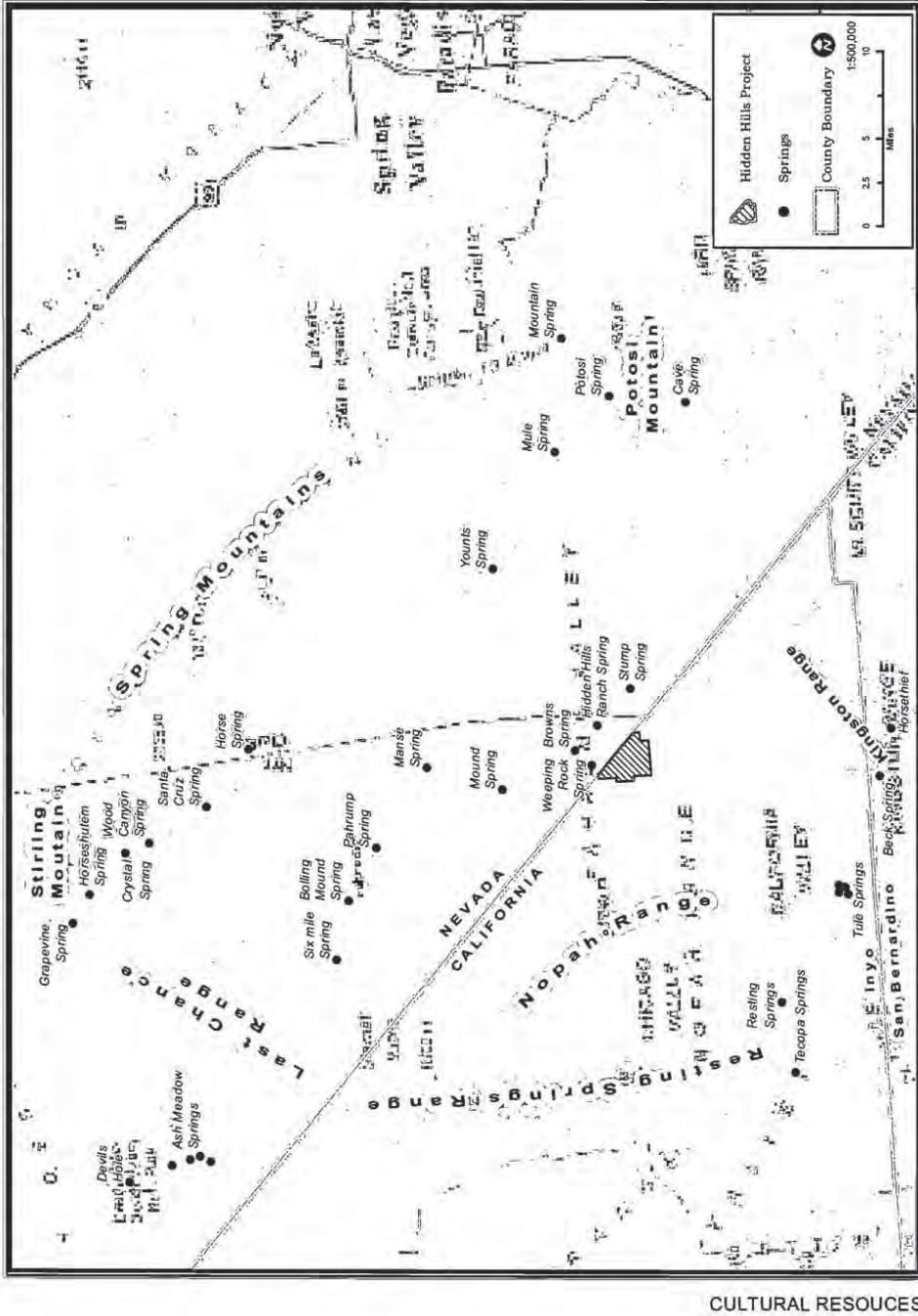
Likewise there are prayers for calling the wind. For example one Pahrump Paiute Elder recounted praying for the wind to blow the mushroom cloud, arising from the first atomic bomb tested at the atomic testing site to the north of Pahrump Valley, to blow away (Interviewee – Personal Communication).

Sufficient ethnographic literature documents that water spirits, are entities deeply entrenched in Paiute springs, (and other places where water can be found or appears), and ways of thinking. Water spirits are small beings that reside in the water ways and can entice careless humans to come too close to springs. Water spirits are thought to pull unwary humans into springs where they are later found drowned (Kelly 1964:138, Interviewee - Personal Communication). Underground water ways are interconnected. This is conveyed with stories of a person who placed a barrel cactus in a spring in Ash Meadows. Some days later the same barrel cactus appeared in a spring in Furnace Creek located some 35 miles away (Interviewee – Personal Communication). A recent substantiation of the Southern Paiute understanding of interconnectivity of distant places, including springs, was documented in a recent Pahrump newspaper article that discussed a 7.4 magnitude earthquake in Oaxaca Mexico that caused significant sloshing of water at Devils Hole in Ash Meadows. The distance between the two places is 1700 miles (Pahrump Valley Times April 13, 2012).

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A Moapa Tribal Elder simply stated, “springs are very special places.” (Interviewee – Personal Communication). Another Tribal Elder said, “The project will use water. We people of the desert do not have more water to give, what will we do with less water?” (Interviewee – Personal Communication).

CULTURAL RESOURCES - FIGURE 5
 Hidden Hills Solar Electric Generating System (HHSEGS) - Some Springs in the Pahrump Valley and Vicinity that are Culturally Important to Pahrump Paiute



CULTURAL RESOURCES

CALIFORNIA ENERGY COMMISSION, SITING, TRANSMISSION AND ENVIRONMENTAL PROTECTION DIVISION
 SOURCE: Topographic Maps - USGS, National Geographic (2002), California Atlas & Gazetteer - De Lorme (2010), Nevada Atlas & Gazetteer - De Lorme (2010).

Plants

The western portion of the project area is comprised of Shadscale Scrub. The eastern portion of the project area is comprised of Mojave Desert Scrub. Within a mile to the east of the project area are mesquite thickets or “groves,” that provide some anchoring for the coppice dunes that parallel the project boundary. While many culturally sensitive plant types are associated with mesquite thickets, this section is not intended to list those plant types. The plant types found on the project site are further analyzed below.

A comparison of the plants documented in the project AFC as “[O]bserved within the HHSEGS Site and 250-foot Buffer during 2011 Surveys” (AFC 5.2-73 – 79) and a list of culturally important plant species of the Southern Paiute, derived from David Rhode’s *Native Plants of Southern Nevada: An Ethnobotany*, and a list of species provided by the Pahrump Paiute Tribe (Jim 2012), has resulted in the following list of cultural use plants known to occur in the project area. Of the 139 plant species identified in the project area, 30 (or approximately one-fifth) of the identified plant types are culturally significant for cultural use. While other tribal representatives have identified more, of the approximately 100 known plant species documented as used by the Southern Paiute people, 30 (or approximately one-fourth) grow in the project area. An exhaustive ethno-botanical study is more likely to identify several hundred plants types that are known by Pahrump Paiute. While many of the plants identified have multiple uses, most informants intentionally chose not to identify those plants that are used for medicinal purposes. Table 4 provides a list of some culturally important plant species in the project area.

Common English Name	Scientific Name	Pahrump Paiute Uses
Annual Turtleback	<i>Psathyrotes</i>	[REDACTED]
Ash	<i>Fraxinus sp.</i>	[REDACTED]
Beavertail cactus	<i>Opuntia basilaris var. basilaris</i>	[REDACTED]
Broom Snakeweed (resin weed, 'turpentine weed' and 'matchweed')	<i>Gutierrezia sarothrae</i>	[REDACTED]
Creosote bush	<i>Larrea tridentata</i>	[REDACTED]
Datura, Thornapple, Jimson Weed, Devil's Trumpet	<i>Datura Wrightii</i>	[REDACTED]
Desert larkspur	<i>Delphinium parishii var. parishii</i>	[REDACTED]
Desert globe mallow	<i>Sphaeralcea ambigua</i>	[REDACTED]
Desert milkweed	<i>Asclepias erosa</i>	[REDACTED]

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Desert needlegrass	<i>Achnatherum speciosum</i>	
Desert paintbrush	<i>Castilleja angustifolia</i>	
Desert trumpet	<i>Eriogonum inflatum</i> var. <i>inflatum</i>	
Four wing saltbrush	<i>Atriplex Canescens</i>	
Fiddleneck (Bristly)	<i>Amsinckia tessellata</i>	
Goodding Phacelia	<i>Phacelia pulchella</i> var. <i>gooddingii</i>	
Honey mesquite	<i>Prosopis glandulosa</i> , var. <i>torreyana</i>	
Indian ricegrass	<i>Oryzopsis hymenoides</i>	
Nevada Ephedra, Jointfir	<i>Ephedra Nevadensis</i>	
Pahrump Valley buckwheat	<i>Eriogonum bifurcatum</i>	
Pima Ratany (Littleleaf ratany)	<i>Krameria erecta</i>	
Primrose (yellow)	<i>Oenothera primiveras</i>	
Princes plume (Cabbage Desert Plume, Indian Cabbage, Sentinel of the Plains)	<i>Stanleya pinnata</i>	
Purplenerve springparsley	<i>Cymopterus multineratus</i>	
Rattlesnake weed (White margin Sandmat)	<i>Chamaesyce albomarginata</i>	
Rubber rabbitbrush	<i>Chrysothamnus nauseosus</i>	
Shadscale	<i>Atriplex Confertifolia</i>	
Silver Cholla (Golden Cholla)	<i>Opuntia echinocarpa</i>	
Tansy mustard	<i>Descurainia pinnata</i> ssp. <i>glabra</i>	
Wire-lettuce	<i>Stephanomeria pauciflora</i>	
Winter fat	<i>Kraschennikovia lanata</i>	
Winding Mariposa Lily	<i>Calochortus flexuosus</i>	
Wooly Plantain	<i>Plantago ovate</i>	

The above list represents some of what is known, or used today by the several Pahrump Paiute that participated in this study. Paiutes did not have time to finish the list. Some of the traditional knowledge base has been lost because elders have passed away without passing on the information and some plants are now extinct and, therefore, the knowledge has also been forgotten. While some of the plants in the project area may not have a known use, the plants may still have a Southern Paiute name and some indigenous knowledge may be known about the plant because it is to be avoided, or because a

plant may function in some other ecological way, or because there is a free association between the plant and some otherwise unrelated ecological function.

Creosote

The creosote bush, predominate in the lower desert floors and in the project area, provides numerous uses, such as [REDACTED]

[REDACTED]

[REDACTED] There are many other uses of the creosote sap. For example it can be used as [REDACTED]

[REDACTED]. Creosote branches are used to [REDACTED].

Creosote is also an [REDACTED]

[REDACTED]. There is even more contemporary knowledge of creosote characteristics, such as a warning from one elderly Pahrump Paiute, “do not back-up over creosote. Its branches can poke through the thickest tires just like a nail.” (Interviewee - Personal Communication).

Seed, Root, Leaf, and Basketry Material Gathering

Five listed plants provide seeds as a food source. Seeds are gathered using a fan or wand-shaped seed beater and basket tray. Gathered seeds are winnowed, sometimes parched, and stored. There are various methods and utensils used for storage. Some of these utensils are woven from other plant materials. Seed gathering is very labor intensive and requires in-depth ethno-botanical knowledge, but has been a mainstay of the Southern Paiute diet for thousands of years (Anderson 2005).

Many plants that are not used directly can otherwise be useful to traditional knowledge because the plants are indicator species. When certain plants change (e.g., bloom, emit sap, drop leaves), such plants indicate that something else is likely to occur. For example, when [REDACTED] on the valley floor, the plant indicates [REDACTED] in the mountains. Humans, plants, and animals are interrelated. Plants have feelings and emotions and need to be talked to and listened to in order to live co-harmoniously. Many plants will go dormant or will appear non-existent for years and then will suddenly spring up in an area (Interviewee – Personal Communication).

In addition, some plants may not have specified cultural uses, but are still considered culturally significant because such plants may provide vital ecological roles that support the continuance of culturally used plants and animals.

As one Pahrump tribal representative wrote:

“The fact that we co-existed with plants and have such a deep knowledge of plant uses proves that we have an intimate relationship with the landscape surrounding them. We never exploited this resource or looked to destroy or waste the plants, rather we used only what is needed and are mindful of the future. Plants provided materials for homes, ceremonies, medicines, food, and practical uses. Plants must be collected from particular areas or at specific

times of the season. A system of traditional beliefs and methods attend the collection and use of plants, traditions that involve elements of respect, approach, preparation, dosage, administration, and/or consumption of foods or medicines. We know that plants are found in certain areas for reasons explained in our traditional stories or beliefs. Many plant species are rare and should be protected, not picked. Care should be exercised to avoid damaging plants in certain areas, even though they may appear to be abundant.” (Jim 2012).

Plant knowledge can often come from observing animal relations to plants. Seeds, including gathering, processing, storing, and consumption, are a resource type critical to the Paiute people for desert survival. In fact, the Paiute people call themselves *Pi Yates*, which is the Paiute word for the kangaroo rat. The Paiute people think of themselves as thrifty seed gatherers, similar to the Kangaroo rat that exists almost exclusively on seeds gathered from the desert scrub plant populations (Interviewee - Personal Communication).

For example, a Paiute baby girl’s dried umbilical cord is placed in the hole of an anthill, a gopher hole, or Kangaroo rat hole so that the baby would grow up to be an industrious gatherer like the animals that exhibited similar seed-gathering activities (Kelly and Fowler 1982: 379).

Moapa Paiute mentioned that they cherish gathering in the Pahrump Valley because they feel that the Pahrump Valley environment has not been contaminated as much as Las Vegas Valley and valleys east of Las Vegas. They blame the higher level of environmental contamination in their local area and gathering areas to the north and south of the Moapa Reservation on the testing of bombs at nearby military bases during the Cold War and also the smoke that comes out of a nearby coal power plant (Interviewee – Personal Communication). Very preliminary research indicates that contamination impacts to Moapa lands, plants, animals and membership have never been investigated or mitigated (Titus 1986, Interviewee – Personal Communication). Pahrump Paiute acknowledge that Paiute from other areas gather in Pahrump Valley but do so acknowledging that Pahrump Paiute are hosts, and that permission should be asked and granted before outside gathering commences. Pahrump Paiute also acknowledge that this is placing increased use on their local sources of sustenance and puts them in the role of attempting to balance their needs, their neighboring Southern Paiute’s requests and the sustainability of the plant communities that are traditionally gathered. Plants are very important to many Paiutes and must be protected from threats so they have enough for all to use.

Animals

Insects, birds, reptiles, and mammals, that are considered by Pahrump Paiute as culturally significant animals, occur, inhabit, forage, or otherwise pass through the project area. No threatened or endangered arthropods (what the Pahrump Paiute Tribe calls “insects”) are known to occur on the project site; however, one federally listed species, Carole’s silverspot, may occur within the greater vicinity of the proposed project site. Insect surveys are not required unless a threatened or endangered insect is known to occur on the site, or is reasonably likely to occur on the site. Table 5 provides a list of insect types identified by the Pahrump Tribe as culturally important. It is not known by the author whether or not these insects occur on or near the project site. There are antidotal reports of tarantulas crossing the roads near the project site (Interviewee – Personal Communication).

Table 5. Some Culturally Important Insects and Pahrump Paiute Uses

Bumble bee	
Butterfly	
Centipede	
Grasshopper	
Inch Worm	
Louse	
Red Ant	
Stink Bug Beetle	
Tarantula	
Tiger Swallowtail Butterfly	

Table 6 provides a list of culturally important animal species in the project area

**Table 6 Hidden Hills Solar Electric Generating System (HHSEGS)
Animal Species Occurring in Project Area per the Project Area 2011 surveys that Pahrump Paiute (personal communication) or ethno- biologist Cornet (2000), anthropologist Kelly (1982) have identified as culturally significant**

Common English Name	Scientific Name	Pahrump Paiute Uses
BIRDS		
American crow	<i>Corvus brachyrhynchos</i>	
Anna’s hummingbird	<i>Calypte anna</i>	
Barn owl	<i>Tyto Alba</i>	
Black phoebe	<i>Sayornis nigricans</i>	
Common raven	<i>Corvus corax</i>	
Common poorwill	<i>Phalaenoptilus nuttalli</i>	
Cooper’s hawk	<i>Accipiter cooperii</i>	
Costa’s hummingbird	<i>Calyptecostae</i>	
Eurasian collard-dove	<i>Streptopelia decaocto</i>	
Gambel’s Quail	<i>Callipepla gambelli</i>	
Greater roadrunner	<i>Geococcyx californianus</i>	
Golden eagle	<i>Aquila chrysaetos</i>	
Mourning dove	<i>Zenaida macroura</i>	
Northern flicker	<i>Colaptes auratus</i>	
Red-tailed hawk	<i>Buteo jamaicensis</i>	
Rock pigeon	<i>Columba livia</i>	
Tree swallow	<i>Tachycineta bicolor</i>	
Turkey vulture	<i>Cathartes aura</i>	
Western burrowing owl	<i>Athene cucularia hypugaea</i>	

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White-crowned sparrow	<i>Zonotrichia leucophrys</i>	[REDACTED]
REPTILES		
Chuckwalla	<i>Sauromalus ater</i>	[REDACTED]
Common collard lizard	<i>Crotophytus callarus</i>	[REDACTED]
Desert tortoise	<i>Gopherus agassizii</i>	[REDACTED]
Long-nosed leopard lizard	<i>Gambelia wislizenii</i>	[REDACTED]
Northern Mojave Rattlesnake	<i>Crotalus scutulatus scutulatus</i>	[REDACTED]
Side-blotched lizard	<i>Uta stansburiana stejnegeri</i>	[REDACTED]
Sidewinder	<i>Crotalus cerastes</i>	[REDACTED]
Southern desert horned lizard	<i>Phrynosoma platyrhinos calidarium</i>	[REDACTED]
Speckled rattlesnake	<i>Crotalus mitchellii</i>	[REDACTED]
Western fence lizard	<i>Sceloporus occidentalis</i>	[REDACTED]
Western whiptail	<i>Aspidoscelis tigris ssp. Tigris</i>	[REDACTED]
Zebra-tailed lizard	<i>Callisaurus draconoides</i>	[REDACTED]
MAMMALS		
American badger	<i>Taxidea taxus</i>	[REDACTED]
Audobon's cottontail	<i>Sylvilagus audobonii</i>	[REDACTED]
Black-tailed deer	<i>Odocoileus hemionus</i>	[REDACTED]
Black-tailed jackrabbit	<i>Lepus californicus</i>	[REDACTED]
Botta pocket gopher	<i>Thomomys bottae</i>	[REDACTED]
Coyote	<i>Canis latrans</i>	[REDACTED]
Deer mouse	<i>Peromyscus sp. Maniculatus</i>	[REDACTED]
Desert kit-fox	<i>Vulpes macrotis</i>	[REDACTED]
Merriam kangaroo rat	<i>Dipodomys merriami</i>	[REDACTED]
Nelson's bighorn sheep	<i>Ovis Canadensis ssp. nelsoni</i>	[REDACTED]
Pocket mouse	<i>Perognathus longimembris</i>	[REDACTED]
Whitetail antelope squirrel	<i>Ammaspermophilus leucurus</i>	[REDACTED]

Animals provide Pahrump Paiute with nutritional sustenance, materials for utensils, clothes, housing, and other adornment, and also provide mental and spiritual guidance. Some animals provide role models. At the time of creation and immediately afterward, and before humans were introduced by the creator, animals (including insects), played a key role in managing the world, preparing it for Southern Paiute, and providing aboriginal inhabitants with the knowledge of how to live in the desert environment. A few species are highlighted next, to illustrate the extensive symbiotic relationship that Pahrump Paiutes and animals maintain. A more comprehensive list of all culturally important species is provided at Appendix 3.

Desert Tortoise

The Desert Tortoise is [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] (Interviewee – Personal Communication). However, the tribe has refrained from consuming tortoises since the species has been deemed endangered. The tortoise is a role model for going the long distance, for being capable of a living a long life and therefore is a conveyor of good luck.

Flicker

Flicker brought light to the world. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] (Interviewee – Personal Communication). The Pahrump Tribe finds it ironic that the bird attributed with bringing light to the people may now be harmed by people trying to harness the sunlight.

Rabbit, Deer, and Mountain Sheep Hunting

Sources of animal protein are critical for a diet that otherwise consists of roots, greens, berries, nuts and horticultural produce. Hunting is primarily men’s activity and young boys are initiated at an early age to begin to learn to hunt. In the selection of mates, Southern Paiute placed high priority on those males that were proficient hunters. In fact, a baby boy’s dried umbilical cord is taken to the mountains by the father and placed on the trail of a mountain big horn sheep to petition for good luck in hunting (Kelly 1982: 379).

Hunters [REDACTED] on the dry lake bed. [REDACTED]
[REDACTED]
[REDACTED] (Jim – 2012:3).

While deer and mountain sheep hunting is an individual activity or done with a few male cohorts, rabbit hunting is both an individual and a communal pursuit. There is much description in the literature about how rabbit hunts are communally conducted. Long nets are set up and rabbits are then driven into nets where they are then clubbed. Rabbit furs are utilized to make rabbit blankets and robes. Hunting, although currently conducted by means of a rifle, is an ongoing tribal activity in the project area (Interviewee – Personal Communication, Interviewee– Personal Communication).

Horticulture

Pahrump Paiute were dependent on three broad sources of food: 1) Wild plants that were gathered in their natural condition or with some manipulation, such as pruning; 2) animals that were hunted or gathered; and 3) horticulture. These activities occurred at specific times within a seasonal migration (Kelly 1982: 371).

The anthropological and archaeological literature documents that Southern Paiute, including Pahrump and Las Vegas Paiute, farmed prior to contact with the Spanish (circa 1775). While it is suggested that the eastern Southern Paiute obtained horticultural knowledge from the Pueblo and Hopi people to the east and south; and the Western Southern Paiute are thought to have obtained the knowledge from the Mohave via the Chemehuevi (Kelly 1964: 40, Kelly 1982: 371), Southern Paiute representatives believe their traditional ecological knowledge has been practiced for thousands of years. The Owens Valley Paiute seemed to have adapted a different set of cultigens (cultivated species) and some have suggested that they did this in isolation from their Paiute neighbors to the east (Lawton et al 1976). While some literature suggests that perhaps the spread of horticulture occurred sometime around 1850 and was introduced by Mormon settlers, there are conflicting reports of farming occurring in the lower Colorado Basin at least 25 to 75 years earlier (Inter-Tribal 1976:24, 31).

One Pahrump Paiute informed the author of a Southern Paiute understanding that the Big Horn Sheep provided Paiute with the knowledge and seeds for horticulture. This understanding would place horticultural practices back to the creation and animal instruction times (Interviewee – Personal Communication). A more Eastern Southern Paiute account of the origins of corn seed relate a story of a young Paiute boy who goes on a quest for a better food source for his people. His travels take him to the sky where he encounters the creator who after a series of tests sends him back to his people with corn seeds (Inter-tribal 1976:3-4).

Mexicans traveling along the Old Spanish Trail between Mountain Springs and Good Springs or Resting Springs were aware of a Paiute man that extensively gardened out on the flats below Mule Springs and just north of the present highway. (Interviewee – Personal communication) What is documented is that particularly Mormon settlers usurped Southern Paiute springs and garden plots (Roberts 2007: 89-90). For example, it is not clear how Mormon Charlie's ranch at Manse Spring was acquired by the Jordan brothers, Mormons who sold the ranch to Joseph Yount, after less than a year of ownership. One source says the ranch was "taken over" by the Jordan brothers (McCraken 2009: 4, Lingenfelter 1986: 167).

Corn, squash, gourds, pumpkins, melons, sunflower, amaranth, winter wheat, various beans (including chickpeas - an old world cultigen), and Devil's claw were some of the cultigens (Kelly 1982: 371). George Wheeler, U.S. Army expedition leader, notes in 1872, that the Pahrump Paiute cultivated "corn, melons, squashes, [and] great quantities of wild grapes" around the springs (McCracken 2009:3). Southern Paiute gardens were planted near springs and along the Colorado River floodplain. In the Pahrump Valley, gardens were known to have been planted at most of the springs immediately east of the project area, including Stump Springs. A garden could consist of from one to several acres. Extended or cohort (two or more brothers) families might cultivate several acres. The area was cleared and leveled as best as possible and berms were placed around garden plots. Irrigation ditches were dug from water sources to the nearby plots. Where there were multiple plots, a main ditch was dug and lateral ditches extended off of the main ditch. Where multiple families used the same water sources, a watering schedule was established. Where the spring was too far for a ditch, sometimes the water was carried from the source to the garden plot. Plots were used for several years until productivity diminished and then plots were rotated allowing old plots to go fallow. (Ibid, Roberts 2007: 95).

Garden plots were prepared in early winter and were thoroughly soaked before planting in the early spring. Plants were planted from sprouts and from seed. After planting, most Southern Paiute migrated to higher terrain to avoid the heat and to hunt and gather as the weather permitted. The elderly were left to attend to the gardens. People that had seasonally migrated to higher elevations would periodically return to make sure the garden was progressing through the growing season and to assist the elderly with some of the more physical tasks of gardening. As harvest time approached, most of the families returned from the high country. As the harvest and procurement activities neared completion, some would return to the high country to harvest pine nuts and hunt. This usually occurred in the middle to late fall (Ibid).

The earliest farms in the Pahrump Valley were established by Pahrump Paiute at places such as Hidden Hills Spring, Mound Spring, Manse Spring, Pahrump Springs and Bolling Mound Spring. These farms were taken by the earliest non-Indian settlers that arrived in the valley circa 1875 (McCracken 1992: 11, 31). Pahrump Paiute maintain that the word "taken" is a polite substitute word for "stolen," regardless of whether or not a patent was filed for homestead lands.

Within 50 to 75 years (circa 1925 -1950), the Pahrump Valley area and its lush springs were owned by non-Indians and mass cultivation was the farming method of choice. Cotton, originally a plant domesticated by Native Americans to the south, became a lucrative "cash crop." Wells were established for the watering of vast fields and local Paiute became the laborers. For example, the Manse Ranch had an "Indian Rancheria" for housing Indian laborers (Interviewee – Personal Communication, Interviewee – Personal Communication). A Pahrump Paiute Elder recalled the family's labors:

"My two sisters were the best cotton pickers in the family and would average 400 pounds of cotton per day. One time my sister picked 500 pounds in one day. The hardest part of picking cotton was that the cone where the cotton grew out had sharp stickers on it that would cut up the fingers. They picked cotton at the Pahrump Ranch

that was established by John Hughes in 1936. They picked cotton the next year in 1937.”
(Interviewees – Personal Communication)

Pahrump Paiute continue to garden today. However, because they have been pushed off of their spring areas, gardening occurs in backyards and often is watered with hoses and municipal or well source water. (Interviewees – Personal Communication)

Trails

Early Spanish explorers, including some of the first to enter Southern Paiute territory, relied on Native American guides to find their way around the southern Great Basin and Mojave Desert (Kessell 2002:273, 279; Steiner: 1999:11, 14, Reeder 1966: 6-7). Inevitably, the routes “discovered” were Indian trails. In the desert, with the crucial role that springs played in long distant travel, it was Indian guides who knew of such locations and who showed where these precious locations were tucked away in an otherwise seemingly barren land. When there were decades of non-use of a previously “discovered” trail, and newcomers arrived to re-discover routes, again it was local Indians that informed recent newcomers that foreigners had previously passed through. While the Old Spanish Trail (Trail) is comprised of various tracks and routes, the general corridor, regardless of how various tracks diverged, converged, or paralleled, led the traveler along a string of essential watering stops. Even though some Indian-White first encounters along the trail were amicable, as the non-Indian traffic increased Southern Paiute retreated from their nearby trails, springs, encampments and garden areas. Certain sections were less travelled by newcomers; and during those months when weather prevented travel, Southern Paiute re-frequented their trail-side places and activities (Inter-Tribal 1976: 39). As the Trail became a standardized route between California and New Mexico, its primary purpose was to move commodities from the California seaport of Los Angeles to the Interior Spanish settlements located in New Mexico.

Slave Trails

A commodity traded towards the west was wool products. Horses and mules were traded towards the east. Unfortunately for the Paiute, they were captured by Ute and Navajo Indians and sold to Mexican travelers as slaves and were also directly pursued by Mexicans and were sold/traded in both directions. Descriptions abound of lines of Paiute tied to pack trains and force marched hundreds of miles along the trail system that was originally their own. After establishment of the Old Spanish Trail as Spanish, then Mexican, and finally a Mormon or American trail, Paiute people continued to travel the trail sometimes against their own volition (Reeder, 1966; Inter-Tribal 1976: 22-33, 36-51, Walker 2009: x-xi). One elderly Pahrump Paiute exclaimed, “Hardship, suffering, and fear between watering holes, that’s what it was for travelers and the Indians that lived nearby.” He also added, “I know this trail, I used to travel it as a boy” (Interviewee – Personal Communication). Suffice to say, the Old Spanish Trail is an Indian trail.

Earlier Old Spanish Trail routes cut either well below or went through the Southern Pahrump Valley. The first documented crossing of the Pahrump Valley along the Old Spanish Trail corridor that intersects the HHSEGS project area, was made by John Fremont. Fremont was travelling from west to east and, while still somewhat south of the northern route, encountered two survivors of a massacre that had

happened at Resting Springs. Indians, perhaps a band of Pahrump Paiute, had killed a large number of Mexican packers and had gone north into the Amargosa Valley with the pack animals. Fremont's men made pursuit and returned with those stolen animals that had not already been butchered by the Indians. Fremont's men killed many of the Indians in the encampment. From Resting Springs, Fremont made his way to Stump Springs and then on to Mountain Springs, just past where the previously followed Armijo route came through the Southern Pahrump Valley. This was in 1844 (Steiner 1999:55, 56). It is suggested that the slave raiding activities forced Paiute that had once resided in proximity to the trail to move to less favorable resource areas which were either of marginal subsistence quality or in neighboring family, band, or tribal areas, creating internal conflict over resource utilization. These events caused tribal people to prey upon the pack trains for trade goods and horse meat (Walker 2009).

At this same time, Chief Tecopa, a famous and early Pahrump Paiute spokesperson, was camping in the Providence Mountains, approximately 100 miles distant, and heard, by means of an Indian "running" messenger, of the massacre. Chief Tecopa made tracks post haste and caught up with the Fremont party at Las Vegas Springs. After ascertaining the facts, Chief Tecopa made his way back to Pahrump where he went about making clear to his people the errors of raiding travel parties (Lowe 1981: 4, 5). Decades later in 1865, despite Chief Tecopa's pleadings, the gold prospector Charles Breyfogle was attacked by Pahrump Paiute at Stump Springs. The attackers were led by Ash Meadow "Mormon" Charlie, the Pahrump Paiute war chief of that time (Lingenfelter 1986: 74). Suffice to say that Pahrump Paiute were well aware of travelers crossing on the Old Spanish Trail network, had a trail network that supported Indian messengers, and could travel expeditiously throughout their traditional trail network.

With increasing pressure on the U.S. military to map and understand the new territories that had been negotiated through the Treaty of Guadalupe Hidalgo and to take stock of what groups were using the Old Spanish Trail and for what purposes, several military mapping expeditions were undertaken. The ensuing journals and related maps make mention of the Pahrump Valley springs and the numerous Paiute Indians residing in the area (McCraken 1990:2; Steiner 1999: 72, 76, 77).

Indian Roads

The Mallory Wood 1877 expedition map shows an expanding network of roads in and around Pahrump Valley. It is likely that these roads are, in part, original Indian trails. For example, Mule Springs is indicated on the Wheeler map of 1869-1873. By 1877, Mule Springs is connected by road to Manse Spring. However, it is documented that the Pahrump Paiute "Ash Meadows" or "Mormon" Charlie was the first (circa 1860) to farm the Manse Spring area (McCraken 1990:11, 2009: 4). Another Pahrump Paiute spring fed garden area had been established at Mule Spring "[S]ince the Mexicans used the Old Spanish Trail" (Interviewee - Personal Communication). Chief Tecopa, possibly born at Manse Spring, established a "rancheria" at Bolling Mound by 1875 (McCraken 1990:11; Interviewee - Personal Communication). It is safe to infer that most, if not all, springs in the Pahrump Valley were connected with an indigenous trail system. Further, it is safe to infer that roads that later connected springs followed Indian trails. The first farmers and ranchers of the valley were Pahrump Paiute and, as the first ranchers began to adapt to the use of the wagon, it is likely that it was Paiute Indians that constructed

the valley's roads, whether or not such roads followed original Indian trails. It is highly likely that the spring areas of the Pahrump Valley that align along the present California-Nevada border were connected by a trail system and that all of these spring areas were connected to other Paiute-occupied springs such as Resting Springs and Tule Springs.

As the agricultural and mineral values of the Pahrump Valley became more apparent and non-Indians began to dominate the Valley, there was a push to remove all Paiute, including Pahrump Paiute, to the Moapa Reservation (established by Executive Order in 1873) located east of Las Vegas. Special Indian Commissioners Wesley Powell and George Ingalls recruited Chief Tecopa to go around Pahrump and Las Vegas Paiute territory to talk his kin and neighbors into participating in the march to Moapa (Lowe 1981). In an article titled *Chief Tecopa and the "Hikos"*, Celesta Lowe documents Chief Tecopa's journey circa 1877. See Figure 4 for a mapping of Chief Tecopa's journey. It takes him from Pahrump, southeast through the villages of the Pahrump Valley Springs, and over Mountain Pass to Las Vegas Springs. From there, the Chief and his son Johnny traveled along the springs north of Las Vegas, Tule Springs, Indian Springs, Johnny, and then Ash Meadows. Talking his fellow Southern Paiute through the inevitable changes to come, the Chief did not reach his first resistance from his own people until after following the Amargosa River south to the area of Shoshone. The Yagats Band felt secure at their springs that provided ample water for acres of vegetable gardens. From there, the Chief and his son continued south into the Mojave desert and to the Providence Mountains and the famous caves that were once occupied by Pahrump Paiute people. From the Providence Mountains, they headed east towards Searchlight and the Newberry Mountains. From the Southern extent of Pahrump Paiute territory, Chief Tecopa traveled north to Las Vegas Springs and then back over Mountain Pass to his home at Pahrump Springs. This journey indicates the extent of Pahrump Paiute territory. It also shows the extent of wagon roads established by the 1870's, since the article describes Chief Tecopa and his son Johnny taking the circular journey in a buckboard wagon. It also indicates a Pahrump Paiute leader's knowledge of his homeland and the people that inhabited Tecopa's circular journey. Subsequently many Pahrump Paiute were forced to leave their homes in Pahrump Valley with the only viable option being to relocate to the Moapa Reservation. Some Pahrump Paiute stayed behind and some Pahrump Paiute returned after a few years in Moapa as conditions were not good due to poor government management (Zanjani 1994: 33-47). Some of those that stayed behind or returned now comprise the Pahrump Paiute Tribe.

A Moapa Tribal member with ancestral ties to the Pahrump Valley recently exclaimed:

"An Indian trail isn't just one or two-track like the wagon roads are. Instead, Indian trails are corridors. When it is decided to go from one place to the next, then Indians simply go. If they are in their own lands, they don't get lost because they know where they are. White people are the ones who need trails so they don't get lost. Local Indians sometimes followed paths because, over time, the trail marked the best way to go... but that isn't the only way that Indians would go. The whole spring area [Stump Springs to Pahrump Springs] is an Indian travel and use area. Indians walked all over that project area [Hidden Hills Solar Generation Systems]. I walked all over the project area. I used to hunt rabbit and quail out there in the 50s" (Interviewee – Personal Communication).

Sacred Trails

There is physical and epistemological¹ overlap of trails on and through the landscape regardless of the intent and psychological disposition of the Pahrump Paiute traveler. That is to say, that a trail, a traveler, and the knowledge of the trail (usually encapsulated in a song) are not separate and distinct realities. This is hard to articulate in English. In the words of a Pahrump Paiute tribal representative:

Song trails that are connected to the Spring Mountains include the Fox Trail and the Mountain Sheep Song. Each trail is connected to powers, as well as the life of the Southern Paiutes. These trails are sacred because of the elements that can be found by following them, or because of their ultimate destination, such as the afterlife. Even song trails that are used to guide people from place to place are connected to power, in that people travel along paths of power. Groups used traveling songs that told of their seasonal rounds. In each of the songs, places are linked together by a mental and/or physical path. All places along the routes are connected with creation (Jim-2012:2).

Landforms

According to the literature, the Southern Paiute, including the Pahrump Paiute, have adapted to their environments over at least the last 500 to 3000 years. Archaeologists have competing date claims and lines of evidence to support various dates (Bettinger 1982: 490). More recent dates, most from archaeological sites located in the Las Vegas Valley, provide dates for Southern Paiute ceramics located near springs that are between 1000 and 500 years ago (Roberts et al. 2007: 46-47).

Pahrump Paiute claim that dates supported by archaeological evidence are arbitrary and the musings of experts from an alternate world view than the world view of traditional Southern Paiute. Regardless of origins, Southern Paiute, (or what archaeologist refer to as a southern extension of the “Numic Spread”), adapted to the desert environment in a lifestyle that relied upon multiple sources of food that required intensive food gathering, hunting, processing, procurement, and storage. The diverse food procurement lifestyle attributed to Southern Paiute, required an intense knowledge of specific territories (Bettinger and Baumhoff 1982: 490-493).

An alternate abbreviated version told by Southern Paiute, insists that they were placed in their various homelands by the creator. For the Pahrump Paiute, the story has the Southern Paiute world flooded with only the highest peaks of Mount Charleston poking above the water as an island. All of the animals, at that time with anthropomorphic characteristics, moved down the flanks of the mountain as the water receded. Significant animals, such as the two brothers Wolf and Coyote, Deer and Mountain Bighorn Sheep, Mouse and Kangaroo Rat, and many birds participate with one another to remake the world as it dried out. Mountain Bluejay is sent to check on the receding waters of the “ocean” several ridges to the west (Badwater, Death Valley). Coyote introduces humans into this world by allowing a basket to open up and the various Southern Paiute spring from this basket. Coyote then instructs humans how to

¹Epistemology: the branch of philosophy that studies the origin, nature, methods, validity, and limits of human knowledge.

survive within their territories. This story was not provided by Pahrump Paiute to the author due to the seasonal prohibition on telling such stories. However, several Southern Paiute versions of the story exist in the literature and were summarized above. The summarized version above does not provide nuanced meanings and distinctions that are unique to the Pahrump Paiute people who are the Southern Paiute custodians of the Spring Mountains and Mount Charleston where all of the rest of the Southern Paiute attach significance as a common place of creation.

This symbolic, and to the western mind, seemingly fantastic story provides the basis for defining the Pahrump Paiute world as a world that they are entitled to as a birthright and as a pact between them and their creator, somewhat akin to the concept of a “holy land”. Further, Stoffle explicates that:

“For land attachment reasons, most Indian people have two origin places – an origin place for their ethnic group and one for their local group” (Stoffle et al 2009:33).

This explains how two neighboring tribal groups can agree to a common place of origin and simultaneously point to separate places of origin for their own sub-group.

Stoffle goes on to describe that Mount Charleston, *Nuvagantu*, “where snow sits” is one such place of symbolic origin. It is “the” Southern Paiute place of origin, because it is a source of the most abundant water in the entire Southern Great Basin, a place of extreme topography, and a house for numerous animals that figure prominently in Pahrump Paiute story, song, inspiration, and sustenance and that serves to consolidate the various contributing powers that are the Spring Mountain Range (Ibid: 35). It is not the fact that it is the highest peak available within human eyesight that makes the place powerful; rather it is that its body, the mountain in its entirety, holds and is supported by many features that all contribute to its power. As one Pahrump Paiute expressed, “[A] valley is defined from the valley floor up to the tops of mountain ranges and mountain ranges are defined from the tops of mountains down to the valley floor” (Interviewee - Personal Communication).

The interconnections, overlaps, and relations go far beyond what has been documented in the literature or what can be possibly adequately conveyed in one or two interview sessions or in this report. Despite the inadequacies of written English to fully explain the complex relational systems of peoples and places, the following list of mountain ranges are just a few of the places understood, revered, travelled about, or otherwise important in Pahrump life-ways. A complete list of culturally important mountain ranges can be found at Appendix 4.

Potosi Mountain

█ It is the head of Ocean woman. (Interviewee – Personal Communication)

Sandy Valley

This landform section provides additional information beyond some of the other landforms described in this section because the Sandy Valley area is considered a proposed project alternative.

The Sandy Valley area is within the Pahrump Paiute Tribe's ancestral territory. The valley rests between two tribal districts. To the east of the alternative site rests the Potosi District traditionally represented by Chief To-ko'-pur. Chief To ko'-pur was widely referred to as Chief Tecopa. Chief Tecopa was also the head Chief for the larger seven district ancestral territory of the Pahrump Paiute tribe. Chief Tecopa passed away in 1904. To the west of the project area is the Mo-quats District that was represented by Chief Hu-nu'-na-wa. The Sandy Valley study area was a common use area between the two districts. The Potosi District's center is Potosi Mountain and the Mo-quats District's center is Kingston Peak. Several springs exist around the flanks of each mountain. These springs were centers for family units that seasonally traversed the districts' mountains, lower flanks, valley floors and the washes that drain the mountain slopes and eventually lead to Mesquite Dry Lake. Some of the significant springs that anchored family units in the vicinity of the project study area are Potosi Spring, Cave Spring, Horsethief Spring and Beck Spring. While Pahrump tribal families have since moved away from the springs, with many now residing in Pahrump or Las Vegas, the Sandy Valley area and the mountains to the east and west of the valley are still used by Pahrump Paiute for traditional purposes.

Potosi Mountain sits above Sandy Valley and is a vision questing area. There was a large prehistoric bird that had an egg the size of a house. The bird laid the egg in Sandy Valley [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED] (Interviewee – Personal Communication)

Moapa tribal members related that there are village sites on the [REDACTED] of the valley [REDACTED]. These locations were indeterminate (Interviewee – Personal Communication). It is known that Cub Lee, who married a Paiute woman, maintained a well and cattle ranch in the Sandy Valley area (Waring 1920: 70). It is also documented that "Indians dug pits for water" on the east side of the valley in a sandy area (Ibid 78).

The Coyote Trail Song goes through Sandy Valley (Laird 1976).

Kingston Mountains

Home of Owl. A place where pinyon nuts are gathered. Also a hunting area for Bighorn sheep and deer.
[REDACTED]

No Pah Range

A place were Big Horn sheep are found. There is very little water in this range. [REDACTED]
[REDACTED] Some Paiute lived at the [REDACTED]
[REDACTED]

Resting Springs Range

Indians live at the [REDACTED]. There were ceremonial bathing places that are now the [REDACTED].

Lizard Mountain

(also referred to as Last Chance Range (middle and eastern portions), Shadow Mountain (southern portion) and Devils Hole Hills (northern portion))

This is a place for [REDACTED] and is described in songs and stories that tell of when the sky opened up during the time of Southern Paiute creation. The southern side of the mountain has the mark of a lizard, similar in color to the chuckwalla lizard, across its flanks. [REDACTED]

Stirling Mountain

This mountain is located at the northern end of the Spring Mountains and is said to be the foot of Ocean Woman. (Interviewee – Personal Communication) It is a place for hunting, gathering, and [REDACTED].

These mountain ranges provide most of the water that supplies the springs listed in the water section and mapped on Figure 5. The southeast side of Mount Charleston, the highest place in the Spring Mountains and the place of Southern Paiute creation, provides the water that emerges from the springs closest to the project area. Specific Springs will not be further described here.

Landform Connectivity

The Southern Paiute People live in a world very alive with spirits and power. Some spirits originate from when the world was new, and some spirits are from a time when animals had power of speech and were defining customs that the people would later follow. Spirits can behave beneficially or malevolently towards people if customs are not followed. Southern Paiute with specific knowledge can interact with spirits by dreaming or singing. The following has been excerpted from a Pahrump Paiute document (Jim 2012: 1).

Earth Spirits

[REDACTED]

Mountain Spirits

[REDACTED]

Water Spirits

[REDACTED]

Other Spirits

[REDACTED]

Power *Poe-ha-ghun*²

A mainstay of Southern Paiute thought and practice, is a “power” or *poe-ha-ghun* that is synonymous with mountain ranges and interconnected landscapes. *Poe-ha-ghun* is a sustaining and reciprocal power that requires human obligations to their place, as much as the place and its contributing attribute have obligations to provide for its people (ibid: 36). Powers are manifest in many attributes; water, plants, and animals are a few of the inter-connecting attributes. It is said that plants that contain curing properties, the animals that instructed humans concerning the plants curing powers, the humans that dream of, know of, and administer the plants curing properties and the person cured, all participate in a resonance of “power” or *poe-ha-ghun* (Interviewee – Personal Communication, Interviewee – Personal Communication). While *poe-ha-ghun* is a concept that is interconnected and therefore is disperse, it can also be concentrated in various places and particularly mountains and springs. For example, Mount Charleston is an origin or holy place for all Southern Paiute, including the Pahrump Paiute. One of the springs feed by these waters is Stump Spring where John “Stumper” Pete received and administered his powers. In addition, Pahrump Paiute relate to additional places throughout their territory and landscape, which stretch this obligation into one that pervades beyond a place to encompass an entire territory.

Poe-ha-ghun not only emanates from power places like mountains, but also, similar to electricity, resonates between places through conveyances called *poe-ha-ghun* trails. Such trails are physically manifest on and in the land, in the creatures that move about the land, and in human travel that occurs

² Some literary sources on the subject of Southern Paiute power refer to power as *puha*. The complete Pahrump Paiute word is *poe-ha-ghun* and is used in this document rather than the abbreviated word *puha*.

by walking, running, dreaming, or singing. These trails are of a religious nature and are further discussed in the next section. A Pahrump Paiute attempts to express this complex:

“This is Paiute “Holy Land”. The Mountain is a holy place and it extends from the top all the way to the flats. Potosi is the head, Mt. Sterling is the tail. Woman helped create people. You can see her silhouette as she is laying down. Once the land was covered with flood. Then the waters went down and sky opened up. A big bird came down and seized lizard. The bird then threw up lizard. There are three green marks on the mountain up by Lizard Mountain. The Woman is watching over all of this. She will be the one to know of the havoc created.” (Interviewee - Personal Communication).

Figure 6 is a map that provides a visual two-dimensional image of how extensively *poe-ha-ghun* trails circulate and emanate from the Spring Mountains. This map is not included to show where precise trails are and by extension are not. Rather it is intended to show how extensive a holy place is for a people's inhabitation of their birthright lands.

Ma-hav (Hidden Hills) Landscape

The Hidden Hills area, because of its proximal and encompassing relation with the proposed project site, is culturally described further. Numerous places, stories, and Pahrump practices abound throughout the landscape which will be referred to as Ma-hav, the Pahrump Paiute place name for what is referred to in currently as Hidden Hills. Pahrump Paiute tend to use either place name inter-changeably but in conversation with non-Paiute tend to refer to the place by its more current name.

The Ma-hav Landscape, specifically refers to several springs, an intermittent set of creeks that, flowing all of the way from the flanks of Mount Charleston, cut through a coppice dune mesquite bosquet zone and includes the valley floor and the edge of a dry lake bed. This area is rich in prehistoric archaeology, historic archaeology, includes a historic ranch complex and is replete with historic events involving local Pahrump Paiute and later newcomers. Ma-hav is an area of approximately 35 square miles that takes in the southeastern margins of the Pahrump Dry Lake bed, the washes that extend from the alluvial toes of Mt. Charleston down to the Pahrump Dry Lake bed, the spring areas in between that include Browns Spring, Hidden Hills Ranch Spring, Stump Spring, several unnamed spring discharge areas (including Weeping Rock Seep), the various vegetations including the Mojave Scrub, Shadscale Scrub, and the coppice dune mesquite grove areas. The proposed project site, taking its name from the dude ranch established by Roland Wiley, is wholly within the Ma-hav Landscape. It is a place where Pahrump Paiute lived, hunted, gathered, worshipped, were born, gardened, died, and were buried. Figure 7, located at the end of this section, is a vicinity map of the Ma-hav Landscape.

A Pahrump Paiute person provided the following synopsis.

Many types of clay for pottery come from the Hidden Hills area. Hidden Hills was a caching area. This entire area is extremely important and was the site where Indian families lived. The entire area is a known desert tortoise habitat that was, and is, currently used for the traditional collection/preparation of medicines and foods. This particular location is considered unique and is the home of these resources that can only come from this special area (Interviewee – Personal Communication).

Ma-hav is particularly where females become woman, learn of menstruation, birthing and menopause. Set in the time just after creation when animals were anthropomorphic, it relates the connection between mountains, valleys, springs, creeks, travel and procreation and the role of the creator in teaching humans how to be.



While some of the exact course of events and specific meanings are lost to translation and because of gender specific descriptions that are taboo for mixed audiences, the story attempts to convey that Hidden Hills is a place designated by the creator (coyote) as a place where girls learn to become women.

Before Owl switched the course of the Colorado River, [REDACTED]

(Interviewee – Personal Communication).

There are several burials located throughout Ma-hav, some marked and some no longer locatable due to shifting sand. One such cemetery has some evidence of grave looting. When the Pahrump Paiute took the author to one such cemetery, [REDACTED], it was noted that within the last month someone had stole the cemetery gate. Two graves sites showed signs of digging, leading some to wonder if the bodies had been taken and who would do such despicable things. Another Pahrump Paiute source suggested that one of the burials was simply a grave dug, but the internment was cancelled for that cemetery and the potential grave was never backfilled (Interviewee – Personal Communication). A local historian suggested that one of the open graves sites was that of John B. Yount, who was buried in the cemetery, but later was moved to the Chief Tecopa Cemetery located in Pahrump where he was buried in the Indian part of the cemetery (Interviewee – Personal Communication, Pahrump Nevada Genealogical Society 1998: 7). Another suggestion is that the open grave was where the Indian Queho was buried by Roland Wiley and then later exhumed by local tribes (MacDonald 2012:1). The Pahrump Paiute vehemently deny these last two suggestions and provide their version of the Queho story.

One Pahrump Paiute relayed the Queho story as follows.

“Queho Burial/monument – The burial is located [REDACTED]. In very broad terms, Queho’s remains were found in a rock shelter and exhumed circa 1920. The remains were possessed by the El Dorado Elks Club. The Elks had a parade float that had a simulated rock shelter with the actual remains entombed. The float was used in an annual parade into the 1960s. The float commemorated “The Last Indian Renegade.” When it was decided that it was not politically correct to parade bones in public, the remains were stored in an Elk member’s garage. Roland Wiley (a non-Indian owner of the Hidden Hills area) discovered the bones and took possession of them and then reburied them [REDACTED]. He wrapped the remains in chain link, encased the remains and chain link in concrete and then buried the entire package under a concrete slab with a memorial plaque that continued the “last renegade” language. The burial sits on [REDACTED] overlooking the project area” (Interviewee – Personal Communication).

The full story is more telling of a century of Indian and white relations and is pieced together from several sources that include two Pahrump Paiute interviewees, O.J. Fisk Photographic Collection: 0221 0434, and Donna Andress 1997.

Queho was born circa 1880 of a Cocopah mother. His father was a white soldier stationed at Fort Mojave. The mother and child were banished from the tribe and they both moved north to Southern Paiute territory where they were taken in by Moapa Southern Paiute. As a young man, Queho had a

Moapa half brother, Athocwa and was also related to a Moapa Paiute named Archie Kay. Queho's other close Southern Paiute friends were Joe Rudloff, and Jim and Tweed Wilson. The notorious Moapa Paiute "Mouse" was Quehos' mentor and protector. Queho worked as a miner, was a boatman along the Colorado River, was adept at mechanical skills and was known for his hunting and general desert skills. Mouse was legendary for similar skills, considered a "renegade", and routinely evaded law enforcement.

Queho was accused of killing another Paiute in 1910 over a dispute involving a firewood transaction. Apparently this led to lengthy spree of thievery, killings and miraculous escapes. Much of this happened in the Searchlight area. Mouse led a similar lifestyle. However both Indian men were said to have been blamed for more acts than they were physically capable of committing. Posses were established and manhunts were periodically conducted.

In February 1940, two prospectors were exploring the Colorado River five miles upriver from the El Dorado Canyon. They noticed a cave at the foot of a cliff and noticed that the cave opening seemed to be unnaturally chinked with rock. Fulfilling their curiosity they made their way up and into the cave and found the mummified remains of Queho. A loaded rifle lay nearby, as well as a bow and arrows. Cans of food were lying about. The cave had been wired with trip lines attached to a bell. Also found were stolen items from Searchlight including a Gold Bug Mine watchman's badge. One of Queho's legs was deformed from what was speculated to be a snake bite. It was surmised that he died of the snakebite and starvation. Others later mentioned that some Southern Paiute knew of Queho's hideout and delivered groceries to him.

Las Vegas Chief of police, Frank Wait, who had led some of manhunts over the years, claimed the remains as his own property to compensate for all of the times that Queho had eluded him. However the Clark County Sheriff ruled that the remains were the property of the County. Wait, undeterred located Archie Kay, Queho's Moapa relative, and supplying Kay with groceries and money, convinced Kay to claim Queho's body. However by the time the pair had arrived to claim the remains, Sheriff Ward had transferred the body to the Anna and Gene Park's funeral home. A dispute ensued because the Parks would not release the remains unless someone paid the mortuary fees. As Ward and Wait both balked at paying the accumulating bill, the United States Government intervened and made a claim for the remains since the cave was located on federal land. The government refused to pay the bill. This led to a three year stall in determining disposition. In the meantime, the Parks allowed people to view the remains of "The Last Indian Renegade of Nevada". After three years, Wait finally paid the bill and transferred the remains to the Benevolent and Protective Order of Elks, who wished to add the remains to their "Helldorado Collection". The elks built a simulated cave, entombed in glass and placed the remains in the cave and charged admission for viewings. Some of the items found with Queho were also displayed. The exhibit was paraded through the streets of Las Vegas during annual Helldorado Days. A thief shattered the glass and stole the remains in 1956. Another posse was formed by James Cashman, Sr. Because they were thwarted in their search, the posse offered a cash reward. The remains were returned without the thief being exposed. Dick Senever became the guardian of the remains. The remains were stolen and returned a second time. In 1974, Senever donated the remains to the University of Nevada, Las Vegas Museum. Another account states that Senever placed the remains in a

building owned by Dobie Doc Caudill. During the time that Queho's was variously possessed by the Order of Elks, Roland Wiley was the Clark County District Attorney. In 1975, it is said that Wiley purchased the remains from Caudill for \$100 dollars. He then reburied the remains near [REDACTED]. It is said that he felt Queho's journey among the white people should come to a rest. The remains were wrapped in wire, encased in concrete and entombed under a cement block. He was buried with popcorn to "accompany him on his journey," but was commemorated with a placard that labeled Queho "Nevada's Last Renegade Indian - He Survived Alone." However, an alternative story claims that after the 1956 thievery, Cashman was duped and was sold the wrong remains. In 1962, a work crew building the Bonanza Road, discovered the remains which were identified as Queho. However the upper limbs were missing. This version of the story does not provide the rest of the story as to what happened to the roadside discovery remains. One Southern Paiute man from Indian Springs, a place that Mouse and Queho sometimes frequented, claimed that the remains were not Queho's because the mummy's stature was too small. Queho was over six feet tall and had limp because of a deformed broken leg or ankle that had never been properly set. The Pahrump Paiute Tribe asserts that the remains the Elks had named Queho are indeed buried at [REDACTED]. Some Southern Paiute relatives and friends of Queho, have stated that the Elks did not have the real Queho remains. See Appendix 6.

Formal Traditional Ceremonies and burials are held at Hidden Hills. They may continue to be held here in the future. The cemetery and the ceremonial areas are still visited by members of the Pahrump Paiute Tribe. Another burial was located [REDACTED] (Jim – Personal Communication). The tribe says there are other burials in the area for which the exact locations are not known. Yet another burial of a young Pahrump Paiute girl was reported buried at the [REDACTED] (Interviewee – Personal Communication).

Two Pahrump elders recalled an "Indian Powwow" or religious ceremony held at Hidden Hills Ranch in 1933 for Susie Yount, (Wa-sid-ai) a Pahrump Paiute woman who had passed away in 1932. John Yount was reported to have "allowed" this ceremony as Susie was his first wife. The ceremony was hosted by Nancy Johnson, a Pahrump Paiute relative. The two elders were children at the time. They recalled hundreds of people who camped along the creek who had come from long distances to participate in the ceremony. They recall that the ceremony was held near large gardens of corn, pumpkins, and watermelons. They recall the orchard that still stands today. They assert that the creek flowed all the way from Mount Charleston (Interviewees – Personal communication). One source suggests that Chief Tecopa's cry ceremony was held in 1905 somewhere at Ma-hav (McCracken 2009: 27).

Table 7 provides a Ma-hav Landscape chronology of Pahrump Paiute – Non-Indian events and people.

Table 7. Ma-hav Landscape Chronology	
Time	Specific Places, People and Events
Beginning of Time	The area is flooded. Primordial animals abide on Mount Charleston to wait out the residing waters. Coyote releases first humans from a basket.
Time of Animal Instruction to First Humans	Coyote provides instruction to his adopted daughter concerning menses, childbirth and becoming a woman at Ma-hav.
Period of Pahrump Paiute occupation	Pahrump Paiute occupy the Springs area as a part of a permanent or seasonal encampment and horticultural place.
1776 - 1830	Pahrump Paiute hear of Spanish, Mexican and early American traders (Escalante, Garces, Armijo, Jedidiah Smith, Peg-leg Smith) that travel, trade, and raid along some of the Paiute trade routes closer to the Colorado River.
1815	Chief Tecopa born at Manse Spring. He will become a leader of various tribes or "districts" that today collectively identify as the Pahrump Paiute.
1829 - 1848	Mexican traders move goods between New Mexico and California and engage in the Indian slave trade. Some travel the old Spanish Trail between Resting Springs and Mountain Springs.
1840s - 1890?	John "Stomper" Pete, a Southern Paiute Medicine Man occupies Stump Springs. There is also anecdotal information of a Southern Paiute family with the last name of Stump that occupied the Stump Springs in subsequent years.
1844	John C. Fremont travels between Resting Springs and Mountain Springs and overnights at or near Stump Springs. Fremont retaliates upon possible Pahrump Paiute for the killing of most of the Hernandez Party.
1849 – 1875	Many emigrants including, gold miners, Mormons and military personnel travel through Stump and other nearby springs, en route to Utah or California. Early homesteaders begin to settle the various valleys by establishing homesteads on or near springs including springs in Pahrump Valley.
1849 -1930s	Several diseases are introduced into Pahrump Paiutes well as other Native American populations. Many young and old die. Alcohol is introduced to the Pahrump Paiute causing social disarray. There is a time of famine. This

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	happens throughout the Pahrump Valley, including Ma-hav.
1860s	Miners pass through the area to begin harvesting timber in the Spring Mountains to be used for the development of mining infrastructure. The first reported mill is established in the Spring Mountains in 1875 by the Brown brothers.
1860 - 72	Charlie, a Pahrump Paiute man and the Tribal War Chief, establishes one of the first Indian Ranches in Pahrump Valley, the Ma-hanse (now named Manse Ranch). He is sometimes referred to as "Mormon Charlie" or "Ash Meadows Charlie". Chief Tecopa also establishes a ranch at Bolling Mound Spring. John B. Yount is born in Oregon. Charlie is involved in the 1865 assault and robbery of gold prospector Charles Breyfogle at Stump Springs.
1872	Wagon roads connect Stump Springs, Mountain Springs, Charlie's Ranch and other Pahrump Valley Springs. One road runs through the Hidden Hills area. Other ranches become established by Indians and whites at some of the larger springs such as Ash meadows, Pahrump, and Manse.
1873	Chief Tecopa is encouraged by the US government to make his circular journey to convince his and neighboring tribes to move to the newly established Moapa Reservation. The Paiute and Shoshone from the Armagosa River refuse to go. Many Pahrump Paiute are enticed or force marched to Moapa reservation. Some hid and remain, others escape and return.
1874 - 1915	Lee brothers move to area and Phi Lee buys the Resting Spring Ranch. Phi marries a Sally "Mopats," Paiute woman and has several children including Dora, Robert, Robert "Bob", Dick, Clara, Gus, Bert and Cub. Phi and Sally have a seasonal camp at Ma-hav. "Bob" Lee resides at an area of Hidden Hills near Weeping Rock Springs and raises his son Robert (1910?). Cub Lee homesteads in Mesquite (Sandy) Valley. Bob Lee is at Hidden Hills as a small boy and sees two Indian-constructed fireplaces at Hidden Hills.
1877	Joseph Yount purchases Manse Ranch from the Jordan brothers.
1880	Queho is born.
1900?	Albert Howell, Pahrump Paiute, and later informant to anthropologist Julian Steward, lives with his Pahrump Paiute wife Mary at Ma-hav where they maintain a small farm. Howell's have a daughter-in-law named Anna Tecopa. Albert is the son of John Howell, the first black to live in the area

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	and is a free slave from North Carolina. John works in the mines and marries a Southern Paiute from Las Vegas.
1904	Chief Tecopa dies, the Chief's son, Tecopa Johnny inherits his father's leadership role.
1905	Chief Tecopa's Cry ceremony held at either the Pahrump cemetery or Ma-hav or at both places.
1910's?	Dora marries Gallant Brown and they live at Ma-hav near Dora's brother, Bob Lee's place. Dora and Gallant have several children, (Steve, Earnest, William and Gallant Jr.), who are raised in the Ma-hav area.
1900 - 1920	<p>Many more ranchers and farmers move into the Pahrump Valley and begin to develop large crop lands, which require greater amounts of water. Many Pahrump Paiute provide the labor required for the flourishing ranches of the Valley. Chief Tecopa's son Charlie is killed in 1911 by another ranch hand, Joe Lake while both are working for the Manse Ranch.</p> <p>Pahrump Paiutes claim that Charlie Tecopa (Paiute) was shot by John Yount (east of Manse Ranch) and is buried [REDACTED]. And John Smith (Paiute) was shot by John Yount [REDACTED] and was buried where he was shot.</p>
1911	Las Vegas Reservation established through a 10-acre land donation made by Helen Stewart.
1915	John Yount, son of Joseph Yount, sells his Trout Creek Property to Phi Lee, and he and his Pahrump Paiute wife Sally "Mopats," move to Ma-hav and rename the place Charleston View (not the Charleston View of today). John makes improvements.
1916	It is reported that the Yount Ranch (at Ma-hav) was irrigated by means of windmills that pumped from three shallow wells. Water was within 6 to 15 feet below surface.
1921	George Rose receives patent on 179 acres to the east of the Bob Lee homestead and north of the Yount Ranch.
1922	John Yount files fee patent and becomes owner of Yount Ranch at Ma-hav.

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1920-31	“Tank” Sharp (Libby Scott’s son), whose family is from Mound Spring and Manse Ranch area is ¼ Pahrump Paiute and friend of John Yount. Tank operates a still and bootlegs alcohol from the hills around Yount Ranch. Joe Hudson, a non-Indian killed Tank, and Oscar Bruce a Pahrump Paiute from Mound Spring and perhaps living near Bob Lees place, retaliates by killing Joe Hudson. The still area can still be found at [REDACTED]. Other bootleggers operate out of the Ma-hav area.
1926	William Wilson receives patent for 160 acres immediately south of the Yount Ranch.
1920’s	John Yount purchases Wilson and Roses’ properties.
1932-33	Susie Yount, John Yount’s first wife dies and a Cry Ceremony is held at Yount Ranch. John Yount allows the ceremony. Hundreds of Indians attend ceremony and camp out at the Yount Ranch near the orchard.
1930’s?	Bob Bruce and Susie Howell die and are buried at the Ma-hav cemetery.
1930’s to Present	Archaeologists accumulate evidence of southern Great basin/Mojave desert occupations that reach back to 12,000 years B.P. When inland seas covered some of the area. There are numerous archaeological sites throughout the Mesquite dunes including at Hidden Hills Ranch.
1935 – 1940	John Yount has a second common-law wife named Sally Belle, who is white. John dies. Belle attempts to sell property to Roland Wiley and becomes embroiled in estate heir-ship problems with Younts. Eventually Wiley buys out heirs. Before Wiley arrives at property Sally Belle illegally sells property to Louise Kellogg. Wiley and Kellogg have a legal battle and Wiley wins. Wiley evicts Kellogg.
1940-1990	Wiley buys additional property. Wiley evicts numerous Pahrump Paiute families from his properties. Including Dora Brown. Dora establishes Dora’s Place at Browns Spring In 1941. Wiley holdings become the largest private property holdings in Pahrump Valley. Wiley establishes the Hidden Hills Ranch (dude ranch), has guests living in teepees and digging for Indian artifacts, constructs an airplane runway, attempts to grow crops, taps springs and messes up water flow, builds Cathedral Canyon tourist attraction. Wiley hires Al Carpenter as the Hidden Hills caretaker.
1940s to Present	Pahrump Paiute families, Lees, Browns, Weeds, Howells, Bruces and Toms and their descendents continue to live near Hidden Hills after being forced out. These are some of the families that are tribal members of the

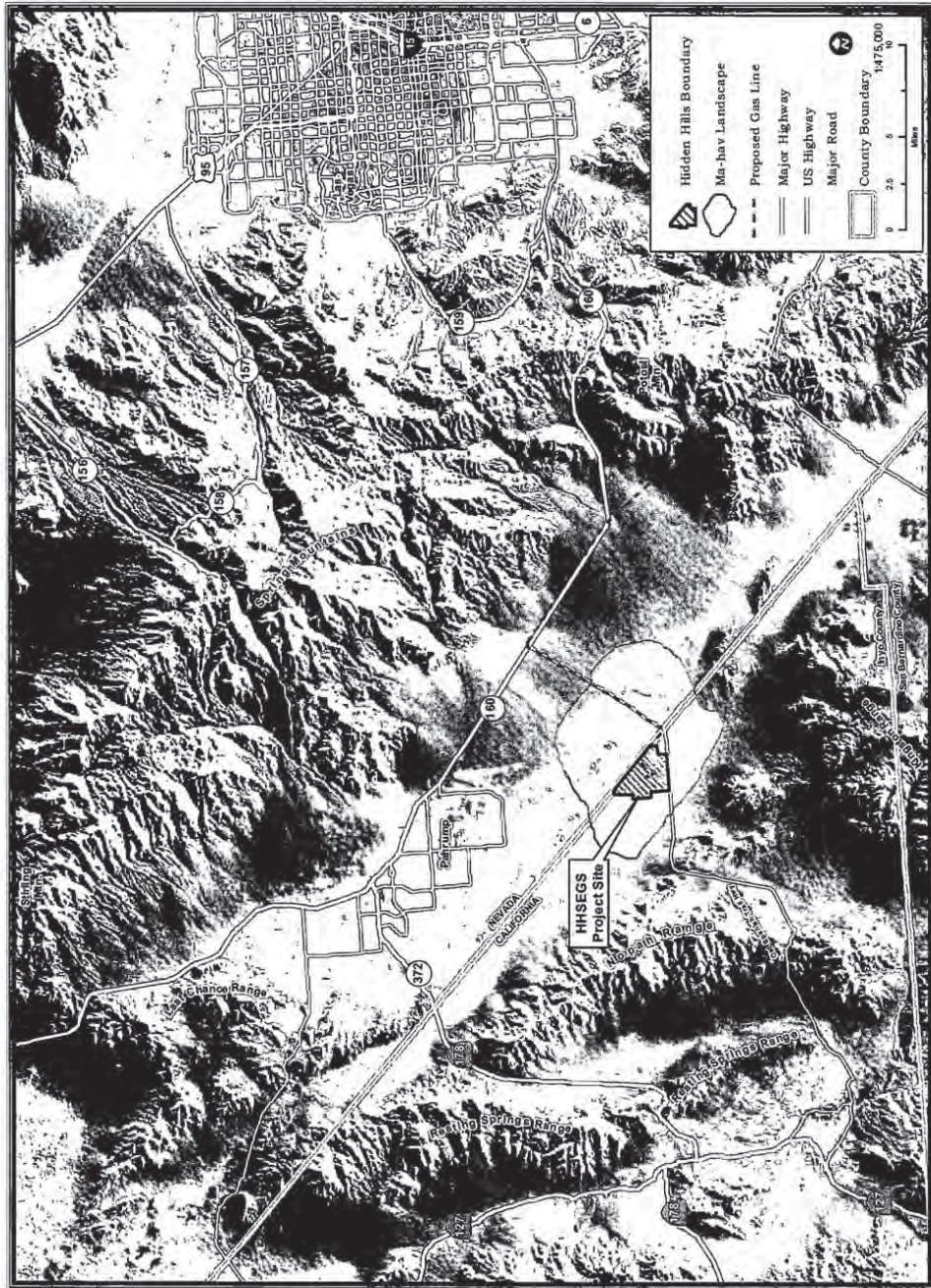
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	unrecognized Pahrump Paiute Tribe. The Ma-hav Pahrump Paiute Cemetery continues to be used and maintained by Pahrump Paiute.
1951	The mushroom cloud from the detonation of an atomic bomb can be seen from the Hidden Hills ranch.
1975	Queho is buried at Hidden Hills Ranch.
1987 to Present	Pahrump Tribe files for federal recognition with the U.S. Department of Interior. The filing was posted in the Federal Register on Dec 10 1987. The petition for federal recognition remains pending.
1989	Roland Wiley dies and Wiley estate is established
2006	Hidden Hills Caretaker, Al Carpenter dies. Hidden Hills Ranch is vandalized and looted.
2006	Stump Spring ACEC, established by the BLM for protection of the associated cultural resources located at and near the spring.
2011	Bright Source proposes Hidden Hills Solar Energy Generating Systems on Wiley Property and has lease option with Wiley Estate.

Appendix 6 provides a selection of historic photographs of the Ma-hav Landscape.

Figure 7 provides a vicinity map of the Ma-hav landscape.

CULTURAL RESOURCES - FIGURE 7
 Hidden Hills Solar Electric Generating System (HHSEGS) - Ma-hav Landscape Vicinity Map



CULTURAL RESOURCES

CALIFORNIA ENERGY COMMISSION, SITING, TRANSMISSION AND ENVIRONMENTAL PROTECTION DIVISION
 SOURCE: Landsat - NASA (2002), SRTM Shaded Relief - USGS (2005), US Major Highway - Tele Atlas North America, Inc (2010).

Burials

The following burial practice description is a combined effort that was provided by Pahrump Tribal representatives.

"Native Americans are buried in different areas. In the desert, sometimes the deceased were not able to return to villages or their areas to have proper burials. It just depended on the situation. After the person died, they stayed with the body all night, singing the various songs for them and preparing the body for burial. A relative cleansed the body with herbs and soapy water and dressed the body. A long time ago, when the body is buried, it was sometimes [REDACTED]

[REDACTED] This practice is still observed. Sometimes the body was put in [REDACTED]. Burned creosote bush was placed on top, which left an oily film, to keep away the animals. [REDACTED]

[REDACTED] People would come from long distances to participate in the traditional religious funeral ceremony. Many time people would speak during the ceremony as they came and encircled it clockwise. Singers would come from all around to sing for days and describe the spiritual journey the deceased would travel. This is different than the Cry Ceremony that is held one year after the death. This ceremony reminds the soul how to travel to get to that place. [REDACTED]

[REDACTED] Some property is burned separately. They do this right away. A long time ago, if the man had dogs or horses, they were taken out and shot by a non-relative. If it was a woman who died, they broke her metate, and destroyed her personal things. Mourners trimmed their hair a little, if distant, or cut their hair short to their neck or ears if close relative, like mom, dad, spouse, child, etc... the day after funeral. The name of deceased is not mentioned again as it will call the spirit back of the deceased. This important ceremony allows the grieving to sing songs and dance.

After the mind leaves the body it turns into the soul. It travels and goes away, but still remains within the homelands. [REDACTED]

[REDACTED] to a good place where everything was lush and they saw their relatives who had previously took the journey but they were well again. They saw the land how it once was. All said they had to cross a wash, and if they were bad, they would experience making the journey. Elders scold children for whistling at night because it could call back or confuse the deceased. Today, we still feed the land and spirits by throwing food away at the first meal. It was thrown in all directions, so that they would not get sick from the spirits that might still be in the area." (Jim 2012: 10; Interviewee- Personal Communication)

One elder from Moapa stated, "Suicide was a no-no. That is not right to do that. The Creator has a plan for everyone, so those people are going against the will of the creator; they do not get a Salt Song Ceremony. Their souls wander." (Interviewee – Personal Communication)

Pahrump Paiutes also consider Suicide taboo. (Interviewee – Personal Communication).

There is some uncertainty in the literature as to whether Pahrump Paiute cremated their dead (Kelly and Fowler Vol. 11: 380). Most Pahrump Paiute today say that cremation was not a traditional practice. Others suggest that cremations were rare and conducted when there was strange sickness or the deceased was considered a practitioner of “bad medicine” (Interviewee - Personal Communication). Sometimes, when the ground was too hard to dig, the deceased was [REDACTED], then creosote was burned on top to cover with an oily film to keep animals away, and only their possessions were burned. [REDACTED] (Interviewee – Personal Communication)

One local archaeologist reports that he has seen Southern Paiute burials in the local area discovered at the bottom of [REDACTED] (Interviewee – Personal Communication).

Suffice to say that a homeland is a place that one’s people are created in, inhabit, die, and are buried in.

Ceremonies and Trail Songs

Pahrump Paiute hosted their own and participated in their neighbors’ ceremonial cycles (Kelly and Fowler Vol 11: 383-385). Many and various Paiute from Pahrump, Las Vegas, Moapa, Paiute Springs, Lone Pine, Independence, Big Pine, Bishop, Benton, Needles, and elsewhere still believe in, practice, understand, and educate others concerning their traditional religion. The song trails are for all Southern Paiute. It can be argued that Salt Song trails are the most important of all trails for Southern Paiute because, sooner or later, all Southern Paiute will travel that trail (Stoffle 2009:40).

The various Southern Paiute trail songs and related ceremonies are listed and described. This list was provided by the Pahrump Tribe (Jim 2012: 2-5).

Southern Fox Trail Song

The Paiute stories of the journey of the Southern Fox include references to several places within Pahrump Ancestral Homeland Territory. Southern Fox sets out to visit his brother Blue Jay to the north, meeting various others along the way. He had several adventures with Flicker, Bear, Wasp, and Crow. He starts from [REDACTED]
[REDACTED]
[REDACTED]. Ultimately, he ends his journey at Fire Valley, before returning to his home.

The Fox Trail is a spiritual trail that comes into the vicinity of the Spring Mountains, Nevada Nuclear security site (formerly Nevada test site), Pahrump, etc... It moves in leaps from spring to spring, traveling south. That was Fox’s journey down to the southern end. He made the water holes with his arrow. Indians travel this route in ceremony through song to check on the water and bless the water and give thanks for the spring, and this keeps them alive.

Salt Trail Song

This is an important song. It is mostly sung today at Annual Morning Ceremony or Cry Ceremony. The Song is about travels from place to place, naming everything they saw. [REDACTED] Each place they stopped has its own story and named as you go along [REDACTED] This song describes where to go and then how to get there and what to do. Paiute people travel on these trails physically across the land, mentally in a dream state, and spiritually after death.

Coyote Trail Song

This is a traveling song. Coyote started in [REDACTED], went place to place, walking around, telling everything he did, even stealing cantaloupes. [REDACTED] then back to where he started.

Bear Trail Song

This is done in the spring time to show respect for bears emerging from hibernation. [REDACTED]

Bird Trail Song

The Bird Song, [REDACTED] This is sung at harvest time and at Mourning Ceremonies.

Deer Trail Song

The Deer Song tells of the deer's travels around [REDACTED] naming every place that he stops and everything that he eats.

Mountain Sheep Trail Song

These songs were dreamed and ran in the family [REDACTED] The song names every place you can find sheep, his travels. Many songs, maybe 200 total. [REDACTED]

Prophesy Trail Song

Use of a split-stick cane rattle instrument. [REDACTED] he tells what is happening far away.

Prophesy Ceremony

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] Dance is held outside in the evening at social occasions.

Circle/Round Dance Ceremony

This dance is usually done at any time, social, sometimes funeral, night, harvest time, for rain, and when there is enough food for up to a week. [REDACTED]
[REDACTED]
[REDACTED]

Bear Dance

A Woman's Choice dance [REDACTED]
[REDACTED]
[REDACTED] Ceremony and/or Social Dance.

War Dance

This is an enemy dance to show solidarity during war efforts [REDACTED]
[REDACTED]

Bird Dance

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Salt Song Dance

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Mountain Sheep Dance

[REDACTED]
[REDACTED] Dance version
was sung at Mourning ceremonies and again for a person who had owned it.

Coyote Dance

[REDACTED]

Deer Dance

[REDACTED]

Hunting Deer Dance

Used before a hunt, sung by the man who owned it for the hunters alone, and on their request.

[REDACTED] After that, they went hunting for game.

The following additional information was provided by a Pahrump Paiute traditional singer. This information is provided to summarize what Salt Song trails mean and how they function in the Pahrump Paiute world today.

Various trail songs are vocal snapshots of the landscape. Various places and geographic features are covered, but that does not mean that a song has less significance for a particular area because a place is not mentioned in a song. However, playas and flat desert areas are mentioned in songs... not just prominent landscape features, such as springs or mountain ranges/peaks. There are 364 plants and 170 animals mentioned in the songs. The vocal snapshot is a total experience; not just a visual experience. It is sung and therefore it is an auditory experience. Therefore, there is a reverberation, resonance quality that rings throughout valley/mountains. For example, Fox songs really hone in on springs/water sources. This is not to say that the other songs ignore water sources.

When something is taken that was not properly requested, then traditional Southern Paiute believe that physical and spiritual imbalance results. Imbalance causes sickness and that increased imbalance places a burden on singers and healers. It is not a matter of whether a traditional system works in the face of incompatible change, but rather the difficulty or additional burden to continue adapting and adjusting to incompatible change.

When singing, the traditional system is very complex and requires cognizance of ten directions: cardinal directions (4), up/down (2), past, present and future (3), and self (1)

Songs follow a tradition, but also are individual expressions that resonate, reverberate with the land, the songs both re-make the land and are made by the land. Because of individual singers with multiple directions, there are multiple landscape iterations. Songs do not follow linear trails, but fill/make space. Prayers/Songs respond to the land and the land speaks back. This is two way “memory lane.” Weather and climate are part of this memory.

Singing requires a visual, auditory, and spiritual solitude. Large land developments in the midst of these song scapes cause havoc or chaos ... not just for the singer, not just for what the singer seeks to balance, but also the entire Paiute world...and the entire world ...cosmos.

Havoc or chaos confuses and angers spirits who are the environment and its constituent plants and animals. Water spirits are one such spirit. Magma is a type of water spirit... just from a lower world. It can be angered.

The land has emotions just like humans: joy, anger, jealousy, confusion, clarity etc. The songs are an antidote to harm. (Interviewee – Personal Communication)

The following information concerning the Salt Song trails is provided by a Moapa Tribal Elder.

The proposed Power Plant outside of Mesquite, the Toquop Power plant, had Salt Song ceremony issues. Every tribe and practitioner has a different version of the songs so it can be confusing.

Performing the Salt Song ceremony is an obligation.

The grieving family is the host. The singers meet in a common area before entering into the host’s place. The host sends a runner to meet the ceremonial singers, who are then ushered into the funeral/ceremonial area. The host then announces to the assembled group who the singers are.

The funeral ceremony can go on for days and in the past it was expected that all attendees were required to stay for the entire duration of the ceremony. Now-a-days, the people come and go to pay respect. But the singers still stay for the whole ceremony. The bird songs and ceremony are for the one-year memorial. Some other tribes sing the bird songs for entertainment. All of these ceremonies are serious matters and should be taken seriously. These are not things to be played with. [this phrase: “the Salt Song trails are very sacred and are to be taken seriously and are not to be played with”, was repeated several times throughout the interview]. Larry Eddy is a traditional singer and is related to people in the area. (Interviewee – Personal Communication)

The Salt Songs trails continue to be sung and travelled into the present. The following summary information comes from a publication of the Storyscape Project of The Cultural Conservancy.

The Salt Songs are the sacred songs of the Nuwuvi people and describe a physical and spiritual landscape spanning ocean and desert, mountains and rivers, life and death. The landmarks

identified on the map, [see Figure 7], are described by the songs and represent ancient villages, gathering sites for salt and medicinal herbs, including routes, historic events, sacred areas, and cultural landscapes. At memorial ceremonies, Salt Song singers “throwing the gourd” are accompanied by dancers as they perform the 142 song cycle from sunset to sunrise to assist the deceased in their sacred journey. The Salt Songs begin their journey at *AviNava/Ting-ai-ay* (Rock House), a sacred cave at the confluence of the Bill Williams and Colorado Rivers. The songs travel north along the Colorado River to the Kaibab and Colorado Plateau, into Southern Utah, and then west to the great mountain *Nuva Kaiv* (Mt. Charleston) – the place of origination of the *Nuwuvi* People – and then further west to rise above the Pacific Ocean before arcing back east through the Mojave desert to their origin at *Avi Nava*.

At memorials it is the responsibility of the lead singer to guide the singers across the spiritual landscape to gather at *Nuva Kiav* [Mt. Charleston] at midnight when the mourners assist the deceased in their spiritual crossing. (Klasky 2009: 1-2)

“I am like a bus driver ... making sure that the singers visit all the right stops at the right times along the way,” said a lead Salt Song Singer. (Larry Eddy quoted in Klasky: *ibid*)

The Salt Songs cross, reverberate and provide passage for deceased Southern Paiute in the vicinity of Pahrump Valley including the project site.

[Figure 8 Salt Song Trail inserted here]

Analysis Summary

This report's analysis has divided some of the Pahrump life-ways, and how those life-ways are intertwined with a landscape, into seven attributes: water, plants, animals, horticulture, trails, landforms, and ceremonies. The reader will note that there is crossover between categories. For example trails are waterways, trails are songs, trails are ceremony, trails are for hunting and gathering, and trails run through all of the landforms that allow Southern Paiute (and others), to travel between the mountains, valleys, gardens, plants and animals and homes and camps. Likewise any of the other attributes can be explained in terms of, or have overlaps with, the other attributes. The Pahrump Paiute world is one holistic phenomenon. This whole is segmented into attributes so that non-Paiute can understand something about the life-ways of a different people.

Paiute and Shoshone people from the various tribes consulted for this study, continue to practice their traditional ways as best they can against the backdrop of modern dominant society and the various developments that come with modern society.

This area is comprised of several overlapping ethnographic landscapes which have as their contributing attributes or elements: water, plants, animals, horticultural gardens, trails, landforms and religious practices. These landscapes encompass the project area.

The following section will evaluate the eligibility of these landscapes to the National or State Registers, per what criteria, for what periods of significance and with what levels of integrity.

PROPOSED FINDINGS OF FACT

Ethnographic Landscapes

Ethnographic landscapes are defined generally in this document's Introduction. Ethnographic landscapes can have considerable overlap with what are called traditional cultural properties. Traditional cultural properties are synonymous with the term "place." Places and areas are types of historical resources that can be synonymous with traditional cultural properties and ethnographic landscapes. The term ethnographic landscape will be used to generally refer to the types of resources that are considered in this report; however the author, by using the term ethnographic landscape also intends that usage to also mean an "area" or "place" per the definition of historical resources.

Southern Paiute, Pahrump Paiute and Ma-hav Ethnographic Landscapes Generally Described

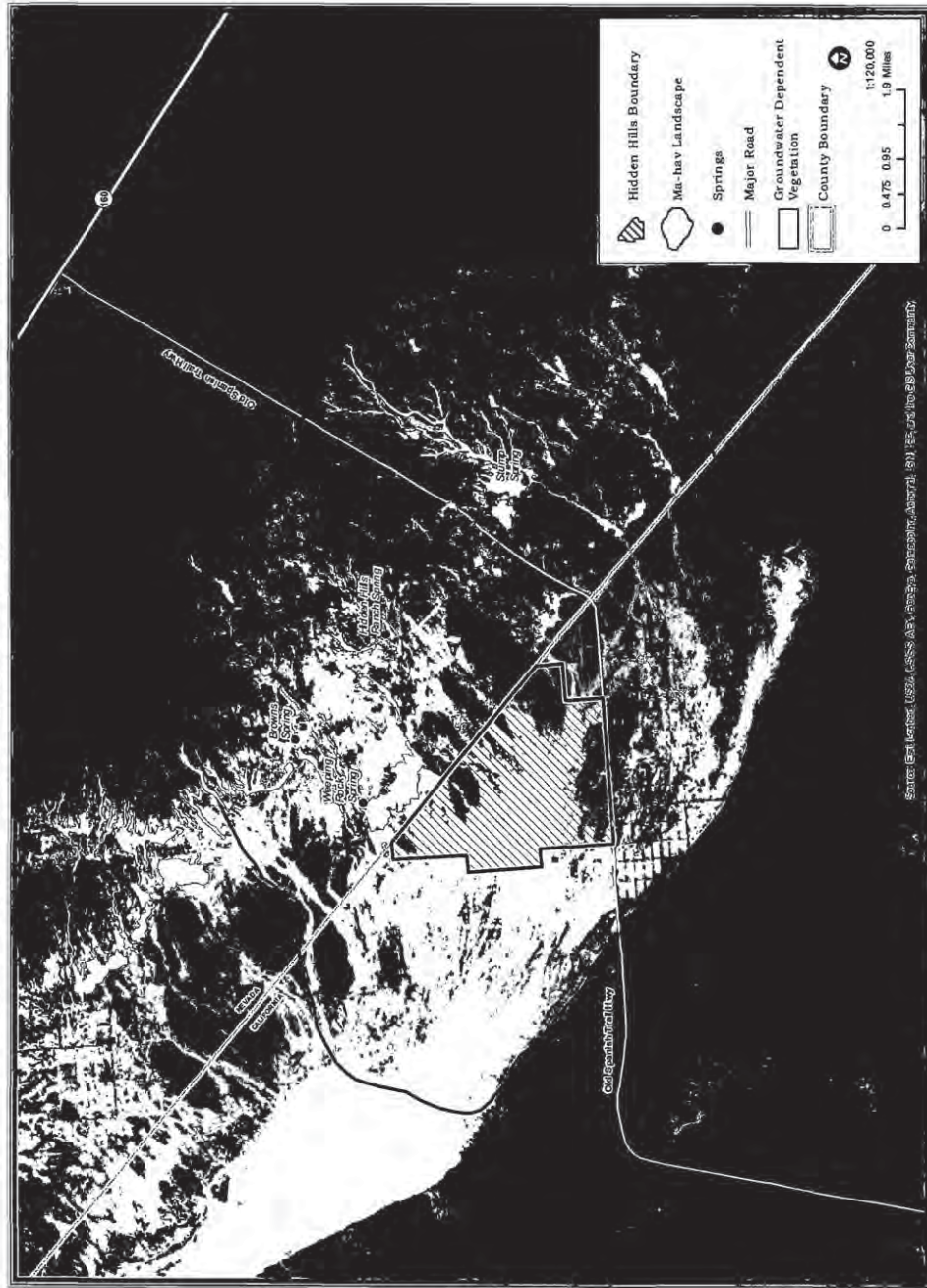
There are three ethnographic landscapes that this report describes and that, to varying proximity, are in the vicinity of the project:

1. Salt Song Landscape
2. Pahrump Paiute Home Landscape
3. Ma-hav Landscape

The Salt Song Landscape is generally described and mapped in the previous section (Figure 8), and encompasses portions of current day Southern California, Southern Nevada, Northeastern Arizona and Southwestern Utah and within which numerous bands of Southern Paiute participate. This ethnographic study does not attempt to fully describe this song and landscape except as such description is relevant for the purposes of assessing affects of the project on the Salt Song Landscape. The Pahrump Paiute Home Landscape is a part of the Salt Song Landscape.

The Pahrump Paiute Home Landscape ensues from and radiates out from and around the Spring Mountains. Its largest extent is slightly larger than the area encircled by Chief Tecopa's 1873 homeland journey. It can be easily asserted that some portion of the eastern side of the Spring Mountains is more directly affiliated with the Las Vegas Southern Paiute. This report does not attempt to specifically delineate the boundaries of the Pahrump Paiute Home Landscape, nor is it necessary that such boundaries are defined. Because the project is on the west side of the Spring Mountains and the west side is more directly affiliated with the Pahrump Paiute homeland. The Pahrump Paiute Home Landscape consists of numerous component landscape areas with multiple contributing attributes. It is not necessary, for the purposes of this document, to further describe and delineate all of the component landscapes and delineated boundaries. However one component landscape, the Ma-hav Landscape is fully described and delineated in a previous section of this report. The proposed project is within the Ma-hav Landscape. See Figure 9 for the extent of the Ma-hav landscape.

CULTURAL RESOURCES - FIGURE 9
 Hidden Hills Solar Electric Generating System (HHSEGS) - Ma-hav Landscape Vicinity Map



CULTURAL RESOURCES

CALIFORNIA ENERGY COMMISSION, SITING, TRANSMISSION AND ENVIRONMENTAL PROTECTION DIVISION
 SOURCE: US Major Highway - USDA National Agriculture Imagery Program (NAIP) Imagery and USGS Digital Ortho Quarter, Quad, CH2M HILL, Tele Atlas North America, Inc (2010).

Contributing Attributes, Elements or Features

The National Park Service Cultural Landscape guidelines provide various terms for the smallest units that collectively define any landscape. These units are called synonymously, “attributes”, “elements” or “features”. The following tables, (Tables 8, 9 and 10), provide a features listing, description and other relevant information for understanding the natural and cultural make-up of the three landscapes discussed in this report.

Table 8. Contributing Features of the Salt Song Landscape Related to the Hidden Hills Solar Energy Generating Systems Project Vicinity		
FEATURE	DESCRIPTION	ADDITIONAL INFORMATION
Water	<i>Poe-ha-ghun</i> , Spirits, Springs, Creeks, Flats, Washes, Creeks	Refer to Table 3
Plants	<i>Poe-ha-ghun</i> , Spirits, Plants along the trail and in project vicinity,	Refer to Table 4, There are 364 plants related to the Salt Song Trail
Animals	<i>Poe-ha-ghun</i> , Spirits, Animals, Insects	Refer to Table 5 and 6, there are 174 animals related to the Salt Song Trail
Horticulture	<i>Poe-ha-ghun</i> , Spirits, Springs	Horticulture is a secondary aspect of the primary aspect of water, specifically springs and the activities that occur near springs.
Trails	<i>Poe-ha-ghun</i> , Spirits, Humans, Animals	All Southern Paiute living and deceased participate in the Salt Song Trail. The trail is a path on the ground, a corridor on and above the ground, and an auditory sound-scape.
Ceremony	<i>Poe-ha-ghun</i> , various types of ceremonies related to funerals and memorials.	Refer to Ceremony section for list of ceremonies, Ceremonies require aesthetically compatible view-sheds, noise free space and foreign-odor free space. See Figures 6 and 7 for maps of some Salt Song Trail routes.

Table 9. Contributing Features of the Pahrump Home Landscape Related to the Hidden Hills Solar Energy Generating Systems Project Vicinity		
FEATURE	DESCRIPTION	ADDITIONAL INFORMATION
Water	From Valley to Mountain Crest: Playa (Pahrump Dry Lake Bed), Washes, Springs and Seeps of the Hidden Hills Landscape, Alluvial washes including creek bed of Trout Canyon Creek and Pahrump Valley Creek, Springs that contribute to the aforementioned Creeks, Rain, Dew, Mist, and the Snow of Mount Charleston	Refer to the Water Section
Plants	Some of the plants listed at Table 4	There are other plants that are not listed at Table 4 that may be dormant, that may have been forgotten

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		or not documented in the references used for this report.
Animals	All of the arthropods and animals listed at Tables 5 and 6	Arthropod types at or near the project site are not known.
Horticulture	Corn, squash, gourds, pumpkins, melons, sunflower, amaranth, winter wheat, various beans, and Devil's claw. Irrigation systems Garden plots	
Trails	Lateral trails along the valley floor Lateral trails along the valley spring escarpments Lateral trails along the mountain side Vertical trails that connect the valley floor with the high elevations of the Spring Mountains Trails that connect various districts/tribes and the larger Southern Paiute Nations	These trails include the Old Spanish Trail and the later and overlapping Mormon Road.
Ceremony	All of the ceremonies listed at in this report's Ceremony section	Some ceremonies are site specific and some ceremonies can be held based upon a consensus of the involved practitioners and affiliated families

Table 10. Contributing Features of the Ma-have Landscape Related to the Hidden Hills Solar Energy Generating Systems Project Vicinity

FEATURE	DESCRIPTION	ADDITIONAL INFORMATION
Water	Stump Spring, Hidden Hills Ranch Spring, Browns Spring, Weeping Rock Seep, and other unnamed springs within the Ma-hav Landscape boundaries as depicted on Figure 8. Edge of the Playa (Pahrump Dry lake Bed, washes and creeks within the boundaries of the Hidden Hills landscape	
Plants	Some of the Plants listed at Table 3	
Animals	Arthropods and animals listed at Table 6	
Horticulture	Horticulture gardens at Weeping Rock, Browns, Hidden Hills and Stumps Springs	The garden area at Hidden Hills can still be discerned today. The exact garden locations at the other springs would require further historic and archaeological investigation to determine exact locations
Trails	Trails that connected the springs, and connected the spring areas to other destination points such as the springs to the north (Mound, Manse, Pahrump), Sandy Valley to the south, the playa, Mule Springs to	Tribal members assert that the project area is a traditional hunting and gathering area and that procurement activities do

	the east, the Trout Canyon, and Resting Springs to the west. smaller paths in and around each of the spring areas	not necessarily follow pre-established routes
Ceremony	Hidden Hills Cry ceremony and Salt Song memorial Burials and Pahrump Paiute Cemetery	It is highly probable that similar ceremonies occurred at the other Springs. Also John Stumper, being a renowned medicine man, conducted personal religious activities at or near Stump Spring.
Archaeology	Various resource procurement locations, seasonal occupation, village and homestead sites, including historic sites such as Tank Sharp's still are located throughout the Mo have landscape.	The CEC archaeological report provides additional parameters for considering an archaeological district that encompasses the Mo hav Landscape.

Boundary Justifications

Salt Song Landscape

A precise delineation and boundary justification for the Salt Song Landscape is not necessary for this project because the landscape, extending over a large swath of the Southwest and California, far exceeds the area of the project. Research project time constraints also prohibit such a robust delineation. Figure 8 provides the general parameters of the Salt Song Landscape. Figure 6 provides more precise Salt Song trail areas for the Spring Mountain area. However, suffice to say that the boundaries permeate the Pahrump Valley, and surrounding mountain ranges that collectively form the Pahrump Valley. The Salt Song landscape is ubiquitous throughout, saturates and exceeds the Project Area.

Pahrump Paiute Home Landscape

A precise delineation and boundary justification for the Pahrump Paiute Home Landscape is not necessary for this project because the landscape, extending from the western side of the Spring Mountain Range and including Pahrump Valley, Last Chance Range, No Pah Range and the Kingston Mountains and areas further to the north, west and south, far exceeds the area of the project. Research project time restraints also prohibit such robust delineation. Figure 4 provides a general sense of some of the area mentioned above. However, suffice to say that the boundaries permeate the Pahrump Valley, and surrounding mountain ranges that collectively form the Pahrump Valley. The Pahrump Paiute Home Landscape is ubiquitous throughout, saturates and exceeds the Project Area.

Ma-hav Landscape

Figure 9 provides a precise delineation of the Ma-hav Landscape. There are four specific justifications for the boundary delineations:

1. **Geology:** The area represents a unique geological surface covering of clay that has uplifted, eroded and flows towards and contributes to the Pahrump Valley Dry Lake bed. The Playa itself is not included because it is formed from other eroded deposits that surround the Playa on all sides. This surface provided for specific plant and animal communities that are hunted and gathered by Pahrump Paiute affiliated with the Ma-hav area.
2. **Watershed:** The area represents a specific lower portion of the watersheds of the Trout Canyon Creek and its main tributary the Pahrump Valley Creek. These two creeks collectively drain the Southwestern portion of Mount Charleston. These watersheds are separate and distinct from watersheds that drain the northwestern slopes of Mount Charleston and that flow towards the springs north of the Hidden Hills Landscape such as Mound, Manse and Pahrump Springs. These watersheds provided a corridor for travel from the valley floor to the heights of Mount Charleston.
3. **People:** The area represents the closely related Pahrump Paiute families of the Lees, Weeds, Browns, Howells, Bruces, and Toms. While these families are inter-related to other Pahrump Paiute families, and other none Pahrump Paiute people, they tended to reside, or frequent, in and around the Ma-hav, Hidden Hills, and Charleston View areas.
4. **Unique Character:** The Hidden Hills springs and surrounding hills tend to have a unique character in that the springs flow less and attracted non-indian development more recently. The larger Pahrump Valley ranches were first established to the north around Ash Meadows, Pahrump Spring, Manse Spring and Mound Spring. As a result the Hidden Hills area was known to have a more unique set of people that differentiated themselves from the larger valley population to the north and near the city of Pahrump. In addition, specific esoteric cultural and religious knowledge was formulated, instructed and practiced within this delineated landscape and nowhere else in the Paiute landscape. Finally this landscape and the Pahrump Paiute people that occupied it during the Spanish Trail and Mormon road periods were subjected to the some of the first contacts and related hostilities ensuing from trail side encounters.

Given that the land is a contiguous whole, this delineation is conservative. The Ma-hav Landscape boundaries could be drawn up to the crest of Mount Charleston by including the Trout Canyon and Pahrump Valley Creeks. However the upper reaches of the aforementioned creeks are included in the Pahrump Paiute Home Landscape.

The Pahrump Paiute Home Landscape is ubiquitous throughout, saturates and exceeds the Project Area.

Periods of Significance

Salt Song Landscape

The period of significance for the Salt Song Landscape spans from the time of primordial instruction, just after the great flood and Coyote’s creation of Paiute up to the Present.

Pahrump Paiute Home Landscape

The period of significance for the Pahrump Paiute Home Landscape spans from the time of Coyote’s creation of Southern Paiute up to the Present.

From an archaeological perspective the earliest dates would liberally be sometime between 10,000 Before Present to the ethnographic present. A conservative archaeological perspective would be from 600 years before present up to the ethnographic present. A historically documented time period of significance would be from the time of Chief Tecopa’s leadership (circa 1840s) to the present. It can be assumed that Chief Tecopa inherited his leadership from one of his male relatives.

Ma-hav Landscape

The period of significance for the Ma-hav Landscape is provided in the timetable found at Table 7.

Archaeological evidence that provides dates for material remains (including dating of artifacts from sites within the Ma-hav landscape) has not been conducted.

A historic time period that can be documented in the literature, including oral histories collected for this ethnographic study, starts with John “Stomper” Pete’s occupation of Stump Springs, circa 1840 – 1890, up to the present.

Eligibility Criteria

The California Register maintains four criteria for eligibility to the California Register of Historical Resources. These are provided below.

1. Is associated with the events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
2. Is associated with the lives of persons important to our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

These criteria are applied to the three landscapes described above.

Salt Song Landscape

This landscape is eligible under Criteria 1 at the regional level for its broad contributions to the unique historic events that shape Southern Paiute understanding of the landscape, its mapping through song and movement and the conveyance of the deep oral tradition through the generations for the unborn, living and deceased.

This landscape is eligible under Criteria 3 for its contributions to the production of the salt songs for which, without the salt songs, the high artistic value of the songs would fall flat. Songs sung during a ceremony that moves a group of living people and the deceased through a landscape is most aesthetic and culturally appropriate when the songs are sung in the landscape, as contrasted with being sung for a studio recording or transcribed into musical notation and then heard, read or duplicated by others.

Pahrump Paiute Home Landscape

This landscape is eligible under criteria 1 at the regional level for the broad contributions to the unique historic events that shape Pahrump understanding of their homeland and their ongoing traditions and history that have allowed them to survive, and during particular periods of their existence, flourish in a place that many non-Pahrump would consider harsh, inhospitable, or vastly in need of improvements.

This landscape is eligible under criteria 2 at the regional level for its association with the life and times of Chief Tecopa the first Pahrump Paiute chief that withstood, translated and guided his people through the pressures of a rapidly changing world brought on by the intrusions of other cultures. This association of a leader, his homeland and his fellow people to endure into modern times was passed on generation to generation and endures into the present.

Ma-hav Landscape

This landscape is eligible under Criteria 1 at the local level for the broad contributions to the unique historic events that this landscape provides to the Pahrump Paiute Home landscape in that it provides a unique marginal cultural milieu that spanned the interaction of the first contacts between Pahrump Paiute and non-Pahrump Paiute foreigners such as the Mexican traders, American explores, trappers, and traders; the American and Mormon miners, homesteaders and later American ranchers and business men that came to call the Pahrump Valley either a wayside curiosity or new home.

This landscape is eligible under Criteria 4 at the local level of significance for the potential to yield ethnographic information important to the prehistory and history of the Ma-hav area and specifically the prehistoric archaeological potential that lays beneath and on the surface of the Ma-hav area including the archaeological remains known to exist or that potentially exist in the Ma-hav Landscape.

The Ma-hav landscape contains burials and at least one known cemetery. Normally cemeteries are not eligible to the National Register. However, the burials and cemetery are considered as contributing features of the Ma-hav landscape and lend a sense of longevity to the landscape and rather than render the landscape ineligible actually increase the merits for eligibility.

Integrity

Salt Song Landscape

The Salt Song Landscape has been visually and physically compromised by significant modern developments such as the presence of numerous large cities, towns, military installations, energy generating facilities, mining infrastructure, and other infrastructure such as transportation and transmission corridors. In addition, auditory, olfactory and nightscape experiences have been compromised. The Spring Mountains are surrounded on several sides with incompatible intrusions to traditional religious and cultural practices. To the east/southeast lies the sprawling Las Vegas metropolis. To the north lies Nellis Air Force base. And to the east/northeast lies the town of Pahrump. Across and through this terrain are several major highway corridors and transmission lines. However one major area, lying to the south/southeast, and where the proposed-project and its alternative site are proposed, the landscape is remarkably not marred.

In addition Southern Paiute traditional singers have an obligation to continue this tradition lest they void their obligations to the deceased and ultimately to themselves, their yet to be born, and ultimately to their very identity and continuance as a people. No amount of landscape alteration can prevent them from continuing this tradition. However, increased infrastructural intrusions increase the burden and challenges to traditional practitioners to continue traditions vital to their community and related heritage. They consider their landscape to remain aesthetically pleasing despite intrusions due to the beauty, balance and sustenance by which they are provided a unique identity, handed down through generations and originally provided to them in a pact with their creator.

The Salt Song Landscapes maintain integrity of Association, Feeling, Setting, and Location.

Pahrump Paiute Home Landscape

The Pahrump Paiute Home landscape has been compromised by the same modern developments such as the sprawling town of Pahrump. Water from agriculture has significantly lowered the water table resulting in declines of associated plant communities and related animal habitat and population viability. Private property rights have restricted access to important hunting and gathering grounds. The Tribe does not have a land base in order to preserve intact their cultural traditions, and for which they would otherwise be able to take their cultural destiny into their own hands. However sufficient land is in federal ownership, such as the US Forest Service lands in the Spring Mountains, the US Fish and Wildlife Ash Meadows Wildlife Area and designated Bureau of Land Management wilderness areas in the No Pah and Kingston Mountain Ranges, as well as Bureau of Land Management front-country lands that encircle the Pahrump Valley. Because this homeland is intricately tied to Pahrump Paiute identity as a distinct people, no amount of environmental alteration of their lands will deter them from protecting and maintaining their landscape the best that they can. Indeed, one main reason for Pahrump Paiute application for federal recognition is to attain greater leverage in protecting what is their perceived birthright to exist in their homelands, including standing in issues related to the Native American Graves Protection and Repatriation Act.

The Pahrump Paiute Home Landscape maintains integrity of Association, Feeling, Setting, and Location.

Ma-hav Landscape

The Ma-hav landscape has been primarily compromised by the establishment and workings of the Wiley estate and perhaps marginally by the operations of the Front Site Gun Range which sets in the north east portion of the landscape. However these historic and recent alterations are minimal compared to other component landscapes that contribute to the Pahrump Paiute Home Landscape. Areas of the Ma-hav landscape are in Bureau of Land Management ownership and subject to federal management. And one specific area (Stump Springs) is protected as an area of Critical Environmental Concern for its association with Pahrump Paiute cultural values. The Pahrump Paiute People affiliated with the Ma-hav landscape live as close to the property as is possible given that the land is in private ownership by non-Pahrump Paiute people. The Ma-hav Landscape maintains integrity of Association, Feeling, Setting, and Location.

PROJECT MITIGATIONS

Pahrump Paiute feel that their life-ways have been walked upon, stolen, lost, forgotten, rejected, belittled, infringed upon, and otherwise dismissed. In the face of this treatment, Pahrump Paiute also continue to practice as much of their traditional ways as is possible within the current society. They feel like it is still within their reach to maintain their cultural identities and ensuing obligations as traditional Pahrump Paiute while participating in the dominant society. The Pahrump Paiute Tribe continues to seek federal recognition and a tribal land base, including at a minimum, greater tribal involvement in land management planning process, as critical steps to ensure their tribal longevity.

Quotes from recent tribal interviews concerning perceived impacts

The project impact is huge. That does not mean that a traditional ceremony can be held and then the land and spirits will understand once and for all. Confusion will increase and multiply over time and that will accumulate in the burden that the singers and other people will take on year after year. (Interviewee – Personal Communication)

Bomb testing in the area has contaminated a lot of the desert around Moapa. We are at risk if we go gather plants. There is also the local coal plant that causes environmental problems. So we go to Pahrump Valley (and other areas where Southern Paiute are from) to gather because we think that it is a cleaner environment. (Interviewee – Personal Communication)

Area is also important for fox trail songs. Which is a song that follows the fox, who travels from spring to spring. Putting a high tech facility in the midst of the ceremonial song trail is an invasion of Indian religion. The project area is a religious area. There is not only what the project mirrors and towers will do to the salt song prayers and people but also there will be long term impacts from more people and activity over the course of the project. What actual impacts would be to the Salt Song Trail and if those impacts can be mitigated are something that only certain practitioners can answer. Those answers can only be provided by medicine men or song practitioners. It is suggested that the ethnographer talk with Larry Eddy (Chemehuevi Elder) or Richard Arnold (Pahrump Paiute Singer). (Interviewee – Personal Communication)

There is a real concern about environmental justice and how Southern Paiute people are being disproportionately and adversely impacted by the proposed project. When our cultural landscape is impacted significantly such as will happen with the proposed solar project, life-ways are changed forever and does not allow our people to complete their journey to the afterlife as described in our Salt Songs. (Interviewee – Personal Communication)

Clearly, the Commission must give serious consideration to the timing of the ethnographic interviews and our inability to discuss certain things out of season or during the right time of year. A request to

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share this information out of season further compounds the environmental justice concerns of our people. (Interviewee – Personal Communication)

An impact to the song trails would impact all Southern Paiute that need or rely on the Salt Songs trails and related ceremonies (Interviewee – Personal Communication).

CEC Staff Preliminary Impact and Mitigation Conclusion

The impacts of the proposed Hidden Hills Solar Energy Generating Facility project on the three ethnographic landscapes, should it be approved, are anticipated to not be able to be reduced to less than significant. However, California Energy Commission Staff continue to seek ways to lessen impacts in consultation with Native American Tribes affiliated with the proposed project area and the surrounding landscapes.

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APPENDICES

Appendix 1 - Acronym List

- **AFC** Application for Certification
- **BLM** Bureau of Land Management
- **ENERGY COMMISSION** California Energy Commission
- **CFR** Code of Federal Regulations
- **HHSEGS** Hidden Hills Solar Electric Generating System
- **MW** Megawatts
- **NAHC** Native American Heritage Commission
- **NPS** National Park Service
- **REAP** Rapid Ethnographic Assessment Procedures
- **SRS** Solar Receiver Steam Generator
- **TCP** Traditional Cultural Properties

Appendix 2 - List of Springs Culturally Important to the Pahrump Paiute Tribe

- Appaloosa Spring
- Ash Meadows (Kooitsi)
- Aztec Tank
- Big Spring
- Big Timber Spring
- Bill Smith Springs
- Bird Spring
- Bitter Springs [Auqa deTomaso by Fremont]
- Bole Spring
- Browns Spring
- Buck Spring
- Cave Spring
- CC Spring
- Chappo Spring
- Coal Spring
- Cold Creek Spring
- Cougar Spring
- Crystal Spring
- Debert Spring
- Deer Creek Spring
- Devil's Hole (Poobitsi)
- Fairbanks Spring
- Gold Spring
- Grapevine Spring
- Greasewood Spring
- Harris Spring
- Horseshutem Spring
- Horse Spring (Padapunitsi)
- Horsethief Spring
- Jack Rabbit Springs
- Jaybird Spring
- Kiup Spring
- Kwichup spring
- Last Cabin Spring
- Last Chance Spring
- Lee Spring
- Longstreet Spring
- Mammy Spring
- Manse Spring
- Mason Spring
- Mazie Spring
- Mexican Spring
- Mound Spring
- Mountain Spring

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- Mud Spring
- Mule Spring (Pavis)
- Ninety-nine Spring
- Pahrump Spring
- Peak Springs
- Point of Rock Spring
- Potosi Spring
- Prospect Springs
- Rainbow Spring
- Resting Spring (Yaga)
- Rock Spring
- Rogers Spring
- Rose Spring
- Rosebud Spring
- Santa Cruz Spring
- Saratoga Springs
- Shoshone Springs
- Six Mile Spring
- Stanley Springs
- Stump Spring (Tsapingpisa)
- Trout Spring
- Tule Spring (Tisivasi)
- Twelvemile Spring
- Warner Spring
- Wheeler Wells
- Whiskey Spring
- Willow Spring
- Wilson Tank
- Wood Canyon Spring
- Yount Spring

Appendix 3 - List of Plants Culturally Important to the Pahrump Paiute Tribe

Trees

- Curlleaf Mountain Mahogany (*Cercocarpus ledifolius*) [dunumbe]
- Gambel's Oak (*Quercus gambelii*)
- Goodding's Willow (*Salix gooddingii*)
- Sandbar Willow (*Salix exigua*) [sa-ga-ve]
- Screwbean Mesquite (*Prosopis pubescens*)
- Singleleaf Ash (*Fraxinus anomala*) [ya-peep-a]
- Singleleaf Pinyon Pine (*Pinus monophylla*)
- Utah Juniper (*Juniperus osteosperma*)
- Velvet Ash (*Fraxinus velutina*)
- Western Honey Mesquite (*Prosopis glandulosa*) [o-pimb]

Large Shrubs and Woody Vines

- Anderson's Wolfberry (*Lycium andersonii*) [bush-hoop-pi-ve, berries-hupoo]
- Arrowweed (*Pluchea sericea*) [sah-wape]
- Big Sagebrush (*Artemisia tridentata*) [sa-wa-ve]
- Blue Elderberry (*Sambucus cerulea-cerulea*) [kon-vee]
- Canyon Grape (*Vitis arizonica*)
- Creosote Bush (*Larrea tridentata*) [yatumbi]
- Desert Bitterbrush (*Purshia glandulosa*) [hunupi]
- Desert Snowberry (*Symphoricarpos longiflorus*)
- Fourwing Saltbush (*Atriplex canescens*) [cha-upive]
- Fremont's Dalea (*Psoralea fremontii*)
- Gooseberry (*Ribes*)
- Greasewood (*Sarcobatus vermiculatus*)
- Green Mormon Tea (*Ephedra viridis*)
- Lemonade Berry (*Rhus trilobata*)
- Nevada Smokebush (*Psoralea polydenia*)
- Nevada Jointfir (*Ephedra nevadensis*)
- Rubber Rabbitbrush (*Ericameria nauseosa*)
- Shadscale (*Atriplex confertifolia*) [kakumba]
- Skunkbush Sumac (*Rhus trilobata*) [bush-suh-vamp, berries-eissia]
- Stansbury Cliffrose (*Purshia stansburiana*)
- Utah Serviceberry (*Amelanchier utahensis*)
- Woods' Rose (*Rosa woodsii*, *Ultramontana*)

Small Shrubs and Subshrubs

- Brittlebush (*Encelia farinosa*)
- Broom Snakeweed (*Gutierrezia sarothrae*)
- Brownplume Wirelettuce (*Stephanomeria pauciflora*)
- Desert Globe Mallow (*Sphaeralcea ambigua*) [kuku-pa-ni-ve]
- Desert Prince's Plume (*Stanleya pinnata*) [tumanii] [tumar]
- Devil's Claw
- Littleleaf Ratany (*Krameria erecta*) [nagavarodam]

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- Mojave Seablite (*Suaeda Moquinii*)
- Mountain Sagewort (*Artemisia Ludoviciana*)
- Purple Sage (*Salvia Dorrii*) [se-gwe-yan]
- Threadleaf Snakeweed (*Gutierrezia Microcephala*)
- Turpentine Broom (*Thamnosma Montana*) [moo-ga-hu-pe]
- Winterfat (*Krascheninnikovia Lanata*)

Yuccas and Agaves

- Banana Yucca (*Yucca Baccata*) [ochive]
- Joshua Tree (*Yucca Brevifolia*)
- Mojave Yucca (*Yucca Schidigera*) [chumba]
- Utah Agave (*Agave Utahensis*) [yan-da]

Cacti

- Beavertail Pricklypear (*Opuntia Basilaris*) [navumb]
- Cottontop Cactus (*Echinocactus Polycephalus*) [thamave]
- Golden Cholla (*Opuntia Echinocarpa*)
- Hedgehog Cactus (*Echinocereus Engelmannii*) [hu-siv-vich]
- Mojave Pricklypear (*Opuntia Erinacea*)

Herbaceous Plants

- Annual Turtleback (*Psathyrotes Annuia*)
- Bristly Fiddleneck (*Amsinckia Tessellata*) [tho-wa-wi-ve]
- Chia (*Salvia Columbariae*) (pasits)
- Clustered Broomrape (*Orobanche Fasciculata*)
- Coyote Green Tobacco (*Nicotiana Attenuate*) [ko-a-pe] [saxwaxoapi]
- Crimson Columbine (*Aquilegia Formosa*)
- Desert Broomrape (*Orobanche Cooperi*)
- Desert Larkspur (*Delphinium Parishii*)
- Desert Milkweed (*Asclepias Erosa*)
- Desert Rockcress (*Arabis Pulchra*)
- Desert Sand Verbena (*Abronia Villosa*)
- Desert Tobacco (*Nicotiana Obtusifolia*)
- Desert Trumpet (*Eriogonum Indlatum*) [papa-kumba]
- Earth Tobacco (*Nicotiana Trigonophylla*) [tinkoapi]
- Entireleaved Thelypody (*Entireleaved Thelypody*) [na-bitā]
- Evening Primrose (*Oenothera*)
- Firecracker Penstemon (*Penstemon Eatonii*)
- Flatbud Prickly Poppy (*Argemone munita*) [tu-vi-kai-ve]
- Goosefoot (*Chenopodium*)
- Hearleaf Twistflower (*Streptanthus Cordatus*)
- Indian Hemp (*Apocynum Cannabinum*)
- Indian Paintbrush (*Castilleja Angustifolia*) [inip-ma-tho-rup]
- Longleaf Phlox (*Phlox Longifolia*)
- Mexican Whorled Milkweed (*Asclepias Fascicularis*)

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- Mojave Prickly Poppy (*Argemone corymbosa*)
- Mojave Thistle (*Chamaesyce Albomarginata*) [chuvia]
- Mojave Woodyaster (*Xylorhiza Torifolia*)
- New Mexico Thistle (*Cirsium Mohavense*)
- Palmer's Penstemon (*Penstemon Palmeri*)
- Peace Tobacco (*Nicotiana Quadrialvis*)
- Prairie Flax (*Linum Lewisii*)
- Showy Milkweed (*Asclepias Speciosa*)
- Silver Rockcress (*Arabis Puberula*)
- Skyrocket Gilia (*Ipomopsis Aggregata*) [shovia navayuna]
- Stinging Nettle (*Urtica Dioica*)
- Tansy Mustard (*Descurainia Pinnata*) [akive]
- Thorn Apple (*Datura Wrightii*)
- Transmontane Sand Verbena (*Abronia Turbinata*)
- Travel Tobacco (*Eriogonum Inflatum*) [papakuarimpi]
- Velvet Trutleback (*Psathyrotes Ramosissima*)
- Whitemargin Sandmat (*Chamaesyce albomarginata*)
- Whitestem Blazingstar (*Mentzelia Albicaulis*) [ko-ka]
- Willow Dock (*Rumex Salicifolius*)
- Woolly Bluestar (*Amsonia Tomentosa*)
- Yerba Mansa (*Anemopsis Californica*)

Grasses and Grasslike Plants

- Baltic Rush (*Juncus Balticus*) [pai'sive]
- Basin Wild Rye (*Leymus Cinereus*)
- Broadleaf Cattail (*Typha Latifolia*) [to'awve]
- Common Reed (*Phragmites Australis*) [pa-wy-um-ba]
- Desert Needlegrass (*Achnatherum Speciosum*) [howuve]
- Indian Ricegrass (*Achnatherum Hymenoides*) [wai'wave]
- Inland Saltgrass (*Distichlis Spicata*)
- Southern Cattail (*Typha Latifolia*)

Bulb Plants

- Desert Hyacinth (*Dichelostemma Pulchellum*)
- Nevada Onion (*Allium Nevadense*) [nin-young]
- Winding Mariposa Lily (*Calochortus Flexuosus*) [se-go-a]

Appendix 4 - List of Animals Culturally Important to the Pahrump Paiute Tribe

Mammals

- American Badger (*Taxidea Taxus*) [huni]
- Antelope Ground Squirrel (*Ammospermophilus Leucurus*) [tavats]
- Audubon's Desert Cottontail (*Sylvilagus Audubonii*) (Tavuts)
- Badger (*Taxidea*) (Tukuputs)
- Black-tailed Deer (*Odocoileus Hemionus*) (Tuhuee)
- Black-tailed Jack Rabbit (*Lepus Californicus*) (Kaam)
- Bobcat (*Lynx Rufus*) [tuki]
- Botta Pocket Gopher (*Thomomys Botta*)
- Coyote (*Canis Latrans*) [Shin-nav] (Sacred)
- Deer Mouse (*Peromyscus*)
- Desert Big Horn Sheep (*Ovis Canadensis Nelsoni*)
- Desert Kit Fox (*Vulpes Macrotis*) [yipats]
- Desert Tortoise
- Desert Woodrat (*Neotoma Lepida*) [kaatsi]
- Golden Mantled Ground Squirrel (*Spermophilus Lateralis*) [oitsats]
- Gray Fox (*Urocyon*) [honsi]
- Kangaroo Rat (*Dipodomys*) [pail]
- Merriam Kangaroo Rat (*Dipodomys Merriami*)
- Mountain Lion (*Relis Concolor*) [tukumumunts]
- Mule Deer
- Muskrat (*Ondatra Zibethicus*)
- Pocket Gopher (*Thomomys*) [mii]
- Pocket Mouse (*Perognathus Longimembris*) [puintcats]
- Porcupine (*Erethizon Dorsatum*) [yingi]
- Pronghorn, Bear
- Raccoon (*Procyon Lotor*) [yamasi]
- Red Fox
- Rock Squirrel (*Spermophilus Variegatus*) [sikuts]
- Skunk (*Mephitis*) [ponia]
- White-tailed Antelope Squirrel (*Ammospermophilus Leucurus*)
- Wolf (*Canis lupus*) [tiwats] (Sacred) (Indian Legend)
- Woodrat

Birds

- American Crow (*Corvus Brachyrhynchos*)
- American Kestrel (*Falco Sparverius*)
- Anna's Hummingbird (*Calypte Anna*)
- Ash-throated Flycatcher (*Myiarchus Cinerascens*)
- Bats (*Microtus*) [patsatsi]
- Barn Owl (*Tyto Alba*)
- Barn Swallow (*Hirundo Rustica*)
- Bendire's Thrasher (*Toxostoma Bendirei*)

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- Black-headed Grosbeak (Pheucticus Melanocephalus)
- Black Phoebe (Sayornis Nigricans)
- Black-tailed Gnatcatcher (Polioptila Melaneura)
- Black-throated Sparrow (Amphispiza Bilineata)
- Blue-gray Gnatcatcher (Polioptila Caerulea)
- Brewer's Sparrow (Spizella Breweri)
- Bullock's Oriole (Icterus Bullockii)
- Burrowing Owl (Athene Cunicularia)
- Cactus Wren (Campylorhynchus Brunneicapillus)
- Chipping Sparrow (Spizella Passerina)
- Common Poorwill (Phalaenoptilus Nuttalli)
- Common Raven (Corvus Corax)
- Cooper's Hawk (Accipiter Cooperii)
- Costa's Hummingbird (Calypte Costae)
- Dusky Flycatcher (Empidonax Oberholseri)
- Eurasian Collared-Dove (Streptopelia Decaocto)
- European Starling (Sturnus Vulgaris)
- Ferruginous Hawk (Buteo Regalis)
- Gambel's Quail (Callipepla Gambelii)
- Golden Eagle (Aquila Chrysaetos)
- Gray Flycatcher (Empidonax Oberholseri)
- Great Blue Heron
- Great Horned Owl
- Greater Roadrunner (Geococcyx Californianus) (uh-ss)
- Horned Lark (Eremophila Alpestris)
- House Finch (Carpodacus Mexicanus)
- Killdeer
- Lark Sparrow (Chondestes Grammacus)
- LeConte's Thrasher (Toxostoma Lecontei)
- Lesser Goldfinch (Spinus Psaltria)
- Lesser Nighthawk (Chordeiles Acutipennis)
- Loggerhead Kingbird
- Loggerhead Shrike (Lanius Ludovicianus)
- Mountain Bluebird (Sialia Currucoides)
- Mourning Dove (Zenaida Macroura)
- Northern Flicker (Colaptes Auratus)
- Northern Harrier (Circus Cyaneus)
- Northern Mockingbird (Mimus Polyglottos)
- Northern Rough-winged Swallow (Stelgidopteryx Serripennis)
- Pinyon Jay (ahung)
- Phainopepla (Phainopepla Nitens)
- Prairie Falcon (Falco Mixicanus)
- Purple Martin (Progne Subis)
- Red-tailed Hawk (Buteo Jamaicensis)
- Rock Pigeon (Columba Livia)

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- Rock Wren (*Salpinctes Obsoletus*)
- Sage Sparrow (*Amphispiza Belli*)
- Sage Thrasher (*Oreoscoptes Montanus*)
- Say's Phoebe (*Sayornis Saya*)
- Scott's Oriole (*Icterus Parisorum*)
- Tree Swallow (*Tachycineta Bicolor*)
- Turkey Vulture (*Cathartes Aura*)
- Violet-green Swallow (*Tachycineta Thalassina*)
- Western Kingbird (*Tyrannus Verticalis*)
- Western Meadowlark (*Sturnella Neglecta*)
- White-crowned Sparrow (*Zonotrichia Leucophrys*)
- White-throated Sparrow (*Zonotrichia Albicollis*)
- White-throated Swift (*Aeronautes Saxatalis*)
- Yellow-headed Blackbird (*Xanthocephalus Xanthocephalus*)
- Yellow-rumped Warbler (*Dendroica Coronata*)

Reptiles

- Chuckwalla (*Sauromalus Ater?* or *Obesus?*) [tsawadi]
- Coachwhip Snake (*Masticophis Flagellum*)
- Common Collared Lizard (*Crotophytus Callarus*)
- Desert Iguana (*Dipsosaurus Dorsalis*)
- Desert Tortoise (*Gopherus Agassizii*) [aiya]
- Glossy Snake (*Arizona Elegans*)
- Great Basin Gopher Snake (*Pituophis Catenifer*)
- Horney Toad
- Lizards
- Long-nosed leopard Lizard (*Gambelia Wislizenii*)
- Long-nosed Snake (*Rhinocheilus Lecontei*)
- Mojave Western Patch-nosed Snake (*Salvadora Hexalepis Mojavensis*)
- Northern Mojave Rattlesnake (*Crotalus Scutulatus Scutulatus*)
- Side-blotched Lizard (*Uta Stansburiana Stejnegeri*)
- Sidewinder (*Crotalus Cerastes*)
- Speckled Rattlesnake (*Crotalus Mitchellii*)
- Southern Desert Horned Lizard (*Phrynosoma Platyrhinos Californium*)
- Western Fence Lizard (*Sceloporus Occidentalis*)
- Western Whiptail (*Aspidoscelis Tigris*)
- Zebra-tailed Lizard (*Callisaurus Draconoides*)

Appendix 5 - List of Mountains Culturally Important to the Pahrump Paiute Tribe

- Avawats Mountains
- Bare Mountains
- Black Mountain South (Tigimi)
- Eagle Mountain (Puuwin)
- Funeral Mountain South (Isigumpi)
- Greenwater Range
- Ivanpah
- Kingston Mountain (Mogwa)
- La Madre Mountain (Soneuwa)
- Lee Canyon (Tinainabi)
- Lizard Mountain
- McCullough Range North (tiniuhubi)
- Mount Charleston Peak (Nivaganti)
- Mount Potosi
- Mount Stirling
- New York Mountain
- Nopah Mountain (Tsongkwapi)
- North Mesquite Mountains
- Old Woman Mountains (Mamapukaib)
- Paiute Range (Ampanikaiva)
- Providence Mountain (Timpisagwats)
- Providence Mountain Middle (Agaisavantakaibi)
- Providence Mountain North (Asoatunukwitsi)
- Resting Spring Mountains
- Sheep Range (Tuhuti)
- Spring Mountain Range
- Sunrise Mountain (Tasiakaib)
- Turtle Mountains (Nantapiaganti)

Appendix 6 – Historic Photographs of Hidden Hills Area

All photo descriptions from University of Nevada Las Vegas Special Collections.

1. Hidden Ranch Camp. n.d.
2. Summer Camp - Man and Woman Standing in front of a brush house, shade shelter at one end. Man probably Chief Tecopa n.d.
3. Two Indian Women seated in wicker chairs. Manse or Hidden Hills. n.d.
4. Four Indian children in front of cottonwood tree, Manse of Hidden Ranch. n.d.
5. Three Indian children, Manse or Hidden Ranch. n.d.
6. Chief Tecopa. n.d.
7. Page 6 of Pahrump Valley Times, "Me Chief Tecopa..." January 1971.
8. John Yount's home on the Hidden Ranch, now known as the Hidden Hills Ranch, about 1917
9. Homestead house constructed on John Yount's homestead located at the south end of Pahrump Valley. The house looked pretty much as it does here when Roland Wiley acquired John Yount's ranch in 1936.
10. In 1941, Roland constructed the airstrip pictured here near his ranch in Pahrump Valley.
11. Aerial view of the Hidden Hills Ranch. 1980.
12. Willow trees bordering both sides of the first road that led to the old Yount Ranch, also known as the Hidden Ranch or Hidden Hills Ranch. 1937.
13. Hoot Gibson, a western cowboy actor, and Mrs. Elderbrook, then crowned Mrs. America, landing on Roland Wiley's Hidden Hills Ranch airstrip, early 1950s.
14. Visitors at the Hidden Hills Ranch. Hoot Gibson is standing behind the hitching post shaking hands with Murdell Earl, owner of the ENT Drug Store in North Las Vegas. 1950s
15. Hidden Hills Ranch, Pahrump Valley, Nevada. The remains of a fireplace believed to have been constructed by the Indians. Left to right: Ruth Elderbrook; unidentified; unidentified; Frank Elderbrook. Bob Lee remembered seeing these two fireplaces when he was a child. Circa 1950.
16. Cathedral Canyon in Hidden Hills Ranch. Roland Wiley is on left in white shirt; Mr. Elderbrook, from Palm Springs, is in the foreground in the white hat. Mrs. Elderbrook and Hoot Gibson's wife are also pictured. Between 1950 and 1960.
17. Fred Kennedy, riding a gaited horse owned by Roland Wiley at Cathedral Canyon Hidden Hills Ranch. Approximately 1939.
18. Mummified remains of an Indian renegade known as Queho. Standing second from left is Frank White, a member of the posse that initially searched for Queho. 1940s.
19. A view of a truck, farm workers, and melons grown on the Roland Wiley's Hidden Hills Ranch. 1967
20. 15 acres of Roland Wiley's land holdings on the California side of the Pahrump Valley were planted in melons. Part of the irrigation system and the crop from that enterprise are shown. 1967.
21. Unidentified persons and melons grown on the California side of Roland Wiley's Ranch. 1967
22. Dora Lee Brown and her granddaughter at Dora's place on the Yount (Hidden Hills) Ranch, Circa 1940.
23. Granddaughter of Dora Lee Brown near spring at Dora's place on the Yount (Hidden Hills) Ranch. Circa 1940





Summer Camp









"... YOU GOT TWO-BITS?"

Me Chief Tecopa

by
Stanley W. Paher
Author of
"Nevada Ghost Towns
& Mining Camps"

Pahrump Valley's oldest ranch is the Manse, located near the Nye-Clark County line, alongside the paved road. In the accompanying picture, the son of the founder of the Manse, Sam Young, is engaged in a game of pool with another well-known desert character of this area, Chief Tecopa, at right.

He is attired in his habitual dress — shodless, but with top hat and vest. He begged his way through life and it is said that he bathed only annually.

Around the turn of the century, Chief Tecopa frequently hung out around the station of the California Eastern Railway at Mansel, Calif., about 40 miles south of Pahrump and 15 miles west of Searchlight. He used to meet the trains coming in from Goffs, near Needles, on the Santa Fe Railroad main line. There he liked to beg for change to buy food at whiskey.

Capt. Ray Gibson, now 85 and retired from the desert, saw Chief Tecopa in action, and relates the following description: If he saw a man with a pair of high boots, he knew that he was an engineer and would have a lot of money. Tecopa liked three buckled boots better than two buckled boots, believing that the richer engineers had more buckles.

So he would walk up to an engineer and say, "Me Chief Tecopa, Paiute Indian. Great friend of '90ers. Me fight Shoshone. Doctor say got tuberculosis. Me 106 years old. Pretty soon die. You got two bits?" In this way he was able to sustain himself.

Every fall he would go to Los Angeles where he met a banker friend who used to take him to a good Turkish bath. His clothes would be stiff with dirt.

He would return to the desert the happiest man alive because he would have a new outfit on. He wore a swallow-tailed coat, a hat with a big rosette on the side, a white tie, a white shirt and striped pants.

The last year Gibson saw Tecopa, around 1904, he had gone into Los Angeles to see his old banker friend, but the banker had gone to Europe. Tecopa went into the bank as usual, and the other tellers all knew him, but none of them had any authority to give him anything. So he continued to hang around the bank.

This was during the time of the year when the bank was counting its money.

Gold coins were stacked all over the place. Tecopa kept asking about the whereabouts of his friend, and the bankers ignored him.

fast. Bacon, egg, good bread, nice coffee. All fine."

That was Chief Tecopa's idea of a pit. He responded to his friend, and the bankers over 100. Gibson said he

looked about 200. He had arithrows of wrinkles and spotted. Was could hardly see what color his eyes were. He had a face you'd never forget.



"Where Mr. Dutton?", he would ask.
"He's in Europe."
"Where Europe?"
"Maybe 30 days east."
"When he come back?"
"I don't know."
And so the old Chief kept waiting around and getting in the way. Finally the cashier took \$2.50 out of his own pocket and sent it across the counter to Tecopa, hoping he would leave.

But Tecopa wasn't satisfied. He said, "Big money stime! You keep 'em."
Because Tecopa would not leave, the cashier then called the police.

When Tecopa returned to the desert, here's the story he told Gibson:

"Police came...big strong man...take me to fine hotel. But, No one get you. Fine grub...fine dinner...break-

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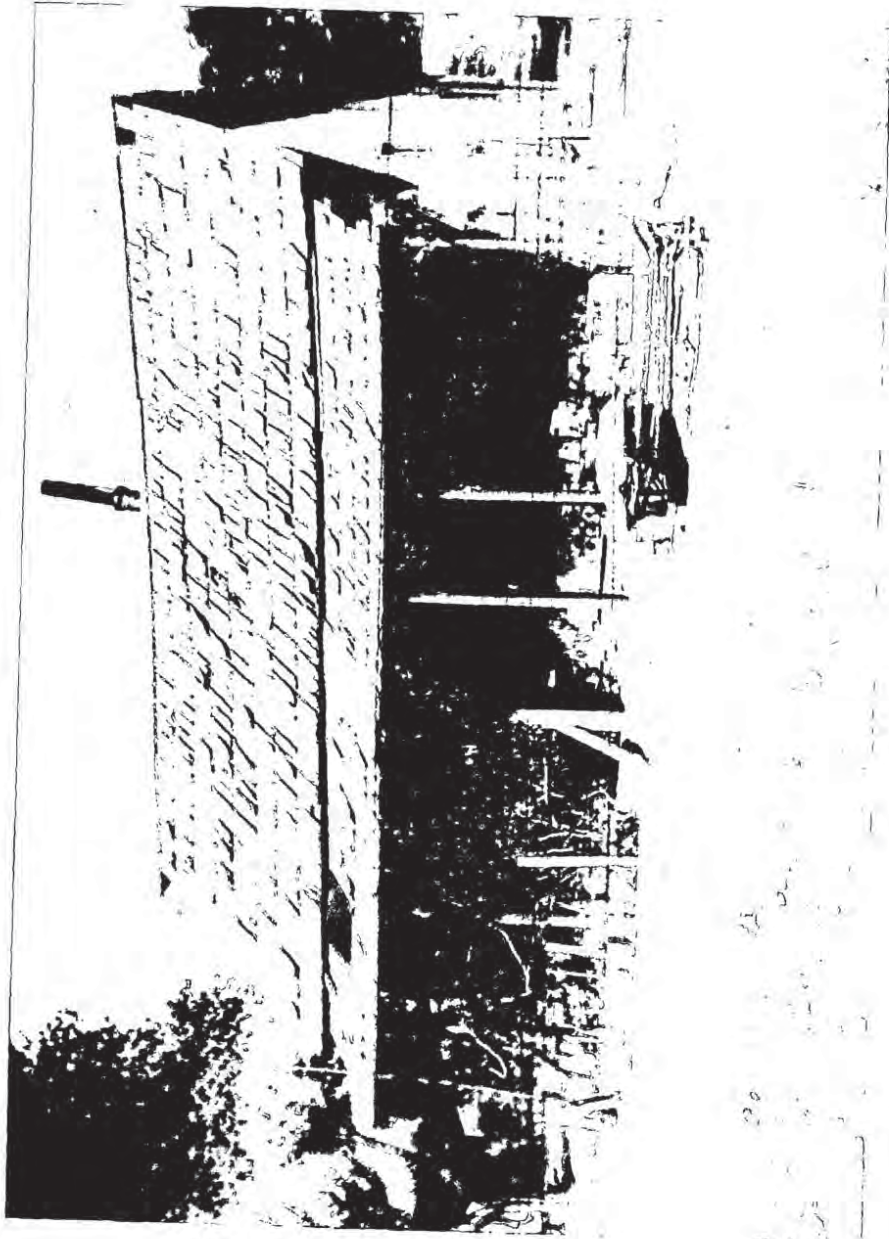
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◆◆◆◆

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TIM HAFEN JACQUELYN HAFEN Realtors	(702) 727-5363 Box 236 Pahrump, Nevada 89041
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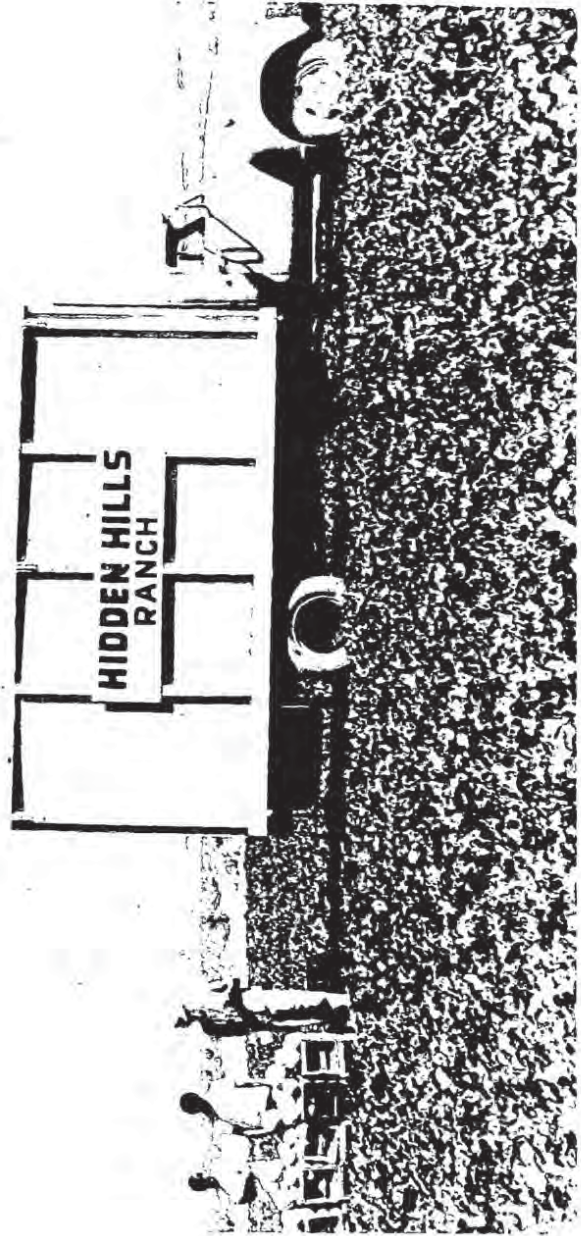


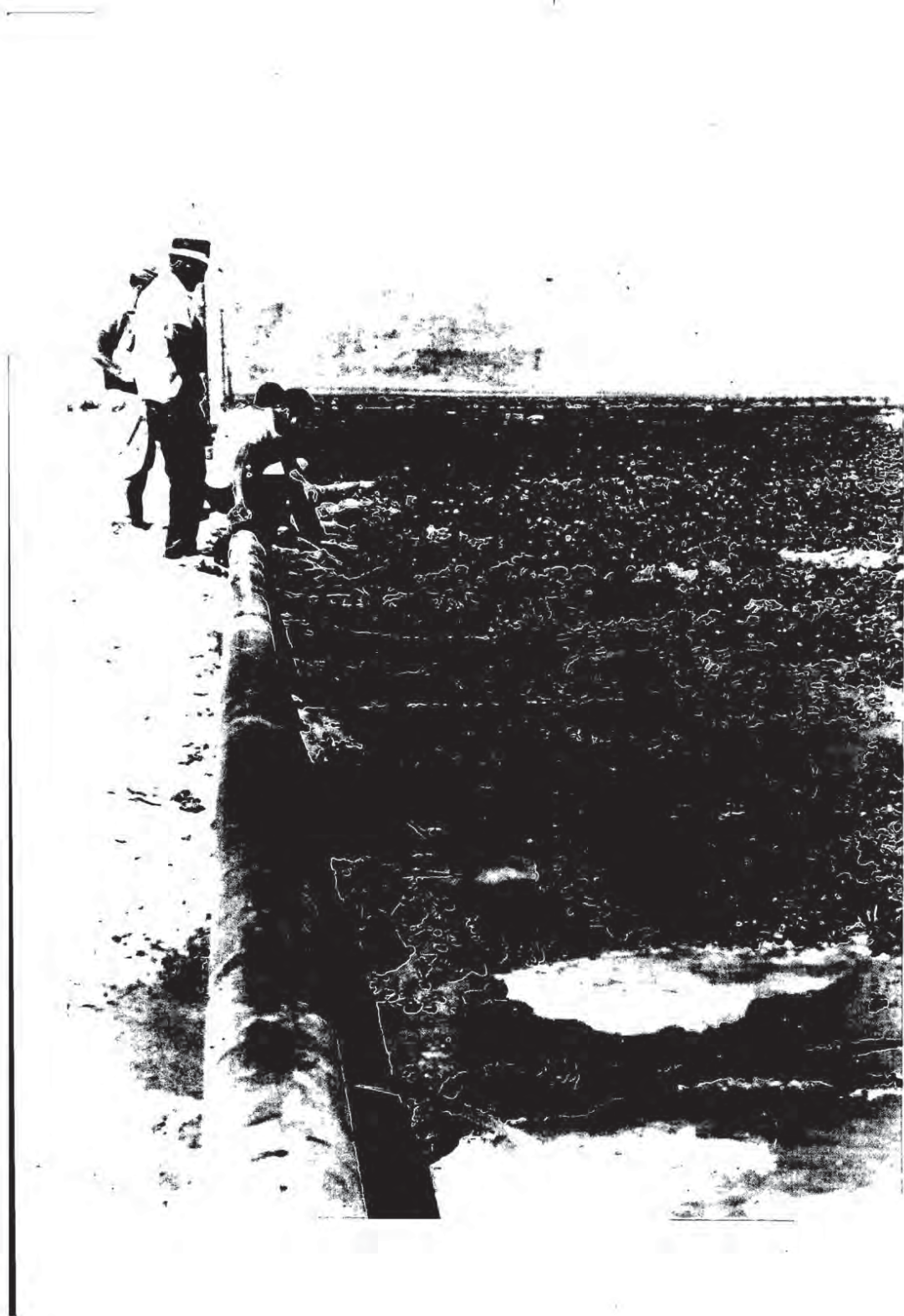


Hidden Hills Ranch Cottages.
Located 150' from entrance to famous
because of many similarities to Ketchikan, Alaska.
natural fire, lakes etc. recently found the
no. lighted a fire, etc. with lights, etc.
pictures of a widely known of

















BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
1-800-822-6228 – WWW.ENERGY.CA.GOV

**APPLICATION FOR CERTIFICATION FOR THE
HIDDEN HILLS SOLAR ELECTRIC
GENERATING SYSTEM**

**DOCKET NO. 11-AFC-02
PROOF OF SERVICE
(Revised 8/14/12)**

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*indicates change

DECLARATION OF SERVICE

I, Raquel Rodriguez, declare that on August 17, 2012, I served and filed copies of the attached Hidden Hills Solar Electric Generating Systems – California Energy Commission Ethnographic Report with New Redacted Appendix A, dated August, 2012. This document is accompanied by the most recent Proof of Service list, located on the web page for this project at: www.energy.ca.gov/sitingcases/hiddenhills/index.html.

The document has been sent to the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit or Chief Counsel, as appropriate, in the following manner:

(Check all that Apply)

For service to all other parties:

Served electronically to all e-mail addresses on the Proof of Service list;

Served by delivering on this date, either personally, or for mailing with the U.S. Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses **NOT** marked "e-mail preferred."

AND

For filing with the Docket Unit at the Energy Commission:

by sending an electronic copy to the e-mail address below (preferred method); **OR**

by depositing an original and 12 paper copies in the mail with the U.S. Postal Service with first class postage thereon fully prepaid, as follows:

CALIFORNIA ENERGY COMMISSION – DOCKET UNIT
Attn: Docket No. 11-AFC-02
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.ca.gov

OR, if filing a Petition for Reconsideration of Decision or Order pursuant to Title 20, § 1720:


Served by delivering on this date one electronic copy by e-mail, and an original paper copy to the Chief Counsel at the following address, either personally, or for mailing with the U.S. Postal Service with first class postage thereon fully prepaid:

California Energy Commission
Michael J. Levy, Chief Counsel
1516 Ninth Street MS-14
Sacramento, CA 95814
michael.levy@energy.ca.gov

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

Originally Signed

Raquel Rodriguez
Siting, Transmission and Environmental Protection Division





COLORADO RIVER INDIAN TRIBES

Colorado River Indian Reservation

26600 MOHAVE RD.
PARKER, ARIZONA 85344
TELEPHONE (928) 669-9211
FAX (928) 669-1216

December 9, 2014

Via Email (publicadviser@energy.ca.gov)

California Energy Commission
1516 Ninth Street
Sacramento, California 95814

Re: Item 3, Energy Commission Tribal Consultation Policy

Dear Commissioners,

The Colorado River Indian Tribes has been actively involved in California Energy Commission siting proceedings and the development of the Tribal Consultation Policy for the last 14 months. We were the first federally recognized Indian tribe to intervene in a siting proceeding and were critical participants in the Commission's consideration of both the Palen Solar Electric Generating System and the Modified Blythe Solar Power Project. Just last week, our Tribal Council invited Commissioner Karen Douglas, her Advisor Christine Stora, and CEC Staff members Roger Johnson and Thomas Gates to participate in government-to-government consultation at the Colorado River Indian Reservation. The Colorado River Indian Tribes appreciates the efforts of the Commission, particularly Commissioner Karen Douglas, to improve the Commission's relationship with Indian Tribes.

While the Colorado River Indian Tribes support the Tribal Consultation Policy in concept, the Tribes are concerned that the proposed Policy does not contain the tools necessary to ensure adequate and sincere consultation in moving forward. In particular, the Policy fails to address or even acknowledge the significant barriers that prevent adequate consultation during siting proceedings. Under the Commission's existing statutory scheme, tribes can never engage in government-to-government consultation regarding a specific project given the bar on ex parte communication. And if a tribe exercises its right to intervene, and thereby present testimonial evidence directly to Commissioners, CEC regulations prevent the tribe from engaging in confidential discussions with CEC Staff. While the Colorado River Indian Tribes recognize that the Tribal Consultation Policy alone cannot remedy these structural concerns, the benefits of the Policy remain unclear if such barriers persist.

Further, the Tribes are concerned about the Policy's lack of an enforcement mechanism. As Commissioner Douglas explained last week, the effectiveness of the Policy relies on an agency culture that recognizes and supports government-to-government consultation. While the

California Energy Commission
December 9, 2014
Page 2

Colorado River Indian Tribes appreciate the Commission's recent efforts with respect to consultation, we also know too well that consultation obligations can easily be swept aside when inconvenient, difficult, or costly. The Policy could be much improved by including more explicit requirements for when and how consultation must occur, by providing internal review procedures in the event a tribe raises concerns about how consultation has occurred, and by imposing an external enforcement mechanism to ensure agency compliance.

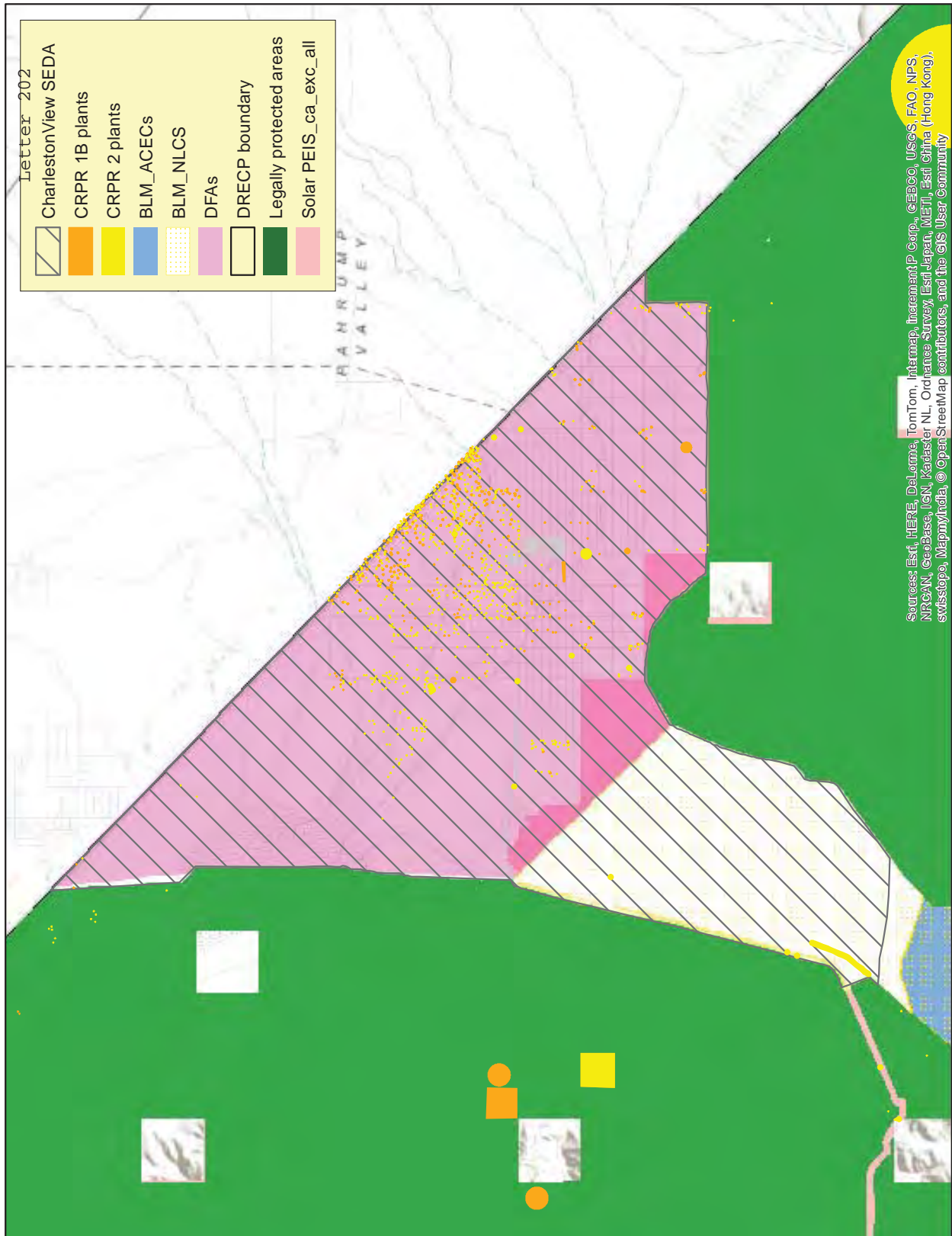
Thank you for the opportunity to provide comments on the Tribal Consultation Policy. We look forward to continuing to engage with the Commission on issues important to the Colorado River Indian Tribes, the State of California, and the members and citizens of both governments.

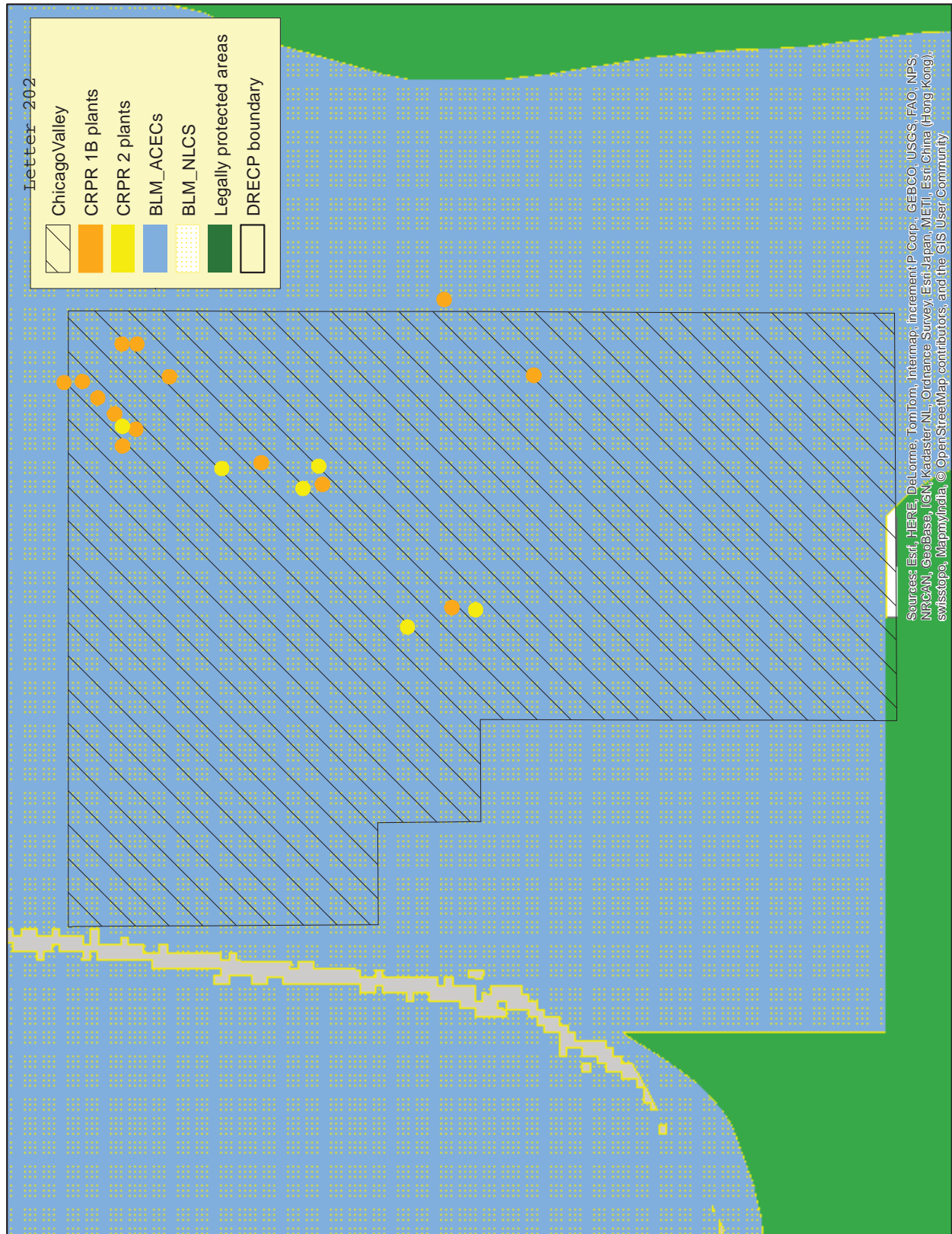
Sincerely,



Chairman Dennis Patch
Colorado River Indian Tribes

Cc: Tribal Council
Rebecca A. Loudbear, CRIT Attorney General
Wilene Fisher-Holt, CRIT Museum/Cultural Resources Director
Daphne Hill-Poolaw, Mohave Elders Chairperson
David Harper, Mohave Elders Spokesperson





Responses to Letter 202 – Amargosa Conservancy

Response 202-1: This comment provides an introduction, acknowledges the County’s public planning efforts, and summarizes the Amargosa Conservancy’s interest and role in the project. As described in the Draft PEIR, although the SEDAs have been identified to direct and constrain utility-scale and commercial scale (referred to as distributed generation in the Draft PEIR) solar development in the County, not all areas within the proposed SEDA boundaries may be suitable for development. This has been clarified in the Final PEIR. Project Objective Number 3 has been updated as follows:

3. Avoid or minimize direct and indirect impact from future solar energy development on the physical, biological, cultural, political, and socioeconomic environments.

In order to preserve the County’s physical, biological, cultural, political, and socioeconomic environments, and allow future development to be implemented in an economically feasible manner, the County identified the potential SEDAs. An OCTS (Aspen 2014) was prepared for the proposed project in which quantifiable data was used to map sensitive resources throughout the County. This data was then used to identify locations that were more or less sensitive based on the available data. The proposed development areas are in locations with the relatively least impact to the resources evaluated. In identifying these development areas, development is directed to avoid and minimize impacts to those areas, and encourage development in areas deemed more appropriate. Not all areas within the SEDA boundaries may be suitable for development. Site specific analysis of sensitive resources will be conducted prior to development in any of the SEDAs and identified sensitive resources will be avoided or impacts will be minimized to the extent practicable and mitigated pursuant to this PEIR.

All future projects under the REGPA would be subject to project-specific environmental review. This process will use the types of impacts and mitigation measures outlined in the PEIR as guidelines. Depending on the size and location of the development and the technology used, a Subsequent EIR may be required. However, the REGPA also encourages small scale, photovoltaic (PV) solar facilities to be constructed which may not require a full EIR. As stated in Section 1.2 of the PEIR:

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

It should be noted that under Title 21 of the Inyo County Code concerning renewable energy development, any person who proposes to construct an electric transmission line, solar thermal renewable energy facility or a PV renewable energy facility in the County must first obtain a Renewable Energy Permit, a Renewable Energy Development Agreement or a Renewable Energy Impact Determination. A Renewable Energy Impact Determination applies to projects over which the County has limited authority because the project is located on federal or state land or is subject to the permitting jurisdiction of the California Energy Commission.

Under Title 21, the issuance of a Renewable Energy Permit is subject to CEQA, and the County Planning Commission must conduct a noticed public hearing before considering approval of such a permit. The Planning Commission must find that there has been compliance with CEQA before a permit can be issued. In addition, “as a condition to the issuance of such a permit, the Planning Commission may impose such reasonable and feasible mitigation measures as it finds to be necessary to protect the health, safety, and welfare of the county’s citizens, the county’s environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.” Finally, the Planning Commission is required to impose as a condition of approval, a plan for the reclamation/revegetation of the project site at the time of decommissioning of the project and the Planning Commission shall require financial assurances from the applicant to ensure that the reclamation plan will be fully implemented.

Concerning Renewable Energy Development Agreements, Title 21 provides that such agreements may be entered into by the County and a project applicant in lieu of obtaining a Renewable Energy Development Permit. Renewable Energy Development Agreements are subject to CEQA and must be approved by an ordinance adopted by the Board of Supervisors following a noticed public hearing. Prior to approving such an agreement, the Board must find that there has been compliance with CEQA. Renewable Energy Development Agreements must include a reclamation plan, acceptable financial assurances to ensure full implementation of the reclamation plan, be consistent with the county general plan and be enforceable by injunctive relief or other enforcement mechanisms under law. In the Renewable Energy Development Agreement, the Board of Supervisors may require such mitigation measures or modifications of the project as it finds necessary to protect the health, safety, and welfare of the county’s citizens, the county’s environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.

Response 202-2: The County agrees that the hydrologic and hydraulic characteristics of groundwater basins within the County, including their connectivity with other basins and relationships to surface waters, are complex. Accordingly, based on a program-level assessment of local groundwater resources, the PEIR identifies potentially significant impacts to groundwater supplies for the Owens Valley Study Area and all eight SEDAs (including Charleston View and Chicago Valley). While detailed groundwater studies within these areas were not conducted as part of the PEIR analysis and are not feasible at the program level (i.e., due to the fact that no specific development projects or associated groundwater withdrawals have been proposed at this time); such investigations would be required prior to approval of all applicable solar development under the REGPA as outlined in Section 4.9.5 of the PEIR. Specifically, this would involve detailed evaluation of factors such as local aquifer volumes and hydrogeologic characteristics, current/proposed withdrawals, inflow/recharge capacity, and potential effects to local groundwater basins and related surface water features (with the referenced mitigation on Section 4.9.5 modified to clarify the required analysis of potential effects to groundwater-dependent features such as springs from proposed groundwater use). The detailed groundwater investigations conducted for proposed solar development under the REGPA would also utilize the most current available technical data, including applicable information from the 2014 “State of Basin Report” and other sources identified in this comment. From these and other pertinent analyses, site-specific impact assessments and related measures would be developed to address potential concerns and ensure that groundwater and related groundwater-dependent surface water features would be appropriately protected and/or subject to applicable mitigation.

Response 202-3: Please refer to Response 202-2 above. As noted therein, all proposed groundwater use related to solar development under the REGPA would be subject to detailed evaluation of associated

potential impacts to groundwater and related groundwater-dependent surface water resources prior to approval. From these and other pertinent analyses, site-specific technical groundwater assessments and related measures would be developed to address potential concerns and ensure that groundwater resources and related groundwater-dependent surface water features would be appropriately protected and/or subject to applicable mitigation.

Response 202-4: Please refer to Responses 202-2 and 202-3 above. As discussed in these responses, detailed groundwater studies have not been conducted as part of the PEIR analysis and are not feasible at the program level. Detailed groundwater investigations would be required, however, for all groundwater use related to applicable proposed solar development under the REGPA prior to their subsequent approval. The groundwater-related mitigation in Section 4.9.5 of the PEIR has also been modified to clarify the required analysis of potential effects to groundwater-dependent surface features such as springs and marshes from proposed groundwater use. From these and other pertinent analyses, site-specific technical groundwater assessments and related measures would be developed to address potential concerns and ensure that groundwater resources and related groundwater-dependent surface water features would be appropriately protected and/or subject to applicable mitigation.

The reader is directed to the Final PEIR to see proposed amendments to the following mitigation measures: Mitigation Measure BIO-2, Mitigation Measure BIO-3, and Mitigation Measure BIO-4. The amendments address potential off-site indirect impacts to special status plant and animal species that may result from solar development projects requiring groundwater pumping. The relevant amendments are outlined below. Please refer to Section 4.4.5 of the Final PEIR for all updates to the mitigation measures.

Mitigation Measure BIO-2:

- If any solar development projects are proposed in the Laws SEDA that would require groundwater pumping, a hydrologic study shall be conducted to determine the potential for impacts to the hydrology of Fish Slough and/or populations of Fish Slough milk-vetch, pursuant to Mitigation Measure HYD-2 in Section 4.9, Hydrology and Water Quality. If any solar development projects are proposed in the Chicago Valley or Charleston View SEDAs that would require groundwater pumping, a hydrologic study shall be conducted to determine the potential for down-watershed impacts to the habitats for special status plants in the Amargosa Watershed including the portion of the Amargosa River that has been designated by Congress as “Wild and Scenic.” If such studies conclude that any project has the potential to result in indirect impacts to the hydrology of off-site habitat for special status plant species (e.g., Fish Slough, marshes, riparian areas, alkaline flats in the Amargosa Watershed and the portion of the Amargosa River that has been designated by Congress as “Wild and Scenic”), a management plan will be prepared in coordination with the County and submitted to the appropriate resource agency with oversight for the species or habitat in question. The plan shall describe any appropriate monitoring, such as vegetation and/or water table monitoring, and prescribe mitigation to offset the impacts of the project on off-site habitat for special status plants such as preservation of suitable habitat or funding of activities to restore, enhance or conserve habitat within the County.

Mitigation Measure BIO-3:

- If any solar development projects are proposed that would require groundwater pumping, a hydrologic study shall be conducted to determine the potential for indirect off-site impacts to special status wildlife species and/or their habitats. If such studies conclude that any project has the potential to result in indirect impacts to the hydrology of off-site habitat for special status wildlife species (e.g., Amargosa vole, Ash Meadows naucorid), a management plan will be prepared in coordination with the County and submitted for approval to the appropriate resource agency with regulatory oversight for the species or habitat in question. The plan shall describe any appropriate monitoring, such as vegetation and/or water table monitoring, and prescribe mitigation to offset the impacts of the project on off-site habitat for special status wildlife such as preservation of suitable habitat or funding of activities to restore, enhance or conserve habitat within the County.

Mitigation Measure BIO-4:

- For all projects proposed in the Charleston View and Chicago Valley SEDAs, an analysis of potential down-watershed impacts to special-status fish species in the Amargosa Watershed will be conducted prior to project approval, if the project involves impacts to groundwater and/or requires pumping of groundwater (e.g. solar thermal projects). If the project is determined to have the potential to result in down-watershed impacts that could alter the hydrology of habitats for special-status fish species, a mitigation and monitoring plan will be prepared by the applicant to address potential impacts to groundwater and down-watershed biological resources and submitted to USFWS and CDFW for approval prior to project implementation. Mitigation measures will be developed in coordination with USFWS and CDFW to offset these impacts. Mitigation measures should include but are not limited to 1) a requirement for the project applicant to purchase and retire currently exercised water rights along the same flowpath as the water being used by the facility at a minimum 1:1 ratio; 2) hydrological and biological monitoring of the impacts of groundwater pumping on the groundwater system and the sensitive habitats down-watershed; and 3) adaptive management to increase the ratio of water rights purchased and retired and restore habitats down-watershed if hydrological and biological monitoring indicates that the projects groundwater pumping is having detrimental effects to sensitive biological resources (e.g., special status species or sensitive natural communities as designated by USFWS, CDFW, or CNPS) within the watershed as determined by a qualified hydrologist/hydrogeologist or biologist in coordination with USFWS and/or CDFW.

The first paragraph of Mitigation Measure BIO-19 has been modified as follows to address off-site impacts to natural communities:

If solar development is sited adjacent to any special status natural communities or protected natural areas or is determined to have the potential to impact any off-site special status natural communities or protected natural areas during the project level biological resources evaluation (e.g., projects in the Laws SEDA could impact the hydrology of critical habitat for Fish Slough milk-vetch; projects in the Chicago Valley SEDA could negatively impact off-site mesquite bosque by altering drainage patterns or altering groundwater levels; projects in the Charleston View and Chicago Valley SEDAs could impact down-watershed habitats in the Amargosa Watershed (including habitats

within the portion of the Amargosa River that has been designated by Congress as “Wild and Scenic.”), a management plan will be developed in consultation with CDFW and/or USFWS.

In addition, Mitigation Measure BIO-25 has been added as follows:

MM BIO-25: Minimize potential indirect impacts due to groundwater pumping

Mitigation measures for potential indirect impacts due to groundwater pumping are included in Mitigation Measure BIO-1, Mitigation Measure BIO-2, Mitigation Measure BIO-3, and Mitigation Measure BIO-4. Prior to approval of any project under the REGPA requiring groundwater pumping, the potential effects of the groundwater pumping on biological resources will be evaluated during preparation of the project-specific biological resources evaluation and will be based on the results of the hydrologic study conducted as a requirement of Mitigation Measure HYD-2 in Section 4.9, Hydrology and Water Quality. If groundwater pumping is determined to have the potential to result in off-site impacts to biological resources, measures will be included in the project-specific biological resources mitigation and monitoring plan to avoid, minimize, and mitigate for any such impacts. The measures will be commensurate with the resource and level of impact and may include but are not limited to vegetation and/or water table monitoring, preservation of suitable habitat or funding of activities to restore, enhance or conserve habitat within the County, and a requirement for the project applicant to purchase and retire currently exercised water rights along the same flowpath as the water being used by the facility at a minimum 1:1 ratio.

Response 202-5: The groundwater-related mitigation in Section 4.9.5 of the PEIR has been modified to clarify the required analysis of potential effects to groundwater-dependent features from proposed groundwater use. From these and other pertinent analyses, site-specific technical groundwater assessments and related measures would be developed to address potential concerns and ensure that groundwater resources and related groundwater-dependent surface water features would be appropriately protected and/or subject to applicable mitigation.

Mitigation measures have also been clarified in the biological resources chapter (see Response No. 202-4) to address special status species and sensitive habitats associated with groundwater dependent habitat.

Response 202-6: See Response No. 202-4 for proposed amendment to Mitigation Measure BIO-19 to address potential off-site indirect effects of solar development projects in the Chicago Valley SEDA on mesquite bosque.

The following language has been added to the discussion of potential impacts within the Charleston View SEDA in Section 4.4.3.2:

Aquatic habitats potentially containing waters of the US/State, including a dry lakebed and ephemeral washes could also be impacted. In addition, development within the SEDA could impact mesquite bosque, a special status natural community, which occurs in limited areas within the SEDA. There is no USFWS-designated critical habitat in the Charleston View SEDA.

Response 202-7: Refer to Response No. 202-4 which proposes an amendment to Mitigation Measure BIO-2 requiring applicants for proposed solar projects in the Charleston View and Chicago Valley SEDAs that may require pumping of groundwater to conduct hydrologic studies on the potential impacts to the Amargosa River system, including special status plant species.

Response 202-8: Amargosa vole has been added to the discussion of special status species in the environmental setting section for Charleston View and Chicago Valley SEDAs in Section 4.4.1.11.

The following sentence has been added to the summary of potential impacts to biological resources for each SEDA:

In addition, critical habitat for the Amargosa vole occurs down-watershed of the Chicago Valley SEDA and could be impacted by solar projects requiring groundwater pumping within the SEDA.

Refer to Response No. 202-4 for amended language proposed for Mitigation Measure BIO-3 requiring that impacts to the vole be assessed if projects requiring groundwater pumping are implemented in the Charleston View or Chicago Valley SEDAs. If a project is determined to have the potential to result in “take” of Amargosa vole, consultation with USFWS would be required along with take authorization as stated in the following bullet in Mitigation Measure BIO-3:

- For projects that are determined to have the potential to result in “take” of state or federally-listed animal species, consultation shall be conducted with CDFW or USFWS respectively and appropriate mitigation measures developed as necessary, and take authorization shall be obtained prior to project commencement, if relevant.

Response 202-9: As described in the first and second bullets of Mitigation Measure BIO-6, consultation shall be conducted with CDFW and USFWS for any projects where desert tortoise or signs of their presence is found on the site and/or the project is determined by a CDFW-approved biologist to have the potential to impact desert tortoise. In such cases, permits under Section 2080 of the Fish and Game Code and Section 7/10 of FESA authorizing incidental take of desert tortoise will be obtained from CDFW and USFWS respectively prior to implementation of the project, including any project-related ground disturbing activities. All requirements of the 2081/2080.1 permit and the Biological Opinion shall be implemented. Proponents of projects with the potential to impact desert tortoise will be required to obtain take authorization from USFWS as well as comply with compensatory mitigation requirements in the Biological Opinion. At the time that a specific project is proposed under the REGPA, USFWS and CDFW will have the opportunity to provide recommendations for project-specific compensatory mitigation that can be designed to effectively mitigate impacts resulting from the specific project. It is not possible to anticipate the potential range of impacts to desert tortoise that may or may not result from implementation of the REGPA. The REGPA does not authorize development in any SEDA; and it is unknown whether or to what extent solar projects would be proposed in any given SEDA. For those reasons, the EIR provides guidelines for mitigation at the programmatic level and leaves the development of specific mitigation measures to the project level.

Mitigation Measure BIO-6 states that projects shall not be sited within areas identified for desert tortoise recovery or conservation according to the Draft Revised Recovery Plan for the Mojave Population of the Desert Tortoise (*Gopherus agassizii*) (USFWS 2011) (such as designated critical habitat, ACECs, DWMA, priority connectivity areas, and other areas or easements managed for desert tortoises). This mitigation measure precludes solar development under the REGPA from occurring

within a desert tortoise priority connectivity area. Mitigation Measure BIO-21 has been modified to reflect this language.

Response 202-10: The potential for burrowing owl to occur in the Chicago Valley and Charleston View SEDAs has been added to the discussion of these SEDAs under Project Area Existing Conditions (Section 4.4.1.11), subsection Special Status Species and in the impact analysis in Section 4.4.3.1 Project Level Impacts to Biological Resources and 4.4.3.2 Impacts to Biological Resources for each Solar Energy Development Area and the Owens Valley Study Area. Therefore, the same measures will be implemented for burrowing owl in these SEDAs as in SEDAs where this species is known to occur.

The following bullet has been added to require mitigation for impacts to occupied burrowing owl habitat:

- Impacts to occupied burrowing owl habitat as defined by CDFW will be mitigated in compliance with the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) including restoration of temporarily disturbed habitats to pre-project conditions and compensatory mitigation for permanent impacts. A burrowing owl mitigation plan will be prepared and submitted to CDFW for approval prior to commencement of any ground disturbing activities. The plan will describe potential impacts to burrowing owl resulting from the proposed project and prescribe mitigation measures in accordance with CDFW guidelines.

Response 202-11: The potential for least Bell's vireo habitat in the Amargosa Watershed to be impacted by groundwater pumping in the Chicago Valley and Charleston View SEDAs has been identified in Section 4.4.1.11 *Project Area Existing Conditions* under the *Special Status Species* subsection for the two SEDAs, in the *Impacts to Least Bell's Vireo* subsection under Section 4.4.3.1 *Project Level Impacts to Biological Resources*, and in the discussion of the two SEDAs in Section 4.4.3.2 *Impacts to Biological Resources for each Solar Energy Development Area and the Owens Valley Study Area*.

The last paragraph of Mitigation Measure BIO -13 has been amended and requires compensatory mitigation for impacts to least Bell's vireo habitat:

For projects with the potential to result in direct or indirect impacts to least Bell's vireo or its habitat, Mitigation measures shall be developed in consultation with USFWS and CDFW and shall be implemented prior to project implementation. Such measures and shall include, but are not limited to, species specific habitat assessments and/or focused surveys to determine whether federally-listed bird species or their habitat are present in or adjacent to the project site, measures to avoid or minimize impacts to these species during construction and operation of the solar development, habitat restoration, and compensatory mitigation for loss of habitat that may include implementation of captive breeding programs.

Response 202-12: Mitigation measures to prevent impacts to migratory birds have been updated to address solar flux. The following requirement for a Bird and Bat Conservation Strategy (BBCS) has been added to Mitigation Measure BIO-18:

Bird and Bat Conservation Strategy

A bird and bat conservation strategy (BBCS) shall be prepared to reduce potential project impacts on migratory birds. The BBCS shall describe proposed actions to avoid, minimize, and mitigate adverse effects to migratory birds protected under the MBTA

during construction and operations of the proposed project. The BBCS shall be submitted to USFWS and CDFW for approval prior to the start of ground disturbing activities. The BBCS shall address buffer distances for specific bird species and include a robust, systematic monitoring protocol to document mortality and habitat effects to birds. The monitoring protocol should incorporate the following objectives at a minimum: (1) a minimum of weekly monitoring for mortality and immediate necropsy to determine cause of death, both during construction and throughout the life of the project; (2) systematic data collection and reporting of bird mortality including data on the following: species, date, time, how the animal died (e.g., exhaustion, trauma), as well as any information on what might be attracting animals to the photovoltaic cells (light, insects, etc.); (3) a method to estimate the overall annual avian mortality rate associated with the facility, including mortality associated with all the features of the project that are likely to result in injury and mortality (e.g., fences, ponds, solar panels); and (4) methods to determine whether there is spatial differentiation within the solar field in the rates of mortality (i.e., panels on the edge of the field versus interior of the field). Biologists performing this work would be required to have a Scientific Collecting Permit from CDFW. Standardized and systematic data on bird and bat mortalities will be collected to contribute to the improvement of the scientific communities' understanding of both baseline and photovoltaic related mortality that occurs in solar projects in the desert and is needed in order to identify improved methods to minimize adverse effects on migrating birds and bats.

In the absence of a permit from the USFWS, the temporary or permanent possession of protected migratory birds and their carcasses is a violation of the MBTA. Because of the need for carcass collection to adequately monitor avian impacts during BBCS implementation and to reduce the food subsidy that carcasses may provide to common ravens (*Corvus corax*) and other predators, developers shall be required to obtain a special purpose utility permit from the USFWS allowing the collection of migratory birds and/or their carcasses prior to implementation of the monitoring protocol.

In addition, the following bullet was added to *Minimize Impacts from Solar Flux* section in Mitigation Measure BIO-18:

- The County shall require developers proposing solar power tower technology to coordinate with the USFWS during project planning. As part of that coordination process, and in conjunction with the project's next tier of CEQA review, the USFWS will advise the County whether a Bird and Bat Conservation Strategy would be necessary for the project, and if required, would adequately reduce the effects of the project on migratory birds and bats.

Response 202-13: The following bullets were added to or altered in the General Bird Mortality Avoidance Measures in Mitigation Measure BIO-18 to address the "lake effect" as follows:

- The most current science regarding visual cues to birds that the solar panel is a solid structure shall be implemented. This may include but is not limited to UV-reflective or solid, contrasting bands spaced no further than 28 centimeters from each other. An adaptive management approach for reducing bird collisions with solar panels shall be implemented in coordination with the USFWS so that measures used are systematically tested and modified as appropriate. ~~This may include but is not limited to UV-reflective or solid, contrasting bands spaced no further than 28 centimeters from each other.~~

- Projects with documented avian mortality shall work with the USFWS to conduct additional research to test measures for reducing avian mortality. Such measures could include, but are not limited to, experimental lighting within the solar field and use of detection and deterrent technologies.
- Developers of Ppower tower operations shall be suspended during peak migration times for indicated species. implement adaptive management in consultation with the USFWS should mortality monitoring indicate that suspension of power tower operations during certain periods is necessary to reduce impacts on local or regional bird populations. Such measures may include, but are not limited to, suspending or reducing project operations during peak migration seasons.

Response 202-14: The following section was added to Mitigation Measure BIO-18 to address potential impacts from open evaporation ponds:

Minimize Impacts from Open Evaporation Ponds

The following mitigation measures shall be implemented for projects that require the use of open evaporation ponds:

- An evaporation pond management plan shall be prepared and submitted to CDFW for approval prior to project approval.
- If the use of open evaporation ponds is permitted for the project and especially if the water would be considered toxic to wildlife, ponds shall be designed to discourage bird and other wildlife use by properly netting or otherwise covering the pond.

Response 202-15: A discussion of potential indirect impacts to special-status fish down-watershed in the Amargosa Valley has been added to the Charleston View and Chicago Valley SEDA discussions in Chapter 4.4.1.11 under *Sensitive Habitats and Protected Natural Areas* as follows:

A substantial portion of the water in the Amargosa River system is thought to be supplied by groundwater within the SEDA. Therefore, impacts to groundwater in the SEDA could affect sensitive habitats down-watershed, including the portion of the Amargosa River that has been designated by Congress as “Wild and Scenic.”

And in the impacts to special-status fish section located in Chapter 4.4.3.1 as follows:

Special status fish species occurring in the Amargosa River system have the potential to be indirectly impacted by projects in the Charleston View or Chicago Valley SEDAs if projects implemented in those SEDAs were to result in impacts to groundwater, such as groundwater pumping.

The reader is directed to Response 202-4 for proposed amendment language to be inserted into Mitigation Measure BIO-4 to address groundwater investigations that may be necessary for projects proposed in Charleston View and Chicago Valley SEDAs.

Response 202-16: The following sentence has been added to Section 4.4.1.11 *Project Area Existing Conditions* under the *Special Status Species* subsection for the Chicago Valley SEDA:

Because floristic surveys have not been conducted in much of this SEDA, there is potential for special status plant species to occur in this SEDA that are not represented in Table 4.4-10.

The following sentence has been added to Section 4.4.1.11 *Project Area Existing Conditions* under the *Special Status Species* subsection for the Sandy Valley SEDA:

Because floristic surveys have not been conducted in much of this SEDA, there is potential for special status plant species to occur in this SEDA that are not represented in Table 4.4-12.

The following language was added to Mitigation Measure BIO-2:

Prior to the approval of any solar development projects or related infrastructure under the REGPA, a CDFW-approved botanist shall evaluate the potential for special status plant species to occur on the site and conduct surveys, if necessary, to determine presence or infer absence of special status plants on the site following the November 24, 2009 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* or the most current guidelines.

Response 202-17: Mitigation Measure BIO-2 has been updated to include more stringent botanical survey requirements, avoidance measures for rare plants, monitoring requirements and success criteria if transplantation is deemed appropriate, requirements for preparation of a mitigation and monitoring plan for rare plants, and requirements for preparation of a hydrologic study and management plan for projects proposed in the Chicago Valley or Charleston View SEDAs that would require groundwater pumping.

Response 202-18: The very high sensitivity of the Charleston View SEDA is addressed in “General Sensitivity Conclusions” in Section 4.5.3.2 (pgs. 4.5-30 to -31), including in Table 4.5-2. Specifically, the following are discussed: the Pahrump Paiute Home Landscape, the Pahrump Metapatch Mesquite Woodland-Coppice Dune Archaeological Landscape, and the Salt Song Trail in Section 4.5.1.1 (pgs. 4.5-17 to -18), citing the Hidden Hills Solar Electric Generating Systems – California Energy Commission Ethnographic Report. The Pahrump Paiute are discussed in the Modern Southern Paiute Tribes portion of Section 4.5.1.1 (pg. 4.5-8).

Response 202-19: The very high sensitivity of the Chicago Valley SEDA is discussed in “General Sensitivity Conclusions” in Section 4.5.3.2 of the Draft PEIR. As a program-level document, it is beyond the scope of this EIR to include resource-specific mitigation measures which will be dealt with on a project-by project basis, as specified in Section 4.5.3. The proposed mitigation measures meet the requirements of CEQA and California Health and Safety Code 7050.5 regarding the discovery of human remains in California. Federal regulations do not apply to this document.

Response 202-20: Consultation with Native American tribes is recommended in Section 4.5 of the Draft PEIR, including as an important preliminary project-specific resources identification method.

Response 202-21: The very high sensitivity of the Charleston View SEDA is discussed in “General Sensitivity Conclusions” in Section 4.5.3.2, including in Table 4.5-2. The Old Spanish Trail is specifically discussed in Section 4.5.1.1.

Response 202-22: As noted in Draft PEIR, Section 4.16.2, State CEQA Guidelines Section 15131 states, “[...]economic or social information may be included in an EIR or may be presented in whatever form the agency desires.” It is important to note that: “...(a) economic or social effects of a project shall not be treated as significant effects on the environment...” Being a programmatic CEQA analysis, to conduct a “full economic study” (as requested by the commenter) is out of the scope of the CEQA environmental review process for the REGPA. Such a study would require project specific parameters over the program’s life cycle to accurately assess both beneficial and adverse economic effects of long-term renewable energy development under the proposed REGPA. Therefore, any such study would be speculative and outside the requirements of CEQA for this planning effort.

Draft PEIR Section 4.16.3.4 identifies outdoor recreation as a vital part of the County’s economy, and that a disruption to available transient housing could result in adverse local economic impacts. Draft PEIR Section 4.16.4 (Relevant Renewable Energy General Plan Amendment Policies) identifies proposed Visual Resources or Economic Development Implementation Measure to develop a standardized method for the quantification of economic impacts from lost visual resources due to renewable energy solar facility development to the County's tourist economy. Section 4.16.3.4 identifies the potential for disruption to the local transient housing market to adversely affect outdoor recreation and support businesses. Additional recommendations are provided in Draft PEIR Section 4.16.5 to supplement proposed REGPA policies and further reduce the potential negative effects to the local transient housing market.

Although socioeconomic issues are not typically addressed in a topic specific EIR section, socioeconomics is an issue of concern to the County; therefore, the information provided in Section 4.16 of the Draft PEIR is presented for informational purposes to better inform County decision makers on the REGPA process. County decision makers will consider the concerns expressed by the commenter on potential adverse economic effects of the proposed REGPA. It should be noted that future renewable energy projects would undergo project-specific CEQA environmental review at the time a project application is received by the County. These future CEQA reviews would consider the programmatic analysis and the information from the REGPA process, including any adopted policy directive related to socioeconomics.

Response 202-23: The discussion provided in Draft PEIR Section 4.16.3.3 addresses the potential for renewable energy development to add to the County’s economic base, not the County’s employment base. Draft PEIR Section 4.16.3.2 acknowledges that employment from renewable energy development and construction of renewable energy facilities would likely result in the temporary in-migration of workers from outside of the County, and that operation and maintenance of such facilities and any associated transmission lines typically require relatively few workers. County decision makers will consider the concerns expressed by the commenter and petitioners on potential adverse economic effects of the proposed REGPA.

Response 202-24: While this comment is not specific to analysis provided within the Draft PEIR, public concern is that property values might decline as a result of deterioration of aesthetic quality, real or perceived health effects, or changes to existing land use patterns as a result of solar energy development. Such determinations prove speculative. Many studies on this subject conclude mixed findings regarding the impacts electric generation facilities and transmission infrastructure have on property values. While environmental concerns and public perceptions in some areas may lead a property owner to believe future renewable energy development will have a negative impact to their

property values, in other locations property values might increase because of access to employment opportunities associated with renewable energy development.

Because many factors can affect property values, to evaluate potential impacts from a renewable energy facility to a specific property requires project-specific details. Additionally, to accurately evaluate property values with and without a renewable energy facility, the facility would need to be constructed and before/after appraisals and sales data tracked for all properties potentially affected. Therefore, the needed data required to make an accurate determination for areas both within and surrounding the Charleston View and Chicago Valley SEDAs (with REGPA implementation) are not realistically available at this time, and any conclusions regarding effects on property values from implementation of renewable energy facilities would be speculative.

While the evaluation of potential adverse effects to property values is not required by CEQA and: "...(a) economic or social effects of a project shall not be treated as significant effects on the environment...", County decision makers will consider the concerns expressed by the commenter regarding the potential adverse effects of the proposed REGPA.

Response 202-25: The comment notes an opinion that Mitigation Measure AQ-3 is not sufficient and needs to be revised. The mitigation measure states that dust control measures shall be incorporated into project design once individual projects are proposed, and lists some types of dust control measures that could be utilized. Mitigation Measure AQ-3 of the PEIR has been modified to clarify the benefit from wind deflectors and to include additional measures to reduce windblown dust during project operation as presented below.

MM AQ-3: Implement dust control measures during operation.

To control emissions of particulate matter, and to ensure compliance with GBUAPCD Rules 401 and 402 as well as applicable BMPs from REAT's Best Management Practices and Guidance Manual (REAT 2010), solar projects shall incorporate feasible dust control measures into the site design including, but not limited to, the following:

- Incorporate perimeter sand fencing into the overall design to prevent migration of exposed soils into the surrounding areas. The perimeter fence is intended to provide long-term protection around vulnerable portions of the site boundary; it is also intended to prevent off-road site access and sand migration across site boundaries and the associated impacts.
- Incorporate wind deflectors intermittently across solar project sites. The solar panels themselves, especially where installed to transverse primary wind direction, will provide some measure of protection of the ground surface. Wind deflectors enhance this effect by lifting winds that may otherwise jet beneath panels, thereby disrupting long wind fetches, and reducing surface wind velocities and sand migration.
- Orient infrastructure/solar panels perpendicular to primary wind directions; ~~and~~
- Adjust panel operating angles to reduce wind speeds under panels.
- Perform revegetation in areas temporarily denuded during construction. These areas would be replanted with native plant species that exist on the site presently.

Irrigation would be applied temporarily during the plant establishment period (typically multiple years), but after establishment it is expected that these areas would require little or no maintenance. Vegetation provides dust control by protecting and preventing threshold wind velocities at the soil surface. Studies have shown that an 11 to 54 percent vegetation cover on a site can provide up to 99 percent PM10 control efficiency (GBUAPCD 2008).

- As the installation of solar panels and associated equipment progresses, each area that is completed (i.e., where no further soil disturbance is anticipated) will be treated with a dust palliative to prevent wind erosion. CARB certifications indicate that the application of dust suppressants can reduce PM₁₀ emissions by 84 percent or more (CARB 2011).

Response 202-26: As previously stated in the Response 202-1, all future projects under the REGPA would be subject to project-specific environmental review. Depending on the size and location of the development and the technology used, a Subsequent EIR may be required. However, the REGPA also encourages small scale, photovoltaic (PV) solar facilities to be constructed which may not require a full EIR. As stated in Section 1.2 of the PEIR:

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

It should be noted that under Title 21 of the Inyo County Code concerning renewable energy development, any person who proposes to construct an electric transmission line, solar thermal renewable energy facility or a PV renewable energy facility in the County must first obtain a Renewable Energy Permit, a Renewable Energy Development Agreement or a Renewable Energy Impact Determination. A Renewable Energy Impact Determination applies to projects over which the County has limited authority because the project is located on federal or state land or is subject to the permitting jurisdiction of the California Energy Commission.

Under Title 21, the issuance of a Renewable Energy Permit is subject to CEQA, and the County Planning Commission must conduct a noticed public hearing before considering approval of such a permit. The Planning Commission must find that there has been compliance with CEQA before a permit can be issued. In addition, "as a condition to the issuance of such a permit, the Planning Commission may impose such reasonable and feasible mitigation measures as it finds to be necessary to protect the health, safety, and welfare of the county's citizens, the county's environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project." Finally, the Planning Commission is required to impose as a condition of approval, a plan for the reclamation/revegetation of the project site at the time of decommissioning of the project and the Planning Commission shall require financial assurances from the applicant to ensure that the reclamation plan will be fully implemented.

Concerning Renewable Energy Development Agreements, Title 21 provides that such agreements may be entered into by the County and a project applicant in lieu of obtaining a Renewable Energy

Development Permit. Renewable Energy Development Agreements are subject to CEQA and must be approved by an ordinance adopted by the Board of Supervisors following a noticed public hearing. Prior to approving such an agreement, the Board must find that there has been compliance with CEQA. Renewable Energy Development Agreements must include a reclamation plan, acceptable financial assurances to ensure full implementation of the reclamation plan, be consistent with the county general plan and be enforceable by injunctive relief or other enforcement mechanisms under law. In the Renewable Energy Development Agreement, the Board of Supervisors may require such mitigation measures or modifications of the project as it finds necessary to protect the health, safety, and welfare of the county's citizens, the county's environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.

Response 202-27: It is acknowledged that much of the land within the County (approximately 92 percent) consists of federal land managed by federal agencies (refer to Table 4.1-2 in the PEIR). Solar energy projects proposed on federal lands within the SEDAs or the OVSA would be regulated by the federal agency with jurisdiction of the specific project site, including analysis of impacts to visual resources (refer to MM AES-8 in the PEIR). The PEIR also concludes that proposed installation of solar energy projects on BLM-managed federal land would require coordination with BLM and compliance with BLM visual guidelines. Given the designated high value of visual resources within these areas, proposed solar energy developments (including utility-scale solar development) within BLM VRI Class I, II, and III areas were assessed as resulting in significant visual impacts.

Response 202-28: Because the REGPA PEIR is a program level document, it is intended to establish a framework and process for future implementation of solar energy projects that fall within the parameters evaluated in the PEIR. Individual projects will be required to prepare a project-specific environmental analysis and associated CEQA document to evaluate the project's potential impacts, including an assessment of the visual changes resulting from a specific future solar development project compared to the existing condition. Specifically, Mitigation Measure AES-1 in the PEIR requires a project-specific visual study that includes assessment of the existing visual environment, including existing views, scenic vistas, and visual resources, as well as an analysis of the potential of the proposed solar energy project to adversely impact resources and degrade the visual character or quality of the site and its surroundings.

Response 202-29: As described in the PEIR, although the SEDAs have been identified to direct and constrain utility-scale and commercial scale solar development in the County, not all areas within the proposed SEDA boundaries may be suitable for development (refer to Response 202-1). Therefore, although existing and proposed ACECs and National Conservation Lands overlap the SEDAs, constraints within the SEDAs will be identified during subsequent, project-specific environmental review under CEQA, as outlined in the PEIR. These constraints include critical habitat, ACECs, National Conservation Lands, military readiness conflict areas, and cultural resource areas, among others. All future projects under the REGPA would be subject to project-specific environmental review, which would include pinpointing the appropriate siting to avoid protected areas. This has been clarified in the Final PEIR. The reader is directed to Response 202-1 for the revisions to Project Objective Number 3.

Further, the County has limited influence over public, state, and LADWP-managed lands in the County. The ACEC's and National Conservation Lands within the SEDAs are BLM-managed, and the County has no regulatory authority over those areas. The following statement has been added to Section 1.2 of the PEIR:

The County is solely responsible for the lands under its own jurisdiction. Any future development in the SEDAs or OVSA involving public, state, and LADWP-owned lands would require coordination with the appropriate land managing agency and would be subject to environmental review and land use constraints consistent with the regulations applicable to that jurisdiction.

Response 202-30: The SEDA boundaries depicted in the PEIR have been identified based on the opportunities and constraints described in the Opportunities and Constraints Technical Study (Appendix D of the PEIR), and further refined based on feedback received through the agency scoping and public planning process (Section 3.1.1 of the PEIR). As described in the PEIR, although the SEDAs have been identified to direct and constrain utility-scale and commercial scale solar development in the County, not all areas within the proposed SEDA boundaries may be suitable for development (refer to response to comment 202-1). Therefore, the SEDA boundaries as presented in the Draft PEIR are not modified for the Final PEIR – rather, constraints within the SEDAs will be identified through subsequent, project-specific environmental review and planning processes, as outlined in the PEIR and described below.

Development in the Laws SEDA has the potential to conflict with the 1991 LADWP/Inyo County Long Term Water Agreement, the 1997 Memorandum of Understanding, and the Owens Valley Land Management Plan. Future solar energy projects under the REGPA will undergo project specific analysis, which will include an evaluation of consistency with existing plans and regulatory framework such as the 1991 LADWP/Inyo County Long Term Water Agreement, the 1997 Memorandum of Understanding, and the Owens Valley Land Management Plan, as appropriate. Refer to Sections 2.4.3.3 *Inyo County/Los Angeles Long Term Water Agreement*, 2.4.3.4 *1997 Memorandum of Understanding*, and 2.4.3.6, *Owens Valley Land Management Plan*.

The Rose Valley, Pearsonville, and Sandy Valley SEDAs have been identified as having biological and/or groundwater land use conflicts with solar development under the REGPA. As stated in the first paragraph of this response, the SEDAs have been identified based on certain constraints, and as required in the PEIR, further project-specific studies would need to be conducted. Similarly, the County agrees that the Owens Lake SEDA contains areas with biological resources that should be avoided; however, portions of the Owens Lake contain degraded land potentially suitable for solar development. The discussion of the Owens Lake in Section 3.3.3 has been updated as outlined below to clarify that the lake contains some areas with sensitive resource value that would not be suitable for development, but should be investigated for areas that would be more suitable:

As described in Section 2.2.1.1, mitigation efforts have been applied to areas of the lake, and some habitat value has been restored; however, large expanses of alkali flat remain that continue to be a source of airborne dust in the valley. The lake is being included in the SEDAs as an area to consider for solar development because if untreated areas of the lake with low habitat value and lacking other sensitive resources are identified through subsequent environmental review and are able to be developed, the development could provide some dust mitigation while meeting the objectives of the REGPA.

In 2009, LADWP announced that it would be pursuing a 550-kW PV solar demonstration project on a 5.3-acre area located within the 2.03-square mile Owens Lake Phase 8 dust mitigation area on the northwest section of the lake bed, south of Lone Pine. This area has been treated with gravel as part of the dust mitigation efforts. The LADWP completed a Mitigated Negative Declaration (2013) on the solar demonstration project.

General construction subsequently began in mid-August 2014 and plans for project completion are set for early 2016. The demonstration project is being implemented to determine whether Owens Lake is a suitable location for larger-scale energy production. The solar demonstration project is on SLC-leased lands, in which the SLC approved a lease amendment to LADWP for the demonstration project. However, renewable energy projects are not, *per se*, consistent with the Public Trust but SLC staff will continue to evaluate each proposed renewable energy project on sovereign lands on a case-by-case basis for consistency with Public Trust principles, values, and needs specific to that location.

Response 202-31: The reader is directed to Response 202-30.

Response 202-32: The Charleston View and Chicago Valley SEDAs have not been removed from the REGPA at this time due to reasons provided in the Responses 202-1 and 202-15.

Response 202-33: A range of project alternatives was considered for detailed evaluation in the PEIR, and compared against the factors outlined in Section 15126(f) of the State CEQA Guidelines for feasibility. The list of alternatives outlined and analyzed in Section 6.3 of the PEIR includes the Commercial Scale Only Alternative (referred to as the Distributed Generation Only Alternative in the Draft PEIR), as the comment suggests. This alternative is identified as being environmentally superior to the proposed project, including with respect to groundwater, but would still potentially result in significant and unavoidable impacts to aesthetics, biology, and cultural resources. The County encourages small-scale and community scale development in the County.

The REGPA is a long term planning policy; and although the County does not specifically advocate the development of utility scale solar thermal facilities within the County, it would not preclude permitting the development of the technology in areas deemed suitable, and as long as the development is consistent with the goals and policies of the General Plan and REGPA., if approved. Mitigation measures Mitigation Measure BIO-requires project-specific evaluation of effects on biological resources from groundwater pumping for projects with the potential to pump groundwater, and mitigation measure Mitigation Measure HYD-2 requires site-specific groundwater investigations to guide siting and design.

Response 202-34: The bulleted responses listed below correspond with the bulleted list of comments contained in the letter.

- Resource conflicts not considered in the DPEIR that were identified during the comment period have been addressed.
- Desktop review of habitats and sensitive biological resources known to occur or having the potential to occur in the SEDAs and the OVSA was considered the appropriate level of review for this programmatic document. The CNDDDB was not relied upon exclusively for the desktop review. Lists of regionally-occurring special status species with the potential to occur in the SEDAs or the OVSA were compiled from the USFWS endangered and threatened species list for the County, spatial data (geographic information systems) of regionally-occurring special status species within each SEDA and the OVSA obtained from the California Natural Diversity Database, the BLM list of special status plants and list of special status animals in California, and the DRECP list of covered species (Dudek et al. 2012). Additional special status species with the potential to occur were identified by reviewing publicly available documents, including the Southern Owens Valley Solar Ranch Project EIR (LADWP 2013) and the Hidden Hills Solar Electric Generating System Preliminary Staff

Assessment. In addition, the document states that these lists may not be inclusive of all special status species with the potential to occur (i.e., rare plants or animals that have not previously been identified in an area have the potential to occur if suitable habitat is present); however, it was not deemed feasible or necessary to do a more comprehensive evaluation for this PEIR because site specific biological studies will be required for each individual project that obtains CEQA coverage under this PEIR.

- A Supplemental Draft PEIR is not warranted; the PEIR has been updated to reflect resource conflicts not addressed in the Draft PEIR. These modifications do not constitute significant new information that would compel re-circulation under Section 15088.5 of the State CEQA Guidelines.

Response 202-35: Where feasible at a program level, issues identified in this letter and in comments received from others as not having been addressed in the Draft PEIR have been incorporated into the Final PEIR. As previously stated in the response to comment 202-1, all future projects under the REGPA would be subject to project-specific environmental review. Depending on the size and location of the development and the technology used, a Subsequent EIR may be required. However, the REGPA also encourages small scale, photovoltaic (PV) solar facilities to be constructed which may not require a full EIR. As stated in Section 1.2 of the PEIR:

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

It should be noted that under Title 21 of the Inyo County Code concerning renewable energy development, any person who proposes to construct an electric transmission line, solar thermal renewable energy facility or a PV renewable energy facility in the County must first obtain a Renewable Energy Permit, a Renewable Energy Development Agreement or a Renewable Energy Impact Determination. A Renewable Energy Impact Determination applies to projects over which the County has limited authority because the project is located on federal or state land or is subject to the permitting jurisdiction of the California Energy Commission.

Under Title 21, the issuance of a Renewable Energy Permit is subject to CEQA, and the County Planning Commission must conduct a noticed public hearing before considering approval of such a permit. The Planning Commission must find that there has been compliance with CEQA before a permit can be issued. In addition, "as a condition to the issuance of such a permit, the Planning Commission may impose such reasonable and feasible mitigation measures as it finds to be necessary to protect the health, safety, and welfare of the county's citizens, the county's environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project." Finally, the Planning Commission is required to impose as a condition of approval, a plan for the reclamation/revegetation of the project site at the time of decommissioning of the project and the Planning Commission shall require financial assurances from the applicant to ensure that the reclamation plan will be fully implemented.

Concerning Renewable Energy Development Agreements, Title 21 provides that such agreements may be entered into by the County and a project applicant in lieu of obtaining a Renewable Energy Development Permit. Renewable Energy Development Agreements are subject to CEQA and must be approved by an ordinance adopted by the Board of Supervisors following a noticed public hearing. Prior to approving such an agreement, the Board must find that there has been compliance with CEQA. Renewable Energy Development Agreements must include a reclamation plan, acceptable financial assurances to ensure full implementation of the reclamation plan, be consistent with the county general plan and be enforceable by injunctive relief or other enforcement mechanisms under law. In the Renewable Energy Development Agreement, the Board of Supervisors may require such mitigation measures or modifications of the project as it finds necessary to protect the health, safety, and welfare of the county's citizens, the county's environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.

Response 202-36: The reader is directed to Responses 202-2 through 202-5, and 202-15 above for detailed information relating to this comment.

Response 202-37: Please refer to Response 202-27.

Response 202-38: Closing statement. No response is necessary.



CENTER for BIOLOGICAL DIVERSITY

Because life is good.

*protecting and restoring natural ecosystems and imperiled species through
science, education, policy, and environmental law
VIA USPS & EMAIL*

11/17/2014

Josh Hart, Planning Director
Inyo County Planning Department
168 North Edwards Street
Post Office Drawer L
Independence, California 93526
inyoplanning@inyocounty.us

Dear Director Hart,

We request an extension to the public comment period in order to adequately review and provide comments on the proposed Renewable Energy General Plan Amendment (REGPA) Draft Environmental Impact Report (DEIR). The DEIR is over 800 pages and a 45 day comment period is an unreasonable time to review the document and provide thoughtful, well-researched comments. Therefore we respectfully request an additional 45 days, for a total of 90 days, for the comment period.

203-1

We believe this request is reasonable based on the size of the DEIR and the complexity of the issues, especially in light of the overlap physically and temporally with the draft Desert Renewable Energy Conservation Plan (DRECP).

Thank you for your consideration on this matter. Please notify us of your decision at your earliest convenience.

Sincerely,

Ilene Anderson
Senior Scientist,
Center for Biological Diversity

Arizona • California • Nevada • New Mexico • Alaska • Oregon • Washington • Illinois • Minnesota • Vermont • Washington, DC

Ilene Anderson, Senior Scientist
8033 Sunset Boulevard, #447 • Los Angeles, CA 90046-2401
tel: (323) 654.5943 fax: (323) 650.4620 email: ianderson@biologicaldiversity.org
www.BiologicalDiversity.org

Response to Letter 203 – Center for Biological Diversity

Response 203-1: The public comment period for the Draft PEIR opened on November 5, 2014 and was originally slated to close on December 19, 2014, meeting the mandated 45-day comment period per Section 15105 of the State CEQA Guidelines. However, the County received multiple requests from potential reviewers of the document to extend the comment period. Accordingly, on December 4, 2014 the County approved the extension of the public comment period to January 14, 2015 (a total of 71 days).

All future projects under the REGPA would be subject to project-specific environmental review. Depending on the size and location of the development and the technology used, a Subsequent EIR may be required. However, the REGPA also encourages small scale, photovoltaic (PV) solar facilities to be constructed which may not require a full EIR. As stated in Section 1.2 of the PEIR:

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

It should be noted that under Title 21 of the Inyo County Code concerning renewable energy development, any person who proposes to construct an electric transmission line, solar thermal renewable energy facility or a PV renewable energy facility in the County must first obtain a Renewable Energy Permit, a Renewable Energy Development Agreement or a Renewable Energy Impact Determination. A Renewable Energy Impact Determination applies to projects over which the County has limited authority because the project is located on federal or state land or is subject to the permitting jurisdiction of the California Energy Commission.

Under Title 21, the issuance of a Renewable Energy Permit is subject to CEQA, and the County Planning Commission must conduct a noticed public hearing before considering approval of such a permit. The Planning Commission must find that there has been compliance with CEQA before a permit can be issued. In addition, “as a condition to the issuance of such a permit, the Planning Commission may impose such reasonable and feasible mitigation measures as it finds to be necessary to protect the health, safety, and welfare of the county’s citizens, the county’s environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.” Finally, the Planning Commission is required to impose as a condition of approval, a plan for the reclamation/revegetation of the project site at the time of decommissioning of the project and the Planning Commission shall require financial assurances from the applicant to ensure that the reclamation plan will be fully implemented.

Concerning Renewable Energy Development Agreements, Title 21 provides that such agreements may be entered into by the County and a project applicant in lieu of obtaining a Renewable Energy Development Permit. Renewable Energy Development Agreements are subject to CEQA and must be approved by an ordinance adopted by the Board of Supervisors following a noticed public hearing. Prior to approving such an agreement, the Board must find that there has been compliance with CEQA. Renewable Energy Development Agreements must include a reclamation plan, acceptable financial

assurances to ensure full implementation of the reclamation plan, be consistent with the county general plan and be enforceable by injunctive relief or other enforcement mechanisms under law. In the Renewable Energy Development Agreement, the Board of Supervisors may require such mitigation measures or modifications of the project as it finds necessary to protect the health, safety, and welfare of the county's citizens, the county's environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.

**California Native Plant Society
Defenders of Wildlife
Natural Resources Defense Council
The Wilderness Society**

November 18, 2014

Joshua Hart
Inyo County Planning Department
P.O. Drawer
Independence, CA 93526
Sent via email to: JHart@inyocounty.us

RE: Inyo County Proposed Renewable Energy General Plan Amendment

Dear Josh,

We are writing to request an extension of time to provide comments on Inyo County's proposed Renewable Energy General Plan Amendment (REGPA) and accompanying draft Environmental Impact Report (EIR). We request an extension of 45 days, bringing the total comment period to 90 days.

As you know, our organizations were deeply involved in the REGPA process last winter and spring. We participated in the pre-CEQA stakeholder meetings, public meetings and multiple discussions before the Board of Supervisors on the proposed action. We also sent detailed comment letters to the Planning Commission and the Board of Supervisors with our recommendations on the REGPA.

We request an extension for the following reasons:

1. We need additional time in order to do the due diligence that is required of this important plan. Due to the holiday season, some of us will be out of the office on vacation when the comments are due the week of Dec. 15.
2. We are in the midst of scheduling field visits to places including Trona and the southern Owens Valley in order to more closely assess some of the areas proposed as Solar Energy Development Areas (SEDAs) in the REGPA draft EIR. Unfortunately, we won't be able to visit some of these areas before the week of January 5-9, 2015.
3. We need additional time to do a comparative analysis between the proposed REGPA and the draft DRECP. It is our hope that when these two plans are ultimately adopted they will be in sync with one another. It will take time for our biologists and GIS staff to conduct this analysis, which we hope will help Inyo County make the best decisions as to

204-1

appropriate locations for potential renewable energy development. We intend to share the results of our analysis with the County via our comments.

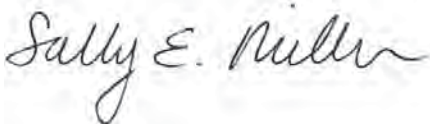
4. The draft EIR is large (800+ pages) and the material is very complex, which together merit substantial additional time in order that the public and other stakeholders can conduct a thorough analysis of the document and provide meaningful comments.

204-1
(cont'd)

We also request that the Planning Commission public hearing on the REGPA be rescheduled from the tentative date of December 3 to a date in the new calendar year that is in sync with an extended comment period.

Thank you for considering our request.

Sincerely,



Sally Miller
The Wilderness Society



Stephanie Dashiell
Defenders of Wildlife



Helen O'Shea
Natural Resources Defense Council



Greg Suba
California Native Plant Society

Response to Letter 204 – California Native Plant Society, Defenders of Wildlife, Natural Resources Defense Council, and The Wilderness Society

Response 204-1: The Planning Commission public hearing on the REGPA was held on December 3, 2014. The public comment period for the Draft PEIR opened on November 5, 2014 and was originally slated to close on December 19, 2014, meeting the mandated 45-day comment period per Section 15105 of the State CEQA Guidelines. However, the County received multiple requests from potential reviewers of the document to extend the comment period. Accordingly, on December 4, 2014 the County approved the extension of the public comment period to January 14, 2015 (a total comment period of 71 days).



January 14, 2015

Ms. Cathreen Richards, Senior Planner
Inyo County Planning Department
PO Drawer L, Independence, CA
93526

Delivered via email to: crichards@inyocounty.us, and inyoplanning@inyocounty.us

Dear Ms. Richards:

The California Native Plant Society (CNPS) provides the following comments regarding botanical concerns addressed in the Program Environmental Impact Report (PEIR) for the Inyo County Renewable Energy General Plan Amendment (REGPA).

CNPS is a non-profit organization working to protect California's native plant heritage and preserve it for future generations. Our nearly 10,000 members professional and volunteers who work to promote native plant conservation through 34 chapters across California and Baja California. Our local CNPS Bristlecone Chapter has members from Inyo and Mono counties, as well as throughout California and from countries across the globe. The attraction of these hundreds of members is the vast and beautiful landscapes – montane and desert – where uniquely intriguing, diverse and sensitive vegetation occur. Local residents and visitors appreciate the lack of human disturbance that offers the increasingly rare opportunity for spacious solitude and provide safe harbor for our native plant and animal life.

205-1

CNPS supports renewable energy generation via large-array utility scale projects only when sited on already-disturbed lands, e.g., brownfields and fallow, mechanically disturbed agricultural lands, and when located near existing transmission lines. We oppose the siting of large-array renewable energy projects sited in functionally intact areas on public trust lands, both in the desert and elsewhere.

The REGPA will govern solar development on public lands for at least 20 years. Therefore, development of large-scale projects must be sited on places with the fewest impacts on intact plant and animal habitats, natural resources, and endangered species. CNPS strongly urges the County to choose a combined the Distributed Generation and Photo Voltaic Alternative, which would provide a program for developing solar energy while still protecting our Inyo County lands.

Programmatic Level Comments

The DEIR's proposed mitigation measures BIO-1 and BIO-20 are insufficient and need to be revised

205-2

The REGPA DEIR is meant to provide a programmatic-level analysis of environmental impacts and recommendations on avoidance and mitigation of impacts to plant resources occurring within SEDAs. Mitigation and monitoring measures for impacts of large-scale projects to botanical resources, including groundwater-dependent ecosystems (GDEs), riparian communities, and plant communities associated with waters of the state, must be specific and detailed. The REGPA DEIR can and must make this recommendation for more specificity and detail by revising mitigation measures BIO-1 and BIO-20 in the following ways.

Groundwater-dependent ecosystems (GDEs)

The DEIR fails to provide programmatic requirements for how project that tier from the PEIR will avoid and mitigate impacts to plant communities as they are related to hydrology and water resources groundwater dependent ecosystems other than to reference a minimum requirement to develop a biological resource mitigation and monitoring plan (BRMMP). Additional language should be included to describe further the kinds of information and guidance required in a project-level BRMMP. The DEIR should require that all project sites that may affect intermittent and perennial streams, swales, ephemeral washes, wetland natural communities, or sites occupied by sensitive aquatic species due to ground water or surface water extraction will conduct hydrologic studies during project planning to determine the potential effect of ground water and surface water extraction on the hydrologic unit. These studies will include both watershed effects as well as effects on the deep aquifer. Projects that are likely to affect ground-water resources in a manner that would result in substantial loss of riparian and wetland natural communities and/or habitat for sensitive aquatic species will be prohibited.

205-2
(cont'd)

We recommend the DEIR include reference to GDE-related Condition of Certification developed by the California Energy Commission (CEC) for the Hidden Hills Solar Energy Generating Systems project (cf. Condition of Certification BIO-23, in December 2012 HHSEGS FSA, Biological Resources pp. 4.2-276 to 282. BIO-23) as a model example for the level of detail that is both necessary to determine and mitigate for impacts, and feasible and implementable for project applicants.

Delineation of and mitigation for jurisdictional waters of the state

Subsequently proposed projects must conduct site-specific surveys to identify and map natural communities using the most current information, data sources, and tools (e.g., CDFW vegetation layers, aerial photos, other sources of digitized data, and reconnaissance site visits) to identify and/or delineate the natural communities, rare plant alliances, and special natural community features (e.g., BLM Unusual Plant Assemblages, aeolian sand transport resources, Joshua tree, microphyll woodland communities, seeps) present. Surveys must comply with the most recent and applicable assessment protocols and guidance documents for natural communities and jurisdictional waters and wetlands, e.g., recently developed CDFW guidelines for delineating waters of the state occurring across

205-3

dryland alluvial fans.¹ The proposed mitigation measures BIO-1 and BIO-20 of the REGPA DEIR should be revised to reference these new CDFW guidelines. 205-3 cont'd

Plant-related avoidance and mitigation measures

While the REGPA DEIR's proposed mitigation measures for Biological Resources consider many factors related to subsequently proposed project impacts, the DEIR fails to consider the adequacy of existing data when determining what level of analysis will be done during project review. We provide the following comments regarding the REGPA DEIR's proposed mitigation measures for Biological Resources. 205-4

BIO-1 should be amended to reflect the lack of adequate vegetation mapping and plant survey data for most of the SEDA lands, and read, "The level of analysis [of biological resource evaluation] will be based on factors such as the size of the proposed project, the extent of impacts to biological resources, and the sufficiency of existing data determine impacts."

Transmission

Subsequently proposed projects should be considered only if near existing transmission lines. Maintaining a small footprint to support energy development will lessen the impacts to the environments and reduce infrastructure costs. 205-5

Conflicts with the DRECP Protected Areas

There are conflicts between the DRECP preferred alternative and the REGPA preferred alternative. Specifically, lands which Inyo County has proposed to include within the SEDAs, the DRECP has proposed to designate as National Conservation Lands. Indeed, all of the federal lands within both the Charleston View and Chicago Valley SEDAs are proposed for designation as both National Conservation Lands and as Areas of Critical Environmental Concern (ACECs). The REGPA should be amended to exclude any areas being proposed for conservation status in the DRECP, at least until such a point when a Record of Decision has been issued for the DRECP. 205-6

Transplantation of native plants

Transplantation of rare native plants and/or plant communities should be considered only as a mitigation measure of last recourse. There is a paucity of substantial evidence available on the long-term success of transplanting to mitigate impacts on desert rare plants and rare plant communities. The preponderance of evidence to date demonstrates that transplanting naturally occurring wild plants does not represent a successful method of long-term conservation. For more information regarding our reservations for using transplantation as mitigation for rare plants, please refer to the CNPS Policy on Transplanting and the CNPS Policy on Mitigation Guidelines Regarding Impacts to Rare, Threatened, and Endangered Plants, which are all available via our website at www.cnps.org. 205-7

¹ Vyverberg, K.A. and R. Brady. 2013. *MESA: Mapping Episodic Stream Activity*. Published by the California Department of Fish and Wildlife, Conservation Engineering Ecosystem Conservation Division, for the California Energy Commission. July 2013.

Avoidance

CNPS strongly urges the County to avoid impacts to rare plant populations and communities to the greatest degree possible.

205-8

CEQA exemption for projects up to 20 MW

While CNPS supports the concept of distributed generation of renewable energy. The DEIR states that, "Solar energy projects up to 20 MW may be exempt from further CEQA analysis, unless an event specified in Public Resources Code Section 21166 occurs, in which case a Supplemental EIR or other CEQA document may be required." DEIR Executive Summary at p. ES-7. A report issued by NREL in June 2013² found that 1-20 MW solar photovoltaic (PV) projects in the U.S. require 8.3 acres/MW on average. This could result in several ground-mounted PV facilities of 100 acres or more, and impacts to rare and sensitive native plant species and natural communities, even when sited adjacent to already existing structures. For this reason, we emphasize the need to fully consider impacts from ground-mounted distributed generation projects, both individually and cumulatively, before pursuing a project CEQA exemption as described in the DEIR.

205-9

SEDA-specific comments

Our comments below list known botanical resources located within and near (<2km) the boundaries of the eight draft Solar Energy Development Areas (SEDAs). Rare plant information comes from a search of rare plant occurrences in the California Natural Diversity Database (CNDDDB, January 2015). Other plant community information comes from the Central Mojave Vegetation Database, available online via the CDFW VegCAMP website. At a minimum, the County must include these botanical resources in the PEIR's environmental assessment of proposed development areas.

As noted below, it will not be possible to disclose potential impacts to botanical resources for much of the proposed SEDA lands since no rare plant surveys or fine-scale vegetation mapping has been completed for these areas. Both CNPS and CDFW have developed rare plant survey and vegetation mapping guidelines (both available online) to help determine when a botanical survey is needed, who should be considered qualified to conduct such surveys, how surveys should be conducted, and what information should be contained in the survey report. We recommend using these guidelines on subsequently proposed projects within SEDAs.

205-10

Eastern Solar Energy Group

CNPS strongly opposes solar energy development in the Eastern SEDAs based on the following concerns.

Charleston View SEDA

Some of the lands within this proposed SEDA have not been surveyed for rare plants.

² Ong, Sean, and others, Land-Use requirements for Solar Power Plants in the United States, National Renewable Energy Laboratory, (NREL/TP-6A20-56290, June 2013), available at <http://www.nrel.gov/docs/fy13osti/56290.pdf>.

Comprehensive rare plant surveys and vegetation mapping will need to be completed on lands proposed for development in order to assess potential impacts to, and avoidance / mitigation measures for rare plant species and communities. The botanical resources included in the table below are known to occur within and/or near the Charleston View SEDA.

Rare Plants

Scientific name	Common name	FED List	CA List	G Rank	S Rank	CRPR
<i>Acleisanthes nevadensis</i>	desert wing-fruit	None	None	G5	S1	2B.3
<i>Allium nevadense</i>	Nevada onion	None	None	G4	S2	2B.3
<i>Androstephium breviflorum</i>	small-flowered androstephium	None	None	G5	S2S3	2B.2
<i>Astragalus nyensis</i>	Nye milk-vetch	None	None	G3	S1	1B.1
<i>Astragalus preussii</i> var. <i>preussii</i>	Preuss' milk-vetch	None	None	G4T4	S1	2B.3
<i>Astragalus sabulorum</i>	gravel milk-vetch	None	None	G5	S2	2B.2
<i>Astragalus tidestromii</i>	Tidestrom's milk-vetch	None	None	G4G5	S2	2B.2
<i>Chaetadelpa wheeleri</i>	Wheeler's dune-broom	None	None	G4	S2	2B.2
<i>Cymopterus multinervatus</i>	purple-nerve cymopterus	None	None	G5?	S2	2B.2
<i>Ephedra torreyana</i>	Torrey's Mormon-tea	None	None	G5?	S1	2B.1
<i>Eriogonum bifurcatum</i>	forked buckwheat	None	None	G3	S3	1B.2
<i>Eriogonum contiguum</i>	Ash Meadows buckwheat	None	None	G2	S2	2B.3
<i>Mentzelia pterosperma</i>	wing-seed blazing star	None	None	G4	S2	2B.2
<i>Peteria thompsoniae</i>	spine-noded milk vetch	None	None	G4	S1	2B.3
<i>Phacelia pulchella</i> var. <i>gooddingii</i>	Goodding's phacelia	None	None	G5T2T3	S2	2B.3
<i>Sclerocactus johnsonii</i>	Johnson's bee-hive cactus	None	None	G3G4	S2.2	2B.2

205-10
cont 'd

Additionally, while the PEIR makes no mention of it, there is limited but existing mesquite bosque habitat in the Charleston View SEDA. The presence of this rare habitat type on the Charleston View site is exemplary of its remarkable diversity. Proposed mitigation measures for biological resources fail to provide sufficient detail regarding how impacts to groundwater-dependent ecosystems (GDEs), including mesquite bosque habitat, will be avoided and mitigated (see our comments regarding recommended revisions to BIO-1 and BIO-20).

The areas around Shoshone and Tecopa have irreplaceable cultural sites and history tied to the Spanish trail. These significant historical and cultural areas are extremely important to the vitality of these small communities and provide an economic driver for the area. Another key concern with development in this area is the strain on already stressed water resources. A recent study by Hydrogeologist Andy Zdon examining water resources in the Amargosa River Basin shows the hydrology and groundwater recharge of Charleston View inextricably linked to the Amargosa River and its spring sources³. The flow (above and below ground) of the river is highly sensitive to groundwater changes. The groundwater in this basin is

205-11

³ Zdon, Andy. 2014 State of the Basin Report: Amargosa River Basin Inyo and San Bernardino Counties, California and Nye County Nevada. June 28, 2014. The Nature Conservancy.

already overdrawn and will not support any type of renewable energy development. The small spring systems, tied to groundwater recharge, within the nearly 1,000 square mile basin, are life lines for desert wildlife.

205-11
(cont'd)

Chicago Valley SEDA

Most of the lands within this proposed SEDA have not been surveyed for rare plants. Comprehensive rare plant surveys and vegetation mapping will need to be completed on lands proposed for development in order to assess potential impacts to, and avoidance / mitigation measures for rare plant species and communities. The botanical resources below are known to occur within and/or near the Chicago Valley SEDA.

Rare plant species

Scientific name	Common name	FED List	CA List	G RANK	S RANK	CRPR
<i>Atriplex argentea</i> var. <i>longitrichoma</i>	Pahrump orache	None	None	G5T2	S2	1B.1
<i>Eriogonum bifurcatum</i>	forked buckwheat Ash Meadows	None	None	G3	S3	1B.2
<i>Eriogonum contiguum</i>	buckwheat	None	None	G2	S2	2B.3
<i>Phacelia parishii</i>	Parish's phacelia	None	None	G2G3	S1	1B.1

This valley is another area that contains pristine honey mesquite bosque (woodland) habitat, which should remain intact and unaltered. Mesquite bosques are considered a special status natural community by CDFW. They are rich in wildlife habitat, important to migratory and resident birds, and hold a treasure trove of archaeological resources. They are considered "very threatened" by the state, and the PEIR itself describes it as a habitat type that is "extremely restricted in California." Development of any kind in the Chicago Valley SEDA could negatively impact the mesquite bosques there. Even if project footprints were designed to avoid the bosques themselves, changes to runoff patterns and potential water withdrawals would inevitably affect and potentially degrade the quality of the mesquite bosque habitat. Indeed, the Chicago Valley SEDA appears to be sited in the direct hydrographic flow zone at the bottom of the basin- the mesquite bosque there is likely the densest and best habitat in the entire valley. The valley also contains low elevation wash systems, important habitat for many desert species.

205-12

The public lands in this area are designated as Limited Use Class. Groundwater in the basin is limited and there is only enough electrical transmission for the few scattered residences in the area. The area contains known desert tortoise and golden eagle nesting and foraging habitat. Golden eagles nest in numerous locations in surrounding mountain ranges and likely utilize Chicago Valley for foraging. The area also provides intermountain habitat for bighorn sheep. Finally, residents and visitors to this area express concern that development in this valley will impact the viewscapes of the Nopah Mountains.

Sandy Valley SEDA

Most of the lands within this proposed SEDA have not been surveyed for rare plants. Comprehensive rare plant surveys and vegetation mapping will need to be completed on

205-13

lands proposed for development in order to assess potential impacts to, and avoidance / mitigation measures for rare plant species and communities (see our recommended revisions to REGPA DEIR BIO-1 and BIO-20). The botanical resources below are known to occur within and/or near the Sandy Valley SEDA. Land use conflicts with subsequently proposed projects will be likely due to existing agriculture (alfalfa) pivot fields, water rights, and BLM lands in the northern sections of the area. There is no existing transmission.

Rare plant species

Scientific name	Common name	FEDList	CA List	G RANK	S RANK	CRPR
<i>Astragalus preussii</i> var. <i>preussii</i>	Preuss' milk-vetch	None	None	G4T4	S1	2B.3
<i>Eriogonum bifurcatum</i>	forked buckwheat	None	None	G3	S3	1B.2
<i>Phacelia pulchella</i> var. <i>gooddingii</i>	Goodding's phacelia	None	None	G5T2T3	S2	2B.3

Other sensitive plant communities in the Eastern Solar Development Area

Marshes

The marshes of the Amargosa Region provide some of the richest habitat and densest biodiversity of any area in the desert. These marshes exist because of reliable spring flow from our precious springs. The three most prominent marshes in our area are the Shoshone Marsh, fed from Shoshone Spring, Tecopa Marsh, fed by the Tecopa Hot Springs, and in the Amargosa Canyon, which is fed by a variety of seeps, springs, and surface flow from Tecopa. These marshes provide important habitat for numerous migratory and resident birds, as well as federally designated critical habitat for the Amargosa Vole, and endangered species. Any reduction in groundwater flow in the Amargosa River system has the potential to lower the water levels in these marshes, which would dry up tens or hundreds of acres of this special habitat.

Alkali Flats

Alkali flats are a poorly understood and understudied ecosystem. While not home to large range of biodiversity, they are home to some of the most fascinating and hardy species on the planet, particularly the halophytic plants. These halophytic plants have evolved over millennia to tolerate intensely high salt concentrations, and are relatively unique in their ability to adapt to conditions which other plants simply wouldn't tolerate. There are two halophytic plant species of significant concern in the Amargosa Watershed, the federally endangered Amargosa niterwort (*Nitrophila mohavensis*) and the federally threatened Ash Meadows gumplant (*Grindelia fraxino pratensis*). These plants have an extremely limited distribution, occurring only in the Carson Slough area near the California/Nevada border. Little is specifically known about their biology, but the most important factor in their abundance and continued existence is reliable access to shallow groundwater emanating from the Ash Meadows outflow. Given how, as outlined above, groundwater flow patterns in the area are still being studied and understood, it is incumbent upon the County to conduct a full analysis of how potential groundwater withdrawals in Charleston View or the Chicago Valley would impact alkali flat plant communities elsewhere in the Amargosa Watershed.

205-13
cont'd

Western Solar Energy Group

Laws SEDA

Most of the lands within this proposed SEDA have not been surveyed for rare plants. Comprehensive rare plant surveys and vegetation mapping will need to be completed on lands proposed for development in order to assess potential impacts to, and avoidance / mitigation measures for rare plant species and communities. The botanical resources below are known to occur within and/or near the Laws SEDA.

Rare plant species (E = Endangered, T = Threatened)

Scientific name	Common name	FED List	CA List	G Rank	S Rank	CRP R
<i>Aliciella triodon</i>	coyote gilia	None	None	G5	S2	2B.2
<i>Astragalus argophyllus</i> var. <i>argophyllus</i>	silver-leaved milk-vetch	None	None	G5T4	S1	2B.2
<i>Astragalus lentiginosus</i> var. <i>piscinensis</i>	Fish Slough milk-vetch	T	None	G5T1	S1	1B.1
<i>Calochortus excavatus</i>	Inyo County star-tulip	None	None	G2	S2	1B.1
	Hall's meadow			G5T3		
<i>Crepis runcinata</i> ssp. <i>hallii</i>	hawksbeard	None	None	?	S1S2	2B.1
<i>Dedeckera eurekensis</i>	July gold	None	Rare	G3	S3	1B.3
<i>Elymus salina</i>	Salina Pass wild-rye	None	None	G5	S2	2B.3
	Booth's hairy evening-primrose			G5T3		
<i>Eremothera boothii</i> ssp. <i>intermedia</i>	primrose	None	None	T4	S3	2B.3
<i>Fimbristylis thermalis</i>	hot springs fimbristylis	None	None	G4	S2	2B.2
<i>Grusonia pulchella</i>	beautiful cholla	None	None	G4	S2S3	2B.2
				G4T3		
<i>Ivesia kingii</i> var. <i>kingii</i>	alkali ivesia	None	None	Q	S2	2B.2
<i>Mentzelia torreyi</i>	Torrey's blazing star	None	None	G4	S2.2	2B.2
<i>Oryctes nevadensis</i>	Nevada oryctes	None	None	G2G3	S2	2B.1
<i>Phacelia inyoensis</i>	Inyo phacelia	None	None	G2	S2	1B.2
<i>Plagiobothrys parishii</i>	Parish's popcornflower	None	None	G1	S1	1B.1
	Owens Valley					
<i>Sidalcea covillei</i>	checkerbloom	None	E	G2	S2	1B.1
<i>Sphenopholis obtusata</i>	prairie wedge grass	None	None	G5	S2.2	2B.2
<i>Thelypodium integrifolium</i> ssp. <i>complanatum</i>	foxtail thelypodium	None	None	G5T5	S2.2	2B.2

205-14

Portions of the Laws area may be appropriate for one or more small-scale (<20mw) projects. Site-specific surveys will need to be done to determine the best location with the least amount of impacts to native vegetation, wildlife and viewscales along Hwy 6 and 395. Site locations must exclude agricultural lands and irrigation leases mandated under the long-term Water Agreement.

Owens Lake SEDA

Some of the lands within this proposed SEDA have not been surveyed for rare plants. Comprehensive rare plant surveys and vegetation mapping will need to be completed on lands proposed for development in order to assess potential impacts to, and avoidance / mitigation measures for rare plant species and communities. The botanical resources

205-15

included in the table below are known to occur within and/or near the Owens Lake SEDA.

Rare plant species (E = Endangered, T = Threatened)

Scientific name	Common name	FED List	CA List	G Rank	S Rank	CRPR
<i>Erigeron calvus</i>	bald daisy	None	None	G1Q	S1	1B.1
<i>Plagiobothrys parishii</i>	Parish's popcornflower Owens Valley	None	None	G1	S1	1B.1
<i>Sidalcea covillei</i>	checkerbloom	None	E	G2	S2	1B.1

Rare natural plant communities

- *Distichlis spicata* alliance (Central Mojave Vegetation Database) - not a rare community, however loss of this community can indicate negative impacts from groundwater pumping
- Olancha Greasewood Unusual Plant Assemblage (UPA)⁴
- Olancha sand dunes - survey and manage for protection of rare dune plant communities

Other mapped important biological features

- Low-elevation wash systems (Central Mojave Vegetation Database)
- Keeler Dunefield - survey and manage for protection of rare dune plant communities
- Alkali meadows and sinks
- Limestone geology represents extremely high probability of endemic rare plants. Comprehensive botanical surveys must be performed by qualified botanists, during appropriate seasons and climate conditions, before any renewable energy development occurs in this area in order to assess, avoid, and minimize potential impacts to rare plants.
- Mid-elevation wash systems (Central Mojave Vegetation Database)
- Springs - mapped in Central Mojave Vegetation Database

CNPS is unclear how the current boundary for this SEDA was drawn and it includes a conservation area for MGS, as well as a proposed ACEC under the DRECP in the Southern eastern section. The northern boundary of the SEDA has known cultural artifact sites. Portions of the lake contain important alkali meadows, which should be properly described and mapped within the REGPA. Owens Lake is an Important Bird Area with millions of individuals using the lake for migration and breeding. We recommend this rare Inyo County ecosystem not be altered.

Rose Valley SEDA

Most of the lands within this proposed SEDA have not been surveyed for rare plants. Comprehensive rare plant surveys and vegetation mapping will need to be completed on lands proposed for development in order to assess potential impacts to, and avoidance / mitigation measures for rare plant species and communities. The botanical resources included in the table below are known to occur within and/or near the Rose Valley SEDA.

Rare plant species (E = Endangered, T = Threatened)

⁴ UPAs were established by the U.S. Bureau of Land Management (BLM) through the 1980 California Desert Conservation Plan as areas administratively managed for conservation of important plant resources.

205-15
cont'd

205-16

Scientific name	Common name	FED List	CA List	G Rank	S Rank	CRPR
<i>Cymopterus ripleyi</i> var. <i>saniculoides</i>	sanicle cymopterus	None	None	G3G4T3 Q	S1	1B.2
<i>Eremothera boothii</i> ssp. <i>boothii</i>	Booth's evening-primrose	None	None	G5T4	S2	2B.3
<i>Mentzelia tridentata</i>	creamy blazing star	None	None	G2	S2.3	1B.3
<i>Sidalcea covillei</i>	Owens Valley checkerbloom	None	E	G2	S2	1B.1

Rare natural plant communities

- Olancha Greasewood UPA

Other mapped important biological features

- Olancha sand dunes - survey and manage for protection of rare dune plant communities

Geothermal to the east already extracts significant amounts of groundwater and water is not available from Haiwee reservoir. The area also falls almost entirely within a MGS conservation area. Regardless of planned mitigation measures, solar or any other development should not occur in special species habitat. The Rose Valley SEDA boundary also contains an ACEC. Because ACECs have special site-specific management prescriptions in order to protect a particular resource, any development within these areas cannot guarantee the resource for which the ACEC was designated will not be negatively impacted. ACECs and conservation areas are the wrong places to site energy development.

Pearsonville SEDA

Most of the lands within this proposed SEDA have not been surveyed for rare plants. Comprehensive rare plant surveys and vegetation mapping will need to be completed on lands proposed for development in order to assess potential impacts to, and avoidance / mitigation measures for rare plant species and communities. The botanical resources included in the table below are known to occur within and/or near the Pearsonville SEDA.

Rare plant species

Scientific name	Common name	FED List	CA List	G RANK	S RANK	CRPR
<i>Phacelia nashiana</i>	Charlotte's phacelia	None	None	G3	S3	1B.2

Rare natural plant communities

- Lepidospartum squamatum Alliance

Although this SEDA has been refined, all public lands within the SEDA are still within potential MGS habitat and offer no buffer between designated conservation area habitat. The area is also known desert tortoise habitat. Private lands within this area may be the most suitable for some <20mw projects. Due to the large acreage of previously disturbed

205-16
cont'd

205-17

private land within this area we recommend avoiding development on all public lands within this SEDA. 205-17
cont'd

Owens Valley Study Area

Most of the lands within this proposed SEDA have not been surveyed for rare plants. Comprehensive rare plant surveys and vegetation mapping will need to be completed on lands proposed for development in order to assess potential impacts to, and avoidance / mitigation measures for rare plant species and communities. 205-18

Southern Solar Energy Group

Trona SEDA

Most of the lands within this proposed SEDA have not been surveyed for rare plants. Comprehensive rare plant surveys and vegetation mapping will need to be completed on lands proposed for development in order to assess potential impacts to, and avoidance / mitigation measures for rare plant species and communities. The botanical resources included in the table below are known to occur within and/or near the Trona SEDA.

Rare plant species

<i>Scientific name</i>	<i>Common name</i>	FED List	CA List	G RANK	S RANK	CRPR
<i>Castela emoryi</i>	Emory's crucifixion-thorn	None	None	G4	S2S3	2B.2

205-19

This area has previously disturbed lands, lakebed mining sites, and industrial infrastructure. We feel a portion of this area may be one of the best locations within the REGPA for a PV solar facility provided it is capped at 20mw.

We appreciate the effort that Inyo County has devoted to incorporating public comment into the REGPA process to date. Please accept and fully consider our comments, and contact either of us directly should you have any questions regarding them.

Sincerely,

Greg Suba
Conservation Program Director

Julie Anne Hopkins
Conservation Chair
CNPS Bristlecone Chapter

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Responses to Letter 205 – California Native Plant Society

Response 205-1: The comment provides an introduction and summarizes CNPS’s role and interest in the project. The SEDA boundaries depicted in the PEIR have been identified based on the opportunities and constraints described in the Opportunities and Constraints Technical Study (Appendix D of the PEIR), which included aligning SEDAs with areas containing already degraded and disturbed lands, and were located near existing transmission facilities. As stated in Section 3.2 of the PEIR, the purpose of the REGPA is to regulate and direct the type, siting, and size of future renewable energy development within the County. The County will encourage development within the SEDAs to be sited on lands that have been previously disturbed and degraded. Several of the project objectives are related to focusing development on already degraded sites, and in line with existing transmission facilities to avoid and minimize impacts on the environment (refer to Project Objectives 1, 3, and 6 of the Final PEIR). The REGPA Land Use Implementation Measure 4 refers to the use of disturbed lands for development. Section 3.3.3 of the PEIR describes the specific disturbed and/or degraded land uses the County has identified as warranting consideration and additional investigation for suitability.

The Distributed Generation Only Alternative described in the Draft PEIR (referred to as the Commercial Scale Only Alternative in the Final PEIR) has been evaluated under the assumption that no solar thermal technologies would be able to be constructed under the REGPA due to the 20 MW size limit for commercial scale facilities (essentially a PV-only alternative). This alternative would eliminate the potential impacts to birds from solar flux and luminosity associated with solar thermal projects and would result in reduced impacts to all environmental topic areas analyzed in the PEIR; however, depending on the size and location of the facility, it would still result in significant and unmitigable impacts to aesthetics, biology, and cultural resources (Section 6.3.3 of the PEIR). The County notes that CNPS opposes utility-scale energy projects not located on already disturbed land, and urges the County to choose the Distributed Generation (now called Commercial Scale in the FEIR) and Photovoltaic Alternative.

Response 205-2: The document has been modified to include the requirement for projects to conduct a hydrology study to determine potential off-site impacts to special-status species and groundwater dependent habitats. Several mitigation measures have been amended to include these requirements. The reader is directed to the Section 4.4 errata sheets attached to these responses as well as Response 202-4 for additional information. The amended mitigation measures are described below.

Mitigation Measure BIO-1 has been amended to include analysis of potential off-site impacts from groundwater pumping:

For projects with the potential to impact on- or off-site special status species or habitats as determined in the biological resources evaluation, a project-specific biological resources mitigation and monitoring plan shall be prepared ~~in cooperation with and~~ that meets the approval of permitting agencies. The plan shall be implemented during all phases of the project and shall identify appropriate mitigation levels to compensate for significant direct, indirect, and cumulative impacts, including habitat, special status plant, and wildlife species losses as well as impacts to groundwater dependent vegetation or off-site impacts to special status species or sensitive habitats due to groundwater pumping. The plan shall address at a minimum:

Mitigation Measure BIO-2 has been amended to include groundwater dependent ecosystems in the Amargosa Valley, and includes reference to Mitigation Measure HYD-2, which includes requirements to protect groundwater dependent ecosystems.

Mitigation Measure BIO-20 has been amended to include avoidance of impacts to jurisdictional waters off-site through groundwater pumping as follows:

- For solar projects proposing groundwater pumping, hydrological studies shall be performed to assess the potential for off-site impacts to jurisdictional waters that depend on groundwater. Projects shall be designed to avoid and/or minimize impacts to groundwater-dependent jurisdictional resources off-site, and all proposed impacts to such resources shall be reviewed by the agencies with jurisdiction over the affected resources, and mitigated according to those agencies' requirements.

Mitigation Measure BIO-24 has been amended as follows:

MM BIO-24: Minimize impacts to groundwater dependent vegetation and ecosystems.

Any solar development projects or related infrastructure implemented under the REGPA which are located on City of Los Angeles-owned land or which could affect City of Los Angeles-owned land shall comply with the terms of the Agreement. A qualified biologist/botanist with experience in Inyo County shall evaluate the potential for any project implemented under the REGPA to impact groundwater dependent vegetation or ecosystems located on City of Los Angeles-owned land. If the qualified biologist/botanist determines that the project has the potential to impact groundwater dependent vegetation or ecosystems, a groundwater dependent vegetation management plan will be prepared. The plan will include an evaluation of the potential impacts to groundwater dependent vegetation or ecosystems and appropriate measures to avoid or reduce the impacts to the extent feasible. The plan shall be prepared in coordination with the County and LADWP and should describe any appropriate monitoring, such as vegetation and/or water table monitoring, and prescribe mitigation to offset the impacts of the project on groundwater dependent vegetation or ecosystems as deemed appropriate by the qualified biologist in coordination with the County and LADWP. Projects that are likely to affect groundwater resources in a manner that would result in a substantial loss of riparian or wetland natural communities and/or habitat for sensitive flora and fauna associated with such habitats shall be avoided to the extent feasible and impacts shall be mitigated to a level determined to be acceptable by the County. The project and vegetation management plan shall be approved by both the County and LADWP prior to implementation.

Response 205-3: Mitigation Measure BIO-2 *Minimize impacts to special status plants* has been updated to include the requirement that prior to the approval of any solar development projects or related infrastructure under the REGPA a CDFW-approved botanist shall evaluate the potential for special status plant species to occur on the site and conduct surveys, if necessary, to determine presence or infer absence of special status plants on the site following the November 24, 2009 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* or the most current guidelines. This will ensure that natural communities, rare plant alliances, and special natural community features are adequately inventoried and mapped.

The first bullet of Mitigation Measure BIO-20 requires delineation of wetlands and other waters of the US/state on the project site using both USACE and CDFW definitions of wetlands. USACE jurisdictional wetlands shall be delineated using the methods outlined in the USACE 1987 Wetlands Delineation Manual and the Arid West Manual, or the most recent guidance. This information shall be mapped and documented as part of the CEQA documentation, as applicable, and in wetland delineation reports.

A method for delineating WS in dryland systems (MESA Method) has been devised under the auspices of the California Energy Commission, but that method has not been formally been adopted by CDFW and is not included in the PEIR.

Response 205-4: The following language has been modified in Section 4.4.5 – Mitigation Measure BIO-1 as follows:

... The level of biological resource analysis will be based on factors such as the size of the proposed project, ~~the~~ and extent of impacts to biological resources, and the sufficiency of existing data to determine impacts. ...

Response 205-5: The County notes that CNPS recommends that subsequently proposed projects be accepted only if located near existing transmission lines. As discussed in Section 3.2 of the PEIR, one of the identified Project objectives is to “Locate future solar development near existing electrical conveyance facilities.” Accordingly, the County has focused the development areas identified in the REGPA along the existing LADWP transmission systems and along the conceptual VEA system. No change has been made to the PEIR based on this comment.

Response 205-6: The County notes that the Charleston View and Chicago Valley SEDAs are inside areas proposed as ACECs and National Conservation Lands by the DRECP. The SEDA boundaries depicted in the PEIR have been identified based on the Opportunities and Constraints Technical Study (Appendix D of the PEIR), and further refined based on feedback received through the agency scoping and public planning process (Section 3.1.1 of the PEIR). As described in the PEIR, although the SEDAs have been identified to direct and constrain utility-scale and commercial scale solar energy facility development in the County, not all areas within the proposed SEDA boundaries may be suitable for development. Constraints within the SEDAs will be identified during subsequent, project-specific environmental review under CEQA, as outlined in the PEIR. These constraints include critical habitat, ACECs, National Conservation Lands, military readiness conflict areas, and cultural resource areas, among others.

The DRECP is currently under review, and although the County is not currently a signatory of the DRECP and is under no obligation to implement the DRECP principles and policies, the County has considered the DRECP in development of the REGPA. Because the DRECP was in draft form during the preparation of the PEIR, the SEDAs were not further constrained based on information contained in the DRECP, such as proposed ACECs and National Conservation Lands. However, if the DRECP and the REGPA are adopted, the County would coordinate with the DRECP agencies to avoid priority conservation areas and future projects in the County would be developed consistent with the requirements of the DRECP. Under REGPA Policy MER-2.6, the County would coordinate with renewable energy solar developers and other agencies to avoid, minimize, or mitigate impacts.

Response 205-7: Mitigation Measure BIO-2 has been amended to emphasize avoidance of special status plant species, and that transplanted will be used only when impacts are unavoidable.

Response 205-8: Mitigation Measure BIO-2 has been modified to require avoidance of special status plants to the maximum extent feasible as determined by the County. The reader is directed to Response 202-4 for the amended text and/or Section 4.4 of the Final PEIR.

Response 205-9: CNPS emphasizes the need to fully consider individual and cumulative impacts before pursuing CEQA exemptions for ground-mounted distributed generation (referred to as commercial scale in the Final PEIR) projects of 20 MW or less in size. All future projects under the REGPA would be subject to project-specific environmental review. Depending on the size and location of the development and the technology used, a Subsequent EIR may be required. However, the REGPA also encourages small scale, photovoltaic (PV) solar facilities to be constructed which may not require a full EIR. As stated in Section 1.2 of the PEIR:

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

This PEIR would provide a framework for these subsequent project analyses, but specific projects would still be assessed on an individual level; all projects under CEQA are legally afforded the same public review process. No change has been made to the PEIR based on this comment.

Response 205-10: Mitigation Measure BIO-2 has been updated to include the requirement that prior to the approval of any solar development projects or related infrastructure under the REGPA a CDFW-approved botanist shall evaluate the potential for special status plant species to occur on the site and conduct surveys, if necessary, to determine presence or infer absence of special status plants on the site following the November 24, 2009 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* or the most current guidelines. This will ensure that natural communities, rare plant alliances, and special natural community features are adequately inventoried and mapped. Please refer to Response 202-4 and/or the errata sheets attached to this document for specific changes to the text.

The rare plants identified by CNPS as being known to occur within or near the Charleston View SEDA has been added to Table 4.4-11. The following language has been added to Section 4.4.1.11 – Charleston View:

Sensitive Habitats and Protected Natural Areas

The USFWS National Wetlands Inventory (USFWS 2014b) identifies a dry lakebed and associated ephemeral washes occurring in the northern portion of the SEDA. This area is a topographically low point that likely collects runoff from the adjacent desert ranges following seasonal storm events. Although limited in distribution, mesquite bosque also occurs within the SEDA.

A substantial portion of the water in the Amargosa River system is thought to be supplied by groundwater within the SEDA. Therefore, impacts to groundwater in the SEDA could

affect sensitive habitats down-watershed-, including the portion of the Amargosa River that has been designated by Congress as “Wild and Scenic.”

Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-4 have been updated to address potential impacts to groundwater dependent ecosystems. In addition, Mitigation Measure BIO-25 has been added also to address groundwater dependent ecosystems. The reader is directed to Response 202-4 and/or the errata sheets attached to this document for specific changes to text.

Response 205-11: It is acknowledged that cultural and historic sites within the County are valued and such features appeal to, and attract, visitors. As described in Section 4.5 in the PEIR, the Old Spanish Trail that traverses the County was an early, important trade route linking New Mexico with California. Mitigation is identified in Section 4.5.5 of the PEIR to protect cultural resources that could potentially be impacted by future solar energy development. Please refer to comment Response 202-4, regarding potential impacts to groundwater and groundwater-dependent biological resources, including in the Amargosa Valley.

Response 205-12: Mitigation Measure BIO-2 *Minimize impacts to special status plants* has been updated to include the requirement that prior to the approval of any solar development projects or related infrastructure under the REGPA a CDFW-approved botanist shall evaluate the potential for special status plant species to occur on the site and conduct surveys, if necessary, to determine presence or infer absence of special status plants on the site following the November 24, 2009 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* or the most current guidelines. This will ensure that natural communities, rare plant alliances, and special natural community features are adequately inventoried and mapped. The rare plants identified by CNPS as being known to occur within or near the Chicago Valley SEDA were added to Table 4.4-10. The potential for projects within the Chicago Valley SEDA to result in off-site impacts to mesquite bosque are discussed in Section 4.4.3.2 and presented in Mitigation Measure BIO-19.

The following language has been added to Section 4.4.1.11 – Chicago Valley:

Habitat Connectivity and Wildlife Corridors

The SEDA falls within a desert tortoise linkage. The does not contain any other essential connectivity areas, missing links, or Important Bird Areas. The SEDA is relatively flat with few washes. Although common wildlife may use the area to move between ranges, most species of wildlife would be expected to use areas to the north where the ranges are closer together. Golden eagle and desert tortoise are known to occur in the region surrounding Chicago Valley, and the valley potentially provides intermountain habitat for desert bighorn sheep.

Impacts to aesthetics and related mitigation measures are presented in Section 4.1 of the PEIR.

Response 205-13: Mitigation Measure BIO-2 has been updated to include the requirement that prior to the approval of any solar development projects or related infrastructure under the REGPA a CDFW-approved botanist shall evaluate the potential for special status plant species to occur on the site and conduct surveys, if necessary, to determine presence or infer absence of special status plants on the site following the November 24, 2009 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* or the most current guidelines. This will ensure that natural communities, rare plant alliances, and special natural community features are adequately

inventoried and mapped. Please see Response 202-4 for additional information as to text changes in the PEIR.

The rare plants identified by CNPS as being known to occur within or near the Sandy Valley SEDA have been added to Table 4.4-12. Also, the PEIR has been modified to include the requirement for projects to conduct a hydrology study to determine potential off-site impacts to special-status species and groundwater dependent habitats such as marshes and alkali flats. The reader is directed to Responses 202-4 and 205-2 for additional information.

Response 205-14: Mitigation Measure BIO-2 has been updated to include the requirement that prior to the approval of any solar development projects or related infrastructure under the REGPA a CDFW-approved botanist shall evaluate the potential for special status plant species to occur on the site and conduct surveys, if necessary, to determine presence or infer absence of special status plants on the site following the November 24, 2009 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* or the most current guidelines. This will ensure that natural communities, rare plant alliances, and special natural community features are adequately inventoried and mapped. Please see Response 202-4 for additional information as to text changes in the PEIR.

Table 4.4-3 was amended to include additional sensitive plant species with potential to occur. Also please see Response 205-19.

The comment notes concerns related to the application of the 1991 Inyo County/ Los Angeles Long Term Water Agreement (Agreement) on the Laws SEDA. The Agreement is discussed in Sections 2.4.3.3 and 4.1.9.3 (under the description of County Ordinance 394) of the PEIR and is recognized as a local regulation that is tied to a groundwater extraction permit ordinance (Ord. 394 § 1, 1980). The Agreement was developed to manage ground and surface water resources while maintaining healthy groundwater dependent vegetation communities found in the Owens Valley and while providing a reliable supply of water for export to Los Angeles and for use in Inyo County. To accomplish this, the Agreement contains management strategies for preventing long term groundwater mining from the aquifers, as well as avoiding of minimizing impacts to vegetation as a result of groundwater pumping or changes in surface water management practices. Vegetation is used as the principal indicator of environmental quality associated with ground and surface water activities in the Owens Valley. As part of this effort, vegetation in the Owens Valley has been classified (as described in Section 2.4.3.3 of the PEIR), and the County maintains maps of the classified vegetation. The management strategies are intended to avoid significant decreases in live vegetation cover of vegetation classified for management under the Agreement. Individual projects would be subject to all applicable federal, state, and local regulations including the Agreement. The Agreement maps from the Inyo County Water Department would be used in the future during project-level analyses, which would ensure that proposed projects would not be located in an area that would conflict with the Agreement. Future solar projects on LADWP-owned lands or management areas in the OVSA would be subject to the terms and conditions of the Agreement and MOU.

Response 205-15: Mitigation Measure BIO-2 has been updated to include the requirement that prior to the approval of any solar development projects or related infrastructure under the REGPA a CDFW-approved botanist shall evaluate the potential for special status plant species to occur on the site and conduct surveys, if necessary, to determine presence or infer absence of special status plants on the site following the November 24, 2009 *Protocols for Surveying and Evaluating Impacts to Special Status*

Native Plant Populations and Natural Communities or the most current guidelines. This will ensure that natural communities, rare plant alliances, and special natural community features are adequately inventoried and mapped. Please see Response 202-4 for additional information as to text changes in the PEIR.

Table 4.4-4 has been amended to include additional sensitive plant species with potential to occur. Also see Response 205-19. The following language has been added to Section 4.4.11 – Owens Lake SEDA:

Sensitive Habitats and Protected Natural Areas

The desert riparian and freshwater emergent wetland habitats described above are considered to be sensitive habitat. In addition, Olancha Greasewood Unusual Plant Assemblage is known to occur on the Olancha Dunes in the vicinity of Owens Lake. This is an unusual occurrence of a Great Basin vegetation community with greasewood (*Sarcobatus vermiculatus*) as the dominant species, unusual because it is growing on tall sand dune hummocks and is acting as an important dune stabilizer. Owens Lake, Owens River, washes, and other waterways and water bodies located within the SEDA may contain waters of the US and/or State which are also considered sensitive habitats. Mohave ground squirrel Conservation Area is located along the southeastern boundary of the SEDA. The Cartago Wildlife Area is a State Wildlife Management Area located along the southwestern bank of Owens Lake. Spring-fed freshwater wetlands provide habitat for waterfowl, wading birds, and shorebirds including western snowy plovers, white-faced ibis, and rails. Other sensitive habitats in the vicinity of the SEDA include the Keeler dune field, alkali meadows and sinks, springs, and mid- and low-elevation wash systems.

The SEDA boundary includes areas of sensitive resources; development would not be permitted in special status natural communities or protected natural areas. As described in the PEIR, although the SEDAs are identified as general planning areas to direct and constrain utility-scale and commercial scale solar energy facility development in the County, not all areas within the proposed SEDA boundaries may be suitable for development. Constraints within the SEDAs will be identified during subsequent, project-specific environmental review under CEQA, as outlined in the PEIR. These constraints include critical habitat, ACECs, National Conservation Lands, military readiness conflict areas, and cultural resource areas, among others. Refer to Response No. 205-6 for more information regarding the consideration of the DRECP in regards to the REGPA.

Mitigation Measures BIO-18 and BIO-21 have been substantially modified to reduce impacts to migratory birds. Refer to Section 4.4.5 for revisions to the mitigation measure.

Response 205-16: Mitigation Measure BIO-2 has been updated to include the requirement that prior to the approval of any solar development projects or related infrastructure under the REGPA a CDFW-approved botanist shall evaluate the potential for special status plant species to occur on the site and conduct surveys, if necessary, to determine presence or infer absence of special status plants on the site following the November 24, 2009 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* or the most current guidelines. This will ensure that natural communities, rare plant alliances, and special natural community features are adequately inventoried and mapped. Please see Response 202-4 for additional information as to text changes in the PEIR.

Table 4.4-5 has been amended to include additional sensitive plant species with potential to occur. Also see Response 205-19. The following language has been added to Section 4.4.1.11 – Rose Valley SEDA:

Sensitive Habitats and Protected Natural Areas

The ephemeral waterways and other waterways within this SEDA may contain waters of the US and/or state which are considered sensitive habitats. The CNDDDB spatial data mapping identifies active desert dunes in the northernmost portion of the SEDA (CNDDDB 2014). This habitat is classified as a special status natural community by CDFW. Olancha Greasewood Unusual Plant Assemblage is known to occur on the Olancha Dunes in the vicinity of Rose Valley. This is an unusual occurrence of a Great Basin vegetation community with greasewood (*Sarcobatus vermiculatus*) as the dominant species, unusual because it is growing on tall sand dune hummocks and is acting as an important dune stabilizer. The entire SEDA falls within Mohave ground squirrel Conservation Area. This SEDA contains the Fossil Falls ACEC which is a cultural resource, and not managed for biological resources (DataBasin 2014).

Prior to approval of any project in this SEDA, a hydrologic study shall be conducted to determine the potential for impacts pursuant to Mitigation Measure HYD-2 in Section 4.9, Hydrology and Water Quality. The SEDA boundary includes areas of sensitive resources; development would not be permitted in special status natural communities or protected natural areas. As described in the PEIR, although the SEDAs are identified as general planning areas to direct and constrain utility-scale and commercial scale solar energy facility development in the County, not all areas within the proposed SEDA boundaries may be suitable for development. Constraints within the SEDAs will be identified during subsequent, project-specific environmental review under CEQA, as outlined in the PEIR. These constraints include critical habitat, ACECs, National Conservation Lands, military readiness conflict areas, and cultural resource areas, among others. Refer to Response No. 205-6 for more information regarding the consideration of the DRECP in regards to the REGPA.

Response 205-17: Mitigation Measure BIO-2 has been updated to include the requirement that prior to the approval of any solar development projects or related infrastructure under the REGPA a CDFW-approved botanist shall evaluate the potential for special status plant species to occur on the site and conduct surveys, if necessary, to determine presence or infer absence of special status plants on the site following the November 24, 2009 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* or the most current guidelines. This will ensure that natural communities, rare plant alliances, and special natural community features are adequately inventoried and mapped. Please see Response 202-4 for additional information as to text changes in the PEIR.

Table 4.4-6 has been amended to include additional sensitive plant species with potential to occur. Also please see Response 205-19.

Mitigation Measure BIO-19 has been refined to include a requirement for preparation of a management plan if a project is determined to have the potential to impact any off-site special status natural communities or protected natural areas during the project level biological resources evaluation. The management plan will address the potential offsite effects of the construction and on-going operations of the facility on special status species including but not limited to the effects of human disturbance, noise, nighttime maintenance activities, increased lighting, increased traffic on desert roads, and barriers to movement for special status species. The management plan will also address potential

mechanisms of offsite habitat degradation such as introduction of invasive weeds, introduction or attraction of feral animals or other species attracted to areas with anthropogenic disturbance, hydrologic disruption due to groundwater impacts or alteration of surface drainage patterns, and increased risk of wildfires. The management plan will also outline the specific measures to be undertaken to avoid and/or minimize indirect effects of the solar development on the adjacent sensitive habitat and special status species and include a plan for long term monitoring of the adjacent habitat as well as an adaptive management plan.

Response 205-18: Mitigation Measure BIO-2 has been updated to include the requirement that prior to the approval of any solar development projects or related infrastructure under the REGPA a CDFW-approved botanist shall evaluate the potential for special status plant species to occur on the site and conduct surveys, if necessary, to determine presence or infer absence of special status plants on the site following the November 24, 2009 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* or the most current guidelines. This will ensure that natural communities, rare plant alliances, and special natural community features are adequately inventoried and mapped. Please see Response 202-4 for additional information as to text changes in the PEIR.

Response 205-19: Mitigation Measure BIO-2 has been updated to include the requirement that prior to the approval of any solar development projects or related infrastructure under the REGPA a CDFW-approved botanist shall evaluate the potential for special status plant species to occur on the site and conduct surveys, if necessary, to determine presence or infer absence of special status plants on the site following the November 24, 2009 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* or the most current guidelines. This will ensure that natural communities, rare plant alliances, and special natural community features are adequately inventoried and mapped. Please see Response 202-4 for additional information as to text changes in the PEIR.

Table 4.4-9 has been amended to include additional sensitive plant species with potential to occur. In addition, Table 4.4-2 has been amended to reflect all changes made to Tables 4.4-3, 4.4-6, and 4.4-9.

The County notes that the commenter believes a portion of the Trona SEDA offers a potentially suitable location for a future solar energy development project consisting of solar PV of less than 20 MW.

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January 14, 2015

VIA E-MAIL & U.S. MAIL

Cathreen Richards, Senior Planner
Inyo County Planning Department
P.O. Drawer L
Independence, CA 93526
Email: crichards@inyocounty.us

Re: Comments on the Draft Program Environmental Impact Report
for the Renewable Energy General Plan Amendment in Inyo
County

Dear Ms. Richards:

We are writing on behalf of California Unions for Reliable Energy ("CURE") with regard to Inyo County's ("County") Draft Program Environmental Impact Report ("PEIR") for the Renewable Energy General Plan Amendment ("REGPA"), SCH No. 2014061039 ("Project"). CURE is a coalition of unions whose members help solve California's energy problems by building, maintaining, and operating renewable energy power plants. CURE's comments are intended to strengthen the environmental review process and ensure a real choice between viable alternatives that balance renewable energy development with the protection of the environment. Based on these concerns, CURE has a strong interest in ensuring projects comply with CEQA, as well as applicable federal, state, and local regulations. We would like to thank the County for the opportunity to provide these comments on the PEIR.

206-1

We commend the County for recognizing that the PEIR provides only a "framework" for subsequent, site-specific environmental review documents.¹ As the

¹ See Inyo County Renewable Energy General Plan Amendment, Draft Program Environmental Impact Report (hereinafter, "Draft PEIR"), p. 1-5, available at: <http://www.inyoplanning.org/projects/documents/DRAFTProgramEnvironmentalImpactReport-InyoCountyRenewableEnergyGeneralPlanAmendment.pdf>.
2123-135ev



County acknowledges, the PEIR provides quantitative and qualitative evaluations only to the “level feasible” and devoid of “speculation” as to the potential environmental impacts resulting from the implementation of the REGPA.² Accordingly, we agree with the County that, before an individual solar project could be approved within a Solar Energy Development Areas (“SEDAs”), project-specific analysis would need to be performed.³

As with most program level environmental analyses, details of subsequent individual projects are unknown or speculative at the time the program EIR is prepared. For that reason, subsequent individual projects require project-specific analyses in order to ensure that all potentially significant impacts are fully analyzed under CEQA. We appreciate that the County unequivocally recognizes this fact throughout the PEIR. For example, the PEIR states, “[a]t the programmatic level of analysis, it is not possible to know precisely the location, extent and particular characteristics of impacts to biological resources.”⁴ In another section of the PEIR, it concludes that “the location and scale of impacts to special status plants and sensitive natural communities and protected natural areas resulting from implementing the proposed REGPA is unknown” even at the programmatic level of analysis.⁵

206-1
(cont'd)

Uncertainty regarding individual project-level details exists for both utility scale and smaller scale solar projects. Ambiguity over project-level details is prevalent with *all* subsequent individual solar projects, including small-scale, distributed generation (“DG”) and community scale (“CS”). For that reason, all future individual solar projects being proposed in Inyo County must be analyzed for potentially significant impacts pursuant to CEQA wherever the project-level details were unknown or too speculative at the program level.⁶ And as the PEIR itself correctly acknowledges, much of the project-level details are unknown at this time. Therefore, we disagree with all portions of the PEIR where the County finds that the impacts from future individual solar energy projects remain “significant and unavoidable.” These findings fail to adhere to CEQA Guidelines Section 15064 because these findings are not supported by substantial evidence. The County cannot determine whether mitigation measures would be effective at reducing significant impacts, let alone whether any impact exists or the extent of the impact,

206-2

² *Id.*

³ *Id.* at 1-2.

⁴ *Id.* at 6-4.

⁵ *Id.* at 5-27.

⁶ CEQA Guidelines, §15168(c)(1).

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when the location, design, and size of subsequent individual solar energy projects remains entirely unknown at the programmatic level.

206-2
(cont'd)

We also disagree with the County's assertion that "[s]olar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in [Public Resources Code] Section 21166 occurs, in which case a Supplemental EIR or other CEQA document may be required."⁷ Subsequent individual solar projects of any size will necessitate additional project-level environmental analysis in an environmental impact report or negative declaration. As explained throughout the PEIR, with respect to several resources, project level analysis has not been conducted and the environmental baseline and the potential impacts are unknown and too speculative to analyze at this time.⁸ Therefore, the PEIR could not possibly analyze the full scope of the projects or their impacts. CEQA requires the County to either conduct the detailed review now or conduct the detailed review later in an environmental review document that is circulated to the public for review. The County cannot avoid disclosing potentially significant impacts and proposed mitigation measures by preparing a PEIR at a time when the existing environmental conditions in the SEDAs and other areas affected are unknown, when the analysis is therefore incomplete, and when the agency does not have sufficient information to formulate feasible mitigation measures that would be effective at reducing impacts. The County lacks the substantial evidence to conclude that solar energy projects 20 MW or less may be exempt unless an event specified in Public Resources Code Section 21166 occurs.

206-3

With respect to aesthetic and visual resources, impacts from subsequent individual solar energy projects are not known and cannot be known at this time. The County acknowledges this reality throughout the PEIR, stating that "[s]ite-specific analysis would be required" and that "[w]ithout project-specific information about the location of a project, the type and layout of solar development technology, and the number and types of viewers, it is not possible to assess project-level impacts [to aesthetic resources] of a proposed solar development project."⁹ Nonetheless, the County improperly found that impacts to aesthetic and visual resources "would remain significant and unavoidable."¹⁰ This finding lacks substantial evidence because no agency with permitting jurisdiction over the

206-4

⁷ Draft PEIR, p. 1-2.

⁸ *Id.* at 4.3-13.

⁹ *Id.* at 4.1-14 (emphasis added).

¹⁰ *Id.* at 4.1-29.

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SEDAs or the Owens Valley Study Area ("OVSA") has conducted a viewpoint analysis. Consequently, the setting, analysis, alternatives and mitigation for impacts to aesthetics is not known and cannot be known at this time.

206-4
(cont'd)

We agree with the County's assessment that emissions of fugitive particulate matter with a diameter of 10 microns or less ("PM₁₀") from construction and operation of subsequent individual solar projects are "unknown at this time" and "potentially significant".¹¹ Varying levels of project-specific activity, including (but not limited to) the variability among equipment used for construction or operation of future projects, as well as varying local conditions at each project site, prevent the County from fully analyzing at the program level emissions associated with individual solar projects.¹² Consequently, the County does not have, nor can it now acquire, the information necessary to fully analyze potentially significant emissions associated with an individual solar project.¹³ We support the agency's conclusion that, "because details regarding individual solar projects are unknown at this time, project-specific analyses *will be necessary* to ensure that potential emissions associated with construction comply with the daily emission thresholds."¹⁴

206-5

The County also correctly determined that greenhouse gas ("GHG") emissions associated with the construction of any individual solar project are potentially significant, but too speculative to analyze in the PEIR.¹⁵ GHG emissions from construction can "vary greatly" depending on the level and type of activity occurring at an individual solar project's site, and can vary also based on the type of equipment being operated.¹⁶ Considering that the details such as site design, proposed equipment, and location of individual solar projects are now unknown, the County appropriately concluded that "project-specific analyses" for every subsequent solar project must be conducted in order to ensure that potential emissions associated with construction comply with the interim South Coast Air Quality Management District GHG thresholds.¹⁷

206-6

The County also appropriately concluded in the PEIR that "[i]t would be speculative to analyze construction emission concentrations of [volatile organic

206-7

¹¹ Draft PEIR, p. 4.3-13.

¹² *Id.*

¹³ *Id.*

¹⁴ *Id.* (emphasis added); *see also id.* at 4.7-10.

¹⁵ *Id.* at 4.7-10.

¹⁶ *Id.*

¹⁷ *Id.*

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compounds] VOC, [carbon monoxide] CO and [sulfur oxides] SOX emissions” for individual subsequent solar projects.¹⁸ Individual solar projects will vary in their size, in their location and proximity to other projects, in the number of mobile source trips required, and in the equipment necessary for its construction. Accordingly, the County is precluded from analyzing at the program level construction-related emissions accompanying subsequent individual solar projects.

206-7
(cont'd)

The County does, however, lack substantial evidence to support its conclusion that cumulative impacts to local ambient air quality would be less than significant solely because background concentrations of these pollutants are low when compared to the California Ambient Air Quality Standards (“CAAQS”) and National Ambient Air Quality Standards (“NAAQS”) in the basin.¹⁹ Background concentrations *may* be low compared to CAAQS and NAAQS, but with construction emission concentrations of VOC, CO and SOX entirely unknown for subsequent individual solar projects in the county, and individual solar project locations also unknown, the cumulative impacts to local ambient air quality cannot be determined at this time.²⁰ The County correctly concluded that it would be speculative to analyze emissions impacts from subsequent individual solar projects,²¹ but erroneously concluded that the cumulative impacts from these projects to local ambient air quality would be less than significant.²² The County’s finding is therefore not supported by substantial evidence and is contradicted by the PEIR’s conclusion that construction emissions from subsequent individual solar projects are speculative at this time.

206-8

We agree with the County that, because the exact locations of solar facilities (whether that be DG, utility, or CS) have not yet been identified, “the associated site-specific effects to drainage patterns and flow directions within and from the SEDA cannot be determined.”²³ Therefore, “associated potential impacts to individual drainage courses and channels are unknown and could potentially result in significant impacts related to local channel or wash diversions and associated erosion and/or flooding issues.”²⁴ Moreover, we agree with the County’s

206-9

¹⁸ Draft PEIR, p. 5-25.

¹⁹ *Id.*

²⁰ *Id.* (“It would be speculative to analyze construction emission concentrations of VOC, CO and SOX emissions”).

²¹ *Id.*

²² *Id.*

²³ *Id.* at 4.9-31.

²⁴ *Id.* at 4.9-24.

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determination that site-specific impacts to long-term water quality also cannot be determined at the programmatic level because the exact nature and location of potential solar facilities have not been identified.²⁵ Because subsequent individual solar projects may involve the use of potential pollutants such as hydraulic fluids, oil and grease, cleaning solutions/solvents, and storage batteries, there is a potential for long-term water quality issues associated with solar facility operations.²⁶

206-9
(cont'd)

The PEIR attempts to mitigate potentially significant hydrological impacts through mitigation measures MM HYD-1, MM HYD-2, and MM HYD-3, but admits these measures were designed *only* for subsequent utility scale solar projects.²⁷ The PEIR does not propose mitigation measures developed specifically for solar energy development projects less than 20 MW.²⁸ The County attempts to ameliorate the PEIR's failure to include hydrology and water quality mitigation measures designed for subsequent DG and CS individual solar projects, stating "all individual solar energy facility project applications (including small scale, community scale, and distributed generation) shall be reviewed by the County" to determine whether the project needs mitigation measures MM HYD-1, MM HYD-2, or MM HYD-3.²⁹ But an internal agency review, shielded from public disclosure, would allow the County to circumvent the notice, disclosure and public review processes required by CEQA. Given that the PEIR already admits that mitigation measures MM HYD-1, MM HYD-2, and MM HYD-3 were designed only for utility scale solar projects,³⁰ the County must prepare project-specific analyses of potentially significant impacts to water resources pursuant to CEQA for all subsequent DG and CS individual solar projects proposed in Inyo County.

206-10

The County acknowledges that "a detailed evaluation of potential impacts to biological resources that may occur as a result of this PEIR is *not feasible* because the locations of future solar development(s) have not been determined."³¹ Nonetheless, the County improperly finds that impacts to biological resources at the

206-11

²⁵ *Id.*

²⁶ *Id.*

²⁷ *Id.* at 4.9-44 ("Hydrology and water quality mitigation measures have been developed for solar energy development projects producing more than 20 MW of electricity for off-site use (utility scale)"); see also *id.* at 4.9-45-47.

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.*

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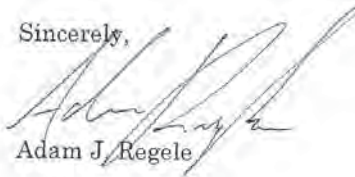
January 14, 2015
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program level are “significant and unavoidable” for all SEDAs and the OVSA even after all feasible mitigation is incorporated in the project.³² This finding is not supported by substantial evidence. The County repeatedly acknowledges throughout the PEIR that it is not possible to know the precise location, extent, and particular characteristics of subsequent individual solar energy projects. Consequently, the setting, analysis, alternatives and feasible mitigation for impacts to biological resources from subsequent individual solar energy projects is unknown and cannot be known at this time.

206-11
(cont'd)

We appreciate the County's hard work analyzing the Project's potential environmental impacts associated with subsequent solar development in Inyo County. Our comments are intended to underscore the importance of analyzing potential impacts only where feasible and where enough known information exists to adequately do so.

Sincerely,



Adam J. Regele

AJR:clv

³² Draft PEIR, p. 4.4-137.
2123-135cv

Responses to Letter 206 – California Unions for Reliable Energy

Response 206-1: The comment acknowledges the County’s public planning process and the degree of evaluation in a PEIR. It also correctly quotes various passages from the PEIR. No additional response is necessary.

Response 206-2: The PEIR identifies that significant and unavoidable impacts would potentially occur in the areas of aesthetics, biology, and cultural resources. This is a conservative conclusion based on the uncertainty, at a Program EIR level, of a subsequent project’s actual impacts. The SEDA boundaries depicted in the PEIR have been identified based on information described in the Opportunities and Constraints Technical Study (Appendix D of the PEIR). The SEDAs are intended to direct and constrain future solar developments to areas in the County identified as possibly supporting a lower level of resource sensitivity, and that are located near existing transmission facilities. Potentially significant impacts that could occur as a result of renewable energy projects being developed in the identified SEDAs were identified at a programmatic level and all feasible mitigation is prescribed in the PEIR; however, without project-specific information coupled with a project-level analysis under CEQA, it can’t be stated with certainty that these potential impacts would be reduced to below a level of less than significant at a programmatic level. That is why the PEIR reaches the conservative conclusion that impacts remain potentially significant and unavoidable. The County will prepare a Statement of Overriding Considerations per Section 15093 of the State CEQA Guidelines that identifies the economic, legal, social, and/or technological benefits of implementing the proposed project in light of the unavoidable impacts identified in the PEIR. This document will be considered along with the PEIR by the County Board of Supervisors in late March 2015.

PEIR Section 4.4.7, concerning biological resources, and Section 4.5.6, concerning cultural resources, provide substantial evidence that significant impacts to these resources may remain even after implementation of prescribed mitigation. Section 4.1.6, concerning aesthetics, has been modified as follows to provide additional evidence as to why aesthetic impacts would remain significant after mitigation:

Visual impacts related to scenic vistas and resources, visual character and quality, and light and glare are considered significant and unavoidable for all SEDAs and the OVSA at the program level. While implementation of Mitigation Measures AES-1 through AES-10 may reduce visual impacts for future utility scale, commercial scale, and community scale solar energy projects, it cannot be concluded with certainty that impacts would be reduced to below a level of significance without project-specific information about the location of a project, the type and layout of solar development technology, and the number and types of viewers. At the programmatic level of analysis provided in this PEIR, it is not possible to know these particular characteristics of future solar energy projects. Because of this uncertainty, at the programmatic level of analysis visual impacts resulting from future utility scale, commercial scale, and community scale solar energy development are considered significant and unavoidable. Implementation of the mitigation measures identified above would reduce visual impacts to the extent feasible, but with respect to scenic vistas, scenic resources, visual character and visual quality, and light and glare, impacts would remain significant and unavoidable.

Response 206-3: The REGPA PEIR addresses the types of impacts and mitigation measures that will be implemented as part of an update to the County’s General Plan and the SEDAs as defined in the PEIR. All future projects under the REGPA would be subject to project-specific environmental review. This

process will use the types of impacts and mitigation measures outlined in the PEIR as guidelines. Depending on the size and location of the development and the technology used, a Subsequent EIR may be required. However, the REGPA also encourages small scale, photovoltaic (PV) solar facilities to be constructed which may not require a full EIR. As stated in Section 1.2 of the PEIR:

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

It should be noted that under Title 21 of the Inyo County Code concerning renewable energy development, any person who proposes to construct an electric transmission line, solar thermal renewable energy facility or a PV renewable energy facility in the County must first obtain a Renewable Energy Permit, a Renewable Energy Development Agreement or a Renewable Energy Impact Determination. A Renewable Energy Impact Determination applies to projects over which the County has limited authority because the project is located on federal or state land or is subject to the permitting jurisdiction of the California Energy Commission.

Under Title 21, the issuance of a Renewable Energy Permit is subject to CEQA, and the County Planning Commission must conduct a noticed public hearing before considering approval of such a permit. The Planning Commission must find that there has been compliance with CEQA before a permit can be issued. In addition, “as a condition to the issuance of such a permit, the Planning Commission may impose such reasonable and feasible mitigation measures as it finds to be necessary to protect the health, safety, and welfare of the county’s citizens, the county’s environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.” Finally, the Planning Commission is required to impose as a condition of approval, a plan for the reclamation/revegetation of the project site at the time of decommissioning of the project and the Planning Commission shall require financial assurances from the applicant to ensure that the reclamation plan will be fully implemented.

Concerning Renewable Energy Development Agreements, Title 21 provides that such agreements may be entered into by the County and a project applicant in lieu of obtaining a Renewable Energy Development Permit. Renewable Energy Development Agreements are subject to CEQA and must be approved by an ordinance adopted by the Board of Supervisors following a noticed public hearing. Prior to approving such an agreement, the Board must find that there has been compliance with CEQA. Renewable Energy Development Agreements must include a reclamation plan, acceptable financial assurances to ensure full implementation of the reclamation plan, be consistent with the county general plan and be enforceable by injunctive relief or other enforcement mechanisms under law. In the Renewable Energy Development Agreement, the Board of Supervisors may require such mitigation measures or modifications of the project as it finds necessary to protect the health, safety, and welfare of the county’s citizens, the county’s environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project. This PEIR would provide a framework for these subsequent project analyses, but specific projects would still be assessed on an individual level; all projects under CEQA are legally afforded the same public review process.

Response 206-4: The assessment of significant and unavoidable visual impacts is a conservative conclusion based on the uncertainty, at a program EIR level, of a subsequent project's actual impacts. The SEDA boundaries depicted in the PEIR have been identified based on information described in the Opportunities and Constraints Technical Study (Appendix D of the PEIR). The SEDAs are intended to direct and constrain future solar developments to areas in the County identified as possibly supporting a lower level of resource sensitivity, and that are located near existing transmission facilities. Potentially significant impacts that could occur as a result of renewable energy projects being developed in the identified SEDAs were identified at a programmatic level and all feasible mitigation is prescribed in the PEIR; however, without project-specific information coupled with a project-level analysis under CEQA, it can't be stated with certainty that these potential impacts would be reduced to below a level of less than significant at a programmatic level. That is why the PEIR reaches the conservative conclusion that impacts remain potentially significant and unavoidable. The County will prepare a Statement of Overriding Considerations per Section 15093 of the State CEQA Guidelines that identifies the economic, legal, social, and/or technological benefits of implementing the proposed project in light of the unavoidable impacts identified in the PEIR. This document will be considered along with the PEIR by the County Board of Supervisors in late March 2015.

Because the EIR is a program document, it is intended to establish a framework and process for future implementation of solar energy projects that fall within the parameters evaluated in the PEIR. Individual projects will be required to prepare a project-specific environmental analysis and associated CEQA document to evaluate potential impacts, including visual analysis. As with the analysis and mitigation framework provided in the PEIR, the visual setting contained in the PEIR describes the general visual conditions of the SEDAs and the OVSA. Required project specific visual analyses and documents, per Mitigation Measure AES-1, would identify existing views, scenic vistas, and visual resources, and would evaluate the potential impacts to existing visual resources.

Response 206-5: The commenter agrees with the County's assessment that emissions of fugitive particulate matter with a diameter of 10 microns or less (PM₁₀) from construction and operation of subsequent individual solar projects would be potentially significant, as the specifics related to future potential projects are unknown at this time. The comment also notes support for the discussion in Section 4.3.3.2 of the PEIR that states "because details regarding individual solar projects are unknown at this time, project-specific analyses will be necessary to ensure that potential emissions associated with construction comply with the daily emission thresholds." This is further explained in Mitigation Measure AQ-1, which requires a site-specific air quality technical report be prepared and approved by the County for solar energy projects prior to issuance of Major Use Permits; this analysis would lead to the verification of compliance with County and GBUAPCD standards during construction and operation of the solar project. It should be noted that Mitigation Measure AQ-3 has been updated and is available for review in Response 202-25 or Section 4.2 of the Final PEIR. As this comment agrees with the conclusions drawn in the PEIR, and does not raise specific issues related to the adequacy of the EIR, no further response is required.

Response 206-6: The comment agrees with the County's determination that greenhouse gas ("GHG") emissions associated with the construction of any individual solar project would be potentially significant, but too speculative to analyze in the PEIR. This is further discussed in Mitigation Measure Mitigation Measure GHG-1 in Section 4.7.5 of the PEIR, which requires a site-specific technical GHG report be prepared and approved by the County prior to approval of a Renewable Energy Permit, Renewable Energy Development Agreement, or Renewable Energy Impact Determination for a solar energy project. The site-specific technical report would identify project-specific emissions to ensure

compliance with the interim SCAQMD GHG thresholds, as well as measures to reduce operational greenhouse gas emissions. As this comment agrees with the conclusions drawn in the PEIR, and does not raise specific issues related to the adequacy of the EIR, no further response is required.

Response 206-7: The comment agrees with statement in Section 5.1.3.3 of the PEIR that states that “It would be speculative to analyze construction emission concentrations of VOC, CO and SOX emissions, because project construction schedules and mobile source trip routes vary.” The County concluded that impacts related to air quality stemming from future solar development projects would lead to significant impacts; however, these impacts would be reduced to below a level of significance with implementation of all feasible mitigation measures as outlined in the PEIR.

Response 206-8: CEQA Guidelines Section 15064(h)(3) states “A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g. water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency.”

Section 4.3.3.3 of the PEIR addresses the potential for a cumulatively considerable net increase of criteria pollutants during construction and operation. Pertaining to construction, details regarding the proximity and scheduling of cumulative projects is unknown at this time. Therefore, the possibility exists that generation of PM₁₀ emissions associated with the project, when combined with other cumulative projects, particularly those occurring nearby and simultaneously, could result in a potentially significant temporary cumulative impact to air quality. Implementation of Mitigation Measure AQ-1 requires the preparation of a site-specific air quality technical report prior to the issuance of a Major Use Permit for a solar energy project to verify compliance with County and GBUAPCD standards during construction and operation of the project. All future projects would also be required to implement the dust control measures during construction (Mitigation Measure AQ-2) and operation (Mitigation Measure AQ-3, as amended). These measures would ensure that future projects comply with applicable significance thresholds that are designed to assist the region in attaining the applicable state and national ambient air quality standards. As a result, the implementation of these mitigation measures reduces the project's contribution to a cumulative impact to a less than significant level.

In response to this comment, the text within Section 5.1.3.3 has been updated to be consistent with the conclusions in Section 4.3.3.3 of the PEIR. The revision of the text in Section 5.1.3.3 is not considered to be “significant new information” as defined in Section 15088.5 of the CEQA Guidelines that would trigger recirculation of the PEIR because the disclosure of the potentially significant cumulative air quality impact and mitigation measures to address the impact were included in the Air Quality section of Table ES-1 in the Executive Summary and in Section 4.3 (impact identified in Section 4.3.3.3, Cumulatively Considerable Net Increase of Criteria Pollutants, mitigation measures identified in section 4.3.5, Mitigation Measures) of the PEIR when it was publicly circulated.

Response 206-9: The discussion in this comment accurately reflects the conclusions regarding potential hydrologic and water quality concerns identified in Section 4.9 of the PEIR.

Response 206-10: The referenced mitigation measures from Section 4.9 of the Draft PEIR were not designed “...*only* for subsequent utility scale solar projects...” as stated in this comment. The introductory text in Section 4.9.5 (Mitigation Measures) specifically notes that:

...all individual solar energy facility project applications (including small scale, community scale, and distributed generation [referred to as commercial scale in the Final PEIR]) shall be reviewed by the County, and the need for implementation of the following mitigation measures shall be determined based on the professional judgment of a qualified county planner, pursuant to ICC Title 21 and State CEQA Guidelines...If a proposed distributed generation [referred to as commercial scale in the Final PEIR] or community scale solar development project is determined by the County to have the potential to impact hydrology and water quality, then the following mitigation measures shall be implemented as determined necessary by the qualified County planner. The County will review future solar energy development proposals to determine if they meet the requirements of Section 15162 of the State CEQA Guidelines; projects that do not meet the requirements may require additional CEQA analysis prior to approval.

The PEIR addresses the types of impacts and mitigation measures that would be implemented as part of an update to the County’s General Plan and the SEDAs as defined in the PEIR. Individual projects would be required to prepare a project-specific environmental analysis and associated CEQA document to evaluate potential impacts. Project specific documents would be subject to public and resource agency review.

Response 206-11: The PEIR identifies that significant and unavoidable impacts would potentially occur in the areas of aesthetics, biology, and cultural resources. This is a conservative conclusion based on the uncertainty, at a Program EIR level, of a subsequent project’s actual impacts. The SEDA boundaries depicted in the Draft PEIR have been identified based on information described in the Opportunities and Constraints Technical Study (Appendix D of the PEIR). The SEDAs are intended to direct and constrain future solar developments to areas in the County identified as possibly supporting a lower level of resource sensitivity, and that are located near existing transmission facilities. Potentially significant impacts that could occur as a result of renewable energy projects being developed in the identified SEDAs were identified at a programmatic level and all feasible mitigation is prescribed in the PEIR; however, without project-specific information coupled with a project-level analysis under CEQA, it can’t be stated with certainty that these potential impacts would be reduced to below a level of less than significant at a programmatic level. That is why the PEIR reaches the conservative conclusion that impacts remain potentially significant and unavoidable.

**Defenders of Wildlife
Natural Resources Defense Council
The Wilderness Society**

January 14, 2015

Inyo County Planning Department
Attn: Ms. Cathreen Richards, Senior Planner
P.O. Drawer L
Independence, CA 93526
crichards@inyocounty.us

Re: Comments on Draft Programmatic Environmental Impact Report for Proposed Renewable Energy General Plan Amendment for the County of Inyo

Dear Cathreen,

Thank you for the opportunity to review and comment on Draft Programmatic Environmental Impact Report (DPEIR) for the Proposed Renewable Energy General Plan Amendment (REGPA) for the County of Inyo. These comments are submitted by The Wilderness Society, Defenders of Wildlife and the Natural Resources Defense Council. Background on our organizations has been provided in previous comment letters submitted on the REGPA in the past several years.

We herein incorporate by reference our previous comments on the proposed REGPA, including our project scoping comments (July 10, 2014) and our letters of December 9, 2010, January 14, 2011, February 19, 2014, and March 24, 2014, and our public testimony associated with multiple Board of Supervisors meetings on the proposed REGPA.

We appreciate the efforts of Inyo County and especially the Planning Department staff in developing the REGPA. The county sought and was awarded a planning grant from the California Energy Commission (CEC) to support this effort, and the provisions for public participation in the planning project have resulted in a plan that presents a reasonable approach to renewable energy development and that takes into account much of the input received from the public through the scoping process and the numerous public workshops that have been held in support of development of the plan.

Given the Governor's recent announcement (Jan. 6, 2015) supporting an increase in California's energy use to 50% renewables in the next 15 years, it is even more important that Inyo County take a proactive approach to renewable energy development. The Los Angeles Times reported an

207-1

expected “boom,” or second rush, of large-scale renewable energy development in the California desert (see <http://www.latimes.com/local/california/la-me-renewable-goals-20150108-story.html>). Thus it is imperative that Inyo County identify locations within the County that may be suitable for large-scale renewable energy development as well as smaller-scale renewable energy projects, and be prepared to tell developers where they can and can’t go. This proactive approach should allow Inyo County to contribute its share to solving the global climate crisis while helping ensure the preservation of the County’s most significant wildlife habitat, open spaces and scenic areas.

207-1
(cont'd)

Summary of our comments

We support Inyo County’s REGPA project objectives, including the County’s “directed development” (or “zoned”) approach to planning for renewable energy. We support a modified SEDA (Solar Energy Development Area) alternative, plus components of the other alternatives. We have proposed modifications to the County’s proposed SEDAs based on our own comparative analysis using information contained in the Desert Renewable Energy Conservation Plan’s (DRECP’s) Draft Environmental Impact Statement/Environmental Impact Report (DEIS/DEIR). Please see details below on our recommended modifications to the preferred alternative. We support development being prioritized on disturbed lands (where feasible given other constraints such as available transmission or use conflicts), and the County’s ongoing work to support smaller-scale and community-based solar projects. We hope Inyo County will adopt our suggestions to further fine-tune or eliminate some of the proposed SEDAs, based on our review of the biological and other “new” information in the Draft DRECP. Finally, we urge Inyo County to coordinate with the DRECP agencies to agree on a consistent plan for renewable energy development in the County across all jurisdictions.¹

207-2

I. Policy Issues

1. Range of Alternatives and Need for a Plan

We commend Inyo County for developing and presenting an excellent range of alternatives. The range includes many options and allows the public to compare and contrast various alternatives, as well as pick and choose from elements of various alternatives that they prefer. We concur with the County that the “no action” alternative is not environmentally superior in this case, as it would allow developers to pursue permits to construct large-scale solar facilities anywhere on lands under jurisdiction of Inyo County.

207-3

2. Type of Energy

We support Inyo County’s proposal not to allow wind development in the County, due to concerns expressed by neighboring military bases and in order to preserve the unparalleled scenic vistas that

207-4

¹ This process should occur with opportunities for ongoing public input.

make Inyo County so special and contribute to its tourism-based economy. Furthermore, disallowing wind energy development in the County would contribute to maintaining and protecting migratory birds in critical areas including the Little Lake-Rose Valley-Owens Valley corridor and the many east-west canyons along the Sierra Nevada escarpment, both of which are important aerial pathways for migratory birds.

We do not believe power-tower technology is feasible in Inyo County given military objections and resource constraints. We understand that the military opposes the use of power-tower technology in the western and southern areas. The only location where power-tower technology is feasible because of military conflicts elsewhere is in eastern Inyo County. Due to the scarcity of groundwater and because most of the eastern Inyo County watershed is within the Amargosa River basin (which is a federally protected Wild and Scenic River) any solar-thermal type technology (which requires more water than solar photovoltaic (PV) technology and which could adversely impact the Amargosa River), should not be permitted.

We also strongly support development of community solar fields that can help generate electricity for use in nearby communities that utilize existing electricity distribution facilities (especially where rooftop solar installations are not an option for every home due to roof surface area, sun orientation and slope, shading, etc.).

3. REGPA objectives, policies and land use implementation measures

We support many of the proposed REGPA policies and/or objectives, which will restrict development of large-scale renewable energy facilities to zones (the SEDAs) that are of a relatively modest size (acreage and megawatts (MW)) compared to the County as a whole. In particular we support these objectives and policies:

- Large-scale renewable energy development only allowed in SEDAs.
- Specify the limits on MW generation and land allocation for development in each proposed SEDA.
- Focus development near existing electrical conveyance facilities. This will maximize the use of the existing electricity distribution grid and facilitate opportunities to use the Feed-in Tariff Program currently offered by the Los Angeles Department of Water and Power (LADWP) and any future similar programs available through the Southern California Edison Company.
- In the Western Solar Energy Group (western portion of Inyo County), limit development to no more than 250 MW total, which is the remaining capacity on the LADWP Rinaldi line.
- Solar panels allowable over the Los Angeles aqueduct.

We request the following policy be added:

- A clear statement to cap transmission in the Owens Valley at the remaining available capacity of 250 MW. Do not support new transmission corridors or lines being developed through the Owens Valley.

Similar to placing limits on developable acreage and MW that can occur within the various SEDAs, we request that Inyo County add a policy to its REGPA stating that transmission of renewable energy for export should be capped at 250 MW, the currently available capacity remaining on LADWP's Rinaldi line. While the County notes (DPEIR, p. 3-18) that the 250 MW cap in the western part of Inyo County is proposed in order to be consistent with the existing transmission capacity in the Owens Valley, we recommend the County affirmatively state that it will not support added transmission capacity. The County should make clear that it will not support additional transmission facilities which would have significant impacts on the County's natural resources, including land-based resources and visual resources.²

207-5
(cont'd)

We do not support several of the land use implementation measures and request that the following measures be deleted:

- Land use implementation measure #3 (p. 3-8), in which the County will require compensation for any projects not developed due to special status species, military concerns or for other reasons. This proposed measure contradicts the criteria established for development of the REGPA adopted by the County, namely that SEDAs were identified based on their location as "areas of avoidance including, potentially, critical habitats, military concerns, cultural and historic resources, and scenic resources." (DPEIR, Chapter 3-2). Proposed SEDAs should be carefully reviewed to ensure that renewable energy development would avoid these named resources and military compatibility issues. Allowing this measure to stand would undermine the purpose, need and objectives established by the County for the REGPA. Furthermore, as written, measure #3 appears to apply to any project that is not approved within the County, which would apply to lands over which the County has no jurisdiction (e.g., federal public lands and State lands). Projects proposed on these lands that are denied by either the BLM or State Lands Commission would likely be based on a finding they are not in the public interest due to immitigable adverse impacts on the very resources the County has committed to protect through project avoidance.
- Land use implementation measure #5, in which the County would encourage development, generally, within the DRECP development focus areas (DFAs). DFAs have yet to be designated, and we do not support all of the proposed DFAs in the Draft DRECP (we will provide comments on Draft DRECP DFAs in our comments on that plan which are due February 23, 2015). As noted below, we encourage Inyo County and the DRECP agencies to strive to make their respective recommendations on DFAs consistent and to seriously consider our own recommendations. Among some of the proposed DFAs we find problematic in the DRECP are, for example, two small areas located within the Owens

207-6

² This includes the west-wide energy corridor, or WWEC, that has already been designated by the Department of Energy and federal land agencies in Inyo County. It is our understanding that agencies will be undergoing a re-analysis of WWEC corridors so it is timely for the County to make clear its preference with respect to the Owens Valley WWEC in the REGPA.

Valley west of U.S. 395 and one large area that encompasses nearly the entire Rose Valley north of Little Lake.

- Land use implementation measure #7, in which the County would promote the designation of additional Solar Energy Zones to the BLM. BLM completed its process to designate SEZs. The DRECP is the appropriate mechanism to identify any additional development areas on federal land and, as per above, we urge coordination with the DRECP agencies.
- Land use implementation measure #8, in which the County would encourage renewable energy development on State Trust Lands under jurisdiction of the State Lands Commission.

We believe the DRECP is the appropriate vehicle in which to identify State Trust Lands suitable for renewable energy development. Many such lands are located within the boundaries of existing and proposed conservation areas (e.g., designated wilderness areas, Wilderness Study Areas, Areas of Critical Environmental Concern (ACECs), National Landscape Conservation System (NLCS) lands, etc.). BLM and the State Lands Commission are jointly working under terms of a land exchange agreement to allow for consolidation of State Trust Lands in areas suitable for renewable energy development and consolidation of public lands within the above-named conservation areas. The land exchange agreement, and the Draft DRECP, recognizes that public lands within any designated DFAs may be subject to acquisition, by exchange, by the State Lands Commission in support of renewable energy development and revenue generation to support the purpose and need of the State Lands Commission.

207-6
(cont'd)

4. Project level planning tiered under the programmatic EIR

We support Inyo’s programmatic approach to assessing the impacts of and potential mitigation measures for renewable energy development in the County. We are concerned, however, with the County’s assumption that projects may not need additional analysis under the California Environmental Quality Act (CEQA) (see Executive Summary, pp. 6-7). Even as the County develops an EIR at a programmatic level, subsequent EIRs may be required for certain individual projects under CEQA, while some projects may require a lesser level of CEQA analysis. Projects under 20 MW (i.e., those that are defined as “distributed generation”) should also not be exempted from further site-specific analysis under CEQA, if needed. Scoping and the initial study for individual projects may identify potential impacts that necessitate additional analysis under CEQA.

207-7

We have also reviewed the proposed mitigation measures. Many of them entail additional surveys and impact avoidance plans that would be submitted by the project developer after permits have been issued. We recommend the County review the proposed mitigation measures and decide which ones should be required prior to issuing project permits and that would be subject to public review and comment under the CEQA process. Examples of these include, but are not limited to species occurrence and avoidance surveys, species clearance surveys and desert tortoise translocation plans. The primary mitigation measure should be avoidance of significant adverse impacts altogether rather than relying on a variety additional studies and measures to lessen direct adverse

207-8

impacts. Projects found to cause significant adverse impacts should be relocated to appropriate locations whenever feasible.

207-8
(cont'd)

5. Public Involvement

Since receiving the initial grant from CEC, Inyo County has done a commendable job of informing and engaging the public in its REGPA process, starting with a series of public meetings in fall, 2013 and multiple public meetings at the Planning Commission and Board of Supervisors that predated formal scoping under CEQA.

One issue area that needs to be clarified as soon as possible is the process for determining potential solar energy development in the Owens Valley, specifically within the Owens Valley Study Area (OVSA).³ The majority of the Owens Valley is owned by LADWP, and Inyo County has little control over the ultimate fate of these lands. However, Inyo applied for and received a second CEC grant (with our support) to engage stakeholders, hopefully including LADWP, in a “process” to determine the fate of OVSA lands with respect to solar energy development, even though the County has no jurisdiction over those lands. There is ongoing confusion and concern as to what this “process” will entail and also how it will be consistent, from a planning and a CEQA standpoint, with the REGPA’s programmatic EIR. We support a tiered approach to project planning, but given the sensitivity and high profile of the Owens Valley, it is essential that the County provide some clarity about the process, both in this PEIR and via other means (e.g., public announcements).

207-9

II. Specific comments on Solar Energy Development Areas

Following are our specific comments on the SEDAs. Inyo County has identified *nine* proposed SEDAs, including the Owens Valley Study Area.

We see the SEDAs as “envelopes” within which development could occur. However, similar to the BLM’s solar energy zones (SEZs) in BLM’s Western Solar Program, not all areas within proposed SEDA boundaries may be suitable for development. We request that this be made clear in the final PEIR and that those areas within SEDAs that may be found upon site-specific analysis to contain significant natural, cultural or recreational values are identified and designated as avoidance areas. Our preference is that Inyo County avoids conflicts, where possible, and we appreciate that the County proposes to use the mitigation hierarchy commonly in use by the BLM for assessing

207-10

³ It is our understanding that the County intends to consider the OVSA for non-large-scale solar energy projects (e.g., community and distributed generation), a measure that we support but which we believe needs to be more clearly articulated in the PEIR. (See our comments below.)

renewable energy development project (see policy LU 1.17, DPEIR at p. 3-7).⁴ In light of this concern we request that REGPA objective #3 be reworded to say:

“Avoid or minimize direct and indirect impact from future solar energy developments...”

Please note that our comments and recommendations differ in some cases from our earlier recommendations. Previously and due to the absence of more detailed information and lack of a Draft DRECP, we identified certain areas as *suggested renewable energy study areas* rather than as suggested development areas. With the advent of new information, particularly on biological resources and proposed conservation reserves in the Draft DRECP, we have modified our recommendations.

207-10
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1. Owens Valley Study Area (OVSA)

We are confused by what the County is proposing for the OVSA with respect to the scale of potential development. It is not entirely clear if the OVSA is being considered *only* for distributed generation and community solar development or if the OVSA may also be considered for large scale solar facilities.

Policy LU 1.19 (DPEIR p. 3-8) mentions a special set of criteria will be defined for the OVSA. These criteria, characterized as *potential* criteria, are in the DPEIR:

A separate set of potential criteria for development siting in the OVSA have been formulated: (1) only utilize existing transmission facilities and corridors; (2) guide the development to disturbed lands, including over and along the Los Angeles Aqueduct; (3) consider encouraging development at solid waste and wastewater treatment facilities, on private lands, in small scale (e.g., roof tops) and distributed generation (20 MW or less) arrays, and around communities in smaller arrays (10 MW or less); (4) mitigate potential impacts to the environment, society, culture, and economy of the County; (5) work to avoid significant alterations to visual resources; and (6) minimize intertie facilities.

207-11

DPEIR at Section 3.3.2, p. 3-15. By not clearly stating that large-scale solar projects will not be entertained in the Owens Valley, some may interpret these criteria (especially given that they are qualified as potential) as potentially allowing large-scale solar facilities within the Owens Valley.

We recommend that the REGPA clearly articulate both in the DPEIR text and as a footnote in Table 3-1 that the OVSA is not intended for large-scale solar projects, if that is indeed the case.

A portion of the OVSA is designated as an interagency conservation priority area for the DRECP. The area surrounding the Owen’s River and riparian areas around the river are a high conservation

⁴ Though as noted above, we are concerned that some of the proposed mitigation measures are meant to mitigate for direct project impacts, as versus using the mitigation hierarchy to first *avoid* areas that contain substantial conflict.

priority for the DRECP and should not be considered for any renewable energy development, large or small.

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2. Owens Lake

Many areas within this proposed SEDA contain important and varied habitats for shorebirds, waterfowl, migratory birds and Tule elk. In addition, cultural resources associated with past shorelines of the lake are present in some areas, such as adjacent to Highways 190 and 136. There are numerous wetlands within the proposed boundary that support shorebirds, waterfowl and migratory birds. These wetlands plus a one-mile buffer around them should be removed from the SEDA. Tule elk are common on the uplands and shoreline habitats located along the entire northern shoreline of Owens Lake and these areas should be eliminated from the SEDA. Areas with known cultural resources should also be eliminated from this SEDA.

We have previously expressed concerns about the now well-documented impacts of solar PV arrays on resident and migratory birds, which the DPEIR acknowledges (see p. 4.4-91). We recommend that, before this SEDA is approved for potential development, a more robust, multi-agency investigation of this issue must occur.

The Draft DRECP has identified the entire bed of Owens Lake as a proposed conservation area, although we were informed by BLM that this is a mapping error; the lack of clarity over the proposed DRECP designation(s) for the bed of Owens Lake needs to be resolved.

Regardless, given that the bed of Owens Lake is mostly under jurisdiction of the California State Lands Commission, as well as our ongoing concerns about documented solar PV-bird impacts, we recommend this SEDA be classified as a “needs further study” area rather than designated a SEDA at this time. The DRECP appears to be the most appropriate planning vehicle to determine the future use of this area for potential renewable energy development because the State Lands Commission is a participating agency in development of the DRECP and has requested incidental take permits for renewable energy development on its lands in the DRECP area that are determined to be suitable for development. The DRECP, as a multi-agency initiative involving U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife, also appears to be the more appropriate forum for addressing and resolving the scientific issues related to bird mortalities at solar PV facilities generally and specifically at Owens Lake if development is contemplated there.

207-12

We also request that the approximately 7,000 acre strip of land due south of Owens Lake (south of state highway 190) that was at one time part of the Centennial Flat REDA be removed from further consideration as a SEDA. Our organizations had recommended this strip as potentially suitable for renewable energy development based on the information we had at the time, but have since learned through our review of the Draft DRECP that it contains significant cultural resources, linkage habitat for Mohave ground squirrel and an important plant community. It is therefore not suitable for renewable energy development.

3. Rose Valley

The proposed SEDA involves both private and public lands. We appreciate the County reducing the size of this SEDA from some of its earlier proposals. However, due to its sheer size in this relatively narrow valley between the Sierra Nevada and Coso Range, build-out of the SEDA would pose a potentially significant adverse impact to the Mohave ground squirrel local population and to populations to the north and south that are dependent, over time, on gene flow through this essential linkage habitat. We recommend that the SEDA be further reduced in size through the removal of all undisturbed public lands that are within the designated Mohave Ground Squirrel Conservation Area. This SEDA should be limited to those private lands that have undergone extensive disturbance with potential addition of some adjacent public lands that BLM determined were suitable for disposal in the West Mojave Plan in 2006. Such areas include the former Hay Ranch property once used for alfalfa production located east of Highway 395 and other alfalfa growing areas located north of Haiwee Reservoir. Dunmavin is another area with relatively high levels of fragmentation from now-abandoned residential use. Another opportunity for development in this area is small-scale solar PV facilities that could support the commercial property at Coso Junction and the Caltrans highway rest area in the same area.

207-13

The Draft DRECP indicates that some lands within the proposed Rose Valley SEDA (except for the large Development Focus Area in the center of Rose Valley proper) are a proposed conservation area due to the importance of this habitat linkage for the Mohave ground squirrel. In general, now that additional studies have occurred and that the Draft DRECP has been released, we recommend that the County coordinate with the DRECP agencies in developing a final proposal that is consistent with the conservation needs envisioned in the Draft DRECP.

4. Pearsonville

There appears to be significant acreage of disturbed private lands in the Pearsonville area directly adjacent to existing transmission lines. These private lands, as well as disturbed public lands in the vicinity, may be suitable for development. It should be noted, however, that all public lands in this area are Limited Use Class and designated as Mohave ground squirrel conservation areas. Public lands located west of Highway 395 are essential in maintaining habitat connectivity and north-south movement for this species. The DRECP has designated a large portion of this SEDA as an interagency conservation priority. And, the preferred alternative in the Draft DRECP has identified the westernmost portion of the SEDA as both an ACEC and for inclusion in the NLCS. We therefore recommend that critical areas for the Mojave ground squirrel and the areas identified as ACEC and NLCS in the Draft DRECP be removed from this SEDA. Additionally, the northern section of this SEDA overlaps with desert bighorn sheep intermountain habitat.

207-14

5. Laws

We support the SEDA at Laws, much of which is highly disturbed land near existing transmission. Because the Laws area is subject to the regulations contained in the 1991 Long Term Water Agreement between Inyo County and the Los Angeles Department of Water and Power (LADWP), any renewable energy development in this location should be carefully considered in light of these agreements.

207-15

6. Trona

The Southern Solar Energy Group is limited to the Trona SEDA, and we commend the County for removing the Panamint Valley from consideration. We also appreciate the additional analysis by the County in further refining the extent of the proposed SEDA in Trona. Except for the airport, recreation facilities and other disturbed or fragmented lands in this SEDA, it is identified as ACEC and NLCS under the preferred alternative for the Draft DRECP. The County should work with the DRECP agencies to refine this SEDA so that solar development does not undermine the DRECP conservation designations. Due to military and civilian aircraft operations within the area, we recommend that only PV technology should be allowed. Some transmission capacity may exist in SCE facilities linking the Searles Valley with the substations in the Indian Wells Valley.

It is our understanding the Argus Cogeneration Expansion facility in the Searles Valley provides 102 MW to Southern California Edison under a power purchase agreement that extends until November 2015, and that the electricity is transmitted by SCE transmission lines connected to the Inyokern Substation. (see: <http://northernstargeneration.com/ace.html>, and <http://www.pennenergy.com/articles/pennenergy/2012/11/dco-buys-stake-in-coal-fueled-ace-plant-with-plans-to-switch-to-natural-gas.html>). We recommend the County determine if spare capacity exists on SCE’s transmission line from the Trona facility, and also determine if minor upgrades would be needed to accommodate the 100 MWs of solar-based electricity generated in the proposed Trona SEDA. Appendix D of the Draft REGPA indicates there is no transmission facility in the area and only a distribution system that serves the local area. This may not be the case, so we recommend further investigation into the availability of existing transmission.

207-16

7. Chicago Valley

As we have previously recommended, we believe that this SEDA be removed from further consideration for development. Public lands in this area are designated as Limited Use Class. Groundwater in the basin is limited and there are no electrical transmission facilities other than local distribution lines serving scattered local residences. Chicago Valley has well developed mesquite woodland habitat and is suitable Desert tortoise habitat. Golden eagles nest in numerous locations in surrounding mountain ranges and likely utilize Chicago Valley for foraging. Bighorn sheep occur in these ranges as well, and may cross Chicago Valley during inter-herd movements or utilize the bajadas in the valley adjacent to the mountains for winter and early spring forage. This area has been

207-17

modeled as intermountain habitat for desert bighorn sheep. Additionally, the entire extent of the SEDA is proposed ACEC and NLCS under the preferred alternative for the Draft DRECP. Development in this area would undermine the desert-wide conservation strategy that the DRECP is developing.

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8. Charleston View

We consider private lands within this proposed SEDA potentially suitable for renewable energy development provided that any proposed water consumption for a project results in no net loss of groundwater in the Pahrump Valley. We urge great caution, however, because of the high probability that Pahrump Valley groundwater is interconnected with the Death Valley Flow System and the Amargosa River. The Amargosa River is a federally designated Wild and Scenic River, and no actions should be permitted that may impact the life-supporting flow of the river. The County should not permit water-consumptive solar-thermal technologies in this SEDA. Undeveloped public lands within the SEDA likely support the threatened desert tortoise. The majority of the SEDA is a DFA in the preferred alternative for the Draft DRECP. However, the westernmost portion of the SEDA overlaps with proposed NLCS in the Draft DRECP. We recommend that these public lands in the western portion of the SEDA be removed from consideration for any renewable energy development.

207-18

Segments of the Old Spanish Trail have been identified within and adjacent to this SEDA, as described in the CEC's Staff Assessment for the formerly proposed Hidden Hills solar project. We recommend that these lands and an appropriate buffer be removed from the SEDA, which the County should do in coordination with the National Park Service.

We are aware that any renewable energy development in this SEDA will be controversial for the reasons noted above. Therefore, we recommend that the County develop additional criteria that must be met in order to consider any project in this area. A supplemental EIR will likely be required projects proposed in this area.

9. Sandy Valley

The Sandy Valley SEDA is comprised of private and public lands, the latter of which are designated Unclassified by BLM. Many of the private land parcels are used for alfalfa and sod production or are no longer in use. The Draft DRECP does not appear to identify any conservation designations within the proposed SEDA. Groundwater under Sandy Valley is in a state of decline due to groundwater extraction for alfalfa and sod grass irrigation, and any additional water demand may result in groundwater depletion issues in adjacent Nevada. Nevada residents also use the same groundwater but under Nevada permits. This SEDA appears to be suitable for consideration of solar energy facility development provided water use requirements are minimized. Most of the

207-19

private lands within the greater Sandy Valley are located to the south, in San Bernardino County and in Nevada. 207-19
(cont'd)

III. Inyo County’s reduced SEDA recommendation

We support a “reduced SEDA” alternative that is different from the one described by the County, with our suggested modifications to each SEDA as noted above.

Our comments on Inyo County’s reduced SEDA alternative are as follows:

- We do not support the Owens Valley Study Area being the only location that might accommodate up to 250 MW of energy in the western group (which we must assume would conceivably, then, include large-scale solar facilities). Our alternative would modify the individual SEDAs in the western group as noted above.
 - We support the reduced SEDA alternative’s proposal to eliminate Chicago Valley; the elimination of Chicago Valley is in our reduced SEDA alternative.
 - We would support a reduced MW alternative for Sandy Valley.
 - We do not support an increased MW output for Charleston View.
- 207-20

IV. Disturbed Lands

We support the development of disturbed lands for renewable energy facilities where it is feasible. Specifically, we support inclusion of the PPG plant near Owens Lake for further assessment (PEIR at p. 3-16), abandoned mining areas and borrow pits that are within designated SEDAs and landfills, airport sites including the Bishop airport (as suggested previously by many citizens), etc. where conflicts don’t exist with existing uses, and especially those areas that are near existing electrical transmission lines.

207-21

While we recognize that portions of the Owens Lake dry lakebed are highly disturbed, we are uncomfortable with Owens Lake being recommended for large-scale solar energy development at this time because of its importance to birds. Further study needs to be done, in conjunction with state and federal wildlife agencies, to ensure large-scale solar development on the dry portions of the lakebed won’t adversely impact the area’s significant populations of migratory birds.

V. Coordination with the DRECP

We urge Inyo County to coordinate with the DRECP agencies prior to finalizing the DPEIR. During REGPA scoping, we asked Inyo County to utilize data in the DRECP (which was made available to the desert counties before the Draft DRECP was released to the public) to modify its proposed Renewable Energy Development Areas (REDAs), a prelude to the SEDAs. Because it did not appear that modifications were made (e.g., proposed REDAs/SEDAs do not appear to have

207-22

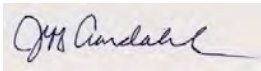
been modified to avoid conflict with DRECP proposed conservation reserves), we did our own analysis.

Moving forward, we hope the local, state and federal agencies can work together to share data and knowledge and to reach agreement on which areas within Inyo County are suitable for potential development of large-scale solar energy facilities, while also supporting increased incentives for rooftop solar, community solar facilities and smaller distributed generation projects. And, we hope all the agencies, including Inyo County, will heed our recommendations for modifying (and in cases eliminating) both the proposed SEDAs and the proposed DFAs in the DRECP.

VI. Conclusion

We thank Inyo County for its diligence in preparing the Draft PEIR, and for its excellent process to date engaging the public in the critical conversation about future renewable energy development within the County. As climate change continues to affect us at the local and global levels, and as local, state, federal and international governments increasingly look to solutions to try to attenuate the impacts of climate change on our planet, there will be additional pressure for citizens at all levels to “step up” and help find solutions to a global problem. Inyo County has taken a tremendous step forward in this regard. We thank you for your leadership.

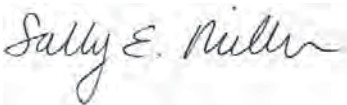
Sincerely,



Jeff Aardahl
Defenders of Wildlife



Helen O'Shea
Natural Resources Defense Council



Sally Miller
The Wilderness Society

CC: Karen Douglas, California Energy Commission
Jim Kenna, Bureau of Land Management

207-22
(cont'd)

Response to Letter 207 - Defenders of Wildlife, Natural Resources Defense Council, and The Wilderness Society

Response 207-1: This comment provides an introductory statement acknowledging the County's public planning efforts and the value of the REGPA. No additional response is required.

Response 207-2: This comment provides a summary of comments contained in the letter. The comments are addressed individually in comment responses 207-3 through 207-22.

Response 207-3: The comment expresses concurrence with the PEIR that the "No Action" alternative is not environmentally superior to the proposed project. No additional response is required.

Response 207-4: The County recognizes that solar thermal facilities may not be suitable in all of the SEDAs or in certain areas of the SEDAs due to resource constraints and land use conflicts (such as the military overflight path). The REGPA is a long term planning policy; however, and although the County does not specifically advocate the development of utility scale solar thermal facilities within the County, it will not preclude the opportunity to permit development of the technology in areas deemed suitable as long as the development is consistent with the goals and policies of the General Plan and REGPA, if adopted. The REGPA Land Use Implementation Measure 1 (Section 3.3.1 of the PEIR) requires the County to coordinate with the Department of Defense, U.S. Navy China Lake, and Edwards Air Force Base personnel on siting of solar facilities to avoid and minimize impacts on military readiness. Any utility scale solar development under the REGPA would be subject to Mitigation Measure HYD-2, Mitigation Measure BIO-24, and Mitigation Measure BIO-25, which require individual projects to conduct site-specific groundwater investigations.

Response 207-5: REGPA Policy MER-2.3 has been updated to clarify that the total allowable megawatts presented in Table 3-1 of the PEIR (which is part of the REGPA) apply to developments that may export electricity – utility scale and commercial scale (referred to as distributed generation in the Draft PEIR), and New Mineral and Energy Resources Implementation Measure 3 has been updated for consistency. The revisions are as follows:

Policy MER-2.3: SEDA Land Inventory. As illustrated in Table 3-1, ~~the County proposes caps on~~ the total megawatts that may be produced by utility scale and commercial scale renewable energy solar facilities within each SEDA as well as the total acreage of those renewable energy solar facilities that may be developed within each SEDA are capped. ~~(Distributed Generation, Small scale and community scale solar energy facilities are excluded from the SEDA caps and total allowable developable area.)~~

New Mineral and Energy Resources Implementation Measures

3. Create and maintain a SEDA Table of Megawatts and Corresponding Acreages for utility scale and commercial scale renewable energy solar facility development.

As outlined in Table 3-1 of the PEIR, the total allowable generation capacity in the Western Solar Energy Group which includes the Owens Valley (Laws SEDA and OVSA) and the Rose Valley, Pearsonville, and Owens Lake SEDAs, is 250 MW. As stated in Project Objective Number 5 (Section 3.2 of the PEIR), the development areas have been situated along existing and planned transmission systems to minimize new facility construction and to maximize existing facilities. Due to the relatively small energy load required by the County, the majority of potential solar electric energy generated in the county would

serve areas outside of the county. By identifying the total allowable MW for each solar energy group and defining the different types of development, the County is effectively capping the amount of electricity that may be exported. The megawatt and acreage caps indicated in the Draft PEIR for the proposed SEDAs apply to both currently proposed (e.g., Munro Solar Project and LADWP's Solar Ranch) and future projects after adoption of the REGPA by the County. If the REGPA is adopted, any proposed solar energy development that would exceed the cap would require a General Plan Amendment, further CEQA analysis, and public comment.

Response 207-6: REGPA Land Use Implementation Measure #3 regarding compensation to the County for solar projects not developed has been removed.

Land Use Implementation Measure 5 would encourage development in the development focus areas (DFAs) as designated under the DRECP, if adopted. As stated under the discussion of the DRECP in Section 2.4.3.1, the DRECP is currently under review, and although the County is under no obligation to implement the DRECP principles and policies (including the DFAs), the County has considered the DRECP in development of the REGPA. Because the DRECP was in draft form during the preparation of the PEIR, the SEDAs were not further constrained based on information contained in the DRECP. If the REGPA is adopted then Land Use Implementation Measure would apply to those approved DFAs contained in the DRECP. If the County becomes a signatory of the DRECP, future development under the REGPA within the DRECP area could be expedited by the take coverage under Section 10 of the Endangered Species Act of 1973 that is provided by the DRECP.

Land Use Implementation Measure 7 has been deleted by the County as reflected in Section 3.3.1 of the Final PEIR.

Under Land Use Implementation Measure 8, the County would encourage renewable energy development on State Trust Lands under jurisdiction of the SLC. As the comment suggests, the County will continue to coordinate with the SLC regarding future renewable energy development on lands under jurisdiction of the SLC to direct the development to the most appropriate areas in those lands where they overlap the SEDAs.

Response 207-7: All future projects under the REGPA would be subject to project-specific environmental review. The REGPA PEIR addresses the types of impacts and mitigation measures that will be implemented as part of an update to the County's General Plan and the SEDAs as defined in the PEIR. All future projects under the REGPA would be subject to project-specific environmental review. This process will use the types of impacts and mitigation measures outlined in the PEIR as guidelines. Depending on the size and location of the development and the technology used, a Subsequent EIR may be required. However, the REGPA also encourages small scale, photovoltaic (PV) solar facilities to be constructed which may not require a full EIR. As stated in Section 1.2 of the PEIR:

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

It should be noted that under Title 21 of the Inyo County Code concerning renewable energy development, any person who proposes to construct an electric transmission line, solar thermal renewable energy facility or a PV renewable energy facility in the County must first obtain a Renewable Energy Permit, a Renewable Energy Development Agreement or a Renewable Energy Impact Determination. A Renewable Energy Impact Determination applies to projects over which the County has limited authority because the project is located on federal or state land or is subject to the permitting jurisdiction of the California Energy Commission.

Under Title 21, the issuance of a Renewable Energy Permit is subject to CEQA, and the County Planning Commission must conduct a noticed public hearing before considering approval of such a permit. The Planning Commission must find that there has been compliance with CEQA before a permit can be issued. In addition, “as a condition to the issuance of such a permit, the Planning Commission may impose such reasonable and feasible mitigation measures as it finds to be necessary to protect the health, safety, and welfare of the county’s citizens, the county’s environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.” Finally, the Planning Commission is required to impose as a condition of approval, a plan for the reclamation/revegetation of the project site at the time of decommissioning of the project and the Planning Commission shall require financial assurances from the applicant to ensure that the reclamation plan will be fully implemented.

Concerning Renewable Energy Development Agreements, Title 21 provides that such agreements may be entered into by the County and a project applicant in lieu of obtaining a Renewable Energy Development Permit. Renewable Energy Development Agreements are subject to CEQA and must be approved by an ordinance adopted by the Board of Supervisors following a noticed public hearing. Prior to approving such an agreement, the Board must find that there has been compliance with CEQA. Renewable Energy Development Agreements must include a reclamation plan, acceptable financial assurances to ensure full implementation of the reclamation plan, be consistent with the county general plan and be enforceable by injunctive relief or other enforcement mechanisms under law. In the Renewable Energy Development Agreement, the Board of Supervisors may require such mitigation measures or modifications of the project as it finds necessary to protect the health, safety, and welfare of the county’s citizens, the county’s environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project. This PEIR would provide a framework for these subsequent project analyses, but specific projects would still be assessed on an individual level; all projects under CEQA are legally afforded the same public review process.

Response 207-8: The mitigation monitoring and reporting program in Appendix B of the PEIR identifies the implementation timing for each mitigation measure prescribed in the PEIR. All mitigation measures are subject to public review during the public comment period of this PEIR. Applicable mitigation measures must be implemented prior to an individual solar energy development project being constructed under the REGPA.

Response 207-9: Section 1.1 of the PEIR states:

“Potential solar projects in the OVSA will be considered in a subsequent planning process, separate from the REGPA, which will identify a set of criteria for identifying and mapping areas appropriate within the OVSA for solar energy development. Still, limitations on the size of projects and transmission policies pertaining to the OVSA are established in the REGPA.”

The County maintains that having General Plan policy on LADWP-owned lands is one of the few ways it can influence the potential development of these lands. Since it is known the LADWP has interest in solar energy development on some of its lands in the Owens Valley, it would greatly benefit the County to have policy in place with regard to that potential development. In regards to the REGPA Phase II study, the scope is process-oriented and the outcomes cannot be predicted. It is anticipated that recommendations to address solar energy development in the Owens Valley and Owens Lake will be presented for incorporation into the General Plan, but this cannot be determined prior to completing the study. The process for future evaluation in the OVSA will be conducted publicly and comply with all CEQA regulations and requirements. The process will further address a subsequent General Plan Amendment in the OVSA, resulting in a subsequent CEQA document that will be consistent with policies set forth in the REGPA.

Response 207-10: Project Objective 3 has been updated as follows:

3. *Avoid or minimize direct and indirect impact from future solar energy development on the physical, biological, cultural, political, and socioeconomic environments.*

In order to preserve the County's physical, biological, cultural, political, and socioeconomic environments, and allow future development to be implemented in an economically feasible manner, the County identified the potential SEDAs. An Opportunities and Constraints Technical Study (OCTS) (Aspen 2014) was prepared for the proposed project in which quantifiable data were used to map sensitive resources throughout the County. These data were qualitatively used to identify locations that were more or less sensitive based on the available data. The proposed development areas are in locations with the relatively least impact to the resources evaluated. In identifying these development areas, development is directed to avoid and minimize impacts to those areas, and encourage development in areas deemed more appropriate. Not all areas within the SEDA boundaries may be suitable for development. Site specific analysis of sensitive resources will be conducted prior to development in any of the SEDAs and identified sensitive resources will be avoided or impacts will be minimized to the extent practicable and mitigated pursuant to this PEIR.

207-11: Although the County does not specifically advocate utility scale development in the OVSA, the potential criteria listed in Section 3.3.2 do not preclude utility scale development in the OVSA. Alternately, small and community scale and commercial scale (referred to as distributed generation distributed generation in the Draft PEIR) are encouraged under the REGPA.

As stated under the discussion of the DRECP in Section 2.4.3.1, the DRECP is currently under review, and although the County is not currently a signatory of the DRECP and is under no obligation to implement the DRECP principles and policies, the County has considered the DRECP in development of the REGPA. Because the DRECP was in draft form during the preparation of the PEIR, the SEDAs were not further constrained based on information contained in the DRECP. However, if the DRECP and the REGPA are adopted, the County would coordinate with the DRECP agencies to avoid priority conservation areas and future projects in the County would be developed consistent with the requirements of the DRECP. Under REGPA Policy MER-2.6, the County would coordinate with renewable energy solar developers and other agencies to avoid, minimize, or mitigate impacts. If the County becomes a signatory of the DRECP, future development under the REGPA within the DRECP area could be expedited by the "take" coverage under Section 10 of the Endangered Species Act of 1973 and state take coverage under Section 2835 of

the California Fish and Game Code for species listed under the California Endangered Species Act as threatened, endangered, or candidates.

Response 207-12: Please refer to the discussion of the DRECP in Response No. 207-11 regarding the role of the DRECP in the development of the REGPA and in future projects under the REGPA. Refer to Response 202-30 regarding the how the SEDA boundaries have been developed and how development within the SEDAs would be constrained through subsequent studies, and the discussion of the Owens Lake SEDA.

Response 207-13: Please refer to the discussion of the DRECP in Response 207-11 regarding the role of the DRECP in the development of the REGPA and in future projects under the REGPA. Refer to Response No. 202-30 regarding the how the SEDA boundaries have been developed and how development within the SEDAs would be constrained through subsequent studies, and the discussion of the Rose Valley SEDA.

Response 207-14: Please refer to the discussion of the DRECP in Response 207-11 regarding the role of the DRECP in the development of the REGPA and in future projects under the REGPA. The reader is directed to Response No. 202-30 regarding the how the SEDA boundaries have been developed and how development within the SEDAs would be constrained through subsequent studies, and the discussion of the Pearsonville SEDA. Refer to Response 205-6 regarding ACEC and National Conservation Lands overlapping the SEDAs.

Response 207-15: Future solar energy projects under the REGPA would undergo project specific analysis, which will include an evaluation of consistency with existing plans and regulatory framework such as the 1991 LADWP/Inyo County Long Term Water Agreement, the 1997 Memorandum of Understanding, and the Owens Valley Land Management Plan. Refer to Sections 2.4.3.3 *Inyo County/Los Angeles Long Term Water Agreement*, 2.4.3.4 *1997 Memorandum of Understanding*, and 2.4.3.6, *Owens Valley Land Management Plan*.

Response 207-16: Please refer to Response No. 207-11 regarding the DRECP. As described in the PEIR, although the SEDAs have been identified to direct and constrain utility-scale and commercial scale solar development in the County, not all areas within the proposed SEDA boundaries may be suitable for development (refer also to Response No. 202-1). Therefore, although existing and proposed ACECs and National Conservation Lands overlap the SEDAs, all future projects under the REGPA would be subject to project-specific environmental review, which would include pinpointing the appropriate siting to avoid protected areas. This has been clarified in the Final PEIR. Refer to Response No. 202-1 for the revisions to Project Objective Number 3.

Further, the County has limited influence over public, state, and LADWP-managed lands in the County. The ACEC's and National Conservation Lands within the SEDAs are BLM-managed, and the County has limited regulatory authority over those areas. The following statement has been added to Section 1.2 of the PEIR:

The County is solely responsible for the lands under its own jurisdiction. Any future development in the SEDAs or OVSA involving federal, state, and LADWP-owned lands would require coordination with the appropriate land managing agency and would be subject to environmental review and land use constraints consistent with the regulations applicable to that jurisdiction.

The discussion of the southern solar energy group transmission requirements in Section 3.3.5 has been updated as follows:

The Southern Solar Energy Group is comprised of the Trona SEDA and has a 100-MW energy generation cap. ~~Exporting 100 MW from the Trona SEDA would require a new transmission line because~~ There are no existing transmission lines in this area of the County; only lines providing distribution to local residences currently exist. However, SCE owns the McGen Substation and Searles Substation located approximately 3.5 and 8.5 miles away from the Trona SEDA. With upgrades, these facilities connecting subtransmission lines may be able to accommodate the Trona SEDA, potentially reducing the need for new transmission lines. This new line If new transmission lines are required, they could parallel the existing 33-kV SCE distribution line and would most likely be built at 115 kV to interconnect with the existing SCE 115-kV line that runs along US 395 in Kern County.

Response 207-17: Please refer to the discussion of the DRECP in Response 207-11 regarding the role of the DRECP in the development of the REGPA and in future projects under the REGPA. Refer to Response 205-6 regarding the how the SEDA boundaries have been developed and how development within the SEDAs would be constrained through subsequent studies.

Response 207-18: Please refer to the discussion of the DRECP in Response 207-11 regarding the role of the DRECP in the development of the REGPA and in future projects under the REGPA. Refer to Response 205-6 regarding the how the SEDA boundaries have been developed and how development within the SEDAs would be constrained through subsequent studies.

Response 207-19: Refer to Response 205-6 regarding the how the SEDA boundaries have been developed and how development within the SEDAs would be constrained through subsequent studies.

Response 207-20: As discussed in Section 6.0 of the PEIR, a range of project alternatives were considered and compared against the factors outlined in Section 15126(f) of the State CEQA Guidelines for feasibility. The list of alternatives outlined and analyzed in Section 6.3 of the PEIR include: No Project Alternative, Solar PV Only Alternative, Commercial Scale Only Alternative, Reduced SEDA Alternative, and Solar Energy Development on Previously Disturbed Lands Only Alternative. As summarized in Section 6.5, the No Project Alternative would result in an exacerbation of the potential impacts in relation to the proposed project. The remaining alternatives were identified as being environmentally superior to the proposed project, but would all result in significant and unavoidable impacts to aesthetics, biology, and cultural resources.

Response 207-21: Refer to the Response 205-6 regarding how development within the SEDAs would be constrained through subsequent study and revisions to the PEIR regarding known biological resources in the Owens Lake.

Response 207-22: Please refer to the discussion of the DRECP in Response 207-11 regarding the role of the DRECP in the development of the REGPA and in future projects under the REGPA. The County has limited influence over public, state, and LADWP-managed lands in the County. The ACEC's and National Conservation Lands within the SEDAs are BLM-managed, and the County has no regulatory authority over those areas. The following statement has been added to Section 1.2 of the PEIR:

The County is solely responsible for the lands under its own jurisdiction. Any future development in the SEDAs or OVSA involving federal, state, and LADWP-owned lands would require coordination with the appropriate land managing agency and would be subject to environmental review and land use constraints consistent with the regulations applicable to that jurisdiction.



Cathreen Richards
 Inyo County Planning Department
 P.O. Drawer L
 Independence, CA 93526

January 13, 2015

RE: REGPA Program Environmental Impact Report

Submitted via email: crichards@inyocounty.us

Dear Ms. Richards,

Thank you for the opportunity to comment on the Renewable Energy General Plan Amendment PEIR and for granting a comment period extension. We greatly appreciate the extra time to thoughtfully comment on this important public process. The Eastern Sierra's iconic landscapes within Inyo County comprise unparalleled recreational opportunities, world-renowned cultural resources, and many rare and sensitive plant and animal species. Friends of the Inyo's comments represent a local and regional membership of over 600 and thousands of supporters and volunteers who care about the landscapes and values of the Eastern Sierra. We advocate for the protection of public lands from large-scale energy development (>20mw), which includes the impact to public land viewsapes, natural resources, and recreation opportunities. We support a small-scale renewable energy plan and greatly appreciate the incorporation of comments made during the scoping process. We believe there is need and opportunity for renewable energy development in Inyo County, provided it is sited in the proper locations, having the least potential impact on our natural and cultural resources, recreational opportunities, viewsapes, and other values important to residents and the tourism industry.

208-1

Friends of the Inyo is actively involved in renewable energy issues in the Eastern Sierra including the Desert Renewable Energy Conservation Plan (DRECP). We hope the planning commission will use the DRECP to help inform siting decisions and strongly encourage collaboration and consultation with state and federal government so that the County can use existing data and the Best Available Science on species habitats and distribution, land use patterns and other scientific and cultural information. It is of particular concern that we have not seen the County more involved in the development of the Development Focus Areas and Conservation planning within DRECP. We feel the County needs to do a better job of integrating information within the DRECP into its own renewable energy planning, including the use of the conservation reserve design and biological information. We hope the County will also provide its own comments on the draft DRECP as they

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relate to the local issues represented in Inyo County. There is also an opportunity to add more protections to public lands within Inyo County. We hope the County sees the economic benefit of continuing to seek permanent protections, such as the addition of National Conservation Lands (NCLs), to our public lands. We feel the REGPA should align with the DRECP in their goals of adding conservation lands within Inyo County.

208-1
(cont'd)

General comments on the PEIR

Friends of the Inyo does not support the preferred alternative as described in the PEIR. We ask the planning commission to modify the alternatives in order to craft a NEW alternative "PV only, least development and previously disturbed lands", which will guide siting to small "pilot" projects on industrial or agricultural lands and address the multitude of recreational and biological conflicts embedded within the current alternatives. In the case of disturbed lands, this needs to be an *analysis* of disturbed lands beyond the description of "brownfields, mines, landfills, and Owens Lake, and properties requested for consideration by private property owners" (ES-3). Although Owens Lake is an engineered landscape, to lump it under disturbed lands is somewhat misleading.

208-2

The current alternatives do not balance the resources and values so important to the residents and visitors of this County. The components for a better alternative are there, but are spread out within several different alternatives. We did not wish to oppose this environmental report all together, but intend to offer suggestions on how to improve it, eliminating some SEDAs, while continuing to review the potential of others. In most cases, SEDAs require further site-specific surveys, given the lack of cultural and biological information presented in the PEIR.

We have concerns about the accuracy of some information presented within the PEIR. For example, the prehistoric significance map (4.5) is incorrect. It may be useful to consult the Big Pine-Piute Tribe regarding this information. Consultants and specialists best come from local sources and should have qualifications, which are distinctly defined within the PEIR. An acceptable place to insert such definitions would be within the mitigation measures paragraph of each section.

208-3

We would like to see clarity on the renewable energy development described on LADWP lands. Currently there is insufficient information in the PEIR to adequately assess the development of solar on DWP lands. Some of the SEDAs occur on DWP property and the PEIR needs considerable revision to explain the relationship of DWP to the County, the 1991 Long Term Water Agreement, and how development of proposed SEDAs on DWP lands will move forward if the amendment is passed. The lack of economic benefit to the County from renewable energy if projects are sited on DWP should be made as transparent to the public as possible.

208-4

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We also have a concern with future expansion of transmission lines, and would like to see any renewable energy development use existing available transmission. This is a central argument to supporting small-scale (<20mw) solar development. We recommend the REGPA first focus on the proper siting of <20mw projects, not new energy corridors and transmission infrastructure. Please make sure the PEIR includes transmission in Cumulative Effects (5-1) and addresses adjacent transmission lines in Nevada.

208-5

The PEIR describes impacts to biological resources, in particular, special species. The PEIR does its legal job of addressing the biological opinion with mitigation measures, but does not go far enough to protect impacts to these species or describe the management and monitoring component that is essential to species' recovery. In many cases, the mitigation measures are not biologically realistic. In fact, some SEDAs as having unacceptable impacts to migratory birds, golden eagles, bighorn sheep, the Mohave Ground Squirrel (herein referred to as MGS), a California Endangered Species, and other animal species. It is important for the County to examine how the DRECP is addressing MGS habitat. Both the state and the federal government have made considerable efforts to exclude MGS habitat, and the County's PEIR seems to have overlooked this. In addition, not only special status plants, but ALL locally and regionally rare plants need addressing in development plans. A major omission from the PEIR is a discussion of the plant and ecological communities found within each SEDA. Within the site-specific comments below, we reference these plants and ecological communities and ask you to refer also to species specific comments found within the California Native Plant Society (CNPS) comment letter.

208-6

We wish to remind Inyo County that the governor's clean energy plan places a higher priority on distributed rather than industrial scale development. The PEIR should also update the Board of Supervisors intent for renewable energy development, now that new members have been appointed. The language of a 250 mw cap needs to be refined to a 250 mw total cap for all existing, current, and pending projects (this requires specific language on permitted and constructed projects), plus any under the REGPA.

208-7

SEDA Specific Comments

CHARLESTON VIEW

The energy industry, Inyo County, and the DRECP have all targeted the Charleston View area for renewable energy development. There is widespread opposition to such development by local communities, exemplified by the Hidden Hills project and recent public meetings for REGPA and DRECP. The areas around Shoshone and Tecopa have irreplaceable cultural sites and history tied to the Old Spanish Trail. The National Park Service opposes development in this area. These significant historical and cultural areas are extremely important to the vitality of these small

208-8

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communities and provide an economic driver for the area. Another key concern with development in this area is the strain on already stressed water resources. A recent study by Hydrogeologist Andy Zdon examining water resources in the Amargosa River Basin shows the hydrology and groundwater recharge of Charleston View inextricably linked to the Amargosa River and its spring sources¹. The flow (above and below ground) of the river is highly sensitive to groundwater changes. The groundwater in this basin, including the adjacent Parhump Valley, is already overdrawn and will not support any type of renewable energy development. The small spring systems, tied to groundwater recharge, within the nearly 1,000 square mile basin, are lifelines for desert wildlife. Another past study done by the Sierra Nevada Aquatic Research Laboratory documented the diverse and localized regional desert invertebrate fauna of the Amargosa River and its vulnerability to changes in flow regime². The PEIR also does not contain an evaluation of down-watershed impacts. Such impacts will be significant for endangered species such as the Amargosa Vole.

208-8
(cont'd)

Secondly, plant surveys were completed during the proposed Hidden Hills project development in 2010, 2011, and 2012. Seven species of rare plants were found within this SEDA during these survey efforts. The area contains many rare plant species, including 17 special status species confined to the Nopah Range (see CNPS comments). The SEDA comprises a Priority 1 Tortoise Connectivity Zone, meaning it is essential to the survival of the species. The southwest corner extending into California valley is a bizarre addition to this SEDA, as it is within NCLs under the DRECP. This area is also adjacent to the Nopah Range Wilderness Area and has no existing transmission infrastructure. With 15 residents at the Tecopa public meeting, all opposed to this SEDA, we hope the County is getting the message that Charleston View is the wrong place for any type of solar development.

208-9

CHICAGO VALLEY

This SEDA is within the DRECP's NCLs preferred alternative. This valley contains pristine honey mesquite bosque (woodland) habitat, which should remain intact and unaltered. Boques occur at low points in the desert where water drains and cultural artifacts are often found. Mesquite was a staple food for the first residents of this area. The low elevation wash systems provide important habitat for many desert species. The drainage feeds resting springs, with known Least Bells Vireo and Pupfish habitat. Much of the area has not been surveyed for rare plants, but four rare plant species are known to occur within the SEDA boundary (see CNPS comments). The public lands in this area are designated as Limited Use Class. Groundwater in the basin is limited and there is only enough electrical transmission

208-10

¹ Zdon, Andy. June 2014. 2014 State of the Basin Report: Amargosa River Basin Inyo and San Bernardino Counties, California and Nye County Nevada. The Nature Conservancy, San Francisco, CA.

² Herbst, D.B., Bogan, M.T., Kane, J.M. 2006. Macroinvertebrate Monitoring for the Amargosa River: Baseline Data, the Effects of Floods on Habitats and Communities, and a Regional Faunal Perspective. Sierra Nevada Aquatic Research Laboratory, Mammoth Lakes, CA.

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for the few scattered residences in the area. The area contains known desert tortoise and golden eagle nesting and foraging habitat. Golden eagles nest in numerous locations in surrounding mountain ranges and likely utilize Chicago Valley for foraging. The area also provides intermountain habitat for bighorn sheep. Finally, residents and visitors to this area express concern that development in this valley will impact the views of the Nopah Mountains.

208-10
(cont'd)

LAWS

The northwest corner of Laws may be ideal for one or more small-scale (<20mw) projects. This being said, site-specific surveys will need to be done to determine the best location with the least amount of impacts to native vegetation, wildlife, cultural resources (currently unknown), and views along Highways 6 and 395. Site locations must exclude agricultural lands and irrigation leases mandated under the Inyo County/Los Angeles Long-term Water Agreement. There are considerable areas within this SEDA that contain rare plants, alluvial fans, and BLM land to the east. These areas should be eliminated. Laws will also require dust control measures, which should be listed as a cumulative impact, as it impacts air quality. Dust generation will occur both during construction and after project completion.

208-11

OWENS LAKE

The PEIR needs to acknowledge the lakebed as state land under public trust for aesthetics and recreational values. It also includes a conservation area for MGS, and a proposed ACEC under the DRECP in the southeast section. The northern boundary of the SEDA has known cultural artifact sites, a conflict that would halt any project work done in this area. The Southeast canyons within the SEDA boundary contain paleontological sites. Portions of the lake contain alkaline salt grass meadows, which should be properly described and mapped within the REGPA. We recommend this rare Inyo County ecosystem not be altered. Owens Lake is an Important Bird Area with hundreds of thousands of individuals using the lake for migration and breeding³. Given the negative relationship between birds and solar facilities, there is significant potential for negative impacts to birds if development is to occur here. Wildlife at Owens Lake is considered part of California's Public Trust law as a result of the 1983 Mono Lake California Supreme Court Decision. This decision ruled that wildlife is a public trust and must be balanced with human needs. We recommend proceeding with extreme caution with this SEDA and consulting the Report on the Owens Lake Master Plan Collaboration⁴, which details the lake's resources. There is an error on the SEDA map: The town of Keeler is placed in the middle of the lake, instead of just south of Hwy 136. Finally, any development occurring on the lake needs to be within existing transmission capacity and capped at 20mw.

208-12

³ Herbst, D.B., Prather, M. Owens Lake: From Dust Bowl to Mosaic of Saltwater Habitats. LAKELINE magazine of the North American Lake Management Society (Fall 2014). pages 34-38.

⁴ Report on the Owens Lake Master Plan Collaboration. October 2013. Prepared by the Owens Lake Master Planning Committee. Available at: <https://owenslakebed.pubsvr.com/default.aspx>.

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PEARSONVILLE

Although this SEDA has been refined, it still needs modification to its current boundaries. All public lands within this SEDA are still within potential MGS habitat and offer no buffer with the designated conservation area. The Indian Wells Valley is occupied by MGS. There are multiple records from the California Natural Diversity Database for MGS within the northern section. The area is also known Desert Tortoise habitat and Desert Bighorn habitat connectivity between the South Sierra and Coso Range. We suggest modifying existing boundaries, as some private lands within this area may be the most suitable for <20mw projects. Due to the large acreage of previously disturbed private land within this area we recommend avoiding development on all public lands within this SEDA.

208-13

ROSE VALLEY

This is a large and complex SEDA with unacceptable impacts to natural resources. Firstly, we have concerns about the available groundwater within this SEDA. Geothermal to the east already extracts significant amounts of groundwater and water is not available from Haiwee reservoir. The area also falls almost entirely within a MGS conservation area, and the northern portion contains active breeding sites for Swainson’s Hawk. Regardless of planned mitigation measures, solar or any other development should not occur in special species habitat. The west side of the SEDA impacts the Portuguese Bench, a burial site, while the east side impacts Coso Hot Springs, a ceremonial site. We urge County planners to reevaluate the mapping of Joshua Tree woodlands within Rose Valley. The Rose Valley SEDA boundary also contains an ACEC and is a DRECP interagency plan wide Priority Conservation Area. ACECs have special site-specific management prescriptions in order to protect a particular resource. Most resources managed through ACEC designation will be negatively impacted by development or other disturbances and cannot be effectively mitigated. ACECs and conservation areas are the wrong places to site energy development.

208-14

SANDY VALLEY

The southwest portion of Sandy Valley may support small scale PV solar within its center pivot alfalfa fields, provided the water rights within these agricultural lands are released, as groundwater in this area is already in a state of decline due to agricultural uses. However, transmission is currently very far from this SEDA. The northern section of Sandy Valley is managed by the BLM and contains many rare and unique plant species according to the tables within the PEIR. We ask that the BLM land be eliminated from the SEDA. These lands are not as suitable for small-scale development as the private lands to the south.

208-15

TRONA

This area has previously disturbed lands, lakebed mining sites, and industrial infrastructure. A portion of this area may be one of the best locations within the REGPA for a PV solar facility provided it is capped at 20mw and comprehensive

208-16

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surveys are completed beforehand. The DRECP appears to have missed the site potential at Trona within their preferred alternative, and we urge the County to provide comments and ask questions as to why the Inyo County portion of Trona was not included under the DRECP.

In conclusion, we urge the County to move with progressive caution in developing renewable energy, utilizing new science, and making room for the fast changing technology of the industry. This may require revisiting the objectives outlined in section 4.2 of the PEIR and refining them to realistically address all the biological, cultural, and social resource values of our County. We appreciate all the hard work the planning team has put into the revision of the REGPA, and we look forward to working with you all to continue to identify appropriate locations for small scale renewable energy projects, while simultaneously protecting our County's desert habitats, preserving our viewscapes, and furthering our recreation-based economy.

208-16
(cont'd)

Sincerely,

/s/ Jora Fogg
Preservation Coordinator
jora@friendsoftheinyo.org

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Responses 208 to Letter – Friends of the Inyo

Response 208-1: The introduction to the letter acknowledges the County’s public planning efforts, describes the commenter’s interest in the project, and overall position on the REGPA.

The role of the DRECP as it relates to the REGPA and is discussed in the PEIR as of the date of Draft PEIR publication (November 4, 2014). As stated under the discussion of the DRECP in Section 2.4.3.1, the DRECP is currently under review, and although the County is under no obligation to implement the DRECP principles and policies (including the DFAs), the County has considered the DRECP in development of the REGPA. Because the DRECP was in draft form during the preparation of the PEIR, the SEDAs were not further constrained based on information contained in the DRECP. However, if the REGPA is adopted, the County would coordinate with the DRECP agencies to avoid priority conservation areas and work to guide future projects consistent with the requirements of the DRECP. Under REGPA Policy MER-2.6, the County would coordinate with renewable energy solar developers and other agencies to avoid, minimize, or mitigate impacts. If the County becomes a signatory of the DRECP, future development under the REGPA within the DRECP area could be expedited by the take coverage under Section 10 of the Endangered Species Act of 1973 that is provided by the DRECP.

Response 208-2: A range of project alternatives were considered for detailed evaluation in the Draft PEIR, and compared against the factors outlined in Section 15126(f) of the State CEQA Guidelines for feasibility. The list of alternatives outlined and analyzed in Section 6.3 of the Draft PEIR includes the Solar Photovoltaic Only Alternative. Like the proposed project, proposed developments under this alternative would be prioritized on previously disturbed and degraded lands, as described in Section 3.3.3 of the PEIR. The Solar Photovoltaic Only Alternative is identified as being environmentally superior to the proposed project, but would still potentially result in significant and unavoidable impacts to aesthetics, biology, and cultural resources. As the comment suggests, future projects proposed to be sited on the land uses described in Section 3.3.3 for priority development area would be evaluated through subsequent environmental analysis to determine the potential for impacts to sensitive resources. Although these land uses have been identified as priority development areas, individual sites may not be appropriate for development. This has been clarified in the section of the PEIR. Refer to the discussion of Owens Lake in Section 3.3.3 of the PEIR for clarification of the status of the lake in regards to its potential for development.

The SEDA boundaries depicted in the Draft PEIR have been identified based on the Opportunities and Constraints Technical Study (Appendix D of the Draft PEIR), and further refined based on feedback received through the agency scoping and public planning process (Section 3.1.1 of the PEIR). As described in the Draft PEIR, although the SEDAs have been identified to direct and constrain utility-scale and commercial scale (referred to as distributed generation in the Draft PEIR) solar development in the County, not all areas within the proposed SEDA boundaries may be suitable for development. Constraints within the SEDAs will be identified through subsequent, project-specific environmental review and planning processes, as outlined in the PEIR. The Owens Valley is not a SEDA but instead was identified as a study area; any potential future solar energy project proposed for this area would be subject to a General Plan Amendment and further CEQA analysis and public comment as outlined in the PEIR.

Response 208-3: Due to the programmatic nature of the PEIR, the information depicted in Figure 4.5 is based on database and literature searches, as described in Section 4.5.3.2 of the PEIR. The Big-Pine Paiute Tribe has been coordinated with throughout the planning process, pursuant to Section 15201 of

the State CEQA Guidelines. Future projects under the REGPA would be subject to project-specific environmental review. As appropriate, this review may include consultation with Native American tribes as an important preliminary project-specific resources identification method (refer to the discussion of General Types of Mitigation in Section 4.5.3.3).

Response 208-4: Future solar energy projects under the REGPA will undergo project specific analysis, which will include an evaluation of consistency with existing plans and regulatory framework such as the 1991 LADWP/Inyo County Long Term Water Agreement, the 1997 Memorandum of Understanding, and the Owens Valley Land Management Plan. Refer to Sections 2.4.3.3 *Inyo County/Los Angeles Long Term Water Agreement*, 2.4.3.4 *1997 Memorandum of Understanding*, and 2.4.3.6, *Owens Valley Land Management Plan*.

The County has limited influence over public, state, and LADWP-managed lands in the County. The following statement has been added to Section 1.2 of the PEIR to clarify:

The County is solely responsible for the lands under its own jurisdiction. Any future development in the SEDAs or OVSA involving federal, state, and LADWP-owned lands would require coordination with the appropriate land managing agency and would be subject to environmental review and land use constraints consistent with the regulations applicable to that jurisdiction.

Although socioeconomic issues are not typically addressed in a topic specific EIR section, socioeconomics is an issue of concern to the County; therefore, the information provided in this section of the PEIR is presented for informational purposes to better inform County decision makers on the REGPA process. County decision makers will consider the concerns expressed by the commenter on potential adverse economic effects of renewable energy projects if sited on LADWP lands. It should be noted that future renewable energy projects would undergo project-specific CEQA environmental review at the time a project application is received by the County. These future CEQA reviews would consider the programmatic analysis and the information from the REGPA process, including any adopted policy directive related to socioeconomics.

Response 208-6: The PEIR has a thorough discussion of Mohave ground squirrel and its habitat and prohibits development from occurring within Mohave ground squirrel Conservation Areas. In addition, the PEIR includes mitigation measures for projects that would be sited adjacent to Mohave ground squirrel Conservation Areas. The treatment of Mohave ground squirrel in the PEIR is outlined below.

Mohave ground squirrel Conservation Areas are discussed in Section 4.4.1.5 *Protected Natural Areas*, under Subsection *Special Management Areas*. Mohave ground squirrel Conservation Areas are discussed as occurring within or adjacent to the Owens Lake SEDA, Rose Valley SEDA, Pearsonville SEDA, and Trona SEDA. The potential for impacts to Mohave ground squirrel Conservation Areas is discussed in *Impacts to Riparian Habitat, Special Status Natural Communities, or Protected Natural Areas* under Section 4.4.3.1 *Project Level Impacts to Biological Resources* and again in the impact discussion for each SEDA (Section 4.4.3.2 *Impacts to Biological Resources for each Solar Energy Development Area and the Owens Valley Study Area*). Mitigation Measure BIO-16 Minimize impacts to Mohave ground squirrel requires protocol surveys for the species for projects that are determined to have the potential to impact it. Mitigation Measure BIO-16 reads as follows:

“Protocol Mohave ground squirrel surveys shall be required for projects that propose impacts to habitat with potential to support Mohave ground squirrel or are within or adjacent to the species’ known range.

Mohave ground squirrel surveys consist of a visual survey followed by 3 trapping sessions of 5 nights each (CDFW 2003). Each trapping session must be conducted during a specific time frame. The first session must be conducted between March 15 and April 30; the second between May 1 and May 31; and the third between June 15 and July 15. Trapping can be discontinued if a Mohave ground squirrel is trapped or observed, in which case the survey area is deemed to be occupied. If survey results are negative, the survey area will be deemed to be unoccupied for one year during which pre-construction surveys are not required. If survey results are positive, the project shall obtain an incidental take permit from CDFW under CESA Section 2081.”

Mitigation Measure BIO-19 *Minimize impacts to special status natural communities and protected natural areas* precludes development within protected natural areas, which includes Mohave ground squirrel Conservation Areas (see Section 4.4.1.5), and provides measures to reduce impacts to protected natural areas if they are present adjacent to a proposed development. Mitigation Measure BIO-19 reads as follows:

Solar development authorized under the REGPA will not be sited within any special status natural communities or protected natural areas. If solar development is sited adjacent to any special status natural communities or protected natural areas or is determined to have the potential to impact any off-site special status natural communities or protected natural areas during the project level biological resources evaluation (e.g., projects in the Laws SEDA could impact the hydrology of critical habitat for Fish Slough milk-vetch; projects in the Chicago Valley SEDA could negatively impact off-site mesquite bosque by altering drainage patterns or altering groundwater levels; projects in the Charleston View and Chicago Valley SEDAs could impact down-watershed habitats in the Amargosa Watershed (including habitats within the portion of the Amargosa River that has been designated by Congress as “Wild and Scenic.”), a management plan will be developed in consultation with CDFW and/or USFWS. The management plan will address the potential offsite effects of the construction and on-going operations of the facility on special status species including but not limited to the effects of human disturbance, noise, nighttime maintenance activities, increased lighting, increased traffic on desert roads, and barriers to movement for special status species. The management plan will also address potential mechanisms of offsite habitat degradation such as introduction of invasive weeds, introduction or attraction of feral animals or other species attracted to areas with anthropogenic disturbance, hydrologic disruption due to groundwater impacts or alteration of surface drainage patterns, and increased risk of wildfires. The management plan will also outline the specific measures to be undertaken to avoid and/or minimize indirect effects of the solar development on the adjacent sensitive habitat and special status species and include a plan for long term monitoring of the adjacent habitat as well as an adaptive management plan.

The PEIR includes the requirement in Mitigation Measure BIO-2 for rare plant surveys to be conducted according to CNPS protocols. Plants that qualify for evaluation under CEQA, which includes locally and regionally rare plants identified by CNPS, will be surveyed for. The first paragraph of Mitigation Measure BIO-2 reads as follows:

Prior to the approval of any solar development projects or related infrastructure under the REGPA, a CDFW-approved botanist shall evaluate the potential for special status plant species to occur on the site and conduct surveys, if necessary, to determine presence or infer absence of special status plants on the site following the November 24, 2009

Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities or the most current guidelines.

Section 4.4.1.11 *Project Area Existing Conditions* discusses the plant and ecological communities found within each SEDA as determined by GIS analysis of available data, which is sufficient for a programmatic document like the REGPA PEIR. Additional habitats and special status plant species identified by CNPS as occurring within each SEDA were added to these discussions for the FPEIR.

Response 208-7: While the REGPA has been developed in part to constrain and direct large scale solar development within the County, the County also encourages noncommercial, small and community scale solar energy production for on-site use through existing policies and through components of the REGPA. Inyo County Code (ICC) Title 21 encourages small scale solar energy development with an expedited permitting process, and REGPA Policy MER-2.1 states that the County shall continue to encourage small scale, community scale, and commercial scale solar energy facilities. REGPA Policy LU-1.18 of the REGPA allows community scale solar energy generation outside of the SEDAs and in any zoning district of ICC Title 18.

The 250 MW cap for the western solar energy group applies to both current and future projects after adoption of the REGPA by the County.

Response to 208-8: The very high sensitivity of the Charleston View SEDA is addressed in “General Sensitivity Conclusions” in Section 4.5.3.2 (pgs. 4.5-30 to -31), including in Table 4.5-2. The County shares your concerns regarding the protection and preservation of local groundwater resources, including those within the Amargosa Watershed. It is acknowledged that the hydrologic and hydraulic characteristics of groundwater basins, including their connectivity with other basins and relationships to surface waters, are complex. Accordingly, based on a Program-level assessment of local groundwater resources, the PEIR identifies potentially significant impacts to groundwater supplies for the Owens Valley Study Area and all eight SEDAs (including Charleston View). While detailed groundwater studies within these areas were not conducted as part of the PEIR analysis and are not considered appropriate at the program level (i.e., due to the fact that no specific development projects or associated groundwater withdrawals have been proposed at this time), such investigations will be required prior to approval of all applicable solar development under the REGPA as outlined in Section 4.9.5 of the PEIR. Specifically, this would involve detailed evaluation of factors such as local aquifer volumes and hydrogeologic characteristics, current/proposed withdrawals, inflow/recharge capacity, and potential effects to local groundwater basins and related surface water features (with the referenced mitigation on Section 4.9.5 modified to clarify the required analysis of potential effects to groundwater-dependent features such as springs from proposed groundwater use). The detailed groundwater investigations conducted for proposed solar development under the REGPA would also utilize the most current available technical data, including applicable information from the 2014 “State of Basin Report” and other sources identified in this comment. From these and other pertinent analyses, site-specific impact assessments and related measures would be developed to address potential concerns and ensure that groundwater and related groundwater-dependent surface water features would be appropriately protected and/or subject to applicable mitigation.

Section 4.4.5 includes changes to mitigation measure Mitigation Measures BIO-2, BIO-3, and BIO-4 to address potential down watershed impacts to special status plant and animal species that would result from solar development projects requiring groundwater pumping. Additionally, Amargosa vole has

been added to the discussion of special status species in the environmental setting section for Charleston View in Section 4.4.1.11.

Response 208-9: The County recognizes the potential for rare plants to occur within the Charleston View SEDA. Mitigation Measure BIO-2 has been updated so that prior to the approval of any solar development projects or related infrastructure under the REGPA, a CDFW-approved botanist shall evaluate the potential for special status plant species to occur on the site and conduct surveys, if necessary, to determine presence or infer absence of special status plants on the site following *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (2009) or the most current guidelines. This will ensure that natural communities, rare plant alliances, and special natural community features are adequately inventoried and mapped. The rare plants identified by CNPS as being known to occur within or near the Charleston View SEDA were added to Table 4.4-11.

Issues relating to connectivity areas has been addressed in Mitigation Measure BIO-6 and states that projects shall not be sited within areas identified for desert tortoise recovery or conservation according to the Draft Revised Recovery Plan for the Mojave Population of the Desert Tortoise (*Gopherus agassizii*) (USFWS 2011) (such as designated critical habitat, ACECs, DWMA, priority connectivity areas, and other areas or easements managed for desert tortoises). This mitigation measure precludes solar development under the REGPA from occurring within a desert tortoise priority connectivity area. Mitigation Measure BIO-21 has been modified to reflect this language.

The County further recognizes the challenges of the Charleston View SEDA including lack of infrastructure to accommodate future development. The potential for future solar energy development projects to occur within this will be evaluated based on a multitude of criteria and impacts as described in the Final PEIR.

Response 208-10: The County recognizes that National Conservation Lands overlap some of the SEDAs, where all future projects under the REGPA would be subject to project-specific environmental review, which would include pinpointing the appropriate siting to avoid protected areas. The SEDA boundaries depicted in the PEIR have been identified based on the Opportunities and Constraints Technical Study (Appendix D of the PEIR), and further refined based on feedback received through the agency scoping and public planning process (Section 3.1.1 of the PEIR). As described in the PEIR, although the SEDAs have been identified to direct and constrain utility-scale and commercial scale solar energy facility development in the County, not all areas within the proposed SEDA boundaries may be suitable for development. Constraints within the SEDAs will be identified during subsequent, project-specific environmental review under CEQA, as outlined in the PEIR. These constraints include critical habitat, ACECs, National Conservation Lands, military readiness conflict areas, and cultural resource areas, among others.

Further, the County has limited influence over public, state, and other locally-managed lands within the County. The NCLs within the SEDAs are BLM-managed and the County has no regulatory authority over those areas. However, the County will make every effort to work with other landowners and stakeholders to avoid and minimize impacts to sensitive resources.

The potential for projects within the Chicago Valley SEDA to result in off-site impacts to mesquite bosque are discussed in Section 4.4.3.2 and called out in Mitigation Measure BIO-19, which states that a management plan must be developed in consultation with CDFW and/or USFWS. Impacts to special

status species habitats for Chicago Valley are discussed in Section 4.4.1.11 *Project Area Existing Conditions* under the *Special Status Species*, and more specifically in the *Impacts to Least Bell's Vireo* and *Impacts to Special Status Fish* subsections under Section 4.4.3.1 *Project Level Impacts to Biological Resources*. The rare plants identified by CNPS as being known to occur within or near the Chicago Valley SEDA were added to Table 4.4-10.

The County recognizes the importance of environmentally sensitive lands under the Limited Use designation; however, as described previously, the County has limited regulatory authority on lands outside of its jurisdiction including lands managed and administered by the BLM. Impacts to groundwater have been discussed in Section 4.9 and addressed in comment 208-8. Future projects are intended to be located near existing transmission facilities to limit their impact on resources. Section 4.4.1.11 has added language to *Habitat Connectivity and Wildlife Corridors* to acknowledge that golden eagle and desert tortoise are known to occur and that there is potential habitat for bighorn sheep. Additional impacts to visual resources in this area will be determined through project specific analyses.

Response 208-11: This comment supports one or more small-scale projects in the northwest corner of the Laws SEDA. All future projects under the REGPA will be subject to project-specific environmental review and may include site-specific surveys to help determine the best location for future projects to have the least impacts to environmental resources including rare plants and alluvial fans. Additionally, project-specific analyses will include an evaluation of consistency with existing plans and regulatory framework such as the 1991 LADWP/Inyo County Long Term Water Agreement, the 1997 Memorandum of Understanding, and the Owens Valley Land Management Plan, as appropriate. Refer to Sections 2.4.3.3 *Inyo County/Los Angeles Long Term Water Agreement*, 2.4.3.4 *1997 Memorandum of Understanding*, and 2.4.3.6, *Owens Valley Land Management Plan*.

Future projects will consider appropriate siting and location; however, lands managed and administered by the BLM are under their jurisdiction and the County is unable to exercise regulatory authority. All future projects would be required to implement dust control measures during construction (Mitigation Measure AQ-2) and operation (Mitigation Measure AQ-3). These measures would ensure that future projects comply with applicable significance thresholds that are designed to assist the region in attaining the applicable state and national ambient air quality standards. As a result, the implementation of these mitigation measures would reduce the project's contribution to a cumulative impact to a less than significant level.

Response 208-12: The County recognizes that nearly all of the Owens Lake is under the jurisdiction of the State Lands Commission and has modified the text on page 4.10-1 and to Figure 4.10-1 to reflect these changes. Section 4.4.1.11 acknowledges that the Mohave ground squirrel conservation area exists along the southeastern boundary and Mitigation Measure BIO-19 states that solar development authorized under the REGPA will not be sited within any special status natural communities or protected natural areas. Areas proposed for designation by the DRECP as ACECs and National Conservation Lands may be considered for additional protection and exclusion by the County once the DRECP is adopted. Currently the DRECP is not adopted, and therefore, using proposed designations from it in all of the County's solar designations would be premature. The County is, however, including alternatives for consideration that do reduce and eliminate SEDAs, based on proposed ACECs and NLCS designations.

The County acknowledges that Owens Lake may contain significant cultural, historical, and biological resources, where future development proposals would be evaluated on a case-by-case basis. Future

proposals would be subject to subsequent CEQA analysis to determine the resources present at the proposed project site and the potential for impacts to those resources. The PEIR acknowledges the ecological value of alkali meadows and alkali seeps as discussed in Section 4.4.1.4 *Special Status Natural Communities*. Section 4.4.16 *Habitat Connectivity and Wildlife Corridors* and Figure 4.4-4 acknowledge that Owens Lake is an Important Bird Area. Mitigation Measure BIO-18 has been updated to include a Bird and Bat Conservation Strategy to further reduce impacts to birds from solar facilities. The County acknowledges that wildlife is a public trust and that future projects will be evaluated for consistency with existing plans and regulatory framework such the Report on the Owens Lake Master Plan Collaboration to ensure protection of the lake's resources. Figure 2-4b has been modified to show Keeler in the correct location. It is the intent of the REGPA to constrain solar development facilities in their size, location and placement in proximity to existing transmission facilities. Table 3-1 of the PEIR outlines the total allowable generation capacity in the Western Solar Energy Group which includes the Owens Valley (Laws SEDA and OVSA) and the Rose Valley, Pearsonville, and Owens Lake SEDAs, is 250 MW.

Response 208-13: The Pearsonville SEDA boundary depicted in the PEIR has been identified based on the opportunities and constraints described in the Opportunities and Constraints Technical Study (Appendix D of the PEIR), and further refined based on feedback received through the agency scoping and public planning process (Section 3.1.1 of the PEIR). The County recognizes that potential habitat for Mohave ground squirrel exists near or in the Pearsonville SEDA and has discussed the potential impacts in Section 4.4.3.1.

Mitigation Measure -BIO 16 has been updated to require protocol surveys for projects that propose impacts to habitat with potential to support Mohave ground squirrel or are within or adjacent to the species' known range. Mitigation Measure BIO-6 requires consultation with CDFW and USFWS for any projects where desert tortoise or their sign is found on the site and/or the project is determined by a CDFW-approved biologist to have the potential to impact desert tortoise. The mitigation also states that projects shall not be sited within areas identified for desert tortoise recovery or conservation according to the Draft Revised Recovery Plan for the Mojave Population of the Desert Tortoise (*Gopherus agassizii*) (USFWS 2011) (such as designated critical habitat, ACECs, DWMA, priority connectivity areas, and other areas or easements managed for desert tortoises). This mitigation measure precludes solar development under the REGPA from occurring within a desert tortoise priority connectivity area.

Similarly, Mitigation Measure BIO-14 requires preconstruction surveys for Sierra Nevada Bighorn Sheep and consultation with the USFWS and CDFW if migration routes are identified or likely to occur in or near the project site. Private land near the Pearsonville SEDA may receive further consideration given their suitability for potential small-scale solar energy development; however, the REGPA and the FEIR is focused on regulating the development of future projects within the designated SEDA boundaries.

Response 208-14: The Rose Valley SEDA has been identified as having biological and/or groundwater land use conflicts with solar development under the REGPA, where further project-specific studies would need to be conducted. Section 4.9 discusses impacts to hydrology and groundwater supplies and Section 4.9.5 discusses groundwater related mitigation which has been modified in the FEIR to clarify the required analysis of potential effects to groundwater-dependent features from proposed groundwater use.

Mitigation Measure BIO-25 has been added to the PEIR to minimize potential indirect impacts due to groundwater pumping. Section 4.4.1.11 recognizes that a large portion of the Rose Valley SEDA falls

within the Mohave Ground Squirrel Conservation Area; subsequently, Mitigation Measure BIO-19 has been modified so that future projects under the REGPA would not be sited within any special status natural communities or protected natural areas. Areas proposed for designation by the DRECP as ACECs and NLCS may be considered for additional protection and exclusion by the County once the DRECP is adopted. Currently the DRECP is not adopted, and therefore, using proposed designations from it in all of the County's solar designations would be premature. The County is, however, including alternatives for consideration that do reduce and eliminate SEDAs, based on proposed ACECs and NLCS designations. Impacts to Swainson's hawk have been discussed in Section 4.4.3.1 and states impacts could be significant.

Mitigation Measure BIO-3 has been designed to minimize impacts to special status species including the Swainson's hawk. Impacts to cultural resources have been discussed in Section 4.5, where Table 4.5-2 identifies Rose Valley as having a high sensitivity to cultural resources. Section 4.5.5 outlines the appropriate mitigation measures designed to reduce impacts to the extent possible; however, it is known that some impacts may still occur. The Final PEIR has clarified Project Objective Number 3 to state not all areas within the SEDA boundaries are suitable for development, where site specific analysis of sensitive resources will be conducted prior to development in any of the SEDAs and identified sensitive resources will be avoided or impacts will be minimized to the extent practicable and mitigated pursuant to this PEIR.

Response 208-15: This comment supports small-scale PV solar in the southwest portion of Sandy Valley within already disturbed agricultural lands. It is known that potential groundwater land use conflicts potentially exist in the Sandy Valley SEDA and therefore appropriate mitigation has been designed and discussed further in Section 4.9. While every effort will be made to site future projects in close proximity to existing transmission facilities, it is known and further discussed on page 3-19 of the PEIR that it may be necessary for new substations and transmission interconnections be built to connect the Eastern Group which includes the Sandy Valley SEDA. Rare plants identified by CNPS as being known to occur within or near the Sandy Valley SEDA were added to Table 4.4-12 and additional language has been added to Mitigation Measure BIO-2 to require special-status plant surveys by a CDFW-approved botanist. As stated previously, the County has no regulatory authority on lands outside of its jurisdiction including lands managed and administered by the BLM. However, the County will make every effort to work with other landowners and stakeholders to avoid and minimize impacts to sensitive resources. Private land south of the Sandy Valley SEDA may receive further consideration if they are within Inyo County and considered suitable for small-scale solar development; however, the REGPA and the PEIR is focused on regulating the development of future projects within the designated SEDA boundaries.

Response 208-16: This comment supports further consideration of small-scale PV development within the Trona SEDA, given that much of the area has been previously disturbed. This comment does encourage more comprehensive surveys and a 20 MW cap for solar developments within this SEDA. Section 2.3.2 of the Final PEIR identifies the Trona SEDA as part of the Southern Energy Group and encompasses 7.1 square miles in the Searles Valley. Solar development potential within the Trona SEDA was evaluated in the DEIR and further consideration for development would be given based on the history of disturbance and potential to have less impact on sensitive resources.

As stated under the discussion of the DRECP in Section 2.4.3.1 and in Response 208-1, the DRECP is currently under review, and although the County is under no obligation to implement the DRECP principles and policies, the County has considered the DRECP in development of the REGPA. Because the DRECP was in draft form during the preparation of the PEIR, the SEDAs were not further constrained

or developed based on information contained in the DRECP. The County recognizes the potential for solar energy development within the Trona SEDA under the REGPA; however, the DRECP is an independent effort outside of the REGPA with limited influence on the development of the Trona SEDA.

The project objectives in Section 3.2 have been updated to more clearly represent the intent and purpose of the REGPA while considering input provided to the County during the public comment period.



Manzanar Committee

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January 14, 2015

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VIA EMAIL TO inyoplanning@inyocounty.us

RE: Draft Program Environmental Impact Report (PEIR) – General Plan Amendment 2013-02/Inyo County Renewable Energy

The Manzanar Committee, which sponsors the annual Manzanar Pilgrimage and Manzanar At Dusk programs, and has played a key role in the preservation, protection and creation of the Manzanar National Historic Site, remains steadfastly opposed to any development that would interfere with the operation, goals and purpose of the Manzanar NHS, including forever marring its viewshed. As such, we continue to be gravely concerned that the Owens Valley will be opened to large-scale, industrial solar energy facilities, as the Draft Program Environmental Impact Report (PEIR) – General Plan Amendment 2013-02/Inyo County Renewable Energy seems to indicate. 209-1

As we have stated throughout the REGPA process, we strongly urge the County of Inyo to forever protect the Owens Valley from any large-scale renewable energy development. We also reiterate that:

In addition to protecting the cultural resources in the Owens Valley and the viewshed of the Manzanar NHS, such development in the Owens Valley would make no sense, given that your economy is based primarily on tourism. After all, visitors are attracted to the Owens Valley because of its mostly pristine, open lands, along with forest areas, and other outdoor wonders. Tourism would suffer greatly if massive renewable energy facilities are built in the area. 209-2

We have also noted that some in Inyo County believe that large-scale solar energy projects would bring increased economic development. But if the Los Angeles Department of Water and Power's (LADWP) proposed Southern Owens Valley Solar Ranch (SOVSR) is any indication of how wrong such beliefs are, Inyo County must not buy into this fallacy. After all, according to LADWP's Draft 209-3

Environmental Impact Report, the project would employ approximately 350 *temporary* workers, and *up to ten permanent* employees.

As such, in terms of providing employment opportunities for Inyo County residents, the SOVSR would generate some temporary jobs during construction of the project (LADWP stated it would take approximately five years to finish construction), but no more than ten permanent jobs to operate and maintain the facility. Does that sound like it is worth destroying a huge swath of the Owens Valley, given that, as I stated above, your economy is based on tourists, who are attracted to the Owens Valley because of the beauty of its open spaces and pristine lands?

The above also applies to the proposed Northland Power Independence Solar Project—very similar to the SOVSR. In fact, the developer states that this facility would create only 20 full and part-time jobs—the same issues and concerns apply to this ill-conceived project as well.

We also note that the developer of the Northland project contends that the Owens Valley “has been used historically for industrial purposes and is not a pristine, undisturbed area at all.”

209-3
(cont'd)

The developer also described some of the historic uses of the Owens Valley by humans, including the rail line, the Manzanar Airport and other uses. The developer even pointed to structures that were part of the Manzanar concentration camp as proof that the Owens Valley has a long history of industrial use and that the land is far from pristine.

Obviously, the developer’s comments are motivated by the desire to build their 1,280-acre solar energy generating facility near Independence. However, they are clearly a distortion of reality and entirely self-serving—they should be rejected out of hand.

Indeed, even if you acknowledge the historic uses of the Owens Valley mentioned by the developer, none of those uses were large-scale industrial facilities. Even the Manzanar Airport, was a relatively small facility that was quickly abandoned. It did not have the visual impact that a 1,280-acre site, covered with photovoltaic panels and buildings, would have within Manzanar’s viewshed.

At this point, we must also reiterate that the Manzanar Committee does not oppose solar energy, or other renewable energy sources. However, we have stated, since the first public meetings organized by the LADWP, and in our written comments and oral testimony presented to Inyo County, many alternatives to large-scale, industrial solar facilities exist. Energy efficient, distributed generation, particularly in the Los Angeles area, or other urban centers, are highly preferable steps that will help California transition away from fossil fuels and meet mandates set forth by the California State Legislature.

209-4

As we have also stated in our testimony before the Planning Commission and the Board of Supervisors, and in our written comments regarding the REGPA, allowing large-scale, industrial

209-5

solar energy facilities in the Owens Valley would create a dramatic disruption of the area, and would thoroughly undercut the mission and purpose of the Manzanar National Historic Site.

As the draft PEIR states, the Manzanar NHS attracts tens of thousands of visitors each year. Presently, the Manzanar NHS stands out, its buildings and reconstructed guard tower are fully visible from US Highway 395, unobstructed by any natural or artificial barriers. This, as we have noted previously, and the authors of the draft PEIR reference, provides visitors a "...sense of isolation that was part of the psychological warfare perpetuated by the U.S. government..."

While this is indisputable, the report effectively contradicts itself: "...[the] focus of visitors of the national historic site is generally inward and on the facilities within the site rather than on the surrounding areas and visual landscape."

We are outraged by this statement because:

- 1) In no way does this statement reflect comments received by Inyo County during the REGPA process. To be sure, no one from the Manzanar Committee, the Manzanar NHS, or the general public made such comments, either at the Planning Commission meeting or the Board of Supervisors meetings where the REGPA was discussed.
- 2) The statement also bears absolutely no resemblance to any written comments received by Inyo County during the REGPA process. Again, no one from the Manzanar Committee, the Manzanar NHS, or the general public stated that at any point in this process.

Given points 1 and 2 above, and with no source provided, we can only assume this is the opinion of the County officials/staff who authored the document, or of those who may have instructed staff to include it in the draft PEIR.

We are further outraged because this opinion or assertion bears no resemblance to reality. In fact, there are constant references to the surrounding environs by the thousands of visitors to the Manzanar NHS, as well as in recorded statements of those incarcerated at Manzanar during World War II. Indeed, as one enters the Visitors Center, one is greeted by a quote from a former incarcerated describing the majestic, desolate scene that greeted them as they arrived in 1942. Further, much of the artwork from that dark period of World War II, and continuing today, are works that juxtapose scenes of tarpaper barracks and barbed wire fences with the surrounding area. Famed water colorist Henry Fukuhara, who was among those unjustly incarcerated at Manzanar, is one of many artists who captured this tragically beautiful tension.

209-5
(cont'd)

The Manzanar Committee remains firmly opposed to creating pockets of utility scale renewable energy projects that will forever mar the physical environment and fatally compromise the mission and nature of the Manzanar National Historic Site. We stand with the various Owens Valley Paiute and Shoshone tribal organizations, the Owens Valley Committee, and the vast majority of Inyo County residents who are calling on the County to do everything in its power to protect the Owens Valley from large-scale renewable energy development in perpetuity.

209-6

Sincerely,



Bruce Embrey
Co-Chair
Manzanar Committee

Responses to Letter 209: Manzanar Committee

Response 209-1: The comment notes that the Manzanar Committee is opposed to any development that would interfere with the goals and purpose of the Manzanar National Historic Site (NHS), and expresses concern over the potential for the Owens Valley to be opened to large-scale, industrial solar energy facilities. The purpose of the REGPA is not to encourage large-scale solar energy development; rather, it is to direct and constrain future proposed solar energy development within the County to areas that would have lesser impacts. The REGPA framework is intended to help restrict the siting of potential future projects to more suitable locations. As described in the PEIR, although the SEDAs have been identified to direct and constrain utility-scale and commercial scale (referred to as distributed generation in the Draft PEIR) solar development in the County, not all areas within the proposed SEDA boundaries may be suitable for development. This has been clarified in the PEIR; Project Objective Number 3 has been updated as follows:

3. ***Avoid or minimize direct and indirect impact from future solar energy development on the physical, biological, cultural, political, and socioeconomic environments.***

The proposed development areas are in locations with the relatively least impact to the resources evaluated. In identifying these development areas, development is directed to avoid and minimize impacts to those areas. Individual projects proposed within the County will be required to prepare a project-specific environmental analysis and associated CEQA document to evaluate potential impacts. Identified impacts will be avoided or minimized to the extent practicable and mitigated pursuant to this PEIR and the subsequent project-specific CEQA document.

Response 209-2: The comment urges the County to protect Owens Valley from large-scale renewable energy development, and expresses an opinion that tourism would be greatly affected by such development in the area. As discussed in Section 4.16.1.4 in the PEIR, the County's economy has historically relied on natural resources as its base, including cattle ranching during the gold rush, extracting a wide variety of minerals found in the County, shepherding, growing orchard and vegetable crops, and tourist-based activities that take advantage of the unique landscapes and wildlife the County has to offer. In recent times, the County has relied more on tourist-based activities and services, as well as, government and land management as its main economic drivers. Renewable energy development, however, has also played a role in the County's economy associated with the Coso Geothermal Power Plant and several hydroelectric generating facilities. Additional renewable energy development also has the potential to add to the County's economic base. As indicated in Section 4.16.3.3, future solar energy development could provide an initial boost to the local economy during construction in the form of an increase in the labor force that requires goods and services, land sales, and the use of local materials. In the long term, it can provide higher property and sales tax revenues to the County, the continued use of local materials, and the provision of some long term jobs that can, in turn, generate a permanent increase in the procurement of local goods and services.

Response 209-3: The comment refers to temporary and permanent job creation and references two separate proposed solar energy projects within Inyo County, including the Los Angeles Department of Water and Power's (LADWP) proposed Southern Owens Valley Solar Ranch (SOVSR) Project and Northland Power Independence LLC's Solar Project. These two other projects are separate projects, and their specifics do not inform the specifics of individual projects that may be proposed under the REGPA in the future (as no individual projects have yet been proposed under the REGPA). However, it is not uncommon for renewable energy development projects to require an influx of temporary workers

during the construction period, and to require fewer long-term employees after the completion of construction. PEIR Section 4.16.3.2 (Population In-Migration) acknowledges that employment from renewable energy development and construction of renewable energy facilities would utilize more workers than operation and maintenance of such facilities and any associated transmission lines. County decision makers will consider the concerns expressed by the commenter and petitioners on potential adverse economic effects of the proposed REGPA.

With regard to potential visual impacts on the Manzanar NHS, Section 4.1 of the PEIR concludes that the existing visual setting of the Manzanar NHS could be adversely affected by solar energy development. Individual projects proposed within the County will be required to prepare a project-specific environmental analysis and associated CEQA document to evaluate potential impacts, including visual analysis. Project-specific analysis will use the types of impacts and mitigation measures outlined in the Program EIR as guidelines, including Mitigation Measure AES-1, which requires project specific visual analysis.

Response 209-4: The County encourages a variety of solar energy projects and it is the intent of the REGPA to constrain large-scale, industrial solar facilities while allowing for other types of solar energy development to occur, including commercial scale, community scale, and small scale facilities.

Response 209-5: The County recognizes the historical and cultural significance of the Manzanar NHS within the context of its surrounding landscape. Accordingly, Section 4.1 of the PEIR concludes that the existing visual setting of the Manzanar NHS could be adversely affected by solar energy development. Individual projects proposed within the County will be required to prepare a project-specific environmental analysis and associated CEQA document to evaluate potential impacts, including visual analysis. The County recognizes the concerns raised by the Manzanar Committee and has updated the referenced text in the PEIR (page 4.1-17) as follows:

The Manzanar National Historic Site is located off of US 395 between Lone Pine and Independence within the OVSA. This national historic site has attracted more than 70,000 visitors annually since 2004 (NPS 2014). Views of future solar energy facilities within the OVSA could potentially be provided from this site; ~~however, the focus of visitors of the national historic site is generally inward and on the facilities within the site rather than on the surrounding areas and visual landscape. For this reason, where~~ viewers from this location ~~would, in general, not be highly~~ could be sensitive to changes in the visual environment resulting from solar energy projects in close proximity to the national historic site within the OVSA. ~~Still,~~ the presence of such development could result in an impact to the sense of isolation that was part of the psychological warfare perpetuated by the U.S. government against detainees at Manzanar during World War II.

Response 209-6: The comment notes the position of the Manzanar Committee on the development of utility-scale renewable energy projects in the County. Refer to Response 209-1 above regarding potential visual impacts to the Manzanar NHS.



Owens Valley Committee
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January 14, 2015

Inyo County Planning Department
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To Whom It May Concern:

The Owens Valley Committee submits the following comments on the Draft Program Environmental Impact Report (PEIR) for the Renewable Energy Plan Amendment (REGPA). The Owens Valley Committee is an organization that was founded in 1984 to protect Owens Valley’s water resources and the plants and animals that rely on water from damaging groundwater pumping and export. The Committee is a party to the Memorandum of Understanding that amends and defines the 1991 Inyo Los Angeles EIR in several areas, including the Lower Owens River Project and the Owens Valley Land Management Plan (OVLMP). In that role, the Committee is concerned that the Laws Solar Energy Development Area (SEDA), and the Owens Valley Study Area (OVSA) have the potential for conflict with the 1991 Los Angeles/Inyo EIR, Water Agreement and 1997 MOU, including potential significant effects on the Lower Owens River and its adjacent lands, and on the lands included within the management area prescribed by the OVLMP. OVC has an additional commitment to the small communities that rely on the natural resources of the Valley for environmentally compatible economic benefits, including agriculture, hunting and fishing, and tourism. OVC is also concerned about the impacts of renewable energy development in proposed SEDAs in other areas of Inyo County.

210-1

The REGPA PEIR proposes *unavoidable* impacts to aesthetics, biological resources and cultural resources. The Committee opposes projects in Inyo County that have unavoidable significant impacts or cumulatively considerable impacts, including renewable energy projects. We recognize that the State of California is providing financial incentives and strong pressure to the County of Inyo to provide for large-scale renewable energy development. Appropriate solar energy development is at the “point of use” in order to avoid transmission line losses, maximize the use of degraded urban lands and rooftops, and create energy independence and cost savings for net meter and feed-in-tariff

210-2

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generators. The Committee also objects to the further degradation of the Inyo County environment for resource extraction to benefit urban areas. Inyo County is a major water source for the City of Los Angeles, suffering the consequences of groundwater pumping, and already exports electrical energy from various hydropower operations and the Coso Geothermal field.

210-2
(cont'd)

Detailed below are some of our many concerns and comments.

PAGE NO.	COMMENT
	<p>OVC views larger distributed-energy facilities similarly to utility-scale solar facilities, as a 20 MW PV facility is disruptive to 120 acres, resulting in significant effects. There is also a potential for cumulative effects, depending upon the number of 20 MW facilities constructed. We request that large distributed-energy projects be defined as 5 MW – 20 MW (30 – 120 acres), and be subject to the same environmental review processes that utility-scale solar facilities are.</p> <p>In general, the proposed policies and mitigation measures throughout the PEIR should use the word “avoid” instead of the word “minimize”. Overall, <i>the goal of the REGPA should be to prevent siting of renewable energy facilities if there are unavoidable significant effects</i>, and to control the implementation and operation of facilities to prevent unanticipated effects.</p>
ES-2	<p>We request that several of the Objectives on Page ES-2 be modified:</p> <ol style="list-style-type: none"> 1. Provide Control for solar energy development opportunities in Inyo County with a focus on community-based electrical generation and the reuse of severely damaged sites, such as landfills, to generate electricity from solar resources in accordance with the goals established by California State legislation and local policies regarding renewable energy. 3. Minimize Avoid direct and indirect impact from future solar energy development on the physical, biological, cultural, political, and socioeconomic environments. 5. Locate future solar development near existing electrical conveyance facilities and discourage construction of any additional transmission in Inyo County. 7. Provide for community scale and/or distributed generation solar energy production opportunities throughout the County.
ES-3	<p>The PEIR SEDAs include “...degraded lands such as brownfields, mines, landfills, and Owens Lake, and properties requested for consideration by private property owners.” Recently the Rural Desert Southwest Brownfields Coalition designated two properties in Inyo County as “brownfields,” Mt Whitney Fish Hatchery and the old PPG plant. Both of these are unsuitable as renewable energy sites for historic and aesthetic reasons. Mines and brownfields can have cultural and historic resource values, as in the two examples noted above. Brownfields and mines need to be removed from the category of “degraded lands.” Also, OVC does not view Owens Lake as “degraded land.” There are significant cultural, historical, and biologic resources adjacent to and on Owens Lake, as well as aesthetic impacts from further industrialization. We request that degraded lands consist of landfills, waste water treatment plants, the Los Angeles Aqueduct, and mines/gravel pits that don’t have cultural and aesthetic conflicts. Also, this PEIR needs to treat all lands, private or not, under the same process and with the same provisions.</p>

210-3

210-4

210-5

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ES-3	<p>The PEIR asserts that the project would result in less than significant impacts to air quality, hydrology and water quality, recreation, and socioeconomics. We disagree. The mitigation measures are not adequate to reduce the impacts to “less than significant.” Further, the PEIR recognizes significant and unavoidable impacts with aesthetics, biological resources, and cultural resources. OVC does not support projects that have unavoidable impacts in these areas and requests that the Board of Supervisors <i>not</i> approve a Statement of Overriding Considerations for projects with significant and unavoidable impacts. Furthermore, in this county, much of the economy is based upon tourism, and tourism in Inyo County is based upon the aesthetics of the landscape. Therefore, it is impossible for there to be admittedly “significant” and unavoidable impacts to aesthetics and yet “less than significant” impacts to socioeconomics.</p>	210-6
ES-4	<p>OVC did not find a Project Alternative that we could agree with. We request that you add an Alternative: <i>No Impact Alternative</i>. Under this alternative, <u>only</u> solar PV would be permitted and <u>only</u> on “disturbed lands” defined as landfills or superfund sites. In some cases, an abandoned mine site might be appropriate, but would have to be evaluated on a case-by-case basis. Abandoned grazing and agricultural lands are not included because they can have high habitat values, and in some cases are protected by other legal agreements. In this alternative, all solar projects, including community-based and distributed generation solar projects, would receive an appropriate and thorough environmental analysis before any permitting or project approval.</p>	210-7
ES-6	<p>We concur that a Program EIR is an appropriate document for a General Plan Amendment of this scale. However, it is OVC’s view that the analysis in this PEIR will not reduce the need for project proponents to prepare an EIR for each proposed project because of the general nature of this PEIR and its mitigation measures in contrast to the site-specific issues for each project. Inyo County is the second largest county in California and comprises a wide variety of ecosystems and economic conditions. As such, a PEIR that seeks to provide specific mitigation for projects in this vast area will be inadequate, unless the intent of the PEIR is only to establish a broad framework of policies and potential mitigation, with detailed site-specific analysis and discussion in an EIR required for each project. Additionally, Inyo County has little known and little studied areas, even within the identified SEDAs, with the potential for significant biological and cultural conflicts. New projects, therefore, will require intensive study and analysis in order to insure there are no unanticipated effects (as provided for in 14CCR §15168). An EIR is an information document used by decision makers and the public to understand the impacts of a project. Due to the inherent destructive nature of solar installations, with the removal of plants and animals, impacts to hydrology, permanent and irrevocable impacts to cultural resources, and damage to visual and aesthetic attributes which may disrupt local economies, an EIR would be the appropriate document to reveal significant effects, not a mitigated negative declaration or other CEQA process. An example of a tiered EIR process used by Inyo County is the 1991 Inyo-LA program EIR, and the associated Lower Owens River EIR provided for in the program EIR.</p> <p>The value of a program EIR is to provide a study of the cumulative effects across this region. We have noted that the Owens Valley Study Area has been partially analyzed in this PEIR, despite the <i>overwhelming</i> opinion of the public to exclude the Owens Valley</p>	210-8

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	<p>from solar development. Although the intent may have been to avoid “segmenting,” an impermissible practice under CEQA (<i>Citizens Assoc. For Sensible Development of Bishop Area v. County of Inyo</i> (1985) 172 Cal.App.3d 151), in actuality the old Owens Valley REDA has been expanded into and renamed the much larger Owens Valley Study Area. On pg. 3-15, a list of “potential criteria” for the OVSA is included. OVC supports this criteria with the exception of limiting distributed generation facilities to 5 MW (30 acres) or less (see earlier definition); disturbed lands only include landfills, waste water facilities, and appropriate mines/gravel pits; and private lands will be treated the same as other lands.</p>	210-8 cont'd
ES-9	<p><u>Impacts and Proposed Mitigation Tables</u> Aesthetics: While we don’t disagree with any of these approaches for mitigating aesthetic impacts, the fact remains that Inyo County is a tourist based economy, and the livelihood of its citizens relies on protecting the unspoiled viewsheds. We reiterate that significant and unavoidable impacts to aesthetics are unacceptable.</p>	210-9
ES-13	<p><u>Impacts and Proposed Mitigation Tables</u> Agricultural and Forestry Resources: It is not acceptable to site renewable energy projects on agricultural land, particularly on lands that may be protected by the 1991 LA/Inyo EIR Water Agreement and 1997 MOU. Agriculture is the #2 economic driver in Inyo County, yielding jobs and taxable income to the County. Siting an untaxable industrial solar facility on taxable agricultural land does not make economic sense. In addition, in the Laws SEDA, revegetation of grazing lands and irrigated lands are mitigation measures for Los Angeles’ water extraction activities. Even if Los Angeles DWP has not been assiduous in pursuing these mitigation measures, it does not remove their obligation to do so. The Laws SEDA includes mapped sites that are specifically designated for various land management practices and restoration. Further, siting a solar facility on scarce agricultural land is not adequately mitigated by “mitigation ratios and impact fees” to less than significant.</p>	210-10
ES-14	<p><u>Impacts and Proposed Mitigation Tables</u> Air Quality: No scientific documentation is cited to show that deflectors or angling the solar panels will prevent emissions from a large area denuded of vegetation. In addition, adjusting the solar panels to optimum solar collection regardless of wind conditions may prevent any dust control effect. This plan does not provide for the situation in which these measures are unsuccessful and emissions increase.</p>	210-11
ES-15	<p><u>Impacts and Proposed Mitigation Tables</u> Biological Resources: Owens Valley Committee does not support the implementation of projects that have significant and unavoidable effects to biological resources. We also question what constitutes a “qualified biologist” and request a definition. The PEIR proposes that impacts to special status plants be minimized by fencing, seed collection and/or transplanting. OVC does not view this as acceptable mitigation. Fencing populations within a project site serves to isolate them from other populations, and transplanting has a high rate of failure. In cases where there are special status plants, the project should not be approved. OVC does not believe that any “take” of special status animals is acceptable. If there are special status species located on a project site, then that project should not be approved. Furthermore, an obvious negative impact of disturbing previously undisturbed lands by</p>	210-12

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	excoriating thousands of square acres is the promulgation of invasive species such as Russian Thistle (tumbleweed), which thrives in bulldozed or otherwise disturbed soil, and spreads easily, displacing native species. The recommended mitigation techniques of this plan (see page ES-60) are either unmanageable (washing the tires and undercarriage of every vehicle <i>thoroughly</i> before it enters or leaves the work site) or have been regularly unsuccessful as evidenced by the great success of Russian Thistle throughout Inyo County.	210-12 cont'd
ES-29	<u>Impacts and Proposed Mitigation Tables</u> Biological Resources: The PEIR discusses the application of soil binders and toxicity to wildlife, permitting the “County biologist and County project manager” to approve the use of “agents with known toxicity to wildlife.” We object to using toxic substances and would like to know who the County biologist and project manager are, and how they are selected.	210-13
2-3, 2-7, 2-18	In the discussion of the Owens Lake SEDA, there is no mention of the fact that the 1991 Long Term Water Agreement applies to Owens Lake. Please include this information in the Final EIR.	210-14
2-21	The Westwide Energy Corridor is discussed, but there is no mention that it has been designated a “Corridor of Concern”.	210-15
3-8	The PEIR proposes the adoption of new land use implementation measures. Proposed measure number 3 provides that the County can ask for compensation for solar projects that are not developed for a variety of reasons, including the presence of special status species and aesthetics. Yet the purpose of CEQA, and this PEIR, is to analyze and inform the public and decision makers in order to avoid, minimize or mitigate significant impacts as a result of a project. That may mean that a project does not proceed due to the deleterious nature of the project. It makes no sense that the County would seek reimbursement if the CEQA process is successful in deterring a bad project, as that is its purpose. Further, who would reimburse the County? Citizens who wish to protect special status species? And, in reality, what would the County have lost in the first place since minimal tax revenue accrues to the County from a solar project.	210-16
4.16-5, 2-12	The PEIR discusses renewable energy development agreements as an option to standard permitting processes. OVC strongly believes that matters that affect the public should be discussed with the public, particularly matters with the potential for environmental destruction. Renewable energy development agreements must be transparent during the negotiation process. This enables the public to determine and weigh in on environmental, cultural, aesthetic, and economic losses that may be caused by a project versus any financial or other benefit a developer may offer as compensation. We request that the PEIR include language specifying that any member of the public can review a renewable energy development agreement at any time, and that the initiation of negotiations will be made public. The public must be made aware that a developer has come to the Planning Department to start a renewable project.	210-17
4.16-14	The PEIR states that a standardized method for determining impacts to the County’s tourist economy due to negative visual impacts from renewable energy projects will be developed. We would suggest that such a process or method should be in place as a part of this PEIR in order to adequately analyze economic impacts, and that the failure to analyze or discuss impacts to the County’s tourist economy as a result of this project renders analysis of	210-18

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	socioeconomic impacts inadequate since tourism is by far the most significant part of Inyo County's economy.	210-18 cont'd
5-1	<p>In the section "Other CEQA Considerations", the table of Cumulative Projects does not include the project of export of water to supply the City of Los Angeles as described by the 1991 Inyo/ LA EIR, the 1991 Long Term Agreement, and the 1997 MOU. The project is further described in the Owens Valley Land Management Plan and the Lower Owens River EIR. The OVLMP manages all vegetation types, including Type A which is not groundwater dependent. Solar projects are in conflict with the OVLMP's management goals. In the Owens Valley Study Area, the Laws SEDA and the Owens Lake SEDA, impacts from LA's water export project are significant and ongoing. Taken cumulatively with any renewable energy project development in these areas, the environmental effects will be devastating. Please include this project in the table. Also, on page 5-34 the PEIR states that there will be no impacts to hydrology from the REGPA. That statement is flawed, as any water use (to wash panels for example) in the region protected by the Water Agreement contributes to declining groundwater levels. In Laws, groundwater levels are far below those necessary to support surface vegetation due to LADWP's water management practices with the McNally Canals. Solar facilities will contribute further to this problem.</p> <p>The PEIR fails to discuss possible cumulative effects from siting solar facilities in the SEDAs adjacent to the Nevada border taken in conjunction with Nevada projects. Areas to be considered are the effects of water use on the Amargosa River, transmission connections through Valley Electric Association, and loss of habitat for special status species.</p> <p>The PEIR acknowledges that the REGPA is growth inducing in the areas served by any future solar energy generated by facilities sited in Inyo County, but dismisses growth as a significant cumulative impact if agencies are still able to provide needed public services, or if it does not impact the environment in some other way. It can easily be argued that California is now unable to provide needed public services due to population growth, and that this will continue to worsen. Housing and infrastructure for the expanding population destroy California's unique ecosystems. Air quality suffers from more automobiles. More energy production to fulfill "increased market demand" is clearly growth inducing, and needs to be so stated.</p>	210-19

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Responses to Letter 210 – Owens Valley Committee

Response 210-1: Future solar energy projects under the REGPA would undergo project specific analysis, which would include an evaluation of consistency with existing plans and regulatory framework such as the 1991 LADWP/Inyo County Long Term Water Agreement, the 1997 Memorandum of Understanding, and the Owens Valley Land Management Plan. Proposed projects Refer to Sections 2.4.3.3 *Inyo County/Los Angeles Long Term Water Agreement*, 2.4.3.4 *1997 Memorandum of Understanding*, and 2.4.3.6, *Owens Valley Land Management Plan*.

Response 210-2: The PEIR identifies that significant and unavoidable impacts would potentially occur in the areas of aesthetics, biology, and cultural resources. This is a conservative conclusion based on the uncertainty, at a Program EIR level, of a subsequent project’s actual impacts. The SEDA boundaries depicted in the Draft PEIR have been identified based on information described in the Opportunities and Constraints Technical Study (Appendix D of the PEIR). The SEDAs are intended to direct and constrain future solar developments to areas in the County identified as possibly supporting a lower level of resource sensitivity, and that are located near existing transmission facilities. Potentially significant impacts that could occur as a result of renewable energy projects being developed in the SEDAs were identified at a programmatic level and all feasible mitigation is prescribed in the PEIR; however, without project-specific information coupled with a project-level analysis under CEQA, it can’t be stated with certainty that these potential impacts would be reduced to below a level of less than significant at a programmatic level. That is why the PEIR reaches the conservative conclusion that impacts remain potentially significant and unavoidable. The County will prepare a Statement of Overriding Considerations per Section 15093 of the State CEQA Guidelines that identifies the economic, legal, social, and/or technological benefits of implementing the proposed project in light of the unavoidable impacts identified in the PEIR. This document will be considered along with the PEIR by the County Board of Supervisors in late March 2015.

Solar energy potential in Inyo County is amongst the highest in the nation (Section 2.2.2 of the PEIR). The County has developed the REGPA in light of the California Renewables Portfolio Standard and Assembly Bill 32 (Global Warming Solutions Act), because the County recognizes the important role the County may play in reaching the overall state emission reduction goals, and recognizes the need to direct and constrain potential solar development within the County to avoid or minimize direct and indirect impacts on sensitive resources in the County. The County’s goal to avoid, minimize, and mitigate for impacts is included in REGPA Mineral and Energy Resources Goal MER-2 (Section 3.3.1 of the PEIR). The County’s objective to avoid or minimize impacts to sensitive resources in the County is stated in Project Objective No. 3 (Section 3.2 of the PEIR), which has been updated to emphasize the County’s objective to avoid or minimize impacts. Refer to Response 207-10 for the revisions to the objective.

While the REGPA has been developed in part to constrain and direct large scale solar development within the County, the County also encourages noncommercial, small and community scale solar energy production for on-site use (the electricity will not be exported from the County) through existing policies and through components of the REGPA. Inyo County Code (ICC) Title 21 encourages small scale solar energy development with an expedited permitting process, and REGPA Policy MER-2.1 states that the County shall continue to encourage small scale, commercial scale, and community scale solar development that serve specific communities. REGPA Policy LU-1.18 of the REGPA allows community scale solar energy generation outside of the SEDAs and in any zoning district of ICC Title 18.

Response 210-3: All future projects under the REGPA would be subject to project-specific environmental review. Depending on the size and location of the development and the technology used, a full EIR may be required. However, the REGPA also encourages small scale, PV technologies to be constructed which may not require a full EIR. As stated in Section 1.2 of the PEIR:

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

It should be noted that under Title 21 of the Inyo County Code concerning renewable energy development, any person who proposes to construct an electric transmission line, solar thermal renewable energy facility or a PV renewable energy facility in the County must first obtain a Renewable Energy Permit, a Renewable Energy Development Agreement or a Renewable Energy Impact Determination. A Renewable Energy Impact Determination applies to projects over which the County has limited authority because the project is located on federal or state land or is subject to the permitting jurisdiction of the California Energy Commission.

Under Title 21, the issuance of a Renewable Energy Permit is subject to CEQA, and the County Planning Commission must conduct a noticed public hearing before considering approval of such a permit. The Planning Commission must find that there has been compliance with CEQA before a permit can be issued. In addition, “as a condition to the issuance of such a permit, the Planning Commission may impose such reasonable and feasible mitigation measures as it finds to be necessary to protect the health, safety, and welfare of the county’s citizens, the county’s environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.” Finally, the Planning Commission is required to impose as a condition of approval, a plan for the reclamation/revegetation of the project site at the time of decommissioning of the project and the Planning Commission shall require financial assurances from the applicant to ensure that the reclamation plan will be fully implemented.

Concerning Renewable Energy Development Agreements, Title 21 provides that such agreements may be entered into by the County and a project applicant in lieu of obtaining a Renewable Energy Development Permit. Renewable Energy Development Agreements are subject to CEQA and must be approved by an ordinance adopted by the Board of Supervisors following a noticed public hearing. Prior to approving such an agreement, the Board must find that there has been compliance with CEQA. Renewable Energy Development Agreements must include a reclamation plan, acceptable financial assurances to ensure full implementation of the reclamation plan, be consistent with the county general plan and be enforceable by injunctive relief or other enforcement mechanisms under law. In the Renewable Energy Development Agreement, the Board of Supervisors may require such mitigation measures or modifications of the project as it finds necessary to protect the health, safety, and welfare of the county’s citizens, the county’s environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.

This PEIR would provide a framework for these subsequent project analyses, but specific projects would still be assessed on an individual level; all projects under CEQA are legally afforded the same public review process.

Project Objective 3 has been updated to emphasize the County's objective to avoid or minimize impacts. Refer to response 207-10 for the revisions to the objective. Regarding significant and unavoidable effects, please refer to

Response 210-4: The PEIR project objectives have been updated as follows:

1. ***Provide for Direct and constrain solar energy development opportunities in Inyo County with a focus on community-based electrical generation and the reuse of severely damaged sites, such as landfills, to generate electricity from solar resources in accordance with the goals established by California State legislation and local policies regarding renewable energy.***

Project Objective 3 has been updated as follows:

3. ***Avoid or minimize direct and indirect impact from future solar energy development on the physical, biological, cultural, political, and socioeconomic environments.***

In order to preserve the County's physical, biological, cultural, political, and socioeconomic environments, and allow future development to be implemented in an economically feasible manner, the County identified the potential SEDAs. An Opportunities and Constraints Technical Study (OCTS) (Aspen 2014) was prepared for the proposed project in which quantifiable data were used to map sensitive resources throughout the County. These data were qualitatively used to identify locations that were more or less sensitive based on the available data. The proposed development areas are in locations with the relatively least impact to the resources evaluated. In identifying these development areas, development is directed to avoid and minimize impacts to those areas, and encourage development in areas deemed more appropriate. Not all areas within the SEDA boundaries may be suitable for development. Site specific analysis of sensitive resources will be conducted prior to development in any of the SEDAs and identified sensitive resources will be avoided or impacts will be minimized to the extent practicable and mitigated pursuant to this PEIR.

As stated in Project Objective Number 5 (Section 3.2 of the PEIR), the development areas have been situated along existing and planned transmission systems to minimize new facility construction and to maximize existing facilities. Due to the relatively small energy load required by the County, the majority of potential solar electric energy generated in the county would serve areas outside of the county. By identifying the total allowable MW for each solar energy group and defining the different types of development, the County is effectively capping the amount of electricity that may be exported.

Response 210-5: Although there are two sites being evaluated under the Rural Desert Southwest Brownfields Coalition's programs in the County (the Mt. Whitney Fish Hatchery and the PPG Industries Bartlett Plant), only the PPG Plant is identified in the PEIR as potentially appropriate for renewable energy development (refer to the brownfields discussion under Section 3.3.3). Any future proposal for solar energy development on the site would be subject to subsequent CEQA analysis to determine the resources present and the potential for impacts to those resources. Similarly, although some mines or areas of Owens Lake may contain significant cultural, historical, and biological resources, future

development proposals would be evaluated on a case-by-case basis. Future proposals would be subject to subsequent CEQA analysis to determine the resources present at the proposed project site and the potential for impacts to those resources. Developments would be sited to avoid or minimize impacts to the identified resources. In summary, although certain land uses have been identified as priority development areas within the SEDAs, those areas would still be subject to subsequent CEQA analysis to determine the resources present and the potential for impacts to those resources. Developments would be sited to avoid or minimize impacts to the identified resources, according to the avoidance, minimization, and mitigation measures identified in the PEIR.

The following revisions have been made to Section 3.3.3 of the PEIR to clarify that although the County has identified these land uses as focus areas for future development, they may contain valuable resources and those sites would not be suitable for development:

Abandoned Mines

There are numerous abandoned mine sites throughout Inyo County. Many of these sites are on BLM, National Forest and National Park lands. Mines may contain biological or other sensitive resource value and would not be suitable for development, but others may be severely degraded sites with that would provide suitable opportunities for solar energy development. Abandoned mines and borrow pits sites within the SEDAs will be evaluated for development.

Owens Lake

Owens Lake is an approximately 110-square-mile dry lake bed that was historically the terminus of the Owens River. The Owens River and other area streams that fed Owens Lake were diverted by LADWP into the Los Angeles Aqueduct, which was completed in 1913. As a result of these water diversions, Owens Lake was predominately dry by 1930. The exposed lake bed became a major source of airborne dust in the Owens Valley. Due to the effects on air quality from the lake dust, the Great Basin Unified Air Pollution Control District mandated that the LADWP implement dust control measures. As described in Section 2.2.1.1, mitigation efforts have been applied to areas of the lake, and some habitat value has been restored; however, large expanses of alkali flat remain that continue to be a source of airborne dust in the valley. The lake is being included in the SEDAs as are area to consider for solar development because if untreated areas of the lake with low habitat value and lacking other sensitive resources are identified through subsequent environmental review and are able to be developed, the development could provide some dust mitigation while meeting the objectives of the REGPA.

In 2009 LADWP announced that it would be pursuing a 550-kW PV solar demonstration project on a 5.3-acre area located within the 2.03-square mile Owens Lake Phase 8 dust mitigation area on the northwest section of the lake bed, south of Lone Pine. This area has been treated with gravel as part of the dust mitigation efforts. The LADWP completed a Mitigated Negative Declaration (2013) on the solar demonstration project. General construction subsequently began in mid-August 2014 and plans for project completion are set for early 2016. The demonstration project is being implemented to determine whether Owens Lake is a suitable location for larger-scale energy production.

Response 210-6: The analysis in Section 4.9, Hydrology and Water Quality, identify potentially significant impacts for all eight SEDAs and the Owens Valley Study Area for the issues of drainage patterns/flow directions, groundwater resources, and long-term (operational) water quality. In addition, potential

impacts related to flooding/floodplain hazards are identified as significant for applicable locations, such as areas with mapped floodplains/hazards. The evaluations in Section 4.9 also note that, while significant impacts related to runoff generation, storm drain system capacity, and short-term (construction) water quality are not anticipated, these potential effects would be further evaluated through regulatory compliance (e.g., NPDES permitting) and/or evaluation in the detailed site-specific hydrology-, groundwater- and water quality-related investigations required as mitigation in Section 4.9.5. These mitigation measures (along with the described regulatory conformance) would adequately address all identified issues related to hydrology and water quality, and are anticipated to reduce all associated impacts below a level of significance per applicable CEQA and County standards. Impacts to these environmental issue areas, after implementation of prescribed mitigation outlined in the PEIR, would result in less than significant impacts.

The analysis provided in Section 4.3, Air Quality, of this PEIR concludes that future utility scale, commercial scale (referred to as distributed generation in the Draft PEIR), and community scale solar energy facility projects under the REGPA could result in potentially significant impacts related to: (1) daily threshold exceedances during construction activities; (2) daily threshold exceedances during operations; and (3) cumulatively considerable net increase in criteria pollutants during construction activities. It is noted in the PEIR that these impacts require mitigation to reduce them to the maximum extent feasible. The mitigation measures described, including the requirement for a site-specific air quality technical report to be prepared and approved by the County for solar energy projects prior to issuance of Major Use Permits, would ensure the impacts from specific projects would be reduced to less than significant levels. Additionally, Mitigation Measures AQ-2 and AQ-3 outline specific particulate matter control measures that could be prescribed in the project-specific analysis to ensure project-specific emissions are reduced to less than significant levels. Note that the list of dust control measures that could be incorporated to help reduce individual project air quality impacts to less than significant levels (Mitigation Measure AQ-3) has been updated in the PEIR to include additional measures to reduce windblown dust during project operation. These mitigation measures would adequately address all identified issues related to air quality, and are anticipated to reduce all associated impacts below a level of significance per applicable CEQA and County standards.

Response 210-7: Refer to Response 207-20 regarding the evaluation of project alternatives in the PEIR. As described in Response 210-5, although abandoned mines have been identified as focus areas for future development, they may contain valuable resources and those sites would not be suitable for development. This would be determined through subsequent environmental review. Refer to Response 210-5 for revisions to the PEIR to clarify.

Response 210-8: Future projects under the REGPA would be subject to project-specific environmental review. Depending on the size and location of the development and the technology used, a full EIR may be required. However, the REGPA also encourages small scale, PV technologies to be constructed which may not require a full EIR. As stated in Section 1.2 of the PEIR,

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

In response to public feedback to both remove the previously proposed Owens Valley SEDA and to provide an opportunity for community scale development in the valley, the County removed the Owens Valley SEDA and identified it as a study area demarcated by a geographic boundary of the general valley area that does not correlate with a proposed development area. Any potential future solar energy project proposed for this area would be subject to a General Plan Amendment and further CEQA analysis and public comment as outlined in the PEIR. The reason for evaluation of the area is because the Owens Valley is where the majority of the County's citizens live, and therefore, where the majority of the communities are, but the area is also under multiple jurisdictions and is highly managed. LADWP has expressed interest in developing its land in the Owens Valley for solar energy. The County believes it is wise and good planning to have policies in place in an attempt to influence this potential development.

Response 210-9: It is acknowledged that Inyo County's scenic resources are one of the attributes that attracts visitors to the area and contributes to the local economy. The assessment of significant and unavoidable visual impacts is a conservative conclusion based on the uncertainty, at a Program EIR level, of a subsequent project's actual impacts. The SEDA boundaries depicted in the Draft PEIR have been identified based on information described in the Opportunities and Constraints Technical Study (Appendix D of the PEIR). The SEDAs are intended to direct and constrain future solar developments to areas in the County identified as possibly supporting a lower level of resource sensitivity, and that are located near existing transmission facilities. Potentially significant impacts that could occur as a result of renewable energy projects being developed in the identified SEDAs were identified at a programmatic level and all feasible mitigation is prescribed in the PEIR; however, without project-specific information coupled with a project-level analysis under CEQA, it can't be stated with certainty that these potential impacts would be reduced to below a level of less than significant at a programmatic level. That is why the PEIR reaches the conservative conclusion that impacts remain potentially significant and unavoidable. The County will prepare a Statement of Overriding Considerations per Section 15093 of the State CEQA Guidelines that identifies the economic, legal, social, and/or technological benefits of implementing the proposed project in light of the unavoidable impacts identified in the PEIR. This document will be considered along with the PEIR by the County Board of Supervisors in late March 2015.

Response 210-10: Mitigation Measure AG-2 requires site-specific agricultural resource investigations be completed for proposed solar developments. If agricultural resources are identified, the project shall be sited to avoid or minimize impacts to the agricultural resources. Mitigation measure AG-1 requires review by the Agricultural Commissioner to ensure all proposed developments do not significantly impact agricultural operations. The County has limited control over activities on LADWP-owned lands; however, LADWP is required to consider project consistency with the County's General Plan as a part of the environmental analysis under CEQA. With adoption of the REGPA, future solar energy projects with the potential to affect lands protected by the 1991 Agreement and the 1997 MOU would be reviewed by the Agricultural Commissioner (Mitigation Measure AG-1) to ensure consistency with those policies. Additionally, project-specific analyses will include an evaluation of consistency with existing plans and regulatory framework such as the 1991 LADWP/Inyo County Long Term Water Agreement, the 1997 Memorandum of Understanding, and the Owens Valley Land Management Plan, as appropriate. Refer to Sections 2.4.3.3 *Inyo County/Los Angeles Long Term Water Agreement*, 2.4.3.4 *1997 Memorandum of Understanding*, and 2.4.3.6, *Owens Valley Land Management Plan*.

Response 210-11: The comment notes that no scientific documentation is cited to show how successful the dust control measures described in Mitigation Measure AQ-3 would be once implemented. Mitigation Measure AQ-3 has been updated, as outlined below, to include additional measures to

reduce windblown dust during project operation. Added measures include efficiency ratings cited from scientific documentation. Areas denuded of vegetation have also been addressed with the inclusion of revegetation in this list of potential dust control measures.

MM AQ-3: Implement dust control measures during operation.

To control emissions of particulate matter, and to ensure compliance with GBUAPCD Rules 401 and 402 as well as applicable BMPs from REAT's Best Management Practices and Guidance Manual (REAT 2010), solar projects shall incorporate feasible dust control measures into the site design including, but not limited to, the following:

- Incorporate perimeter sand fencing into the overall design to prevent migration of exposed soils into the surrounding areas. The perimeter fence is intended to provide long-term protection around vulnerable portions of the site boundary; it is also intended to prevent off-road site access and sand migration across site boundaries and the associated impacts.
- Incorporate wind deflectors intermittently across solar project sites. The solar panels themselves, especially where installed to transverse primary wind direction, will provide some measure of protection of the ground surface. Wind deflectors enhance this effect by lifting winds that may otherwise jet beneath panels, thereby disrupting long wind fetches, and reducing surface wind velocities and sand migration.
- Orient infrastructure/solar panels perpendicular to primary wind directions.
- Adjust panel operating angles to reduce wind speeds under panels.
- Perform revegetation in areas temporarily denuded during construction. These areas would be replanted with native plant species that exist on the site presently. Irrigation would be applied temporarily during the plant establishment period (typically multiple years), but after establishment it is expected that these areas would require little or no maintenance. Vegetation provides dust control by protecting and preventing threshold wind velocities at the soil surface. Studies have shown that an 11 to 54 percent vegetation cover on a site can provide up to 99 percent PM10 control efficiency (GBUAPCD 2008).
- As the installation of solar panels and associated equipment progresses, each area that is completed (i.e. where no further soil disturbance is anticipated) will be treated with a dust palliative to prevent wind erosion. CARB certifications indicate that the application of dust suppressants can reduce PM10 emissions by 84 percent or more (CARB 2011).

Response 210-12: Qualified Biologist has been defined in the document as “a biologist with documented experience or training related to the subject species.” This definition has been added to the first paragraph of Mitigation Measure BIO-1 as outlined below:

Prior to the approval of any solar development projects or related infrastructure under the REGPA with the potential to impact biological resources as determined by a qualified biologist (defined as a biologist with documented experience or training related to the subject species), a project level biological resource evaluation shall be prepared by a

qualified biologist for the project. The biological resource evaluation shall include field reconnaissance and focused surveys as determined necessary by a qualified biologist to identify special status species and natural communities present or having the potential to occur on the site, an evaluation of the extent of those habitats, an evaluation of the potential for impacts to each special status species and/or habitat, and shall prescribe specific mitigation measures to avoid ~~or reduce~~ impacts to biological resources to the maximum extent practicable. The qualifications of any biologists conducting special status species surveys or focused habitat assessments will be submitted to CDFW prior to conducting fieldwork. The level of biological resource analysis will be based on factors such as the size of the proposed project, the extent of impacts to biological resources, and the sufficiency of existing data to determine impacts.

Mitigation measures related to transplanting of special status plants have been updated in accordance with CNPS comments. The following bullets have been updated/added to Mitigation Measure BIO-2:

- If transplanting is proposed, the botanist shall coordinate with the appropriate resource agencies and local experts to determine whether transplantation is feasible. If the agencies concur that transplantation is a feasible mitigation measure, the botanist shall develop and implement a transplantation plan through coordination with the appropriate agencies. The special status plant transplantation plan shall involve identifying a suitable transplant site; moving some or all of the plant material and seed bank to the transplant site; collecting seed material and propagating it in a nursery (in some cases it is appropriate to keep plants onsite as nursery plants and sources for seed material); and monitoring the transplant sites to document recruitment and survival rates. Monitoring shall be conducted for a period of five years and transplantation shall be considered successful if an 80 percent survival rate has been achieved by the end of the five-year monitoring period.
- A mitigation and monitoring plan shall be developed by a qualified botanist/ restoration ecologist and submitted to CDFW for approval prior to approval of the proposed project. The mitigation and monitoring plan will dictate appropriate avoidance and minimization measures, compensatory mitigation, and monitoring requirements as pertinent to the specific species and level of impact(s). Mitigation shall include, but is not limited to 1) protection of special status plant populations not directly impacted by construction or implementation of the project as stated above; 2) transplantation and/or collection of seed from impacted plants if feasible, as stated above; and 3) the preservation in perpetuity of an equivalent or larger off-site population for every individual or population of special status plant impacted including sufficient land surrounding the preserved population to ensure its survival in perpetuity as determined by a qualified botanist/ restoration ecologist. The qualified botanist/ restoration ecologist shall include plans to restore and enhance the preserved populations to the extent feasible.

“Take” of plant and animal species would only occur in accordance with legal requirements for take of such species incidental to an otherwise lawful activity. Incidental take authorizations would be obtained from the appropriate agency and fully mitigated as described in Mitigation Measures BIO-2 and BIO-3.

The management of invasive species will be conducted according to Mitigation Measure BIO-22 and in consultation with CDFW as described in Mitigation Measure BIO-2. The best available techniques will be applied to prevent the spread of invasive species. In addition, management plans will be developed in

consultation with the resource agencies to reduce or prevent the impacts of solar development as described in Mitigation Measure BIO-1 and will be implemented during all phases of the project.

Response 210-13: The document has been updated to prohibit the use of agents with known toxicity to wildlife. The following bullet in Mitigation Measures BIO-3 has been updated as follows:

- Water the disturbed areas of the active construction sites at least three times per day and more often if uncontrolled fugitive dust is noted. Enclose, cover, water twice daily, and/or apply non-toxic soil binders according to manufacturer's specifications to exposed piles with a 5 percent or greater silt content. Agents with known toxicity to wildlife shall not be used ~~unless approved by the County biologist and County project manager.~~

Response 210-14: The County and LADWP are in disagreement as to whether the 1991 Long Term Water Agreement is applicable to groundwater pumping by LADWP to supply dust abatement projects on Owens Lake. The matter is currently in the dispute resolution process required by the 1991 Agreement.

Response 210-15: The following revision has been made to Section 2.4.4.2 regarding the west-wide energy corridor.

Within Inyo County, the PEIS defined a corridor on BLM lands near US 395 and within the Bishop Resource Management Plan area. The corridor (Corridor 18-23) was designated as 1,320 feet wide within the Bishop Resource Management area and as 10,560 feet wide within the CDCA (BLM 2009). Corridor 18-23 is designated a "Corridor of Concern" under the Settlement Agreement for Wilderness Society vs. Department of Interior, identified by the plaintiff as having specific environmental issues.

Response 210-16: REGPA Land Use Implementation Measure #3 regarding compensation to the County for solar projects not developed has been removed.

Response 210-17: Under section 21.08.100 of the Inyo County Code, renewable energy development agreements must be subject to a noticed public hearing before the Inyo County Board of Supervisors can consider an ordinance approving such agreement (since the agreement must be approved by ordinance, the ordinance is subject to referendum) and such agreements must comply with CEQA. In addition, section 20.08.010 requires an applicant for renewable energy development permit to file an application with the County. The application is a public record.

Response 210-18: As indicated in the EIR (Section 4.16.6), the proposed REGPA policies and Title 21 will work to not realize adverse impacts. The proposed policy works to minimize impacts, and will be implemented if the REGPA is approved.

Response 210-19: Operation of Los Angeles Aqueduct is added to Table 5-1 as project number 15a.

The discussion of cumulative impacts to hydrology in Section 5.1.3.9 indicates that the REGPA would result in less than significant impacts to hydrology with mitigation incorporated. Potential impacts to hydrology as a result of the REGPA are discussed in Section 4.9. The last paragraph of Section 5.1.3.9 identifies that implementation of the REGPA has the potential to result in significant cumulative impacts to groundwater resources, but the extent of those impacts would be identified through subsequent project specific evaluations, and would be mitigated to a less than significant level. A discussion of the

potential cumulative impacts to biological resources from groundwater pumping has been added to Section 5.1.3.4 as follows:

If solar projects are implemented under the REGPA that require groundwater pumping, such projects along with other cumulative projects that involve groundwater pumping within the same watershed could result in cumulative indirect impacts to special status species and/or their habitats as a result of hydrologic alteration (e.g. lowering the water table). Solar developments requiring groundwater use in the OVSA as well as the Laws and Owens Lake SEDAs have the potential to exacerbate existing groundwater depletion resulting from current and planned developments that require groundwater and the ongoing operation of the Los Angeles Aqueduct and associated facilities. Similarly, solar developments in the Rose Valley SEDA requiring groundwater pumping could contribute to cumulative impacts to groundwater in consideration of cumulative projects in the SEDA (the Munroe Solar Project and Haiwee Geothermal Lease Area). If solar developments are proposed in the Charleston View and Chicago Valley SEDAs under the REGPA that would require groundwater pumping, such projects could contribute to potentially significant cumulative down-watershed impacts to special status species and sensitive habitats in the Amargosa Watershed due to numerous utility-scale solar projects in Nevada also located in the Amargosa Valley. Development in the remaining SEDAs would be expected to result in a less than significant cumulative impact related to groundwater pumping due to the lack of cumulative projects in the vicinity of those SEDAs.

The potential indirect impacts to special status species resulting from groundwater pumping, including modification of suitable habitat for special status species or sensitive natural communities, and/or habitat modification that would be inconsistent with the management goals of the OVLMP (pursuant to the Agreement) resulting from cumulative impacts related to groundwater pumping would be a potentially significant impact. The proposed project contains mitigation measures that require project-specific evaluation of the effects of groundwater pumping on groundwater dependent vegetation or ecosystems (Mitigation Measure BIO-25) and prohibit projects likely to affect groundwater resources in a manner that would result in a substantial loss of riparian or wetland natural communities and/or habitat for sensitive flora and fauna (Mitigation Measure BIO-24), which would reduce or eliminate the potential for significant cumulative impacts to biological resources related to groundwater pumping.

Refer to Table 5-1 for the list of Nevada projects evaluated for cumulative impacts, and Figure 5-1 for the general locations of those impacts. Potential cumulative impacts to the Amargosa River are discussed in the biology and hydrology cumulative discussions. Refer above for the new groundwater discussion added to Section 5.1.3.4; in the biological resources section. Although not specifically called out in Section 5.1.3.9, the overall discussion of hydrology addresses potential impacts to the Amargosa River and all waterways programmatically.

Potential cumulative impacts related to transmission connections through Nevada are identified in the individual issue areas of Section 5.1.3. Potential cumulative impacts to biological resources (including loss of habitat for special status species) from construction and operation of solar facilities are discussed, and the following clarification has been made in Section 5.1.3.4 that transmission connections are considered:

Impacts to biological resources from construction and operation of solar facilities, including associated facilities such as new transmission infrastructure in the eastern and southern solar energy groups, and other cumulative development projects include direct loss of habitat, vegetation removal and disturbance, wildlife mortality, injury or displacement of wildlife, dust and air quality pollution, degradation of water quality, introduction and spread of invasive species, the impacts to wildlife of increased human presence, the impacts of operational noises and lighting, habitat fragmentation, impacts to migratory corridors or native wildlife nursery sites, impacts to special status natural communities and protected natural areas, ~~and~~ impacts to federally protected wetlands as defined by Section 404 of the CWA, and indirect impacts to groundwater dependent vegetation and ecosystems due to groundwater pumping...

Additionally, cumulative impacts to sensitive species and their habitat incorporate Nevada projects by reference; as stated in Section 5.1.3.4 for both the discussion of cumulative impacts to sensitive plant species, and sensitive wildlife species, the cumulative impact to the sensitive species would be from projects impacting the same species and/or their habitats such that those species become more limited in their distribution, population size, or available suitable habitat. The cumulative projects include those Nevada projects identified in Table 5-1. Because the location and scale of impacts to special status species from implementing the proposed REGPA are not known, discussion of specific potential cumulative impacts is not included in the PEIR, but future development under the REGPA would be subject to environmental analysis, including an evaluation of cumulative impacts. The following modifications have been made to the discussion in Section 5.1.3.4 to clarify that the scope of cumulative impacts considered were beyond the SEDAs and OVSA:

As described in Section 4.4.1, the SEDAs and OVSA are characterized by diverse vegetation communities – in particular, the OVSA and SEDAs in the Western Solar Energy Group contain the greatest variety of vegetation communities associated with the perennial water sources and immediately adjacent mountain ranges. These vegetation communities and communities in the Southern and Eastern Solar Energy Groups have the potential to support numerous special status plant species, sensitive natural communities, and protected natural areas. Cumulative loss of special status plant species would result from projects impacting the same species and/or their habitats such that those species become more limited in their distribution, population size, or available suitable habitat. Future construction of solar projects under the REGPA in combination with cumulative development projects affecting similar habitats and species in the OVSA and SEDAs could result in a cumulative impact on special status plant species. The impact may be the result of direct removal of habitat or individuals of the species, degradation of habitat by the introduction and spread of invasive species, altered hydrology, ~~or~~ reduced water quality, or increased fire risks. Future development of solar projects under the REGPA would be required to mitigate for impacts to special status plants, and implement construction and operation measures to control the introduction and spread of invasive species. At the programmatic level of analysis, the location and scale of impacts to special status plants and sensitive natural communities and protected natural areas resulting from implementing the proposed REGPA is unknown; however it is anticipated that impacts would be reduced to less than significant with the implementation of measures to avoid, minimize, and mitigate for impacts to rare plants, special status communities, and protected natural areas. It is also assumed that other projects would be subject to local, state, and/or federal County policies and CEQA guidelines and would also be required to mitigate for impacts such that those impacts would be reduced to a less than significant level. Therefore, the cumulative impact of the proposed project on

special status plants, sensitive natural communities and protected natural areas is expected to be less than significant.

Like cumulative impacts to special status plants, cumulative impacts to special status wildlife species are related to the cumulative loss of special status wildlife species or their habitat, such that those species become more limited in distribution, population size, or available suitable habitat. A variety of special status wildlife species may occur in the SEDAs or OVSA, associated with the diverse vegetation communities and distribution noted above. Future construction of solar projects and associated facilities under the REGPA in combination with cumulative development projects affecting similar habitats and species could result in a cumulative impact on special status wildlife species. The impact may be the result of direct removal of habitat or individuals of the species, degradation of habitat by the introduction and spread of invasive species, altered hydrology, reduced water quality, disturbance associated with noise, increased human presence, spread of disease from pets or feral dogs and cats associated with the project, or increased fire risks. Future solar development under the REGPA combined with cumulative projects would have the potential to reduce the distribution and/or the overall population size of one or more special status wildlife species discussed in Section 4.4.1.9.

Pursuant to ESA, CESA, and other federal, state, and local regulations, future projects under the REGPA and proponents of cumulative projects would be required to implement measures to avoid, minimize, and mitigate for impacts to special status wildlife. Habitat loss and take of individuals of species would be mitigated by measures developed through consultation with the appropriate agency (CDFW, USFWS, and Nevada Department of Wildlife for projects in Nevada). At the programmatic level of analysis, the location and scale of impacts to special status wildlife resulting from implementing the proposed REGPA is unknown; however it is anticipated that impacts would be reduced to less than significant with the implementation of measures to avoid, minimize, and mitigate for impacts to special status wildlife. The construction and operation of cumulative projects could affect the same resources, however, those projects would also be required to implement measures to avoid, minimize, and mitigate for impacts to special status wildlife such that those impacts would be reduced to a less than significant level. Therefore, the cumulative impact of the proposed project on special status ~~plants, sensitive natural communities and protected natural areas~~ wildlife is expected to be less than significant.

Regarding growth inducing effects in the state as a result of increased energy production: California's Renewable Portfolio Standard dictates that 33 percent of the electrical energy needs for the state be obtained from renewable energy resources. As such, the goal is to reduce greenhouse gas emissions by replacing electricity that would otherwise be produced by traditional sources with renewable energy sources. The overall result would not be a growth inducing effect in the State, as the amount of electricity produced would not be in excess of the state's needs. Rather, the source of the electricity produced for the state is being replaced to meet California's greenhouse gas reduction goals.



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Date: January 14, 2015

Subject: Comments of The Nature Conservancy on the Draft Program Environmental Impact Report for the Inyo County Renewable Energy General Plan Amendment #2013-02

Introduction

The Nature Conservancy (“the Conservancy”) appreciates the opportunity to submit the following comments on the Draft Program Environmental Impact Report (PEIR) for the Renewable Energy General Plan Amendment (REGPA) #2013-02, proposing the establishment of Solar Energy Development Areas (SEDAs) in the county. In July 2014, the Conservancy previously submitted comments (attached) on the Notice of Preparation for the PEIR. Those comments focused on four topics: the implications of ecoregional planning, groundwater protection, transmission availability, and coordination of the county’s plans with the federal-state Desert Renewable Energy Conservation Plan (DRECP).

The previous comments continue to express our principal concerns. Thus, we are now resubmitting them, and supplementing them to emphasize the groundwater discussion. New information obtained from scientific studies makes an even more compelling case for eliminating proposed SEDAs in Charleston View and Chicago Valley.

The Conservancy is a world-wide conservation organization, devoted to preservation of the lands and waters upon which all life depends. The Conservancy has long focused on conservation planning and actions to protect the entire spectrum of biodiversity resources. We have actively participated in the federal Solar Programmatic Environmental Impact Statement (SPEIS) proceedings, are a formal stakeholder in the DRECP process, and have commented extensively on individual renewable development project proposals.

The Conservancy has engaged in land and water resource conservation in the Amargosa region of Inyo County for several decades, acquiring critical riparian habitat, supporting studies of the groundwater-dependent Amargosa River system, and assisting in the

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formation and activities of the Amargosa Conservancy, a local conservation organization. Many of our comments focus on the effects that the County’s general plan amendments would be likely to have on groundwater dependent ecological resources in the Amargosa region.

211-1
(cont'd)

Ecological Assessments

The Conservancy’s principal focus in its desert energy work has been to provide science-based analysis to help ensure that renewable energy facilities are sited and conditioned in ways that preserve the remarkably intact yet fragile natural communities of California’s Mojave and Sonoran Deserts. We have encouraged agencies and developers to avoid good quality habitat and instead locate renewable facilities on already disturbed lands. The Conservancy conducted extensive studies to map habitat quality and other ecological values in both the Mojave and Sonoran Deserts, and published the results of these efforts as ecoregional assessments¹. The Conservancy’s Mojave Desert Ecoregional Assessment (MDEA) evaluated habitat and other ecological values across the entire Mojave Desert, and included much of Inyo County in that assessment. The study ranked each square mile-sized hexagon into one of four categories: Ecologically Core habitat, Ecologically Intact habitat, Moderately Degraded habitat, and Highly Converted areas. By siting renewable facilities in either the Moderately Degraded or Highly Converted categories, these facilities can have much less impact on nature.

211-2

Our prior comments included an overlay of all three of the county’s initially proposed options for solar development (intensive, preferred, and less intensive) on the results of the Conservancy’s MDEA (Figure 2 in the attached July 9, 2014 letter). The county has now significantly narrowed its preferred SEDA selections in the draft PEIR, eliminating—properly, in our view – many areas (e.g., Death Valley Junction, Panamint Valley, Centennial Flats) that were previously proposed in alternatives as solar locations, and placing most of Owens Valley above Owens Lake into a study area category. Comparison of the results of the Conservancy’s MDEA with the new preferred SEDA alternative reveals, as we previously noted, two of the three eastern alternative SEDAs (Chicago Valley and Charleston View) are inappropriate because they contain significant areas of ecologically important and intact lands and overlie important groundwater aquifers, an issue we discuss below. Solar development in the third eastern area, Sandy Valley, if it is retained as a SEDA, should be limited to disturbed agricultural lands, coupled with a requirement that multiples of active agricultural groundwater pumping be retired to compensate for proposed solar facility groundwater use.

¹ http://scienceforconservation.org/downloads/mojave_desert_ecoregional_assessment

Groundwater

The protection of groundwater and related surface water flows—the streams, springs, seeps, and wetlands on which the survival of so much desert life depends—has been a principal concern of the Conservancy in the siting of solar plants in the Mojave, since desert renewables almost invariably depend on consumptive use of groundwater. The development of renewable energy represents a new consumptive use of water in our arid landscape, often requiring withdrawal of groundwater from already overdrafted basins. Careful regulation of water use, including well designed modeling and monitoring programs as well as compensatory mitigation for withdrawals, is both warranted and increasingly important for people and nature dependent on that water in the face of drought and likely climate change-driven long-term water shortages.

Desert groundwater is an exceedingly scarce, declining, and crucially important resource, often little understood – especially the subsurface hydrologic dynamics. Renewable energy pumping of groundwater is both new and likely a permanent use of water; the adverse effects of pumping on surface water-dependent resources are often distant from the source and delayed in time so that by the time such adverse effects are detected, it is too late to stop pumping in order to save these resources.

The groundwater-dependent Amargosa River system harbors a world-class collection of listed, endemic, rare and sensitive species in both California and Nevada. With partners, The Nature Conservancy has been engaged in the conservation of this ecologically fragile system for 40 years, spending more than \$8 million to plan, acquire and manage over 18,000 acres of lands, protect groundwater, and restore habitat in the Amargosa Basin. The Conservancy has done extensive conservation analysis and planning for the Amargosa that reveals the unique importance of the aquatic and riparian resources of this area. Recent federal action has confirmed the importance of these resources: in 2009, reaches of the Amargosa River in California were added to the national Wild and Scenic River system.

The County has long been protective of groundwater resources in the Owens Valley, largely driven by its protracted disputes with the Los Angeles Department of Water and Power over water exports to the City of Los Angeles. Groundwater resources are also at risk, though, in the far southeast corner of the county. The proposed general plan amendments would open up significant expanses of land in the Amargosa watershed to large-scale solar generation reliant on pumped groundwater from overdrafted basins, risking harm to

211-3

protected and sensitive groundwater dependent resources and perennial flow in the Amargosa Wild and Scenic River².

The draft PEIR for the proposed County Renewable Energy General Plan Amendment does not assess and provide mitigation for probable effects on groundwater dependent resources in the Amargosa watershed. The PEIR also omits an assessment of the cumulative impacts of solar development that would withdraw groundwater from aquifers supporting California resources, including major solar development proposed in the nearby Pahrump and Amargosa Valleys in Nevada.

211-3
(cont'd)

Accordingly, the Conservancy believes that renewable energy development areas (e.g., SEDAs under the County Renewable Energy General Plan Amendment, development focus areas under the DRECP) within the California section of the Amargosa watershed should be precluded; a position we have asserted in the DRECP process. To protect sensitive resources, the County should also actively work with California and Nevada Bureau of Land Management (BLM) officials to avoid and minimize solar energy development in watershed areas where development could affect resources in the California section of the Amargosa³. This coordination should include the sharing of best practices to minimize groundwater use (e.g., monitoring, trigger conditions), mitigate impacts, and to ensure a consistent suite of protective measures for groundwater across the Amargosa watershed in both California and Nevada. Specifically, we again strongly recommend that Inyo County exclude from consideration the Charleston View and Chicago Valley SEDAs due to the serious threat that development poses to protected groundwater-dependent species.

211-4

The sources and flow paths of the groundwater that supplies the springs and river in the southern portion of the 3.4 million acre Amargosa River watershed were little studied until recently. However, the United States Geological Survey studies and models, and recent work funded by the Conservancy provide evidence that flow in the Wild and Scenic Amargosa River and its tributary springs is supplied in part by groundwater flowing through the Pahrump Valley and Chicago Valley. The results of the recent studies confirming these likely flow paths are included as Attachment 2. These results include

211-5

² The USGS delineation of the Amargosa watershed is included as Figure 2 in the Conservancy's July 2014 letter. Governmental action that would adversely affect the perennial flow and outstandingly remarkable values of the Wild and Scenic River are prohibited by the Wild and Scenic River Act.

³ As noted, we believe that the County should avail itself of the opportunity to participate in decision-making related to solar siting in the Amargosa watershed by engaging in the development of both the Desert Renewable Energy Conservation Plan and BLM's revisions to the Las Vegas-Pahrump Resource Management Plan. Both planning exercises are currently in progress and open for comment and participation.

noble gas and stable isotope sampling and analysis that chemically match source waters with water chemistry in the Amargosa River tributary springs⁴.

Groundwater levels have been steadily dropping in many areas of the region, including the Pahrump Valley and Amargosa Valley⁵ source water areas due in part to existing groundwater pumping from over appropriated bi-state aquifers in Nevada. Maintaining and protecting the perennial flow of springs – and the groundwater aquifers that supply them with water – is the single most important action that must be taken to keep this desert system, and the special status species that inhabit it, viable for the long term.

The Conservancy is concerned by the cumulative effects of groundwater pumping by proposed renewable energy facilities within both the California and Nevada region of the Amargosa Watershed. Renewable energy facilities located in the Amargosa basin in Nevada will pump groundwater from an already over-drafted and over-appropriated bi-state aquifer system that is linked to the Wild and Scenic Amargosa River and its vital springs, seeps and wetlands in Inyo County, California.

211-5
(cont'd)

The Inyo County REGPA itself will not include specific Nevada areas. However, under CEQA the cumulative impacts of regional groundwater pumping on California resources does need to be considered, especially in light of the ecological fragility of the Amargosa watershed as a whole, and the well-documented hydrological connection between the Nevada and California portions of the watershed. The final PEIR should include analyses of the cumulative impacts of regional groundwater pumping on resources in Inyo County.

Charleston View A previous solar development proposed for Charleston View by BrightSource in the area now proposed as the SEDA provides additional, specific support for eliminating this proposed SEDA. The California Energy Commission (CEC) proceeding on the Hidden Hills power tower project has been stayed for over a year. Among other issues, the site proved to be highly controversial because of groundwater pumping by the project from the overdrafted Pahrump Valley basin. Notably, Inyo County expressed deep concern about pumping proposed by the project in the absence of accurate information about regional groundwater flows and about potential effects on the Amargosa Wild and Scenic River. Similar comments about water resources were made by the Bureau of Land Management, the Amargosa Conservancy, The Nature Conservancy, and local residents.

211-6

⁴Andy Zdon & Associates, Inc., 2014 State of the Basin Report, Amargosa River Basin, June 28, 2014. The report includes identification, through new geochemical analyses, of sources of groundwater to springs that sustain the Wild and Scenic Amargosa River, including flows from the Pahrump Valley and Ash Meadows areas, some traversing through Chicago Valley. The report is unpublished; electronic versions of the report have been furnished to the County water department, additional copies will be provided with the hard copy of these comments. Further, relevant sections of the report and analyses are included as Attachment 2 to this letter.

⁵ The Zdon study also found that flow from Ash Meadows in the Amargosa Valley is also an important source of water to the springs that provide water to the Wild and Scenic River. That flow is further threatened by solar development and other groundwater pumping in the Amargosa Valley in Nevada.

In that proceeding, the County supported strong groundwater modeling, monitoring and mitigation provisions as a condition for approval of the BrightSource plant, including trigger conditions that would require reduction or cessation of pumping if the trigger conditions were exceeded.

We urge Inyo County to eliminate Charleston View as a proposed SEDA. If, however, solar development were to be proposed for anywhere in the Amargosa watershed, groundwater modeling, monitoring, and compensation conditions—including triggers that will require reduction or cessation of pumping if adverse impacts on groundwater dependent resources are likely— must be adopted, similar to the recommendations made by the BLM, Inyo County and the Conservancy in the Hidden Hills proceeding. These conditions should be applied even for projects proposing to pump smaller quantities of groundwater than those proposed by the BrightSource project, since even small decreases in water levels can affect spring flows over time.

211-6
(cont'd)

We are concerned that the assessment of groundwater dependent resources and groundwater mitigation conditions proposed by the County in the PEIR do not expressly address impacts on the Amargosa resources, unlike the more specific provision for Owens Valley water resources. The Amargosa Wild and Scenic River is not mentioned as a relevant legal or regulatory provision in the draft PEIR. The PEIR is also silent on whether the approach initially advocated by the County in the Hidden Hills proceeding will be used, and defers all but the most general mitigation requirements to later project-specific Environmental Impact Reports. We believe that greater specificity in mitigation requirements is required in the PEIR to allow stakeholders to understand and reasonably comment on the effects of the SEDA designations. Once the designations are made, mitigation determinations will likely slip to discretionary decisions made late in the individual project approval process, making public involvement difficult. Although this PEIR is styled a program assessment, by avoiding any significant discussion of how mitigation conditions will be decided, the reader is left without a basis to evaluate the real impacts of the SEDA determinations, especially on the Amargosa watershed.

211-7

Transmission

Solar development in the proposed Charleston View and Chicago Valley SEDAs would require construction of new transmission lines that would link to the grid through Nevada, across sensitive BLM lands. There is no evaluation in the draft PEIR of the issues that would be presented in constructing this linkage. The analysis in the PEIR should consider the impacts of transmission and associated infrastructure development (e.g., substations) that may be needed to serve the SEDAs, including the likelihood that these lines would be

211-8

built, the timing of their construction, and the issues, including cumulative impacts that would be presented in gaining approval of this transmission⁶.

211-8
(cont'd)

Coordination with the Desert Renewable Energy Conservation Plan (DRECP)

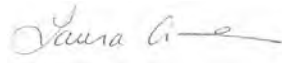
We applaud the County's utilization of a participatory process to review solar generation siting, and its intent to link this work with the results of the impending DRECP. However, we repeat our concern that the County's schedule to complete its obligations under the California Energy Commission planning grant and to produce its REGPA do not appear to be well synchronized with the DRECP process. In light of the fact that the CEC strongly supports integrating county plans with the DRECP process, we recommend that the county seek a delay from the CEC in completing the County's grant obligations and final general plan amendment. This would provide sufficient time for the Board of Supervisors to complete action on the general plan amendment after full consideration of the alternatives selected by DRECP process.

211-9

Conclusion

Thank you for the opportunity to comment on the Draft Program Environmental Impact Report for the Renewable Energy General Plan Amendment. We look forward to working with the County as the REGPA process moves forward.

Sincerely,



Laura Crane
Director, California Renewable Energy Initiative
The Nature Conservancy
lcrane@tnc.org
(415) 418-6513

⁶ The Hidden Hills plant would have required transmission across BLM lands to connect with lines in Nevada, requiring a federal Environmental Impact Statement (EIS). The BLM has not completed that EIS, nor indicated that it will be restarted.

Attachment 1

Comments of The Nature Conservancy on the Notice of Preparation (NOP) for the Program Environmental Impact Report (PEIR) of the Inyo County Renewable Energy General Plan Amendment (REGPA). 2013-02. July 9, 2014.



To: Cathreen Richards, Senior Planner
Inyo County Planning Department
168 North Edwards Street
Post Office Drawer L
Independence, CA 93526

Submitted by mail and electronically at inyoplanning@inyocounty.us

Date: July 9, 2014

Subject: Comments of The Nature Conservancy on the Notice of Preparation (NOP) for the Program Environmental Impact Report (PEIR) of the Inyo County Renewable Energy General Plan Amendment (REGPA) 2013-02

The Nature Conservancy submits the following comments on the Notice of Preparation of the PEIR for the County's proposed general plan amendment for solar energy development.

Introduction

The Nature Conservancy (the Conservancy or TNC) is a world-wide conservation organization, devoted to preservation of the lands and waters upon which all life depends. The Conservancy has long focused on conservation planning and actions to protect the entire spectrum of biodiversity resources. We have actively participated in the federal Solar Programmatic Environmental Impact Statement (SPEIS) proceedings, are a formal stakeholder in the Desert Renewable Energy Conservation Plan (DRECP) process, and have commented extensively on individual renewable development project proposals. The Conservancy has engaged in land and water resource conservation in the Amargosa region of Inyo County for several decades, acquiring critical riparian habitat, supporting studies of the groundwater-dependent Amargosa River system (Figure 1), and assisting in the formation and activities of the Amargosa Conservancy, a local conservation organization. We appreciate this opportunity to comment on the content and scope of the County's pending Program Environmental Impact Report (PEIR).

The Nature Conservancy's Ecological Assessments

The Conservancy's principal focus in its desert energy work has been to provide science-based analysis to help ensure that renewable energy facilities are sited and conditioned in ways that preserve the remarkably intact yet fragile natural communities of California's Mojave and Sonoran Deserts. We have encouraged agencies and developers to avoid good

quality habitat and instead locate renewable facilities on already disturbed lands. The Conservancy conducted extensive studies to map habitat quality and other ecological values in both the Mojave and Sonoran Deserts, and published the results of these efforts as ecoregional assessments¹. The Nature Conservancy's Mojave Desert Ecoregional Assessment (MDEA) evaluated habitat and other ecological values across the entire Mojave Desert, and included much of Inyo County in that assessment. The study ranked each square mile-sized hexagon into one of four categories: Ecologically Core habitat, Ecologically Intact habitat, Moderately Degraded habitat, and Highly Converted areas. By siting renewable facilities in either the Moderately Degraded or Highly Converted categories, these facilities have much less impact on nature.

We prepared Figure 2, which overlays the three original county-selected options (intensive, preferred, and less intensive) for proposed Renewable Energy Development Areas (REDAs²) on the Conservancy's MDEA habitat valuation mapping of the same areas. Most of Inyo County is in fact quite good quality habitat, and the county also has adequate disturbed land to meet most or all of its solar energy goals. The county can do this by limiting Solar Energy Development Areas (SEDAs) to the over 50,000 acres of Inyo County's Moderately Degraded and Highly Converted lands shown in the MDEA. (Table 1 contains tables listing the originally proposed solar development areas and their conservation value category in the MDEA).

In the Amargosa region, the Chicago Valley and Charleston View SEDAs each have, at most, a small area categorized as moderately degraded or converted in the MDEA. The majority of these SEDAs contain ecologically core or ecologically intact habitats. We applaud the County's revisions to its proposed open areas to eliminate several of the originally proposed areas, including Death Valley Junction, but strongly urge the County to reconsider its designation of Chicago Valley and Charleston View as development areas. Each of these areas occupy mostly MDEA core or intact habitat, provide linkages to wilderness areas, and overlie groundwater aquifers that sustain the Amargosa Wild and Scenic River and its tributaries.

Figure 3 depicts the DRECP-released landscape intactness scale overlain with the original (REDA) alternatives. While several of the SEDA areas in the currently proposed option contain areas that are lower on the intactness scale, most of those areas are adjacent to, or surrounded by, areas that are highly intact. The benefit of preserving these intact habitats is that they will serve as corridors for movement of both plants and animals now and

¹ http://scienceforconservation.org/downloads/mojave_desert_ecoregional_assessment

² The County recently changed its nomenclature for solar open zones from renewable energy development areas (REDAs) to solar energy development areas (SEDAs), reflecting the elimination of wind from the plan. Since the County's EIR will include an analysis of alternatives, we have included all of the previously proposed development areas in our overlay maps.

especially in the future, given the likelihood that long-term climate change will necessitate even more movement. This is particularly important when habitat connects different elevations. The existing REGPA documents could be improved by specifically addressing intactness and connectivity issues.

Groundwater

A second issue of focus for our desert energy work is groundwater. Striving to maintain fresh water flows for nature and people in the face of drought and climate change is an increasingly critical aspect of our work in California, across the US southwest, and globally. The protection of groundwater and related surface water flows—the streams, springs, seeps, and wetlands on which the survival of so much desert life depends—has been a principal concern of the Conservancy in the siting of solar plants in the Mojave, since desert renewables almost invariably depend on consumptive use of groundwater. The development of renewable energy represents a new consumptive use of water in our arid landscape, often requiring withdrawal of groundwater from already overdrafted basins. Careful regulation of water use, including compensatory mitigation for withdrawals, is both warranted and increasingly important for people and nature dependent on that water in the face of drought and likely climate change-driven long-term water shortages.

The county has long been protective of its groundwater resources, largely driven by its protracted disputes with the Los Angeles Department of Water and Power over water exports to the City of Los Angeles from the Owens River region. Groundwater resources are also at risk in the far southeast corner of the county, where the Conservancy has been working to protect water dependent species and habitats in the bi-state Amargosa River region since the early 1970s. The currently proposed version of the Inyo County Renewable Energy General Plan Amendment would open up significant expanses of land in the Amargosa watershed to large-scale solar generation, which would have to rely on pumped groundwater from overdrafted basins, risking harm to protected and sensitive groundwater dependent resources.

For planning purposes, the Conservancy recommends using the “Death Valley Regional Ground Water Flow Model Boundary” (USGS) to delineate the Amargosa Watershed (Figure 1, below). The Nature Conservancy believes that development zones within the California section of the Amargosa Watershed should be precluded. Specifically, our strong recommendation would be for Inyo County to exclude from consideration any SEDAs in the Amargosa Watershed in the REGPA due to the serious threat that development poses to protected groundwater-dependent species, for the reasons we outline below.

Desert groundwater is an exceedingly scarce, declining, and crucially important resource, often little understood – especially the subsurface hydrologic dynamics. Renewable energy pumping of groundwater is a new and likely permanent use of water; and the adverse

effects of pumping on surface water-dependent resources are often distant from the source and delayed in time so that by the time such adverse effects are detected, it is too late to stop pumping in order to save these resources.

The groundwater-dependent Amargosa River system harbors a world-class collection of listed, endemic, rare and sensitive species in both California and Nevada. With partners, The Nature Conservancy has been engaged in the conservation of this ecologically fragile system for 40 years, spending more than \$8 million to plan, acquire and manage over 18,000 acres of lands, protect groundwater, and restore habitat in the Amargosa Basin. The Conservancy has done extensive conservation analysis and planning for the Amargosa that reveals the unique importance of the aquatic and riparian resources of this area. Recent federal action has confirmed our analyses: in 2009, reaches of the Amargosa River in California were added to the national Wild and Scenic River system.

The sources and paths of the groundwater that supplies the springs and river across the 3.4 million acre Amargosa River watershed have been little studied until recently. However, groundwater levels have been steadily dropping in many areas of the region, due in part to existing groundwater pumping from over appropriated aquifers in Nevada. Maintaining and protecting the perennial flow of springs – and the groundwater aquifers that supply them with water – is the single most important action that must be taken to keep this desert system, and the special status species that inhabit it, viable for the long term.

The Conservancy is concerned by the cumulative effects of groundwater pumping by proposed renewable energy facilities within both the California and Nevada region of the Amargosa Watershed. Renewable facilities located in the Amargosa basin in Nevada will pump groundwater from an already over-drafted and over-appropriated bi-state aquifer system that is linked to the Wild and Scenic Amargosa River and its vital springs, seeps and wetlands in Inyo County, California.

Understandably, the Inyo County REGPA will not include specific Nevada facilities. However, given the ecological fragility of the Amargosa watershed as a whole, and well-documented hydrological connection between the Nevada and California portions of the watershed, cumulative effects of pumping on both sides of the border should not be overlooked.

A previous development proposal in the Amargosa watershed proved to be controversial because of groundwater issues. Specifically, the California Energy Commission (CEC) proceeding to approve the Bright Source Hidden Hills power tower facility in Charleston View was suspended after hearings were concluded, with groundwater pumping by the project from the overdrafted Pahrump Valley basin a significant, unresolved issue in the proceedings. In that proceeding, Inyo County expressing deep concern about pumping proposed by the project in the absence of accurate information about regional groundwater

flows and potential effects on the Amargosa Wild and Scenic River, comments that were similar to those of the Bureau of Land Management (BLM), the Amargosa Conservancy, the Nature Conservancy and local residents.

In addition, the County took a very strong position on groundwater monitoring and mitigation and also noted that the hydrology of many groundwater basins in the southeast corner of the county was inadequately described, leading the county to apply for state Proposition 84 grant funding to determine groundwater levels and collect other information about basin hydrology in this region. That grant request was not funded, and information about the complex hydrogeology of basins in the Amargosa watershed region (including Charleston View and Chicago Valley) is still incomplete. The Nature Conservancy strongly supports the comments made by Inyo County in the Hidden Hills proceeding and believes that the same approach should be used to exclude the zoning of renewable energy facilities in these locations. Indeed, very recent groundwater geochemistry studies have identified the Pahrump Valley as a likely source of groundwater to the Amargosa Wild and Scenic River.³

Transmission

The Nature Conservancy respectfully requests that the REGPA analyses further consider transmission issues as they relate to the proposed SEDAs. For example, for the Charleston View SEDA, the assumption is made that this area would supply up to 400 megawatts of solar power from 2400 acres or less. However, this energy would have to be conveyed through newly constructed transmission lines into Nevada. The analysis would benefit from a discussion of the likelihood that these lines would be built, and the timing of their construction⁴.

Coordination with the Desert Renewable Energy Conservation Plan (DRECP)

We applaud the county's willingness to consider where solar generation might best be sited to avoid adverse ecological effects in its broad geographic realm, and to link this work with the impending DRECP. However, the county's schedule to complete its obligations under the California Energy Commission planning grant and to produce its REGPA do not appear to be well synchronized with the DRECP process. In light of the fact that the CEC strongly

³ Any Zdon & Associates, Inc., 2014 State of the Basin Report, Amargosa River Basin, June 28, 2014. The report included better identification, through new geochemical analyses, of sources of groundwater to springs that sustain the Wild and Scenic Amargosa River, including flows from the Pahrump Valley and Ash Meadows areas, some likely traversing through Chicago Valley. The report is unpublished, but electronic versions of the report will be furnished to the County water department and additional copies are available from the Conservancy upon request.

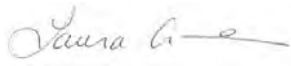
⁴ The Hidden Hills plant would have required transmission across BLM lands to connect with lines in Nevada, requiring a federal Environmental Impact Statement (EIS). The BLM has not completed that EIS, nor indicated that it will be restarted.

The Nature Conservancy
Inyo REGPA

supports integrating county plans with the DRECP process, we recommend that the county seek a delay from the CEC in completing the County's grant obligations. This would provide sufficient time for the Board of Supervisors to complete action on this PEIR, with a full consideration of alternatives proposed by DRECP process.

Thank you for the opportunity to comment. We look forward to working with the county as the REGPA process moves into later stages.

Sincerely,

A handwritten signature in cursive script, appearing to read "Laura Crane", with a horizontal line extending to the right.

Laura Crane
Director, California Renewable Energy Initiative
The Nature Conservancy
lcrane@tnc.org
(415) 418-6513

Figure 1 – Amargosa watershed (Death Valley Regional Flow System)

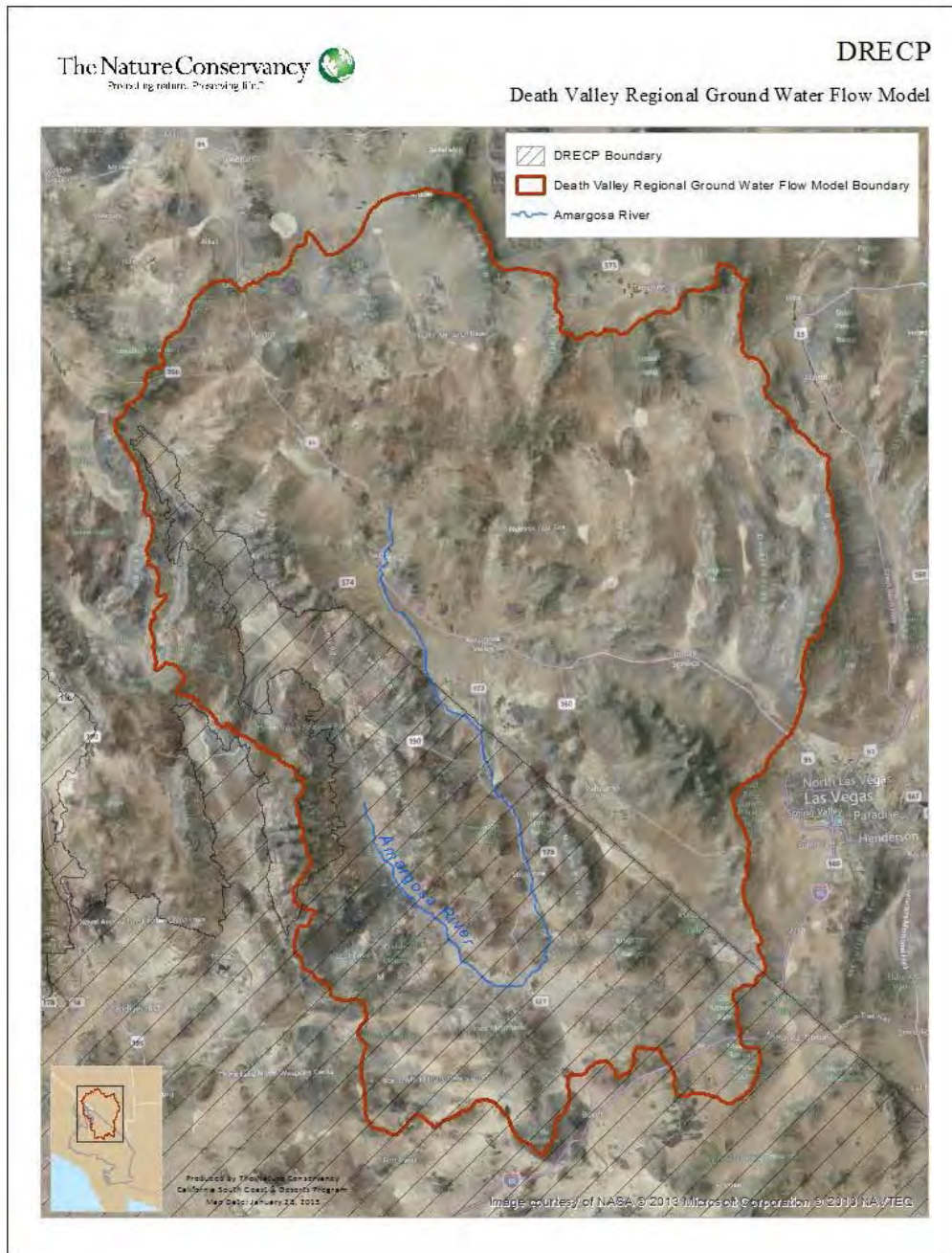


Figure 2 - Overlay of original REDA (SEDA) areas with TNC conservation values

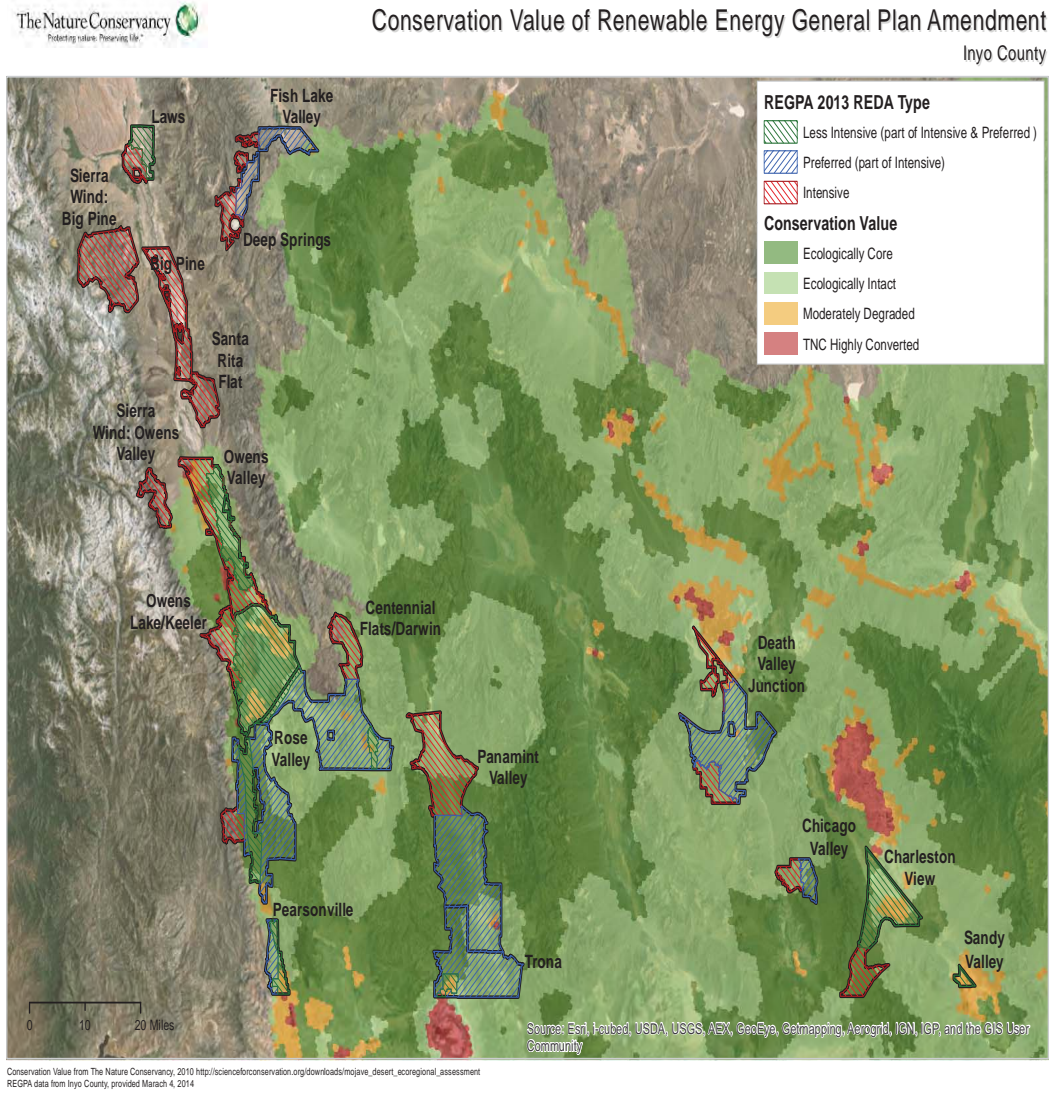


Figure 3 - Overlay of original REDA areas with DRECP intactness values

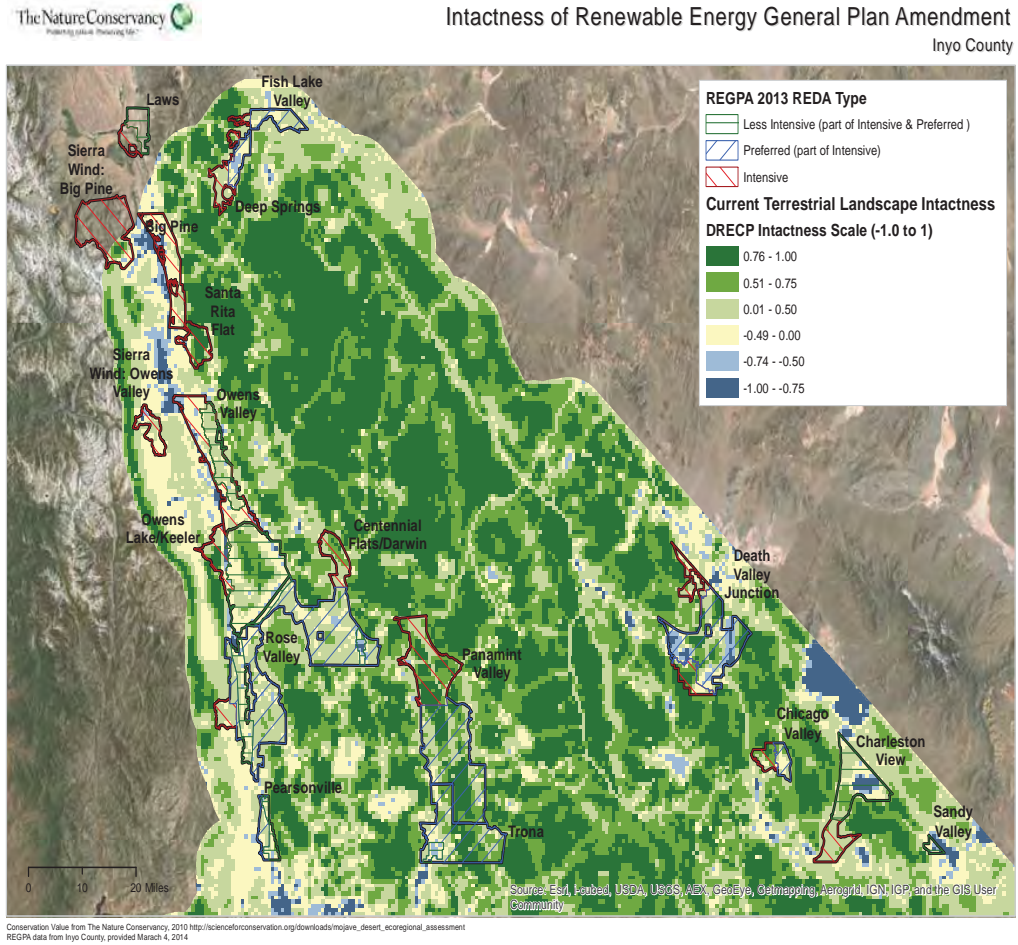


Table 1 – Table of TNC conservation values as compared to Inyo County REDAs

Area Name	TNC				TNC Ecologically Intact				TNC Moderately Degraded				TNC Severely Degraded				Area Totals	
	Intensive	Preferred	Less Intensive	Total	Intensive	Preferred	Less Intensive	Total	Intensive	Preferred	Less Intensive	Total	Intensive	Preferred	Less Intensive	Total		
Centennial Flats/Darwin	70.5	1,005.2	1,636.2	2,711.9	12,745.7	73,352.9	6,851.6	92,950.2					2,691.0	503.8		3,194.7	98,856.8	
Charleston View	14,042.4		13,960.8	28,003.1	1,675.1		16,094.6	17,769.7						9,642.0	9,642.0		55,414.8	
Chicago Valley	414.7	5,627.2		6,041.8	8,171.3	2,332.3		10,503.6									16,545.5	
Death Valley Junction		14,480.9		14,480.9	19,952.4	55,491.7		75,444.1	1,664.6	1,064.4		2,729.0					92,653.9	
Fish Lake Valley						1,298.9		1,298.9			463.4	463.4					1,762.4	
Owens Lake/Keeler	7,409.3		56,995.2	64,404.5	5,613.1		6,914.6	12,527.7					19,570.9	19,570.9		239.6	239.6	96,742.7
Owens Valley	13,777.8		10,246.4	24,024.2	12,858.5		14,879.0	27,737.5	6,328.9			6,328.9	1,745.9			1,745.9	59,836.6	
Panamint Valley	20,670.0	67,905.3		88,575.3	31,739.4	25,010.4		56,749.8		1,278.0		1,278.0		699.0		699.0	147,242.1	
Pearsonville		178.5	460.5	639.0		6,821.8		3,919.1	10,740.8	147.4		2,832.5	2,980.0			141.0	141.0	14,500.8
Rose Valley	2,874.1	48,147.5	19,705.9	70,727.5	182.8	12,837.4		1,556.8	14,576.9	1,931.6		68.0	1,999.6				87,304.0	
Sandy Valley								187.2	187.2			2,910.5	2,910.5				3,097.7	
Sierra Wind: Owens Valley						728.3		728.3									728.3	
Tirona		22,544.9	986.9	23,531.8		41,682.3		467.8	42,150.1	590.7		2,604.6	3,195.3	283.5	516.6	800.1	69,677.2	
(blank)	66.8		7.7	74.5	0.3		1,617.0	1,617.3									1,691.8	

Attachment 2

2014 State of the Basin Report; Amargosa River Basin
Inyo and San Bernardino Counties, California & Nye County, Nevada.
June 28, 2014.

ANDY ZDON &
ASSOCIATES, INC.



**2014 STATE OF THE BASIN REPORT
AMARGOSA RIVER BASIN,
Inyo and San Bernardino Counties, California
& Nye County, Nevada
June 28, 2014**

Prepared For:
The Nature Conservancy | 1450 Arroyo View Drive | Pasadena, California 91103



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Walnut Creek, California 94596

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**2014 STATE OF THE BASIN REPORT; AMARGOSA
RIVER BASIN**

**Inyo and San Bernardino Counties,
California & Nye County, Nevada**

Prepared For:

The Nature Conservancy
1450 Arroyo View Drive
Pasadena, California 91103

Prepared By:

**ANDY ZDON &
ASSOCIATES, INC.**

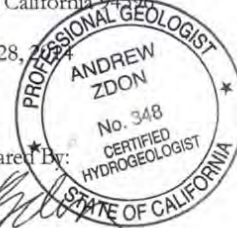


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June 28, 2014

Prepared By:

A handwritten signature in black ink, appearing to read "A. Zdon".



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EXECUTIVE SUMMARY

In 2009, the Amargosa River between Shoshone and the terminus of the Amargosa Canyon received Wild and Scenic status through an act of Congress. As a result, the BLM is charged with developing a management plan for the Wild and Scenic portion of the River. It is essential that hydrogeologic characterization of the California portion of the basin take place in order for that management plan, and its associated management recommendations, to have a firm basis, and to assure that monitoring is conducted in a meaningful way to identify potential impacts to the river and its feeder springs before potential irreversible impacts from future groundwater development occur.

This 2014 State of the Basin Report (SOBR) was prepared by Andy Zdon & Associates, Inc. (AZI) on behalf of The Nature Conservancy (TNC) as part of a much larger effort that is conducted cooperatively between the TNC, U.S. Bureau of Land Management (BLM), U.S. Geological Survey (USGS), Amargosa Conservancy (AC), and Nye and Inyo Counties. It provides an update of work conducted since the last State of the Basin Report produced in early 2012. The goal of the overall project is to improve the understanding of the water that sustains the Amargosa River and the desert ecosystems that flourish along the river and its adjoining springs, and to provide the knowledge necessary to identify and avert impacts to those water sources. The information herein also provides the basis for recommendations provided for inclusion into a management plan for the Amargosa Wild & Scenic River (WSR). The purpose of the work conducted as part of the current scope is to provide important new information and conduct continuing baseline spring and groundwater-level monitoring, and prepare this SOBR.

In addition to the WSR, the area contains many small springs that provide important watering sources for wildlife. These types of watering holes frequently get overlooked in regional hydrologic investigations because they represent such a small portion of the overall water budget. This is unfortunate as these sensitive receptors are critically important resources for vegetation and resident and migratory wildlife. Identification and monitoring of these watering holes is important in order for future land and water resource management in the area to have a firm ecological basis.

The principal surface water body in the region, the Amargosa River, is an intermittent river with headwaters issuing from springs northeast of Beatty, Nevada, and extending approximately 180 miles to the river's terminus at the playa in Death Valley. Except for portions of the river in the Amargosa Canyon area in California, and near Beatty, Nevada, the Amargosa River typically flows only after periodic storms. In those areas where the river is usually dry, the flow of water, where present, is in the subsurface. In areas where surface flow is more constant, or perennial, the flow is the result of groundwater underflow reaching bedrock or other relatively impermeable constrictions and being driven to the surface. This results in a flow regime highly sensitive to groundwater level changes. Given this condition, it appears that a considerable portion of the underflow moving through the Middle Amargosa system can be accounted for by the flow observed at the surface, for example, in the Amargosa River canyon plus spring



discharge and any pumping. This does not result in a substantial amount of underflow, and further highlights the sensitive nature of the river system.

The principal tasks during this recent phase of this project were isotope sampling of selected springs in the Tecopa area, and the continued monitoring of spring flow, river flow and groundwater levels in the Middle Amargosa River Basin, an area encompassing nearly 1,000 square miles. Among the results of the current geochemical work were indications that spring sources within the study area are complex and from multiple sources. Groundwater from Ash Meadows, along with recharge from the Spring Mountains and the Kingston Range all contribute to the groundwater and river system. Flow paths likely include one or more of the following:

- Spring Mountain recharge moving toward Ash Meadows through carbonate rocks and basin fill, then southward toward the Shoshone-Tecopa area;
- Via carbonate rocks at the north end of the Nopah Range into Chicago Valley then toward the Amargosa Valley; and ,
- From Pahrump Valley via the shallow divide into California Valley then toward the Amargosa River.

Among the findings are that the source of heat in the local thermal springs is likely deep circulation of water along deep-seated faults as opposed to the presence of a shallow heat source (e.g. magmatic). The heat associated with this deep groundwater movement likely effects groundwater chemistry as could the surficial deposits from which the springs discharge.

This SOBR closes with technical recommendations for:

- Monitoring (hydrologic, visual, and monitoring current and potential water use):
- Future investigative work (including new monitoring wells, geophysics and additional geochemical studies);
- The development of a management tool (i.e. groundwater flow model); and,
- Recommendations for an adaptive approach to management of the Amargosa WSR that is flexible enough to evolve with our ever-growing knowledge of the Amargosa River and the groundwater system that feeds it.



1.0 INTRODUCTION

This State of the Basin Report (SOBR) was prepared by Andy Zdon & Associates, Inc. (AZI) on behalf of The Nature Conservancy (TNC) as part of a much larger effort that is being conducted between TNC, Amargosa Conservancy (AC), U.S. Bureau of Land Management (BLM), the U.S. Geological Survey (USGS) and Nye and Inyo Counties. The goals of the overall project are to improve the understanding of the water that sustains the Amargosa River and the desert ecosystems that flourish along the river, and its adjoining springs, and to provide the knowledge necessary to identify and avert impacts to those water sources. The purpose of the work conducted as part of the current scope is to improve our understanding of the groundwater flow paths to the Amargosa River and surrounding springs, and to continue to develop baseline spring, river flow, and groundwater-level monitoring, and to prepare a SOBR.

In 2009, the Amargosa River between Shoshone and the terminus of the Amargosa Canyon received Wild and Scenic status through an act of Congress. As a result, the BLM is charged with developing a management plan for the Wild and Scenic portion of the River. It is essential that hydrogeologic characterization of the California portion of the basin take place in order for that management plan, and its associated management recommendations, to have firm basis, and to assure that monitoring is conducted in a meaningful way to identify potential impacts to the river and its feeder springs before potential irreversible impacts from future groundwater development occur.

Many of the springs that feed the Amargosa River are relatively small springs that individually are not significant components to the overall area water budget. Additionally, other small springs and watering holes are present away from the Amargosa River. All of these springs, regardless of size and/or location, are important ecological resources. This SOBR provides up-to-date hydrologic information and a current, real-time snapshot of water resource conditions in the Middle Amargosa Basin area. As mentioned above, springs and watering holes such as those identified in this SOBR are frequently overlooked in hydrologic investigations since their discharges are frequently inconsequential to the overall water budget of the area being studied. This is unfortunate as these sensitive receptors are critically important resources for vegetation, and wildlife (both resident and migratory). It is essential that baseline hydrologic characterization of the region take place in order for future land and water resource management to have a firm basis.

This project is an important starting point into the investigation of the hydrogeology of the Amargosa Basin south of the Nevada state line. Prior to the initial reconnaissance work conducted by the Source Group, Inc. (SGI) during 2010-2011 (SGI, 2011), regional hydrogeologic investigations in the California portion of the basin have been virtually non-existent. The discussions regarding the California portion of the basin therefore have been more conceptual in nature than those regarding the Nevada portion of the basin.

The objectives of the current project described in this report were to:



- Conduct new groundwater geochemical analyses to evaluate potential groundwater flow paths;
- Enhance previous reconnaissance-level information on the springs of the southern half of the Amargosa Basin, generally between Death Valley Junction and Saratoga Spring;
- Continue to develop an understanding of Amargosa River conditions in the southern half of the basin;
- Describe the results of groundwater-level monitoring and evaluate potential future monitoring locations; and,
- Continue to enhance the conceptual model of the Amargosa Basin with an emphasis on the southern half of the basin.

1.1 Current Scope of Work

The current scope of work included the following tasks:

- Task 1 – Comprehensive monitoring of springs, groundwater levels and river flow;
- Task 2 – Sampling and analysis of water from selected springs and one well in the study area; and,
- Task 3 – Data analysis and preparation of this SOBR.

1.1.1 Discharge, Groundwater Level, and Seepage Run Monitoring

Flow discharge and groundwater elevation measurements have been collected on a periodic basis from a select group of springs and wells within the southern Amargosa River area since November 2010 as part of studies conducted by the AC and TNC. The current scope included seepage run monitoring on the stretch of the Amargosa River from Tecopa to the Dumont Dunes area and consisted of five distinct monitoring locations (including the two USGS gauges, and three manual monitoring points). Basic water quality data were also collected at all discharge, elevation and seepage run monitoring points.

1.1.2 Water Chemistry Data Collection

Water samples from four springs, and one well were collected and analyzed for a specific suite of constituents. Noble gas analyses were conducted on water samples from Thom Spring, Tecopa Hot Springs, Borehole Spring, Wild Bath Spring and Monitoring Well ARHS-01. Noble gas laboratory analysis was conducted by the University of Utah. Water samples were collected from ARHS-01, Twelvemile Spring and Dodge City Spring for stable isotope analyses. Stable isotope analyses were conducted by Isotech Laboratories, Inc. A water sample from Dodge City Spring was sampled for general minerals and metals analysis, and was analyzed by Silver State Analytical, Inc., in Las Vegas, Nevada. M.L. Davisson & Associates was retained to provide high-level expert analysis and interpretation.



1.1.3 Data Assessment and Reporting

This task included the time required to analyze the data obtained from the springs and wells, along with the newly collected data from AZI and other sources to be compiled in this updated SOBR. This included updating and expanding the existing “Catalog of Springs” provided in Appendix A.

1.2 Location and Physiographic Setting

The Amargosa River Basin covers an area of 3,124 square miles in east-central California and west-central Nevada (Figure 1-1). The Amargosa River Basin can be subdivided into three basin areas:

- Northern Amargosa Groundwater Basin (Nevada portion of the Basin also referred to as the Amargosa Desert Hydrographic Basin by the Nevada Department of Water Resources);
- Middle Amargosa Valley Groundwater Basin (California); and
- Death Valley Groundwater Basin (California –Nevada).

The Northern Amargosa Valley Groundwater Basin is comprised of the Amargosa River Valley from the river’s headwaters northwest of Beatty, Nevada, to the California-Nevada state line. Elevations in this portion of the Amargosa River Basin range from 6,317 feet above mean sea level (ft msl) at Bare Mountain south of Beatty and east of the Amargosa River, to about 2,300 ft msl at the California-Nevada state line near Death Valley Junction, California. The basin is bounded by consolidated rocks of the Yucca Mountain/Pahute Mesa area to the northeast, Bare Mountain on the east, and the Funeral Range to the west. The Northern Amargosa River Basin as defined covers 896 square miles.

The Middle Amargosa Valley Groundwater Basin (Groundwater Basin #6-20 as designated by the California Department of Water Resources) is comprised of the Amargosa River Valley along with Chicago Valley and parts of Greenwater Valley within Inyo and San Bernardino Counties, California. The California-Nevada state line is considered the northern boundary of the Middle Amargosa Valley Groundwater Basin. The elevation of the valley floor generally ranges from about 400 ft msl near Salt Creek in the southern portion of the valley to about 2,300 ft msl at the California-Nevada state line near Death Valley Junction. The basin is bounded by consolidated rocks of the Resting Springs and Nopah Ranges on the east, the Dumont Hills on the south, and the Greenwater Range and Ibex, Black, and Funeral Mountains (collectively known as the Amargosa Range) on the west. The surrounding mountains range in elevation up to 7,335 ft msl at Kingston Peak (within San Bernardino County along the southeast edge of the Basin) and up to 6,725 ft msl at Pyramid Peak, the high point of the Funeral Range to the west. The Middle Amargosa River Basin covers an area of 609 square miles.

The Death Valley Groundwater Basin (Groundwater Basin #6-18 as designated by the California Department of Water Resources) is comprised of the Amargosa River Valley from the Salt Creek area to the sink at Badwater in Death Valley, and northward to the northern physical terminus of Death Valley in Nevada (Oriental Wash Area of the Death Valley Basin as designated by the Nevada State Engineer). Elevations in this portion of the Amargosa River Basin range from -282 ft msl at Badwater, to 11,049 ft



msl at Telescope Peak, the highpoint of the Panamint Range along the west side of Death Valley. The combined area of the California and Nevada portions of this lower part of the Amargosa River basin is 1,622 square miles.

1.3 Climate

The climate of the area is arid with low precipitation and high mean annual temperatures and evaporation rates. Summer temperatures can exceed 120 degrees Fahrenheit while winter temperatures can fall below freezing. The average annual precipitation at Shoshone, California is 4.81 inches based on a record from 1972 through 2011 (Western Regional Climate Center, 2014). The average maximum high temperature is 83.2 degrees Fahrenheit and the average minimum is 58.8 degrees Fahrenheit. Mean monthly high temperatures at Shoshone range from 58.8 degrees Fahrenheit in December to 108.7 degrees Fahrenheit in July. Mean monthly low temperatures in Shoshone range from 38.0 degrees Fahrenheit in December to 78.3 degrees Fahrenheit in July.

1.4 Land Use

The principal land uses (not including open space and wild lands) in the project area are agricultural, recreational, wildlife, livestock and domestic/municipal uses. With increasing solar development, industrial use is expected to increase in the future. Agricultural and domestic water is generally supplied with groundwater from private wells. Water for the town of Shoshone, California is supplied by Shoshone Spring. The town of Beatty, Nevada derives its water from groundwater wells. However, some residents obtain their water solely from spring water. Sewage is generally treated by individual septic systems with the exception of at the communities of Beatty, Nevada, and Shoshone and Tecopa (both in California) where sewage systems are present serving some areas. Agricultural land use is primarily crops such as alfalfa (Nevada) and to a much lesser extent dates (California). Recreational uses include the use of spring water at the hot springs in Tecopa, California, and the hot springs northeast of Beatty, Nevada along U.S. Highway 95.

1.4.1 Water Rights

Water rights summaries for California and Nevada are provided in Appendices B and C, respectively. Additional discussion regarding permitted rights, water usage, and estimated recharge for the Amargosa Basin are provided in Section 3.0. In California, there has been no change in the status of water rights in the Middle Amargosa Basin since 2011.

Changes in Nevada water rights for the Amargosa Desert (Nevada Basin #230) during the past three years (since 2011) were a net decrease of approximately 570 acre-feet per year (afy) in annual duty (underground). However, of significance was a net increase of approximately 2,050 afy in permitted and certified groundwater rights and associated decrease in rights with a “ready for action” status (the later resulting in the net loss of annual duty), indicative of further development of those groundwater rights.



A ruling in 2012 (6169) by the Nevada State Engineer included the denial of two applications filed by Rockview Dairies, Inc. Those two applications were to change the manner and place of use of irrigation water previously applied for under applications filed in 2003 and 2006. The denial of those two applications was on the grounds that the water right filings that formed the basis of the changes were no longer in good standing and could not be used to support the applications.

A second ruling during 2012 (6172) by the Nevada State Engineer included the denial of an application by LCF Horticulture, LLC to change the point of diversion and manner of use previously appropriated for commercial purposes. Over time, land use had changed from commercial to residential and change applications transferred water to the residential land owners from the LCF Horticulture permit. Therefore, the Nevada State Engineer denied the application because the application requested a change of an existing groundwater permit than no longer existed. Copies of the two rulings are provided in Appendix C.

Water rights information for Pahrump Valley, Nevada (Groundwater Basin #162) are also provided in Appendix C.

1.4.1.1 Devil's Hole

In 2008, the Nevada State Engineer issued Order 1197 concerning applications to appropriate additional groundwater from the Devil's Hole area. This order stated that:

"...with the following exceptions, any applications to appropriate additional underground water and any application to change the point of diversion of an existing ground-water right to a point of diversion closer to Devil's Hole, described as being within a 25 mile radius from Devil's Hole within the Amargosa Desert Hydrographic Basin, will be denied:

- *Any application within the described area that seeks to change an existing point of diversion closer to Devil's Hole but remains within its existing place of use and is no more than 1/2 mile from its original point of diversion;*
- *Those applications filed which seek to appropriate 2.0 acre-feet per year or less, may be considered and shall be processed subject to Nevada Revised Statutes (NRS) 533 and 534;*
- *For projects that require changes of multiple existing rights, the State Engineer may compare the net impact to Devil's Hole of the proposed changes to the impacts to Devil's Hole of the base rights. If the net impact of the proposed changes is the same or less than its base right impacts, as determined by the State Engineer, such change applications may be considered and shall be processed subject to NRS 533 and 534. In no such case shall new points of diversion be allowed within ten (10) miles of Devil's Hole.*
- *Those applications for environmental permits filed pursuant to NRS 533.437 and 533.4377, inclusive; and,*
- *Those applications filed pursuant to NRS 533.371.*

For point of reference, NRS 533 and 534 are the chapters of Nevada water law that pertain to adjudication of vested water rights/appropriation of public water and underground water and wells, respectively.



Environmental permits referenced in NRS 533.437 and 533.4377 are temporary permits for wells used for avoidance of groundwater contamination (e.g. remediation wells). A copy of this ruling is also provided in Appendix C.

1.5 Groundwater Management

Groundwater quality issues in the California portion of the basin are regulated by the California State Water Resources Control Board – Lahontan Region (CRWQCB-Lahontan). Within Inyo County, California portion of the Amargosa River Basin, the county conducts water-related activities such as issuing well permits through the Inyo County Environmental Health Department, and water-quality functions such as monitoring groundwater conditions and quality at the Tecopa and Shoshone landfills through the Inyo County Waste Management Department. Other community planning and environmental review activities are conducted through the Inyo County Planning Department. Currently, there is little to no development in the San Bernardino County, California portion of the basin, however similar functions within San Bernardino County’s departments exist should development occur in the future.

In Nevada, the Nevada Division of Water Resources (NDWR) manages Nevada’s water resources through the appropriation and reallocation of the public waters. In addition, the NDWR is responsible for quantifying existing water rights; monitoring water use; distributing water in accordance with court decrees; licensing and regulating well drillers and water rights surveyors; reviewing flood control projects; monitoring water resource data and records; and providing technical assistance to the public and governmental agencies. The Nevada State Engineer determines the limit and extent of water rights and establishes conditions regarding those rights. The Nevada Department of Environmental Protection manages Nevada’s storm water pollution program. Within Nye County, Nevada, the Nye County Water District was established in 2007 to develop sustainable water development planning, characterize the groundwater resource, and to evaluate and mitigate impacts caused by groundwater use. Nye County’s Water Resources Plan (Buqo, 2004) provides guidance for ensuring adequate supplies of water remain available in Nye County for the benefit of the county’s residents and environment.

Death Valley National Park oversees water-related issues within the Death Valley National Park inclusive of the Devil’s Hole section of the park in Nevada. Currently, Death Valley National Park staff monitor selected springs throughout the park, with an emphasis on Saratoga Spring at the south end of Death Valley adjacent to the Amargosa River. Likewise, the BLM oversees water-related issues on BLM lands. As part of those responsibilities, the BLM is also charged with developing a management plan for the wild and scenic portion of the Amargosa River.

1.6 Sources of Information

Information gathered by AZI and used in this report were from the archives and reports by the of the USGS, NDWR, CRWQCB-Lahontan, Nye County Water District, Nevada Bureau of Mines and



Geology, AC, Death Valley National Park, BLM, California Department of Water Resources, and groundwater level and spring data collected by AZI and within AZI's water resources library.

1.6.1 Death Valley Regional Flow System Report

A key foundational document for this effort is the report “Death Valley Regional Ground-Water Flow System, Nevada and California – Hydrogeologic Framework and Transient Ground-Water Flow Model” (Belcher, 2004). This comprehensive volume describes the conceptual model, and numerical modeling of, the Amargosa Groundwater Flow System in its entirety, however with a focus on the Northern Amargosa River Basin. The description of the conceptual model for the Amargosa Basin in this report is largely distilled from this extensive report. The USGS conducted the modeling and prepared the associated report bringing together data collected over decades for the U.S. Department of Energy programs at the Nevada Test Site and at Yucca Mountain. The purposes of the USGS work described in the report were to:

- Provide boundary conditions for site scale models at the Yucca Mountain and Underground Test Area Corrective Action Units on the Nevada Test Site;
- Evaluate the impacts of changes in groundwater flux;
- Provide a decision-making tool with respect to groundwater for defense and economic development on the Nevada Test Site;
- Evaluate potential effects to the Nevada Test Site due to off-site groundwater development;
- Provide a framework for identifying an effective groundwater quality monitoring network; and
- Facilitate the development of a cooperative, regional Death Valley groundwater management district.

1.6.2 Hydrologic Activities – Amargosa River Hydrologic Survey

A considerable amount of hydrologic work has been conducted since the initial baseline hydrologic investigations (SGI, 2011 and 2012) that were sponsored by the AC. That work included geochemical analysis (anions, cations, and metals along with stable and unstable (uranium and strontium) isotopes on two wells, the Amargosa River, and 16 springs. Since that time the following tasks have been completed:

- Periodic river gaging at several locations along the Amargosa River;
- Periodic spring flow and groundwater level measurements at springs and wells throughout the Middle Amargosa River Basin;
- Installation of four shallow monitoring wells 1) north of Shoshone along the Amargosa River, 2) along Willow Creek, 3) at Twelvemile Spring, and 4) at “Married Man’s Camp” between Willow Creek and California Valley. This work included sampling and analyzing waters from those wells



and outfitting those wells with transducer/data logger installations and periodic groundwater level data downloading (JWI, 2012 and JWI, 2013a);

- Refined geologic mapping being conducted by the USGS (in progress);
- Geophysical surveys by the USGS at selected locations throughout the Middle Amargosa Basin area (in progress);
- An in depth canvassing of the flow in the Amargosa River by the USGS to evaluate gaining and losing character of the River (conducted in February, 2014);
- Initiation of evapotranspiration studies along the Amargosa River in the Shoshone – Tecopa area (USGS – in progress).

In addition, additional sampling and analysis was conducted to evaluate a source of water for potable water and fire suppression for the Tecopa – Tecopa Hot Springs community (JWI, 2013c).



2.0 CURRENT FIELD AND LABORATORY METHODS

The field activities performed during this project were designed following the previous reconnaissance and cataloging of all of the known springs and wells in and beyond the Middle Amargosa River Basin, an area encompassing nearly 1,000 square miles. The results of the initial reconnaissance published in the 2011 State of the Basin Report (SGI, 2011), were used as the foundation for the design and implementation of more detailed hydrogeologic investigations. Additionally, methodologies for describing spring conditions developed for other areas (Sada & Pohlmann, 2002, and Sky Island Alliance, 2012) formed the basis of field descriptions of springs. The field work for this more detailed hydrogeologic investigation was conducted during May 2014 and included the collection of water chemistry samples at four springs and one well, flow volumes, water levels, and ongoing field water quality monitoring for a select group of springs, wells and points along the Amargosa River. The results from this investigation as described in the following sections will serve to assist in the identification of regional and local groundwater flow paths, and enable the development of an efficient, focused and sustainable groundwater monitoring effort that will be protective of the environmental and cultural resources of the basin. The locations of all points monitored or reconnoitered during this work are shown on Figures 2-1 through 2-3.

2.1 Spring Discharge, Groundwater Level and River Surface Flow Monitoring

During May 2014, spring flow discharge and groundwater elevation data were gathered from springs and wells in the Middle Amargosa River Basin. This work supplements similar data collection efforts that have occurred as part of efforts sponsored by the AC and TNC since 2010. Seepage run monitoring (i.e. the measurement of flow at several distinct locations) was conducted by AZI along the stretch of river from Tecopa to below the Dumont Dunes area where the River crosses California Route 127. The seepage runs were conducted at five distinct monitoring locations along the Amargosa River, including two USGS gauge locations and three manual monitoring points as measured during previous monitoring events. Additional monitoring included following the movement (progression and regression) of the leading edge of the River near the Dumont Dunes area and seepage run monitoring of Willow Creek just upstream of the confluence with the Amargosa River.

The three goals of the ongoing discharge, water level and seepage run monitoring are as follows:

- To quantify spring discharge rates, groundwater elevations, and river surface flow which will provide estimates of seasonal variations;
- To establish a record of discharge from the springs and wells selected for monitoring, including seasonal trend information in order to provide a more robust baseline for future comparisons, and



- To establish flow gains and losses along the perennially flowing portion of the Amargosa River, including seasonal trend information in order to provide a more robust baseline for future comparisons.

2.1.1 Spring Discharge Monitoring

For the current monitoring event, springs not previously visited since the initial baseline work in 2011 were revisited to evaluate changes over the past three years. Previously, springs designated for ongoing quantifiable discharge measurement included Amargosa Canyon Spring 1, Amargosa Canyon Spring 4, Borax Spring, Borehole Spring, Crystal Spring, Horse Thief Spring, Tecopa Hot Spring (as measured near the Amargosa Conservancy trailer), and Willow Spring. Data from other springs were collected as practical, including Resting Spring, Shoshone Spring, Thom Spring and Five Springs. These springs were chosen for long-term monitoring as they were the springs from which reliable water samples could be obtained as opposed to the remaining springs where conditions were such that sampling was not practicable at the time of the initial work (SGI, 2011).

The primary method used to quantify spring discharge was measuring the time it takes for spring flow to fill a bucket of a known volume. In some cases, such as Borax Spring and Tecopa Hot Spring, the spring discharged over a lip or out a pipe which enabled direct measurement of spring flow. At other locations, such as at Crystal Spring and Amargosa Canyon Spring #4, spring discharge was temporarily captured and channeled into a pipe or a flume to facilitate direct measurement using the bucket filling technique. A secondary method used to quantify spring discharge was direct measurement using a Marsh-McBirney Flo-Mate solid-state flow meter placed in a flowing channel of water. Measurements from the flow meter are combined with cross-sectional dimensions of the flow channel to yield spring discharge. This measurement technique was used at Amargosa Canyon Spring #1 and Borehole Spring. All of the spring flow measurements recorded starting with the initial spring survey (including visual estimations of flow) are summarized on Table 1. Spring flow measurements are also found in the Catalog of Springs (Appendix A) and on the individual field reconnaissance data sheets (Appendix D).

There are compromises in the use of both spring flow measurement options that can result in under-estimation or over-estimation of free-flowing discharge. Ideally, all of the flow from a spring would be fully captured and channeled into a pipe or flume, allowing for much greater accuracy in measurement of flow. This is the case for Borax Spring and Tecopa Hot Spring at the Nature Conservancy trailer. Temporarily channeling the spring using a pipe and other non-permanent materials such as mud and rocks can capture most of the flow, but not all, which can lead to inaccuracies in measurement. Measurement of flow using the solid-state flow meter requires estimates of cross-sectional area and the use of one to two flow measurement points as the meter is often large relative to the width of the channel. Ultimately, all of the spring flow measurements within this report should be seen as an estimate for the range of flows emanating from each spring. Significant alteration to spring discharge locations would be required to achieve the accuracy needed to resolve fine, seasonal changes in spring discharge.



2.1.2 Groundwater Level Monitoring

The wells designated for ongoing groundwater elevation measurement include those wells previously installed as part of the Amargosa Hydrologic Survey (wells ARHS-01 through ARHS-04); the Eagle Mountain Well and Cynthia's Well. None of these wells have a surveyed mark for ground level, thus surface elevation has been estimated using USGS topographic maps. Depth to water was measured from the same point during each monitoring event so accurate comparisons between events can be made. All of the depth to water measurements recorded starting with the initial well survey are summarized on Table 2-1. Depth to water measurements are also found in the individual well data sheets included in Appendix D. The four ARHS wells have been outfitted with In-Situ transducer / data-logger set-ups, and collect groundwater level measurements at one-hour intervals. The results of the groundwater level monitoring are discussed later in this report.

2.1.3 Amargosa River Flow Monitoring

River flow was measured at five locations along the Amargosa River from the town of Tecopa south to the California Route 127 undercrossing near Dumont Dunes. Two of the measurement points were flow gauges established by the USGS. The first is the USGS gauging station located in the town of Tecopa, California (station no. 10251300) and the second is located near China Ranch, just above the confluence with Willow Creek (station no. 10251330). The three manual flow measurement stations were located at the intersection with Sperry Wash, the crossing of Dumont Dunes Road and the undercrossing of California Route 127. As the project has progressed, additional measurements have been obtained from the Amargosa River just below the confluence with Willow Creek, and along Willow Creek just upstream of the Amargosa River.

A Marsh-McBirney Flo-Mate electromagnetic velocity meter and associated equipment was used to gauge river flow at each measurement location along the Amargosa River. Surface water flow velocity was measured and recorded at 0.5-foot intervals across the width of the Amargosa River along a measurement transect oriented perpendicular to the direction of river flow. Concurrent with each velocity measurement, depth to river bottom was recorded. The full profile of river velocities and depths for the complete cross-section of the river could then be aggregated to determine total river volumetric flow at the measurement location. Each measurement transect location was recorded using a hand held GPS receiver so subsequent measurements were performed approximately along the same river cross-section.

During the spring reconnaissance field activities conducted during November 2010 and January 2011, the leading edge of the Amargosa River extended to an indeterminate point downstream of the California Route 127 undercrossing. This was also the case during the May 2014 monitoring event. The initial visit to this section of the River in late April 2011 showed that the leading edge had retreated to a point between the California Route 127 undercrossing and the crossing of Dumont Dunes Road. A subsequent visit a week later (early May, 2011) showed the retreat of the River continued such that the leading edge was approximately 1,000 feet upstream of the Dumont Dunes Road crossing. The visit in September 2011



showed the leading edge of the River in approximately the same place. During the December visit, the leading edge of the River had advanced beyond the Dumont Dunes Road crossing, but did not extend as far as the California Route 127 undercrossing. This data, along consistent later observations and with visual observations by long-time residents, provides strong indications that flow in the Amargosa River is generally controlled by evapotranspiration. The increase in evapotranspiration that occurs during the longer, hotter summer days reduces water availability for surface flow resulting in the retreat of the River. The reduction in evapotranspiration that occurs during the shorter and cooler winter days increases the water available for surface flow, thus the leading edge of the River advances independent of precipitation. The management of non-native vegetation along the Amargosa River (i.e. tamarisk removal) will likely have a significant effect on the flow of water in the River. Hydrographs of the Amargosa River based on the periodic monitoring events are presented on Figure 2-4.

2.2 Water Quality Analyses

As a continuing step to determine relationships between waters found in the Middle Amargosa River Basin, water samples were collected from a select group of spring and wells, including the following:

- Noble Gas Isotopes (e.g. Helium isotopes) at Thom Spring, Tecopa Hot Springs, Borehole Spring, Wild Bath Spring and well ARHS-01;
- Stable Isotopes at Wells ARHS-01, ARHS-03 (Twelvemile Spring), and at Dodge City Spring; and,
- General minerals and metals at Dodge City Spring.

The noble gas analyses were conducted at the University of Utah. Stable isotope analysis was conducted by Isochem Analytical in Champaign, Illinois. Interpretative work was conducted M. Lee Davisson & Associates, Inc.

2.2.1 Previous Isotope Investigations

A number of previous reports have been published on groundwater geochemistry and isotope abundances in southern Nevada and southeastern California. Notable reports relevant to the Amargosa River area include those of Winograd and Thordarson (1975), Thomas et al. (1996), Davisson et al. (1999), and Larsen et al. (2001). Additional studies that include directly related data can be found in Thomas et al. (2003a) and Hurst (2012).

Winograd and Thordarson (1975) developed one of the early frameworks for groundwater flow in southern Nevada related to the Nevada Test Site, and that included extensive discussion of the Ash Meadows springs discharge area. Based on earlier work, they also summarized types groundwater hydrochemistry that showed calcium magnesium bicarbonate groundwater associated with both the carbonate rock of the Spring Mts. and adjacent Pahrump Valley. In contrast, sodium potassium bicarbonate groundwater drains the largely volcanic rock areas south of the Nevada Test Site (e.g., Oasis



Valley and Jackass Flats). Ash Meadows spring discharge consequently has calcium magnesium sodium bicarbonate water that Winograd and Thordarson inferred as a mixture of recharge of the two latter water types.

Thomas et al. (1996) also compiled and summarized groundwater chemistry types as well as isotope abundances in areas that included groundwater throughout southern Nevada and southeastern California with a focus on the regional carbonate aquifers. They concluded from isotope results that the calcium magnesium sodium bicarbonate water discharging from Ash Meadows springs comprised 60 percent Spring Mountains recharge and 40 percent from Pahrnagat Valley to the east. They also argue from radiocarbon data that groundwater velocities ranged approximately from 10 to 144 feet per year.

Davisson et al. (1999) showed that radiocarbon was not a reliable method for age dating groundwater in the regional carbonate aquifer due to continual isotope exchange reactions combined with mixing of local recharge sources during long-range transport. They further showed that stable isotopes of oxygen-18 and deuterium measured in southern Nevada groundwater had been previously evaporated during its original recharge as melted snow in central Nevada (Rose et al., 1999). By applying a methodology that removed the effects of evaporation on oxygen-18 and deuterium they showed a systematic decrease in their abundances with increasing latitude and local elevation throughout southern Nevada, a result inconsistent with previous studies purporting Pleistocene age groundwater recharge during the last glacial period (Claassen et al., 1986).

Larsen et al. (2001) studied the water quality and stable isotope abundances of groundwater in the Tecopa and Death Valley regions of the Amargosa River and related them to groundwater of southern Nevada to delineate potential recharge sources. They recognized three water types comprising a Spring Mountains recharge source, a deep regional groundwater derived from fracture flow of southern Nevada, and groundwater derived from basin-filled groundwater of the Amargosa Desert.

Additional studies providing a greater variety of isotope measurement types have been reported by Thomas et al. (2003a) and Hurst (2012). Thomas et al. (2003a) focused specifically on Oasis Valley and its hydraulic connection to Pahute Mesa, showing that Oasis Valley groundwater is replenished by groundwater flow through Pahute Mesa that was ultimately derived further north. The Oasis Valley groundwater ultimately replenishes the Amargosa Desert basin fill aquifers. Hurst (2012) specifically focused on tritium, oxygen-18, deuterium, strontium isotopes, and uranium isotopes in regions along the Amargosa River. He showed that spring samples are largely tritium absent, the oxygen-18 and deuterium show only limited evaporation, and that strontium and uranium isotopes show mixing along the entire length of the Amargosa River.

Lastly, one study reported by Thomas et al. (2003b) measured dissolved noble gases in the regional carbonate aquifer of southern Nevada. They showed that noble gas abundances that are typically incorporated in recharging groundwater and reflect the local recharge temperature were systematically



being lost during long-range transport from Pahrangat Valley in east-central Nevada towards Ash Meadows at its terminal discharge point. They concluded this loss of dissolved gas was due to fault barriers and cavities in the regional carbonate aquifer that forces groundwater to migrate upward and encounter gas loss in air pockets. This subsequently masked the calculated recharge temperatures derived from the noble gases.

2.2.2 Field Methods

Stable Isotopes

Samples for oxygen ($\delta^{18}\text{O}$) and deuterium (δD) were collected in 60 milliliter glass bottles equipped with a conical shaped insert inside the cap that forms an airtight seal when the bottle is closed. Samples were shipped to Isotech Laboratories in Champaign, Illinois where the $^{18}\text{O}/^{16}\text{O}$ and D/H ratios were measured as a gas using standardized mass spectrometry methods. Results are reported as a normalization to Standard Mean Ocean Water (SMOW), which is an internationally recognized standard in stable isotope analysis. The normalization converted to standard δ (“del”) notation following the convention:

$$\delta = \left(\frac{R}{R_{std}} - 1 \right) 1000$$

Where R is the isotope ratio of the sample and R_{std} is the ratio of the standard.

Noble Gas

Noble gas samples were collected in passive diffusion samplers comprising two sections of 1/4” copper tubing attached by a small section of semipermeable silicon tubing (Figure 2-5). The terminal ends of the copper tubes were pinched closed gas-tight with cold seal. The samplers were placed in the water to be sampled for 24 hours. During this equilibration period, gases dissolved in the water diffused through the semipermeable tube and came into an equilibrium concentration in the tube proportional to that of the water. At the same time, a special meter was used to measure the total dissolved gas in the water. After 24 hours, the sampler was crimped to a cold seal on the semipermeable tube end of the copper to form two separate gas samples. These two samples were then labeled, the end protected with electrical tape and placed into a plastic bag. Samples from five sample sites were collected by this method. All samples were sent to the noble gas laboratory at the University of Utah. The copper tubes were vacuum fitted to an evacuated container, the copper cold seal was uncrimped to release the gas, followed by cryogenic isolation of noble gases of interest. Noble gas abundances and the $^3\text{He}/^4\text{He}$ ratios were measured on a VG-5400 noble gas mass spectrometer. Results are reported as gas volume per milliliter of water.

2.2.3 Results - Geochemistry

A detailed description of the investigative results and associated laboratory data reports are provided in the report prepared by M.L. Davisson & Associates, Inc., and provided in Appendix E. What follows is a summary of the conclusions of that report.



Stable isotope and other geochemical data indicate that Middle Amargosa River area groundwater appears to be a mixture of Ash Meadows, Spring Mountains and Kingston Range sources (Figures 2-6 and 2-7). The pathways for that groundwater to reach the area probably consist of one or a combination of:

- Water that moves through carbonate rocks from the Spring Mountains to the Ash Meadows and then southward toward the Shoshone-Tecopa area;
- Water that moves through carbonate rocks beneath the northern portion of the Nopah Range into Chicago Valley, then toward the Amargosa River; and,
- Water that moves from Pahrump Valley through the low, faulted divide into California Valley then towards the River.

Most of the spring/groundwater samples have characteristics indicative of having been influenced by Spring Mountain recharge by some route. Most of the mixing is probably occurring via fractured rock at depth, and less so in the alluvium. Water quality in the springs in the Shoshone-Tecopa area likely evolves from a mixture of regional carbonate and Tertiary volcanic rock influences, but acquires increased chloride and sulfate possibly from the Tecopa lake bed deposits. Additionally, regional subsurface heat flow increases groundwater temperature and contributes to increased dissolved silica, decreased bicarbonate, and possibly increased pH, with the latter resulting in the high arsenic concentrations. The source of the arsenic could be from multiple sources, but as pH increases the solubility increases to significantly high levels as presented on Figure 2-8.

Noble gas concentrations of the water in the Shoshone-Tecopa area are strongly similar to those measured in the regional carbonate – Ash Meadows (of southern Nevada) groundwater noted by Thomas, et.al. (2003b). Their conclusions were that dissolved gas loss occurred during subsurface transport across faulted boundaries and compromised recharge temperature/elevation calculations. The noble gas recharge temperatures/elevation calculations for Amargosa River Valley groundwater mostly support the conclusions of Thomas, et.al. (2003b).

The $^3\text{He}/^4\text{He}$ ratios for the four measured springs (Thom, Wild Bath, Tecopa and Borehole) were unusually low, indicating old groundwater ages. The values were 5 to 10 times lower than measured groundwater under the Nevada Test Site. These low ratios could be due to high influx of ^4He from the Earth's crust caused by deep faults. Otherwise, if the low ratio is due to steady-state accumulation from local deposits, then groundwater ages greater than 100,000 years would be required. Additionally, the helium ratios did not suggest the presence of a shallow magmatic heat source for the Tecopa Hot Springs area, and indicate that the heat source is via deep circulation, probably along the faults that run through the area. The elevated temperature of the Tecopa Hot Spring water is not unusual since similar temperatures are seen at depth under the Nevada Test Site. However, at Tecopa, the warm water is driven to the surface probably by some structural control.



Several recommendations for future work are derived from the results of this work and provided in Section 4.0.



3.0 GROUNDWATER SYSTEM – CONCEPTUAL MODEL

The conceptual model of a groundwater system is the foundation of any analysis of a groundwater basin. The conceptual model describes groundwater occurrence, groundwater movement, hydraulic properties of aquifer materials, and groundwater inflow and outflow components. As described in the previous SOBRs, as new data are gathered in the Middle Amargosa Basin, the conceptual model for the area would be updated as appropriate to reflect those data. This section of the SOBR, provides an updated overview of the conceptual model reflecting the results of new geochemical data, groundwater level data, and river gauging results.

3.1 Regional Setting and Geologic Conditions

The Amargosa River Basin is located in Inyo and San Bernardino Counties, California, and Nye County, Nevada within the Basin and Range geomorphic province. The Basin and Range region is characterized by basins of internal drainage with considerable topographic relief, alternating between narrow faulted mountain chains and flat arid valleys or basins. The ranges generally trend north-northwest parallel to the regional structural regime. The geology of the Amargosa Basin is very diverse containing Precambrian, Paleozoic and Mesozoic metamorphic and sedimentary rocks, Mesozoic-aged igneous rocks, Tertiary and Quaternary-aged volcanic rocks, and playa, fluvial and alluvial deposits (Planert and Williams, 1995). A regional geologic map is provided on Figure 3-1.

The valley areas are covered by coalescing alluvial fans forming broad slopes between the surrounding mountains and the valley floors. The regional gradient of the Northern Amargosa River Basin is generally to the south-southeast with gradients that typically range from five to 15 feet per mile. The basin fill deposits are interpreted to be underlain primarily by Paleozoic sediments although in the central portion of the basin floors, the basin fill sediments have not been fully penetrated by drilling. Generally, the Middle Amargosa Basin is marked by several unique features including the badland-type topography of the Tecopa lakebed deposits and the Amargosa River Canyon. Between Shoshone and Tecopa the slope of the valley floor flattens among the lakebed deposits, and then steepens as the river flows through the Amargosa River Canyon. Downstream of the canyon, the topography reverts to an area of broad, coalescing alluvial fans, eventually reaching the flat playa in Death Valley.

3.2 Hydrogeologic Units

In the Amargosa River Basin, the principal hydrogeologic units consist of unconsolidated basin fill materials, volcanic rocks (primarily in Nevada), and the carbonate rock aquifer. The following provides a summary of these three hydrogeologic units.



3.2.1 Basin Fill

Tertiary and Quaternary-aged basin fill deposits are present throughout the basin as alluvial, fluvial and lacustrine (lakebed) deposits. Coarse-grained deposits (primarily sand and gravel) within the basin fill are responsible for transmitting the greatest quantities of groundwater and are most relied upon for groundwater production in the region. The basin fill is generally unconsolidated, moderately to well-sorted sand, gravel, silt and clay, and wells completed in the basin fill can yield several hundred gallons per minute (Walker and Eakin, 1963). As the axes of the valleys are reached, the sorting of the sediments will increase which can serve to significantly increase the permeability of the sediments. With increasing depth, groundwater production can be expected to decrease in these deposits as increasing lithostatic pressure and infilling of pores coincident with their greater age may occur reducing permeability.

Within the basin fill, the fine-grained (clay and silt) deposits that largely comprise the lakebed deposits (for example in the Shoshone – Tecopa area) serve as aquitards. Aquitards are low permeability geologic units that inhibit groundwater flow and can serve as confining units. Wells and boreholes that are completed in aquifer materials underlying these aquitards may exhibit artesian conditions such as those observed from flowing wells and borings such as at Borehole Spring and Borax Spring in the Shoshone-Tecopa area.

3.2.2 Volcanic Rocks

Tertiary and Quaternary-aged volcanic rocks are present within the Amargosa River Basin particularly in the area of the headwaters of the Amargosa River in the Beatty area of Nevada, and in the Greenwater Mountains immediately west of Shoshone, California. In the California portion of the basin, the volcanic rocks are generally of lesser importance to the overall groundwater system as opposed to the northern portion of the basin in Nevada. Locally, volcanic rocks can be of importance, for example, at the Shoshone Spring area where a basalt flow crossing the Amargosa River course may be driving water to the surface in the river bed and the spring. This will be discussed further in Section 3.3.

3.2.3 Bedrock Units

Bedrock units underlying the alluvial valleys and generally comprising ranges such as the Nopah and Resting Spring Ranges, and portions of the Amargosa Range, consist of Precambrian to Mesozoic-aged metamorphic and sedimentary rocks. These geologic units consist of Paleozoic-age carbonate rocks (the “carbonate rock aquifer”); quartzite, and shale which have been folded and faulted (Figure 3-1). Generally, bedrock units such as these produce little water except where they are fractured and faulted, providing pathways for groundwater movement. Other bedrock units consist of the Mesozoic-aged granitic rocks as found in the Kingston Range. Within the granitic rocks, groundwater flow can be assumed to be negligible except where fracturing is present yielding modest quantities of groundwater.

Where carbonate rocks are present, greater movement of groundwater can occur due to the unique depositional and erosional characteristics of those rocks. Fractures and secondary solution openings



along bedding planes can transmit considerable quantities of groundwater. Groundwater that discharges from the springs at Ash Meadows largely involves groundwater moving through these secondary openings in the carbonate rocks. Within the basin, significant groundwater flow through the carbonate rock aquifer occurs within the lower to middle Paleozoic-age carbonate rocks that comprise a package of rocks approximately 26,000 feet thick (Sweetkind, Belcher, et.al., 2004).

Groundwater flow in carbonate rocks can be very complex. Carbonate rocks with extensive solution channels or fractures primarily developed in one direction will have permeabilities that are highly oriented in specific directions. Therefore, the groundwater flow may not be predictable simply by drawing flow lines perpendicular to regional groundwater surface contours representative of the regional carbonate aquifer (Davis & DeWiest, 1966). Although the carbonate rock aquifer likely transmits large volumes of groundwater in the region, permeability is limited to areas of fracturing which proportionally makes up a small portion of the carbonate rock volume. Therefore, despite the potential for wells to obtain large yields from the carbonate rocks, that success is dependent on intersecting those fractured zones.

3.2.4 Geologic Structure

The rocks in the Amargosa River Basin have been extensively deformed by a variety of fault types that have occurred in the distant past as well as the present. These fault types include:

- Normal faulting typical to the Basin and Range with vertical displacement being dominant;
- Strike-slip faulting (lateral displacement dominant) typical of larger-scale regional fault systems such as the Furnace Creek – Fish Lake Valley Fault and Las Vegas Valley Shear Zones; and
- Thrust faults (low angle faults) that during the Paleozoic and Mesozoic resulted in displacing rock units in a manner that can affect groundwater movement in the present.

Springs may issue from the locations of faults due to either the lower fracture permeability of the fault in rock, or the displacement of permeable basin fill or rock adjacent to relatively impermeable materials. For example, The Tecopa Hot Springs rise along a fault (Waring, 1915) that runs north-northwest through the basin (Figure 3-2). Shoshone Spring also rises along the northward extension of the same fault that passes through Tecopa, part of the Furnace Creek Fault Zone (California Division of Mines, 1954). The Death Valley – Furnace Creek Fault System (inclusive of the Furnace Creek Fault Zone) is part of a large, currently active, northwest directed pull-apart zone. Movement along the Furnace Creek Fault Zone is primarily strike-slip (Brogan, Kellog, Slemmons and Terhune, 1991). The Death Valley – Furnace Creek Fault System is the second longest fault system in California (the San Andreas Fault System being the longest).

Thrust faults are present throughout the region, however given their age, in many areas their presence is concealed by overlying volcanic or basin fill deposits. Fracture permeabilities along thrust faults are insignificant due to the age of the structures and fracture filling and the low angle nature of the faulting not supporting fractures with significant apertures. However, in areas where impermeable rocks are



thrust against more permeable rock in the subsurface (e.g., quartzite thrust against carbonate rocks), those faults may also serve as a barrier to groundwater flow. This can be seen along the base of the Nopah and Resting Spring Ranges where the carbonate rock sequence outcrops in the upper portions of the ranges and underlying Lower Cambrian and Precambrian clastic rocks outcrop along the base of each of these ranges. A notable exception is north of the Nopah Thrust in the northern portion of the Nopah Range. North of this fault, the carbonate-rock sequence is down-dropped relative to the carbonate rocks south of the thrust fault resulting in a potential pathway for an undetermined amount of water to seep from Pahrump Valley into Chicago Valley. Of note is the presence of Twelvemile Spring situated approximately west of this thrust fault, and an absence of springs along the west base of the Nopah Range further south.

3.3 Surface Water

The principal surface water body in the region is the Amargosa River, an intermittent river with headwaters issuing from springs northeast of Beatty, Nevada, and extending approximately 180 miles to the river's terminus at the playa in Death Valley. Except for portions of the river in the Amargosa Canyon area in California, and near Beatty, Nevada, the Amargosa River typically flows only after periodic storms. In those areas where the river is usually dry, the flow of water is in the subsurface. The perennial reach of the Amargosa River between Shoshone and Dumont Dunes was designated as a National Wild and Scenic River in 2009. Except during runoff events from rainstorms, the perennial flow in the Wild and Scenic section of the river is completely supplied by groundwater.

The Amargosa River rises as spring flow from the southwest side of Pahute Mesa in Nevada. From here, the river flows generally southwest toward Beatty, Nevada, and after passing through the Amargosa Narrows where water is forced to the surface, enters the Amargosa Desert. After crossing the border into California, the river generally runs southward along a valley that follows the trend of the Furnace Creek Fault Zone, adjacent to California State Highway 127 near Death Valley Junction. Here, the river meets with Carson Slough (which drains Ash Meadows and is the chief tributary to the Amargosa River in Nevada), and continues its southward route passing to the east of the community of Shoshone and on to Tecopa. South of Tecopa, the river enters the Amargosa Canyon, being augmented by spring flow on its course. South of the Amargosa Canyon, the river flows by Dumont Dunes, and then heads west and then northward, rounding the Amargosa Range on the south and flowing into Death Valley.

A series of conceptual cross-sections following the course of the Amargosa River from near Oasis Mountain northeast of Beatty, Nevada, to Sperry below the Amargosa River Canyon in California are provided in Appendix F. As can be seen, areas with continual flow are typically where rock units create constrictions to flow, and that flow is driven to the surface. Beyond the constrictions, the flows typically percolate into the subsurface some distance downgradient. This occurs at the narrows southeast of Oasis Mountain, at the Amargosa Narrows south of Beatty, Nevada, at the Shoshone Spring area, and at the Amargosa River Canyon. Between Shoshone and Tecopa, the river can also rise to the surface, most



likely the result of permeable zones intersecting clayey, Tecopa lake bed deposits causing flow to surface. As can also be seen in the cross-sections (Appendix F), the groundwater surface tends to flatten upgradient of these constrictions, then steepens once past them, as would be anticipated.

This condition also emphasizes the sensitivity of the relatively constant, or perennial reaches of the Amargosa River to changes in groundwater level. Additionally, given this condition, it appears that a considerable portion of the underflow moving through the Middle Amargosa system can be accounted for by the flow observed at the surface for example in the Amargosa River canyon plus spring discharge and any pumping. This does not result in a substantial amount of underflow, and further highlights the sensitive nature of the river system. More about this is discussed in Section 4.1.

The USGS monitors the flow of the Amargosa River (USGS, 2013) at a gage 0.2 miles west (Gauge no. 10251300) of Tecopa. The USGS has monitored Amargosa River flow intermittently at other locations along the river over the past 50 years, but given the spotty nature of those records, they are of limited utility. The average flow of the river at this station based on 39 full years of data between 1962 and 2013 (some years missing) is 3.44 cubic feet per second (cfs), though is skewed high as a result of flood flows. The maximum mean annual flow recorded there was 14.9 cfs in 1983 when the record peak flow of 10,600 cfs was recorded on August 16, 1983. At times the river has been dry at this station. Mean annual flows at the Tecopa station along with the other stations mentioned are summarized on Table 3-1.

AZI conducted flow measurements at three locations along the river which are provided on the Field Activities Data Summary table (Table 2-1). Field water quality parameters collected by AZI indicated that Amargosa River waters are somewhat intermediate in chemistry between the more saline hot spring waters at Tecopa, and the fresh water springs identified in the area. This monitoring has provided strong indications that the extent of flow in the Amargosa River is significantly controlled by evapotranspiration. The increase in evapotranspiration that occurs during the longer, hotter summer days reduces water availability for surface flow resulting in the retreat of the River. The reduction in evapotranspiration that occurs during the shorter and cooler winter days increases the water available for surface flow, thus the leading edge of the River advances independent of precipitation. The management of non-native vegetation along the Amargosa River (i.e. tamarisk removal) will likely have a significant effect on the flow of water in the River.

Other surface water bodies in the area consist of spring-fed ponds in the Ash Meadows area (Nevada), spring-fed Grimshaw Lake in the Tecopa area, and streams that issue from springs only to end where either that flow is utilized by vegetation, or it percolates back into the subsurface. One exception to this is Willow Creek, a significant spring-fed stream that rises northeast of China Ranch (south of Tecopa), and flows into the Amargosa River within the Amargosa River Canyon.

3.4 Regional Groundwater System

The regional groundwater flow system is considerably more extensive than the Amargosa River Basin watershed (Figure 3-3). The reason for this is the extensive area beyond the watershed boundary



underlain by the carbonate rock aquifer that drains toward Death Valley. In this large flow system, groundwater recharge results from precipitation in the form of snowmelt and rainfall that falls within the mountains of southern and central Nevada, and reaches the Amargosa River Basin where it is discharged (Planert and Williams, 1995).

The Northern Amargosa River Basin appears to receive much of its carbonate-rock aquifer underflow from central Nevada. As shown on Figure 3-4, groundwater moves southward through Lincoln County, Nevada where it splits with a portion of that flow heading southwest toward the Amargosa Desert and Ash Meadows. The remainder of the flow moves southeast toward Muddy Spring and the Colorado River area.

Within the Middle Amargosa River Basin (between the California-Nevada state line and Salt Creek), it has long been postulated that groundwater moves directly through the carbonate aquifer southwest from the Spring Mountains and beneath Pahrump Valley toward the Tecopa – Shoshone – Chicago Valley – California Valley areas (Faunt, D’Agnese and O’Brien, 2004). However, based on the results of the current geochemical analyses and more recent detailed mapping by the USGS (Workman, et.al., 2002), it appears that the mechanism by which groundwater moves from the Spring Mountains/Pahrump Valley area toward the Shoshone-Tecopa area may be more complicated. Figures 3-5, 3-5a and 3-5b present a portion of the 2002 geologic map indicating that Precambrian to Cambrian bedrock units underlying the carbonate rock units outcrop along the western base of the Resting Spring Range and the portion of the Nopah Range south of the Nopah Peak Thrust. This would indicate that the saturated rocks beneath these ranges are primarily comprised of quartzite, shale, siltstone and dolomite of lesser permeability than would be expected of the Paleozoic-age carbonate rocks. Alternative flow paths likely include one or more of the following:

- Spring Mountain recharge moving toward Ash Meadows through carbonate rocks and basin fill, then southward toward the Shoshone-Tecopa area;
- Via carbonate rocks at the north end of the Nopah Range into Chicago Valley then toward the Amargosa Valley; and ,
- From Pahrump Valley via the shallow divide into California Valley then toward the Amargosa River.

These deeper flowpaths are most likely influential on the spring flows and discharge to the alluvium. The deeper flowpath beneath the northern Nopah Range was previously discussed (JWI, 2013a) as a potential source for Twelvemile Spring. These flowpaths are consistent with that previously proposed by others (Figure 3-6). Beyond the Middle Amargosa River Basin, groundwater moves west in the Death Valley Basin, then north augmented by underflow from the Owlshead Mountains area, to the Death Valley Playa.



The regional groundwater flow system covers an area of nearly 40,000 square miles. The following sections describe the occurrence and movement of groundwater, the aquifer characteristics of the basin fill and carbonate rock aquifers, and groundwater basin inflow and outflow components.

3.4.1 Groundwater Occurrence and Movement

Within the Amargosa River Basin, groundwater occurs primarily within the basin fill deposits and carbonate rock aquifer. Although groundwater occurs with significance in the volcanic rocks in the northern portion of the basin, the focus of this report is the basin south of the Death Valley Junction area (Middle Amargosa River Basin), and therefore is not discussed here. The only materials from which groundwater can be extracted for significant use is within the coarse-grained deposits of the unconsolidated basin fill and within the fractured carbonate rocks (Walker and Eakin, 1963). Volcanic rocks and other bedrock units can generally be assumed to be relatively impermeable except where locally fractured and minor yields can be achieved. As described in Section 3.3., underflow in the basin fill contributes to surface flow in the Amargosa River where constrictions occur due to the presence of less permeable bedrock or other lower permeability deposits. Based on this condition, in the Middle Amargosa River Basin, the amount of underflow moving through the system may largely be represented by the sum of Amargosa River flow (as observed in the Amargosa River Canyon), underflow in river channel deposits, spring discharge and evapotranspiration, and the limited pumping in the area.

In the Northern Amargosa River Basin, groundwater is generally found within the basin fill from which most of the groundwater pumping in the Amargosa River Basin is concentrated. In the Ash Meadows area, the primary aquifer is the carbonate rock aquifer system. Groundwater within the carbonate rocks flows laterally across basins as interbasinal flow as described earlier.

The direction of groundwater movement usually parallels the slope of the ground surface, from points of recharge in the higher elevations to points of discharge such as springs or the Amargosa River in the valley. Within the basin fill aquifer, groundwater movement is from north to south from the northern portion of the basin toward Shoshone and Tecopa. A potentiometric surface map of the shallow basin fill aquifer based on the groundwater levels collected by the USGS, AZI, AC, Nye County and Inyo County (by TEAM Engineering & Management, Inc.) during the 4th Quarter of 2010 is provided on Figure 3-7. This is the same map that was provided in the 2011 SOBR. Based on the continued monitoring of groundwater levels in the area since that time, and the little change observed south of Death Valley Junction, this map is likely still consistent with existing conditions.

Precipitation and snowmelt runoff from the mountains surrounding the Middle Amargosa River Basin collect in the thick packages of alluvium that fill the valleys. The water percolates through the alluvium under the force of gravity, flowing downhill towards the lowest point in the Basin, the Amargosa River. Figure 3-8 shows the conceptualized flow paths of groundwater flowing in the alluvial valleys within the Middle Amargosa River Basin. North of Shoshone, groundwater flows south around Eagle Mountain in the alluvium that forms the floor of the valley through which runs the Amargosa River.



The valley and the Amargosa River are additionally fed from runoff from the east slope of the Amargosa Range and the west slope of the Resting Spring Range. Water from the east slope of the Resting Spring Range and the west slope of the Nopah Range flow into Chicago Valley, following the slope of the valley floor to the south. At the south end of the Resting Spring Range, the alluvial valley turns southwest towards Tecopa and the Amargosa River. Right at this bend is Resting Spring, which likely exists as a result of the change in valley direction and the constriction in the width of the alluvium in the valley between the Resting Spring Range and the Nopah Range, forcing groundwater to the surface at the spring location. Water from the southeastern slope of the Nopah Range and the western slope of the Kingston Range flows into California Valley and west around the southern tip of the Nopah Range. Some of this water likely flows down China Ranch Wash, which in turn is the source of the water from Willow Spring and Willow Creek.

Runoff from the eastern Ibox Hills flows into Greenwater Valley toward the Amargosa River. South of the Sperry Hills, runoff from the north facing slope of the Avawatz Mountains, along with the Salt Spring Hills, Saddle Peak Hills and the Ibox Hills flows into the basin fill of Southern Death Valley, down the middle of which runs the Amargosa River.

Based on the results of AZI's spring reconnaissance, it is clear that a number of distinct spring sources are represented in this concentrated part of the Amargosa River Basin. Based on the current isotopic work, the elevated temperatures of the hot springs around Tecopa indicate that the spring water has most likely been at great depth. This is similar to warm springs in the Furnace Creek area of Death Valley National Park (Pistrang and Kunkel, 1964). The Furnace Creek area warm springs are also present along the Furnace Creek Fault Zone where deep circulation is postulated. This indicates that absent shallow heated igneous rocks, those waters moved at considerable depth (in the range of thousands of feet below ground surface) only to move upward along fractures or faults to the surface where it is discharged. In other springs, field water quality parameters are suggestive of groundwater flow of a more local nature such as at Crystal Spring (Kingston Range source) or Sheep Creek Spring (Avawatz Mountains source).

3.4.2 Aquifer Characteristics

Groundwater within the basin is held within the sand, gravel, silt and clay that make up the valley fill aquifer. Within the Northern Amargosa River Basin, hydraulic conductivity (the ability for a geologic material to transmit water) in the basin fill can range from 0.02 feet per day (f/d) in the low permeability clayey deposits, to 140 f/d in the coarse-grained sands and gravels (Belcher, 2004). AZI is unaware of any aquifer testing that has occurred within the basin fill in the Middle Amargosa River Basin or the Death Valley Basin, but it is likely that hydraulic conductivities generally fall within the same range as those described above.

The aquifer characteristics of the carbonate rock aquifer can be highly variable. Where fractures and solution openings exist, these rocks can be the most permeable materials in the basin. Absent fracturing,



hydraulic conductivities can be extremely low. Carbonate rock hydraulic conductivities can range from 30 f/d or greater to much less than 0.001 f/d (Spitz & Moreno, 1996).

3.4.3 Groundwater Basin Inflow Components

Groundwater inflow components within the Amargosa River Basin include recharge from precipitation that falls within the drainage basin and groundwater underflow into the basin, primarily through the carbonate rock aquifer. In this area, large uncertainties exist regarding recharge rates, and currently, groundwater pathways for underflow into the basin. Therefore, best estimates of recharge are probably most available by evaluating groundwater discharge and changes in storage/changing groundwater levels in the area.

3.4.3.1 Recharge

Walker & Eakin (1963) estimated recharge to the Northern Amargosa River Basin from precipitation within the basin plus recharge from precipitation on the northern and western slopes of the Spring Mountains to be approximately 5,000 acre-feet per year (AFY). Within the California portion of the basin, the Middle Amargosa Basin and Death Valley Basin do not have specific recharge estimates associated with them (California Department of Water Resources, 2003).

As part of the water-supply feasibility study for a potable water source for Tecopa, JWI (2013c) estimated a recharge of approximately 700 afy from the Kingston Range using the Maxey-Eakin Method.

3.4.3.2 Groundwater Underflow

Walker & Eakin (1963) estimated that of the 17,000 AFY discharged from the springs at Ash Meadows on an annual basis; approximately 13,000 AFY might be the result of groundwater underflow through the carbonate rocks from the Spring Mountains to the east. The remaining 4,000 AFY being supplied by underflow from areas to the northeast in central Nevada. South of Death Valley Junction, the general absence of previous hydrogeologic investigations in the Shoshone – Tecopa region results in more generalized assumptions regarding underflow. As shown in Figure 3-6, regional groundwater flow enters the California portion of the basin from Ash Meadows and from recharge in the Spring Mountains via various potential routes. Additional underflow from the south from the Silurian Valley area enters the system between the Amargosa River Canyon and Saratoga Springs (Faunt, D’Agnese and O’Brien, 2004).

With respect to the Middle Amargosa River Basin, the existing Death Valley Regional Flow System model could be used to evaluate the groundwater budgets for specific zones in this part of the groundwater system, therefore extracting underflow estimates for each of these areas. However, there would be significant uncertainty associated with them, as the model was developed without the benefit of the data collection effort that has been ongoing for the last three years. With the existing data and proposed data collection and analysis, refinement to that groundwater model, or a new groundwater flow model focused



on the Middle Amargosa River Basin, will be an essential management tool and will likely provide additional insight into the dynamics of regional flow in the area.

3.4.4 Groundwater Basin Outflow Components

3.4.4.1 Spring Flow & Evapotranspiration

Spring flow and evapotranspiration have been combined as a basin outflow component in this basin as in this area as they are unavoidably linked. Groundwater-dependent vegetation (phreatophytes) are present along the Amargosa River and in spring areas. Springs discharge water from the groundwater system, but in nearly all cases within the basin, that flow either evaporates, is used by plants, or percolates back to the groundwater system within a relatively short distance. One of the few exceptions to this is Willow Creek south of Tecopa which rises from spring flow within China Ranch, and generally maintains surface flow to its confluence with the Amargosa River. In the Nevada portion of the basin, the discharge from spring flow and evapotranspiration has been estimated at 23,500 AFY (Walker & Eakin, 1963).

In the Shoshone - Tecopa - Chicago Valley - California Valley area, the combined spring flow and evapotranspiration has been estimated at approximately 8,900 AFY. In the Death Valley Basin, combined spring flow and evapotranspiration has been estimated at approximately 35,000 AFY (San Juan, Belcher, et.al, 2004).

Based on the field reconnaissance activities, it is clear that the springs in the California portion of the basin emanate from a variety of sources. These sources appear to range from those with deep circulation paths (such as Tecopa Hot Springs), and those with shallow and potentially more local circulation paths (such as at Willow Creek). With respect to specific spring flow (not including evapotranspiration or Amargosa River flow), AZI's total field estimated spring flow has typically been approximately 1.8 cfs during the spring reconnaissance activities (approximately 1,300 AFY).

3.4.4.2 Pumpage

Within the Amargosa River Basin, pumpage is primarily within the Northern Amargosa River Basin. This water is largely used for irrigation. Table 3-2 summarizes groundwater pumping from the Northern Amargosa River Basin since 1983 (NDWR, 2012a). This represents the most up to date pumping data available from the Nevada Division of Water Resources at the time of this report. Total pumping over time is also represented on Figure 3-9. Average annual pumping since 1983 has been 12,153 AFY. In 2012, a total of 17,622 AFY was pumped from the basin. As can be seen, over the 27 years of pumping records, the Northern Amargosa River Basin has seen a steady increase in pumping. For comparison purposes the annual duty for the Northern Amargosa River Basin is 27,336.86 AFY (includes certificate, permit, and ready for action) as of February 21, 2012 compared to the estimated annual perennial yield of the basin of 24,000 AFY (Walker and Eakin, 1963). This updated annual duty is a reduction of approximately 1,700 AFY since first reported in the 2011 SOBR (SGI, 2011).



In the Middle Amargosa River Basin and Death Valley Basin, water supplies are more reliant on spring flow, and groundwater pumping is relatively insignificant in comparison to the Nevada portion of the basin. Groundwater pumpage for domestic or public use is probably on the order of less than 100 AFY (San Juan, Belcher, et.al., in Belcher, 2004). Water used for irrigation of date palms is supplied by spring water. It is unlikely that water use in the Shoshone-Tecopa area has changed significantly since the last State of the Basin Report (SGI, 2012). Furthermore, any additional water usage resulting from the proposed new potable water supply for Tecopa will be insignificant to the overall water budget of the area.

Outside of the Amargosa River Basin, pumpage in the Pahrump Valley is of most significance to the Amargosa groundwater system. Pumping records available since 1959 (NDWR, 2012b) indicate that beginning with initial groundwater usage of 1,159 AFY in 1959, groundwater pumping in the Pahrump Valley rapidly increased to a maximum pumpage of 47,950 AFY in 1968 (Figure 3-10). During the period of 1964 through 1978, pumping in the Pahrump Valley averaged more than 37,000 AFY. Since that time, groundwater pumping in the Pahrump Valley has gradually decreased to the point that in 2011, total groundwater pumping in the Pahrump Valley was 13,352 AFY, the lowest pumpage since the initial record in 1959. The 2011 pumping rate (which also represents a 2739 AFY reduction in pumping since 2009) is likely attributable to economic conditions and may represent a temporary decrease from the 20,000 to 25,000 AFY of pumping that has been characteristic of the Pahrump Valley since 1980. In 2012, total pumping in Pahrump Valley was 14,136 AFY, an increase of 784 AFY from 2011.

Groundwater levels in the Pahrump Valley were noted to have declined steadily over the period of record, but of note is that impacts to springs in the Middle Amargosa Basin, particularly in the Shoshone – Tecopa area have not been reported. However, Thompson (1929) referred to a site called Yeoman Spring that had at the time an estimated flow of 90 gpm. Although there is no spring currently called Yeoman Spring, this appears to be the same spring now referred to as Chappo Spring. The only surface expression of flow at Chappo Spring is a “puddle” surrounded by trees (including non-native palms) and shrubs. Additionally, early reports indicated that Resting Springs had flows of substantially more than 200 gpm (up to 250 gpm). Both of these springs flow at rates lower than those reported in the first half of the 1900’s. While this may be the result of spring modification and additional vegetation uptake, it is possible then, that spring flow in the Middle Amargosa Basin may have been effected by past pumping in the Nevada portion of the basin.

Recently, localized stabilization and recovery has been reported in selected areas of Pahrump Valley indicative of a basin beginning to come closer to balance with recently reduced pumping rates.

3.4.5 Groundwater Quality

Groundwater quality in the Amargosa River Basin is highly variable. In recharge areas, the concentrations of dissolved solids in groundwater are low. However dissolved solids will increase as the groundwater moves through the groundwater system and is in contact with the rock materials present. For example,



in the area of Willow Creek, dissolved solids may be high due to the presence of gypsum deposits in the geologic materials through which groundwater in that area is flowing. In the Northern Amargosa River Basin where groundwater pumping is focused, much of the water present is suitable for irrigation (not all of which is suitable for domestic use), however water of medium to high salinity is locally present. Existing groundwater quality data along with those of new wells ARHS-01 through ARHS-04 (and associated well logs) are provided in Appendix G.

3.5 Groundwater in Storage

The volume of groundwater in storage within the basin fill is a function of the area of the aquifer material, a selected saturated thickness, and specific yield (ratio of the volume of water that the aquifer will yield due to gravity to the aquifer's volume) of aquifer material. For the purposes of this report, estimates of groundwater in storage are based on the existing literature. In the Amargosa Basin, the volume of groundwater in storage is orders of magnitude greater than the volume of recharge that occurs on an annual basis representing a groundwater accumulation over thousands of years. Storage calculations are rough estimates as the parameters described above are subject to significant variation.

In the Northern Amargosa River Basin, the volume of groundwater in storage for the Amargosa Desert has been estimated at 1.4 million acre-feet within the upper 100 feet of the saturated basin fill (Walker & Eakin, 1963). Estimates of the volume of groundwater in storage within the Middle Amargosa and Death Valley Basins have not been developed by the State of California.

3.6 Groundwater Levels and Discussion of Inflow and Outflow Components

The volume of groundwater in storage is an important aspect of the groundwater system. Changes in storage are identified in the field by changes in groundwater levels. A fundamental groundwater equation and the basis for evaluations of groundwater budgets (inflow vs. outflow estimates) is:

$$\text{Inflow} - \text{Outflow} = \text{Change in Storage}$$

When outflow exceeds inflow, there is a negative change in groundwater in storage and groundwater levels can be expected to decline. When inflow exceeds outflow, the reverse is true. When the system is in equilibrium, water levels will generally remain relatively constant despite short-term fluctuations. Long-term groundwater level declines are a clear indication that outflow has been exceeding inflow for an extended period of time. It should also be noted that in many areas, the recovery of groundwater levels due to groundwater being removed from storage can take longer than the period to remove it depending on the volume removed from storage, precipitation trends and the geology of the basin.

Taking this one step further, under predevelopment conditions, a groundwater system is in equilibrium, a condition where inflow equals outflow. Groundwater pumping causes a disruption in this equilibrium, and recharge amounts and patterns can change. More often, discharge amounts and patterns are impacted. This includes the loss of phreatophytic vegetation (vegetation whose water requirements are



met by roots tapping groundwater such as in the area of springs) and reduction or elimination of spring flow. All pumped water must be supplied by one or more of the following:

- Decreases in groundwater storage;
- Increased or induced recharge; and
- Decreased discharge either in the form of reduced subsurface outflow or decreases in natural forms of discharge such as evapotranspiration, spring flow or river base flow.

Regardless of the amount of groundwater pumped, there will always be groundwater drawdown (and the removal of water from storage) in the vicinity of pumping wells, a necessity to induce the flow of groundwater to said wells. For most groundwater systems, the change in storage in response to pumping is a transient phenomenon that occurs as the system readjusts to the pumping stress. The relative contributions of changes in storage, increases in recharge, and decreases in natural discharges evolve over time. As an example, upward leakage from the carbonate rock aquifer to the basin fill aquifer has been postulated as early as the 1960's (Walker & Eakin, 1963). Elevated pumping in the basin fill aquifer could induce greater upward leakage from the carbonate rock aquifer that correspondingly could result in reduced spring flow from those carbonate rocks.

If the system can come to a new equilibrium (i.e., a combination of increased recharge and/or decreased discharge), the storage decreases will stop, and inflow will again equal outflow. The amount of groundwater "available" for a future groundwater development project is therefore dependent on what these long-term changes are, and how these changes affect the environmental resources of the area. Numerical models are ideal tools to evaluate these issues in that the complexities of the groundwater system can be evaluated in detail, and assumptions of how the groundwater system works can be tested for internal consistency. Further, with advances in software available to the groundwater professional, the efficiency and associated costs of groundwater modeling have significantly decreased over the last two decades.

Groundwater inflow, outflow and storage estimates were provided where available in the previous sections. Based on a review of limited shallow groundwater levels in the Shoshone – Tecopa area, the groundwater system in the Shoshone and Tecopa area appears stable.

3.7 Future Groundwater Use and Discussion of Groundwater Availability

As shown in Table 3-2 and Figure 3-9, there has been an increased use of groundwater in the Nevada portion of the Amargosa Basin over the past 25 years. The potential for future development will be limited by both quantity and quality of water. However, as can be seen by the active duty for the Northern Amargosa River Basin, there is significant potential for pumping to increase considerably should water rights holders fully exercise their water rights. Given the over-allocated nature of the Northern Amargosa River Basin, significant impacts to the groundwater resource could result if that condition occurred. These uses are anticipated to increase due to future population growth, and the likely future addition of



groundwater usage for solar energy development. Although wet cooling solar projects are not anticipated, groundwater usage for processes such as mirror washing will still be needed.

The incremental increase of solar projects within the region could result in a significant steepening of the increased trend in groundwater usage. The competing demands for renewable energy and protection of the Amargosa River point to the need for increased knowledge and baseline hydrologic data in the Middle Amargosa River Basin. Recommendations for future investigations are provided in Section 4.0 of this report.



4.0 RECOMMENDATIONS FOR WILD & SCENIC RIVER MANAGEMENT

Given the regional nature of the groundwater source that feeds the Wild and Scenic Amargosa River, it is clear that an effective monitoring program for the WSR will include sites well away from the River. Although the management plan will be for a specific water course, the unique hydrology and the expansive area that contributes to the river through complex groundwater flowpaths would make purely river-centric monitoring of limited value. Based on the results of current and past work, decreases in groundwater level and associated underflow in the northern Amargosa basin and Pahrump Valley (both in Nevada) could affect springs in the Middle Amargosa Basin and the Amargosa River fed by those springs.

The Amargosa River Basin, which spans two states, three counties and one National Park, exists as one of the most important desert waterways in the southwestern United States. Both the groundwater and surface water in the basin support a unique and diverse ecosystem, while also supporting human needs through domestic, agricultural, wildlife, stock-watering, mining and other industrial uses. As the river is a groundwater-fed surface water body, relatively small variations in the groundwater surface elevation can have considerable effects on the ability for the river to maintain surface flow. While the Nevada portion of the basin has been well-studied, primarily as a result of hydrologic studies centered on the Nevada Test Site and the Yucca Mountain Project, until recently the California portion of the basin has seen little in the way of regional hydrogeologic investigations. Therefore, it is essential that a monitoring program be incorporated into management of the WSR that identifies changes in the groundwater system, prior to the Amargosa River being impacted.

In the Northern Amargosa River Basin groundwater is already over-allocated. Although pumping does not currently take place at the full amount entitled to by water rights holders, considerable impacts to the groundwater reservoir and associated springs could occur should those holders eventually fully exercise their water rights. Groundwater usage within the Northern Amargosa River Basin has steadily increased over the past 25 years, and the addition of a new industry to the area (solar) will likely provide additional pressure on the groundwater resource. Also as groundwater usage increases in the Northern Amargosa River Basin, it is conceivable then that groundwater flow into the Middle Amargosa River Basin could decrease. Given the importance of the alluvial aquifer to many of the springs in the Middle Amargosa River Basin, this issue is of key importance to sustaining the Amargosa River.

In 2009, the Amargosa River between Shoshone and the terminus of the Amargosa Canyon received Wild and Scenic status through an act of Congress. As a result, the BLM is charged with developing a management plan for the Wild and Scenic portion of the River. It is essential that hydrogeologic characterization of the California portion of the basin continue to take place in order for that management plan, and its associated management recommendations, to have a firm basis, and to assure that monitoring is conducted in a meaningful way to identify potential impacts to the river and its feeder springs before irreversible impacts from future groundwater development occur. Based on the results of the current



and past hydrologic work along the Amargosa River, the following sections highlight technical needs that should be incorporated into a management plan for the Amargosa WSR.

4.1 Monitoring

Monitoring forms the basis for any water management activities in that it is impossible to manage any resource without a basis for what that resource comprises. The recommendations provided below contain provisions for both automated monitoring techniques and regular field monitoring. In desert areas where river channel or spring conditions can radically change as the result of one summer thunderstorm, having regular field observations taking place is key to not only monitor the resource, but to assure that automated data collection devices are working correctly (and to perform maintenance) and that physical conditions on the ground have not changed to the extent that automated data collection is compromised (e.g. river changing course and stream gage station no longer accurately measuring flow).

As described in Section 3.0, flow along the Amargosa River will be highly sensitive to changes in groundwater level. Generally, water rises to the surface of the river channel where constrictions are encountered forcing water to the surface. Groundwater monitoring will therefore be an essential component to river management. Additionally, infestation of non-native vegetation such as tamarisk will also have a negative effect on river flow and spring flow where it is present at spring discharge points. Visual monitoring of vegetation, particularly for the presence of tamarisk or other water-using, non-native vegetation will be a key component of river management.

AZI makes the following monitoring recommendations:

- **Spring Discharge, Water Level, Precipitation and Seepage Run Monitoring** - Flow discharge and groundwater elevation measurements should continue and be collected on a regular basis from the existing suite of springs and wells being monitored in addition to new wells. Seepage run monitoring should continue to be conducted periodically (at least three times per year) on the stretch of River from Tecopa to the Dumont Dunes area and should continue to consist of the existing five distinct monitoring locations (including the two USGS gauges, and three manual monitoring points). Basic field water quality data should be collected at all discharge, elevation and seepage run monitoring points.
- **Groundwater Level Measurements** should be collected regularly, preferably with pressure transducer/data logger installations at all existing (currently in place) and future monitoring wells. The existing monitoring wells (ARHS-01 through ARSH-04) should continue to be monitored as part of the Wild and Scenic Monitoring Program for the following reasons:
 - ARHS-01- North of Shoshone – identification of changes in groundwater level north of Shoshone Spring area resulting from pumping in northern part of basin;
 - ARHS-02- Willow Creek – identification of changes in groundwater level that may affect the most important tributary to the Wild and Scenic Amargosa River;



- ARHS-03 – Twelvemile Spring – Identification of changes in groundwater level that may indicate reduced movement of groundwater from Pahrump Valley beneath northern portion of Nopah Range; and,
- ARHS-04 – “Married Man’s Camp” - identification of changes in groundwater level that may affect Willow Creek above the Willow Creek station.

Other wells to be monitored will include those new wells listed for future installation in Section 4.2.

- **Visual Monitoring** – Photographic and video (where applicable) documentation should be collected from specific locations to identify noticeable changes in the spring and river environments. This will assist in identification of tamarisk or other non-native vegetation encroachment that could affect river and spring flows. Additionally, periodic cross-checking with aerial imagery should be conducted to identify changes to areas not specific to monitoring sites.
- **Groundwater Usage** – Monitoring existing and proposed groundwater usage throughout the basin both in Nevada and California will be a key monitoring component protective of the WSR.

4.2 Additional Investigation

Currently, there is insufficient information to develop a groundwater budget for the Middle Amargosa River Basin or for that matter to specifically identify recharge locations for specific springs. Attempting to evaluate groundwater recharge and groundwater underflow into the basin will be difficult both from a technical standpoint and in funding what would be a major investigative endeavor. Therefore, the most logical means to evaluate the groundwater budget for the Middle Amargosa River Basin will be to develop a firm understanding of the various groundwater discharge components including evapotranspiration (including spring flow), subsurface underflow beyond Salt Creek and analyzing associated groundwater level trends. The recommendations for additional investigations are based on AZI’s experience in the Amargosa Basin and elsewhere, from M.L. Davisson & Associates, Inc., and from the USGS (2013, 2014).

Based in the results of current investigative work, and in order to accomplish the larger goals of the project, the following lines of investigation to refine the conceptual model for the Middle Amargosa Basin should be considered fall into three categories including; 1) monitoring well installation to improve our understanding of the system and provide protective monitoring points; 2) additional investigation for sourcing of springs and the river; and 3) additional investigations to better understand the overall system.

- **Additional Piezometer/Monitoring Well Installation** – Up to 13 piezometers/monitoring wells (wells) should be installed to further evaluate the conceptual model of this part of the Amargosa Basin with an emphasis on understanding groundwater flow paths; and for supplemental monitoring to evaluate baseline groundwater conditions and identification of impacts to groundwater levels in the future should they occur. AZI anticipates the wells would



consist of both shallow (assumed depth of 25 feet below ground surface (ft bgs)) and deep (assumed depth of up to 200 ft bgs) wells. We anticipate wells in the following general locations:

- One deep well in the alluvial aquifer between Eagle Mountain and Shoshone (anticipated depth to groundwater in this area is approximately 200 ft bgs);
- Two shallow wells along the Amargosa River between Shoshone and Tecopa;
- Two monitoring wells along the Amargosa River south of the Amargosa River Canyon (one near the site of Sperry and the other at the end of the graded dirt road north of Dumont Dunes);
- One shallow well along the Amargosa River near Tecopa and the USGS Amargosa River gaging station there;
- Four deep wells in the area northeast, east and southeast of Tecopa to evaluate flow coming from Chicago Valley and the Kingston Range, and,
- Up to three monitoring wells in California Valley / Southwest Pahrump Valley to evaluate connectivity between the two valleys.

Deep monitoring wells in the carbonate rock aquifer would be particularly helpful in evaluating flow paths and refining the conceptual model. However, they would also be costly. At this time, as it is anticipated that most future groundwater production will occur in the basin fill aquifer, a focus on monitoring wells in the basin fill is recommended here. Should sufficient funding become available for the installation of deep monitoring wells that could penetrate the carbonate rock aquifer in a meaningful way, locations that should be considered would be at Twelvemile Spring; ARHS-01 north of Shoshone, and in the Death Valley Junction/Eagle Mountain area.

- **Geochemical Sampling of New Piezometers/Monitoring Wells** - Water samples should be collected from new wells and analyzed for a specific suite of constituents, including field parameters, general chemistry, anions, cations, a comprehensive suite of trace metals, and selected stable/non-stable isotopes as presently being conducted with the exception of tritium which would no longer be analyzed.
- **Low-levels Metals Analysis** – Although metals analysis has been conducted at springs in the Middle Amargosa Basin, many of the metals are not detectable at standard laboratory detection limits. Metals suites can be quite informative to understanding the relationship between waters, so this would entail specialized analysis to obtain metals concentration information at substantially lower detection limits than typically conducted.
- **Radiocarbon Dating and Chlorofluorocarbons (CFCs) Analysis** – Carbon-13 and Carbon-14 analysis along with CFCs to age date waters, particularly in light of the results of the current analysis. Measuring radiocarbon abundance of spring water in the Amargosa River Valley with



the lowest helium ratios would indicate either high flux along faults or whether waters are very old.

- **Measure additional $^3\text{He}/^4\text{He}$ ratios** – Between Ash Meadows and Tecopa area to provide a continuum of ratios with downgradient distance and would facilitate the development of a groundwater age model.
- **Analysis of Salts in Discharge Areas** – To identify elements in discharge areas that may be introduced into spring waters at specific discharge points and their solubilities that may alter the chemical makeup of waters. This would provide comparative data to spring water containing high concentrations of total dissolved solids to determine if this is a viable mechanism to explain spring water compositions.
- **Geophysical Investigations** – Geophysical surveys in the vicinity of Tecopa to evaluate faulting in the vicinity of the thermal springs. Additional surveys north of ARHS-01 to evaluate the geologic connectivity between the northern portion of the basin and the area south of Eagle Mountain. This would also help inform our understanding of monitoring results in that area.
- **Installation of Four Precipitation Stations** – To evaluate areal and elevation variations in precipitation in the area (for greater understanding of the water budget of the area and to provide information useful in distributing recharge in the numerical groundwater flow model) and to refine our understanding of recharge sources and the effects of precipitation events on groundwater-level fluctuations, four precipitation stations should be installed at the following locations:
 - The south flank of Eagle Mountain;
 - Twelvemile Spring;
 - Saratoga Spring; and
 - Horsethief Spring (in the Kingston Range).

Precipitation samples could be collected from these stations (particularly the Kingston Range station) to evaluate recharge sources. These precipitation stations would also provide key data for any future investigations on effects of climate change on the Amargosa River and its feeder springs. These locations (along with the existing station in Tecopa) provide good areal coverage and spanning a wide elevation range (from approximately 200 ft msl to 4,600 ft msl). Permitting would be required by the BLM and Death Valley National Park (for Saratoga Spring). At this time, it is planned that data downloading would be accomplished during quarterly events as part of the hydrologic monitoring. It is anticipated that NOAA-II precipitation gages would be installed, manually serviced, and fitted with data loggers and flash memory data collection modules. The stations would be able to account for snow water content which would be of



particular importance at the Kingston Range location (Horsethief Spring area). Precipitation stations would be secured by fencing.

4.3 Development of River Management Tool

The development of a refined numerical groundwater flow model for the Middle Amargosa Basin area should be developed as a management tool upon which to base future water management decisions. Ideally, the model would be created using the industry standard program MODFLOW originally developed by the USGS. The model should be developed in a means (e.g., using standard format files) that allows such a tool to be used efficiently and cost-effectively by groundwater professionals fluent in groundwater flow modeling representing governmental, non-profit and for profit private sector constituents and stakeholders. This will enable all future projects to be evaluated using the same tool which is useable in a timely, cost effective manner.

4.4 Periodic Updating of Technical Requirements

Best Management Practices (BMPs) for future groundwater development projects in the Amargosa River region should be established that are focused on protection of the Wild and Scenic Amargosa River. The monitoring proposed is a starting point. With additional monitoring wells as listed in Section 4.2 and additional investigations being conducted, the monitoring program will likely need to adapt to meet our growing knowledge of how the Amargosa River system works. The Wild & Scenic management plan then will need to be a dynamic plan, able to guide the management of the river with our ever growing knowledge of how it works and sustains its fragile ecology.



5.0 CONDITIONS AND LIMITATIONS

This report has been prepared according to generally accepted standards of hydrogeologic practice in California at the time this report was prepared. Findings, conclusions, and recommendations contained in this report represent our professional opinion and are based, in part, on information developed by other individuals, corporations, and government agencies. The opinions presented herein are based on currently available information and developed according to the accepted standards of hydrogeologic practice in California. Other than this, no warranty is implied or intended.



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FIGURES

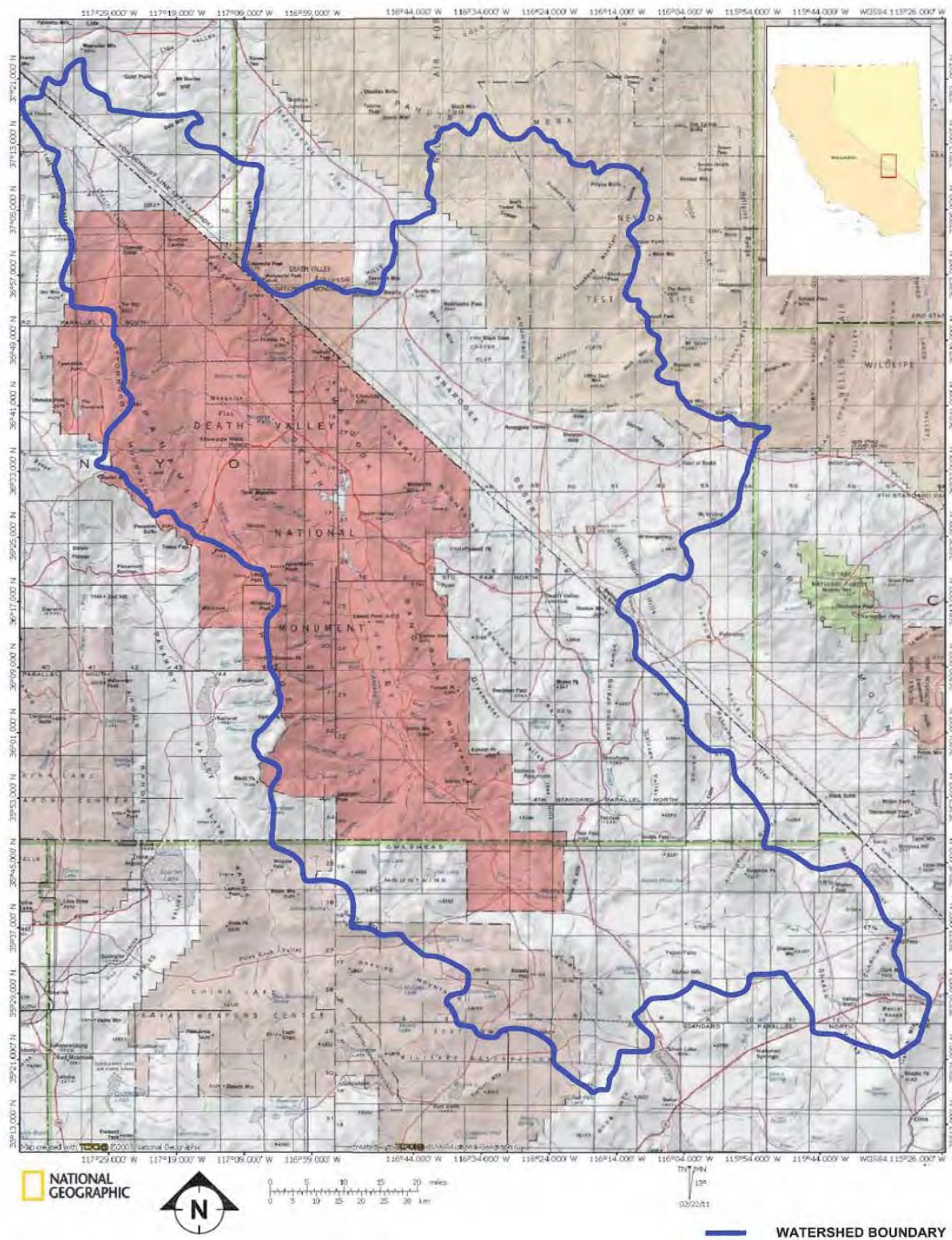


Figure 1-1. Location of Amargosa River Drainage Basin

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Figure 2-2
Spring Location Map

Legend

- Spring Location

Scale: 1" = ~6 miles

Date: June 3, 2014
 Project: TNC – Amargosa
 Image Source: Google Earth

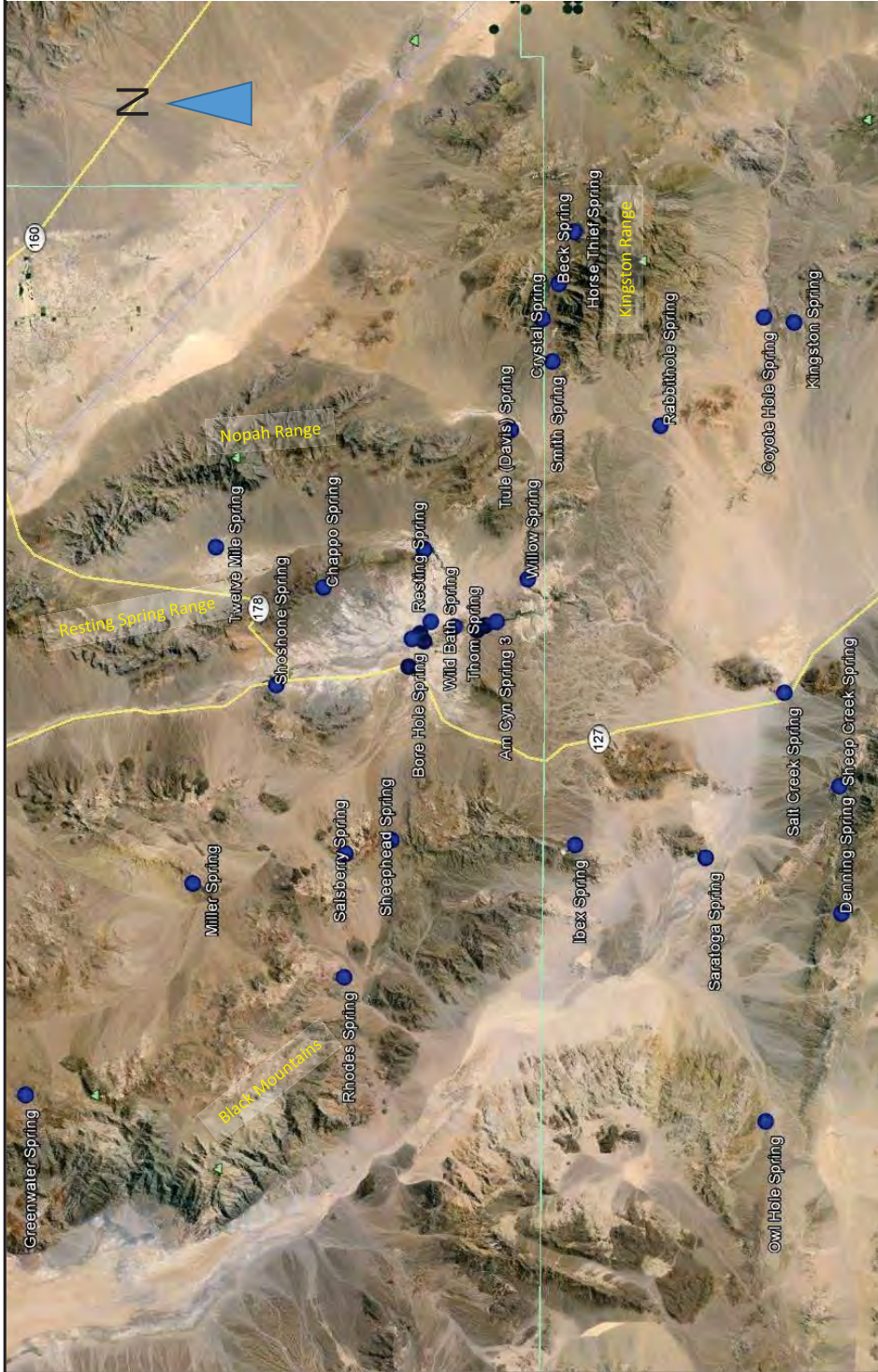
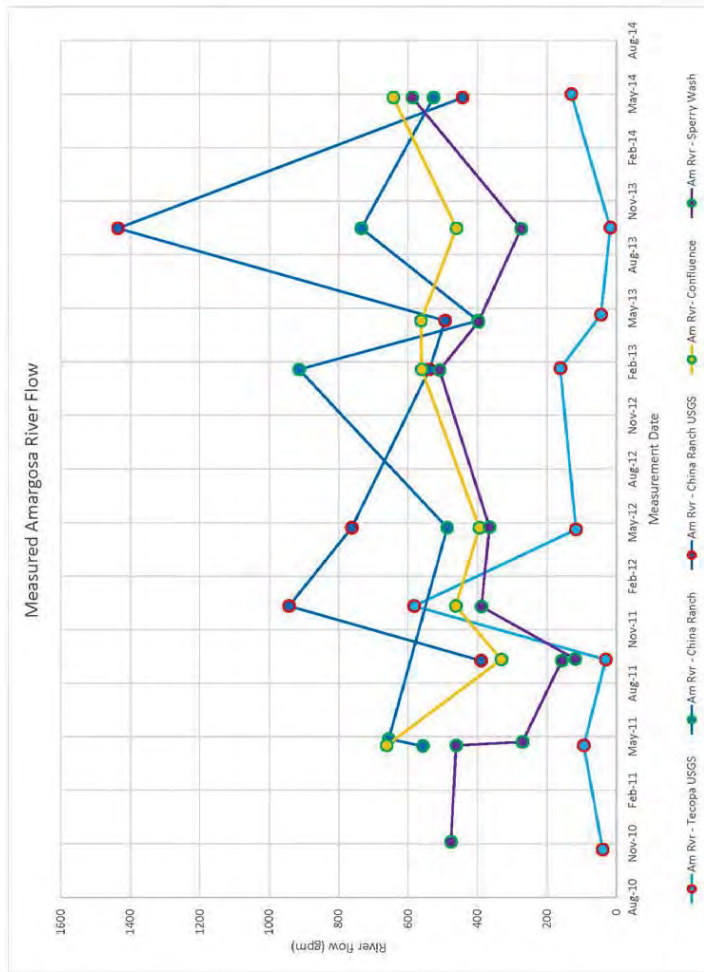




Figure 2-4

Amargosa River Hydrographs
Periodic Monitoring Data



Date: June 23, 2014
Project: TNC – Amargosa

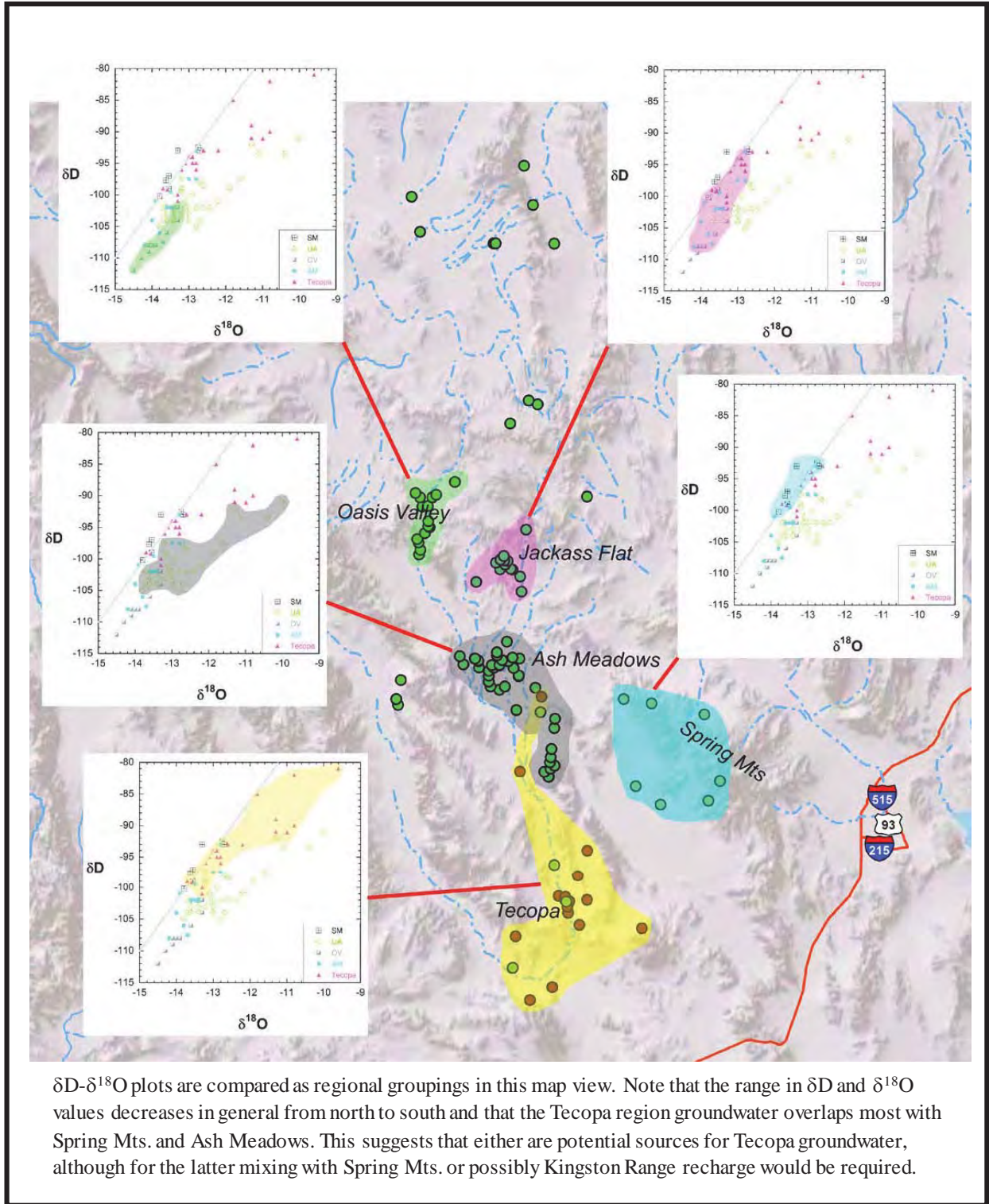




Figure 2-5 Passive Diffusion Sampler
Used for Noble Gas Sampling

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δD-δ¹⁸O plots are compared as regional groupings in this map view. Note that the range in δD and δ¹⁸O values decreases in general from north to south and that the Tecopa region groundwater overlaps most with Spring Mts. and Ash Meadows. This suggests that either are potential sources for Tecopa groundwater, although for the latter mixing with Spring Mts. or possibly Kingston Range recharge would be required.

Figure 2-6 Regional Stable Isotope Groupings

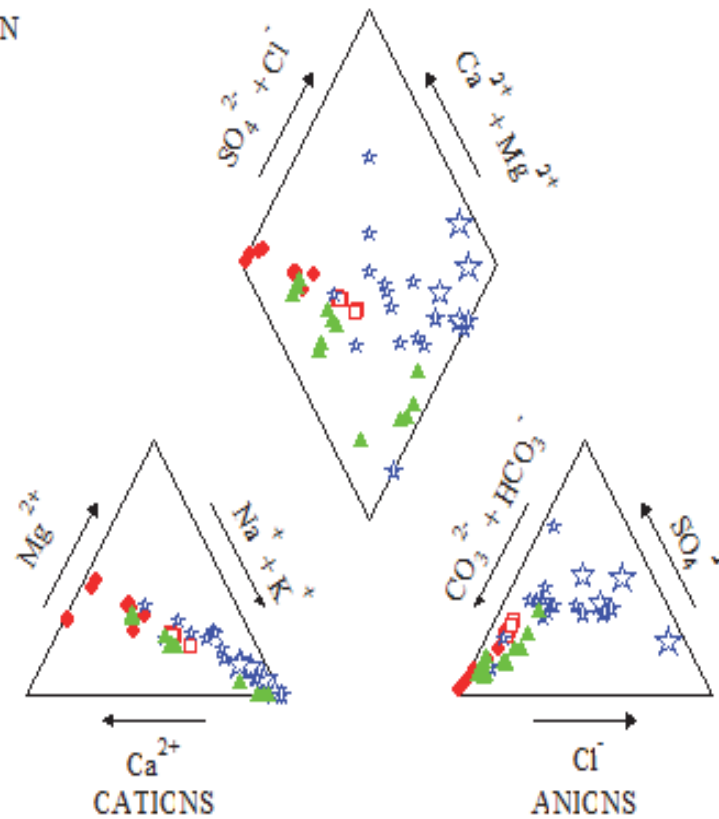
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Regional Carbonate, NTS, and Amargosa River Valley

EXPLANATION

- ◆ 200
- 5100

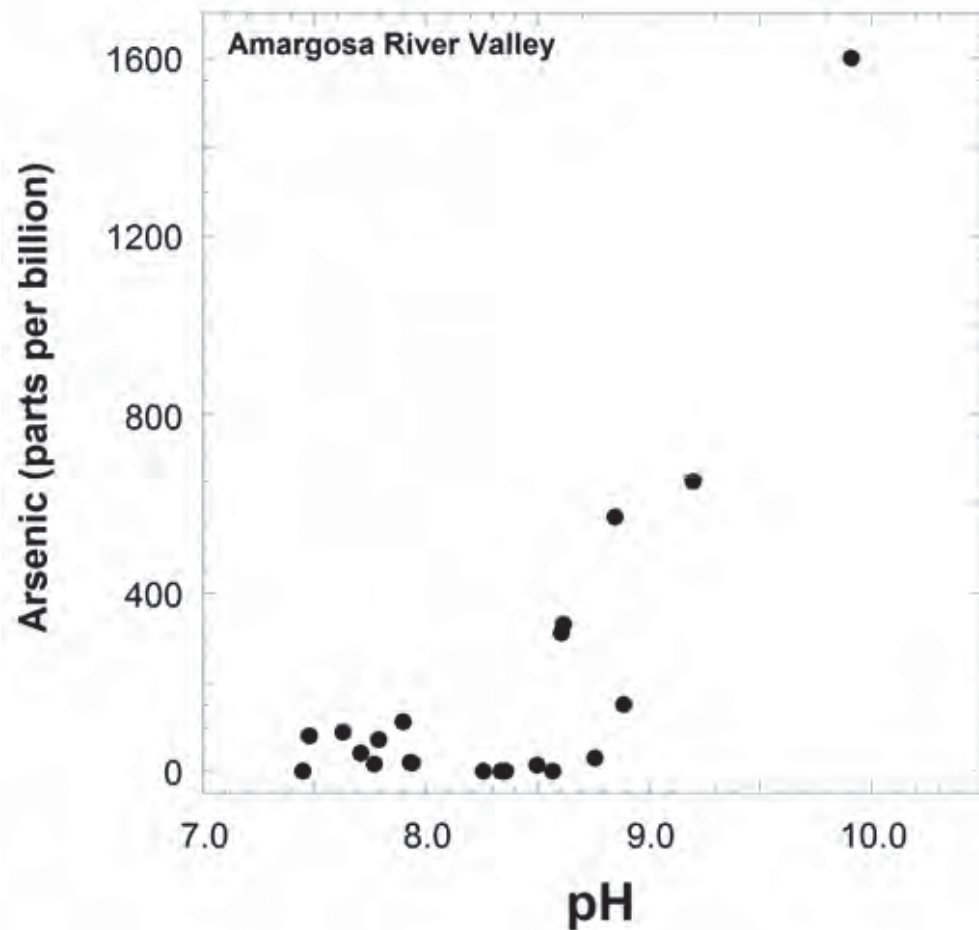


Piper plot comparing cation and anion relative concentrations in groundwater of the regional carbonate aquifer (red circles), Ash Meadows (open red squares), Nevada Test Site (green triangles), and Amargosa River Valley (open blue stars). Note that between the regional carbonate aquifer and the Amargosa River Valley groundwater, water quality changes from Ca-Mg-HCO₃ type toward Na-K-HCO₃-Cl-SO₄ type accompanied by increased salinity.

Figure 2-7 Piper Plot for Amargosa Region Waters

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Arsenic solubility increases with increasing pH as illustrated by groundwater in the Amargosa River Valley region. The ultimate source of arsenic is not known but could be associated with the Tecopa lake beds deposits.

Figure 2-8 Arsenic and pH Relationships, Middle Amargosa Waters

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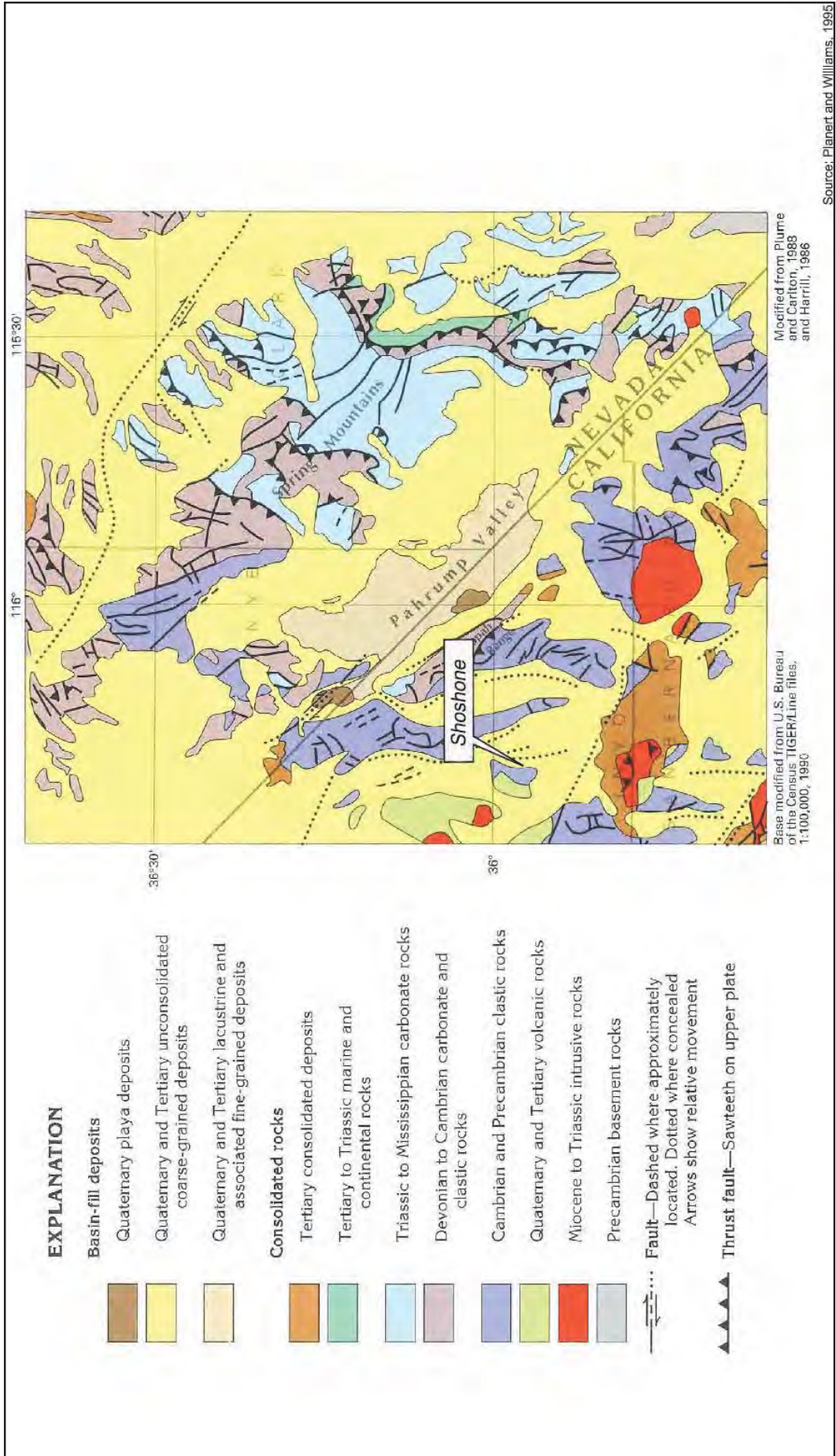


Figure 3-1. Regional Geologic Map

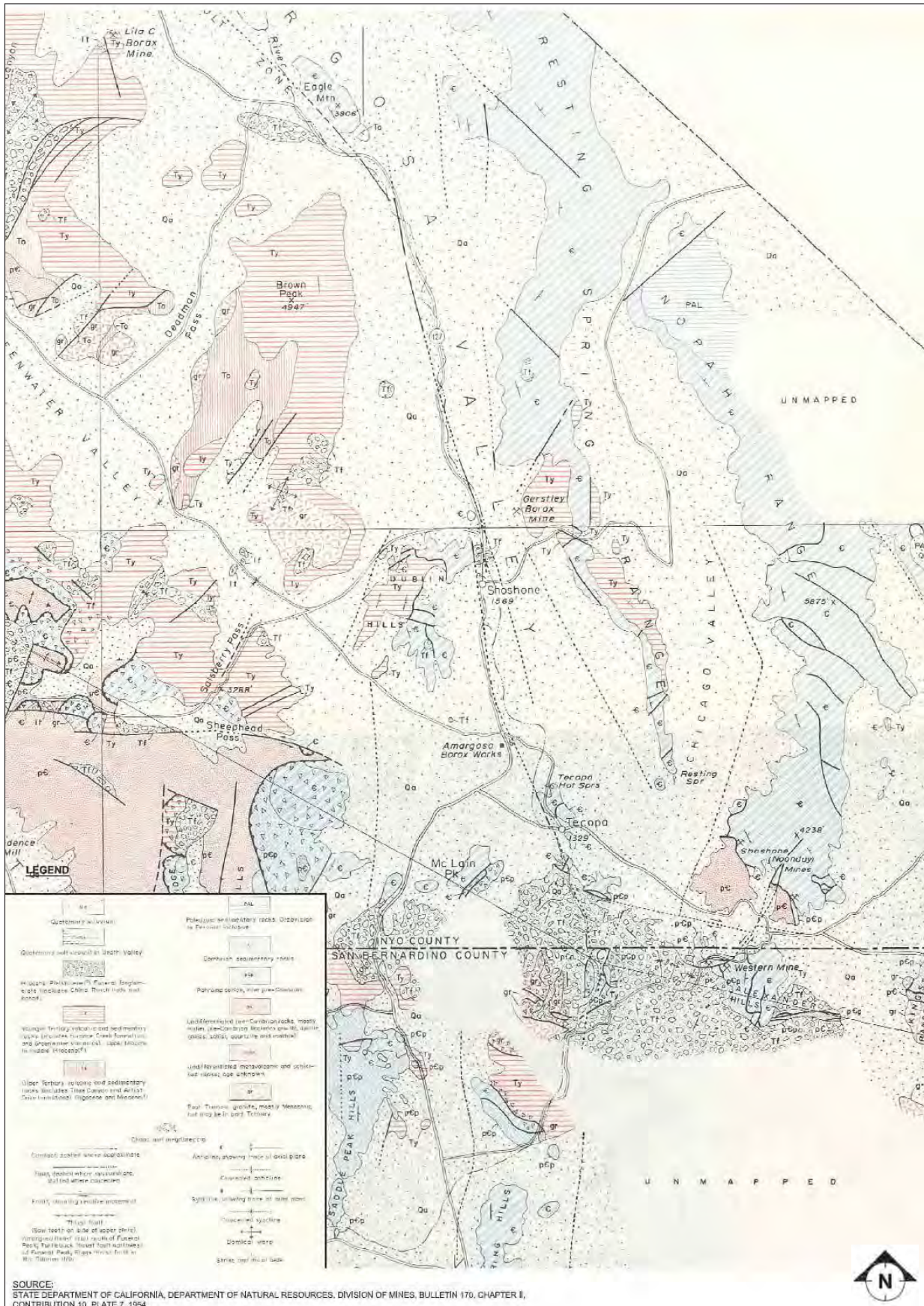


Figure 3-2. Geology of the Shoshone-Tecopa Area

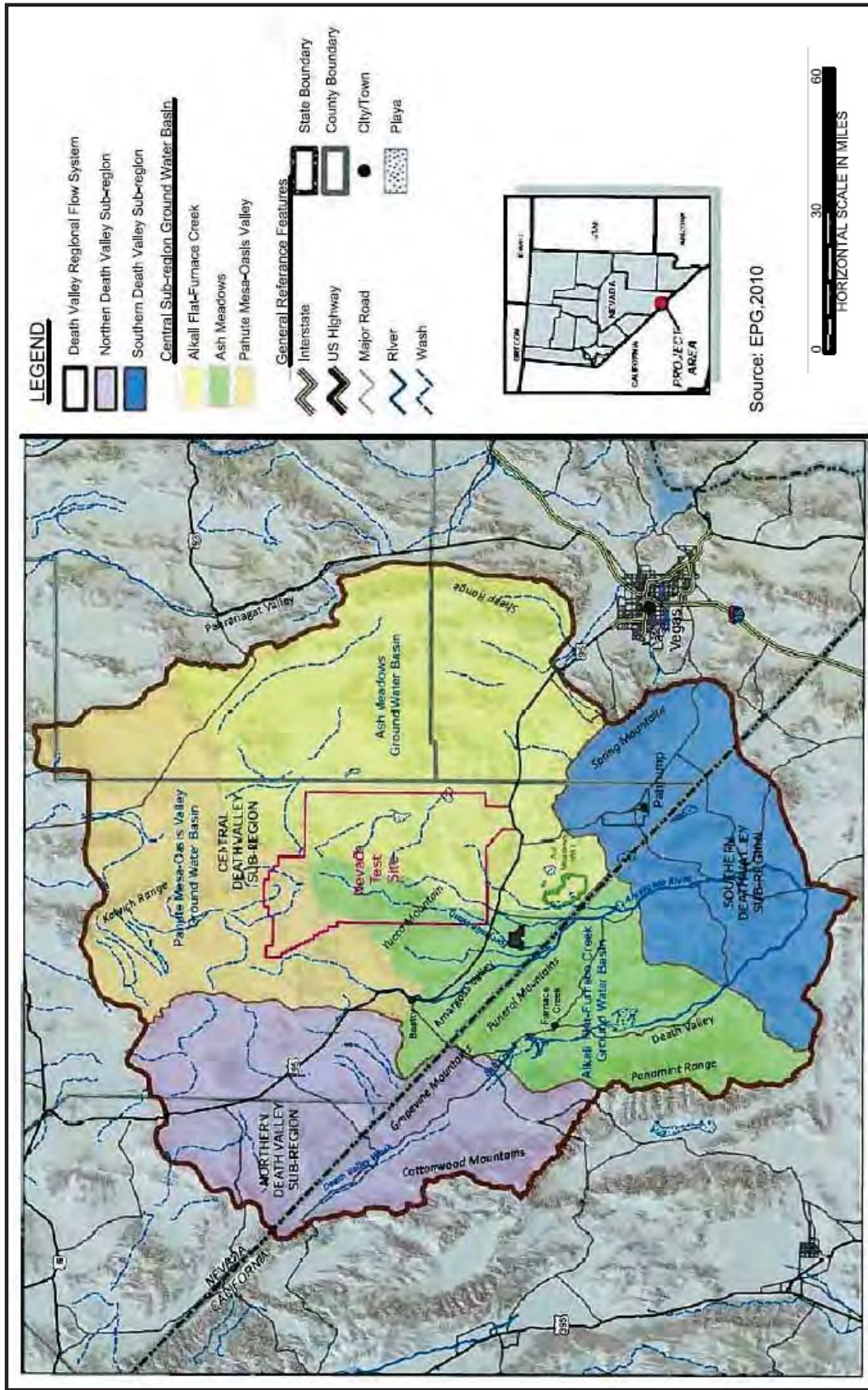


Figure 3-3. Extent of the Death Valley Regional Flow System

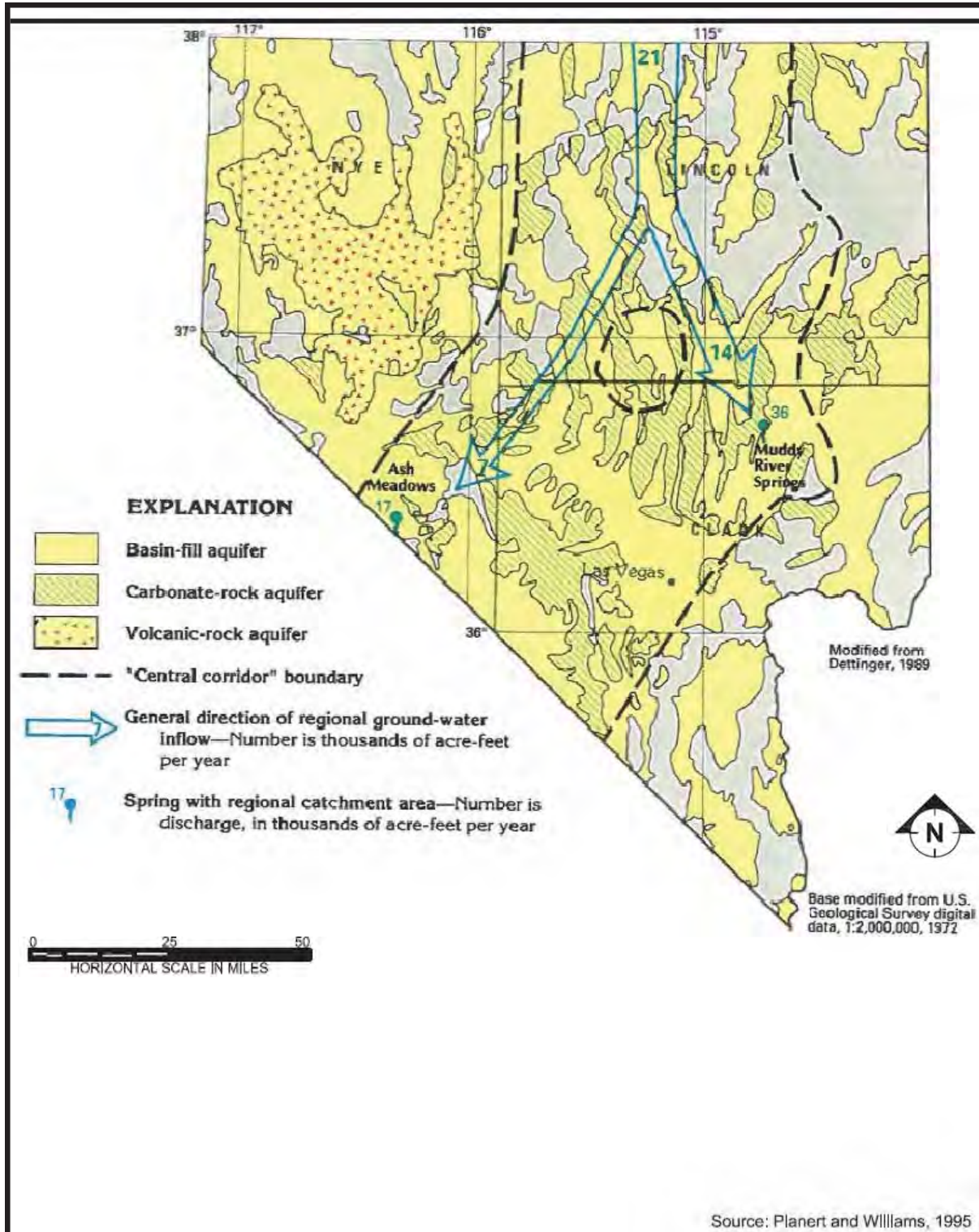


Figure 3-4. Paths for Regional Groundwater Flow
 – Nevada Portion of Basin

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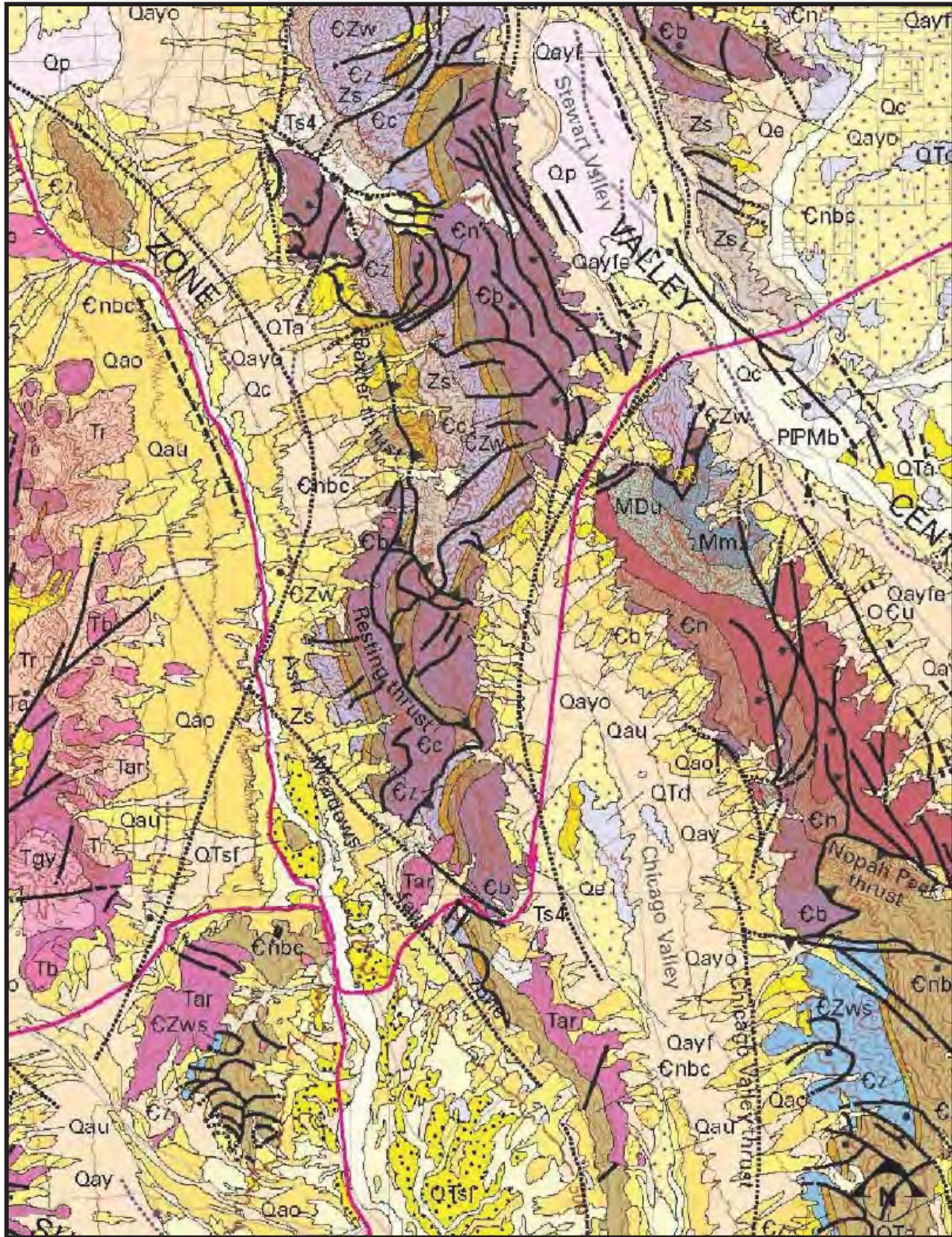
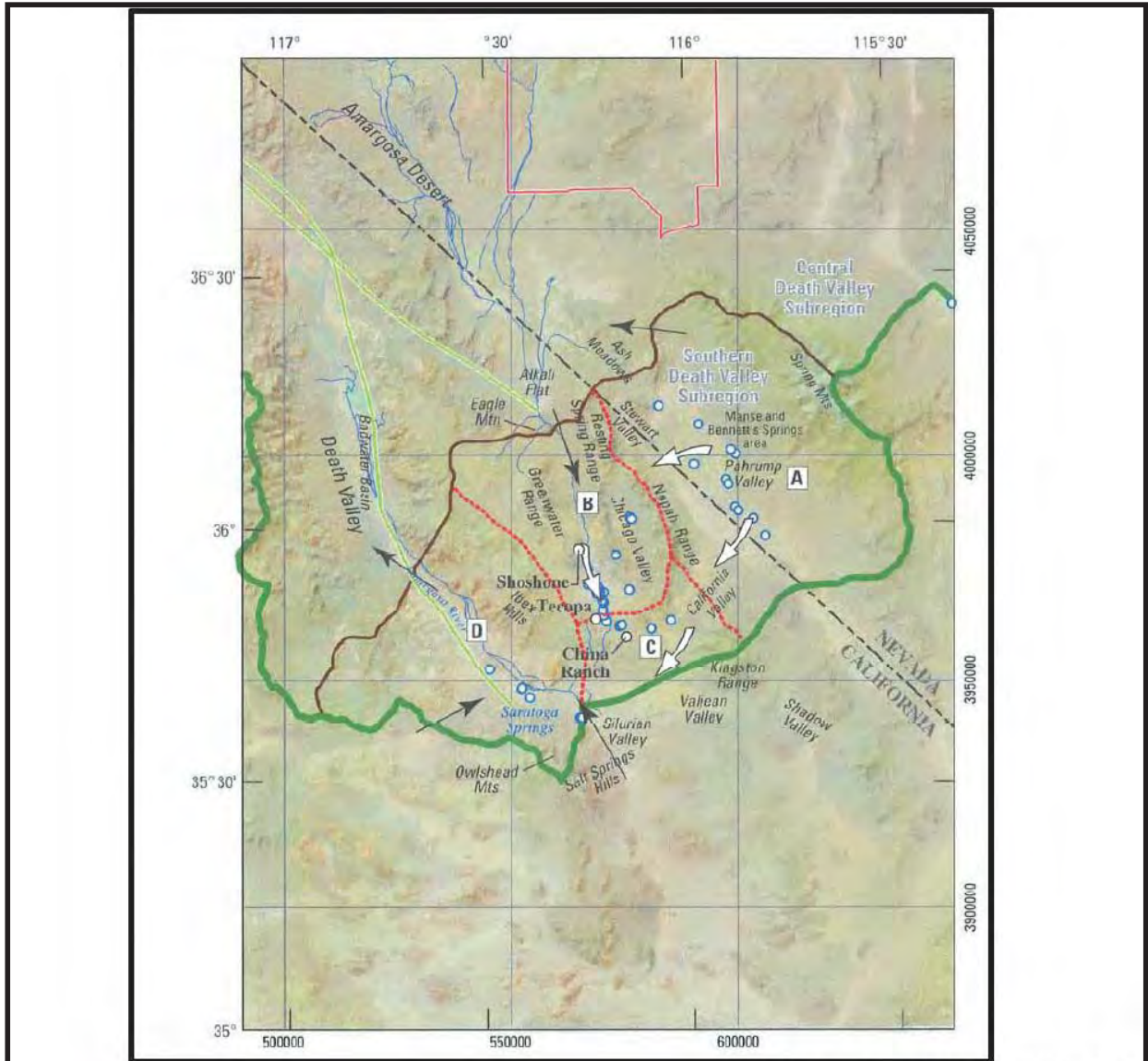


Figure 3-5. Geology of Chicago Valley Area
(Workman 2002)

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Source: Faunt, D'Agnese, O'Brian, 2004

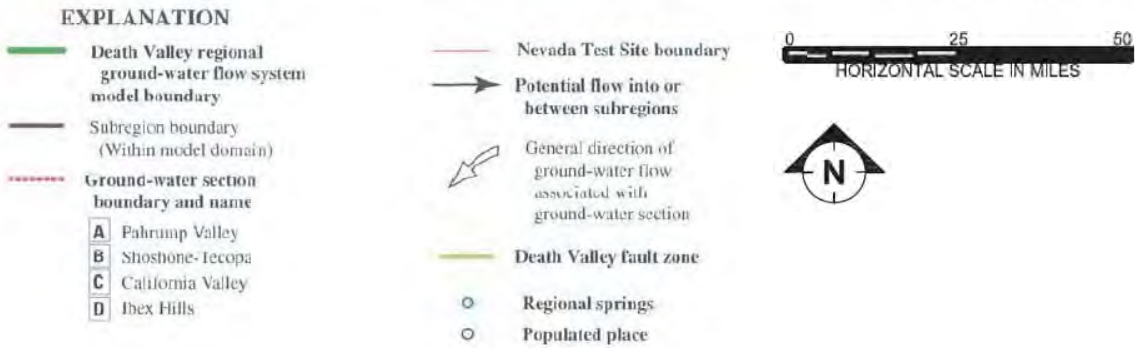


Figure 3-6. Paths for Regional Groundwater Flow – Middle Amargosa River and Death Valley Basins

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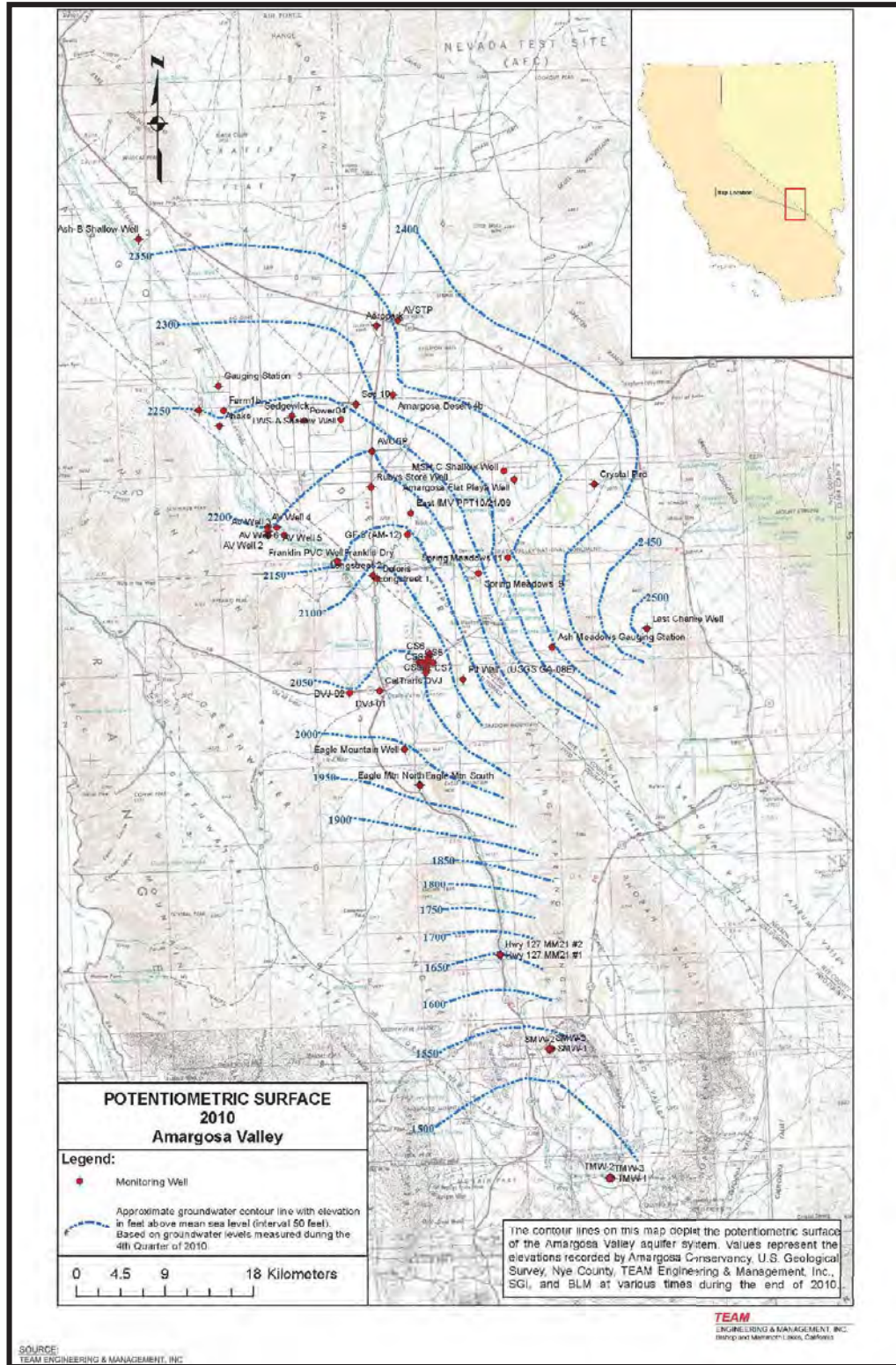


Figure 3-7. Potentiometric Surface Map –
4th Quarter 2010

ANDY ZDON &
ASSOCIATES, INC.



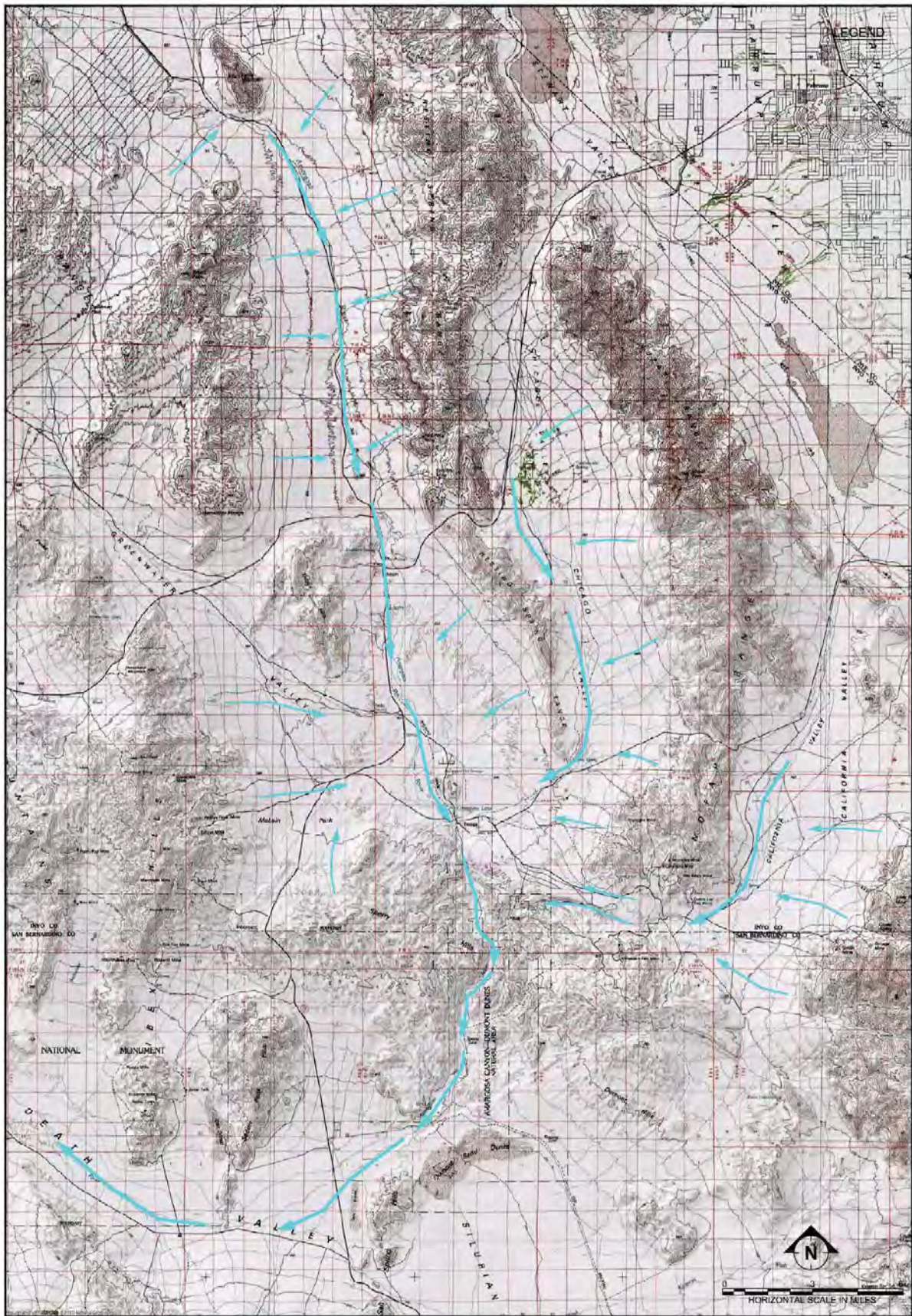
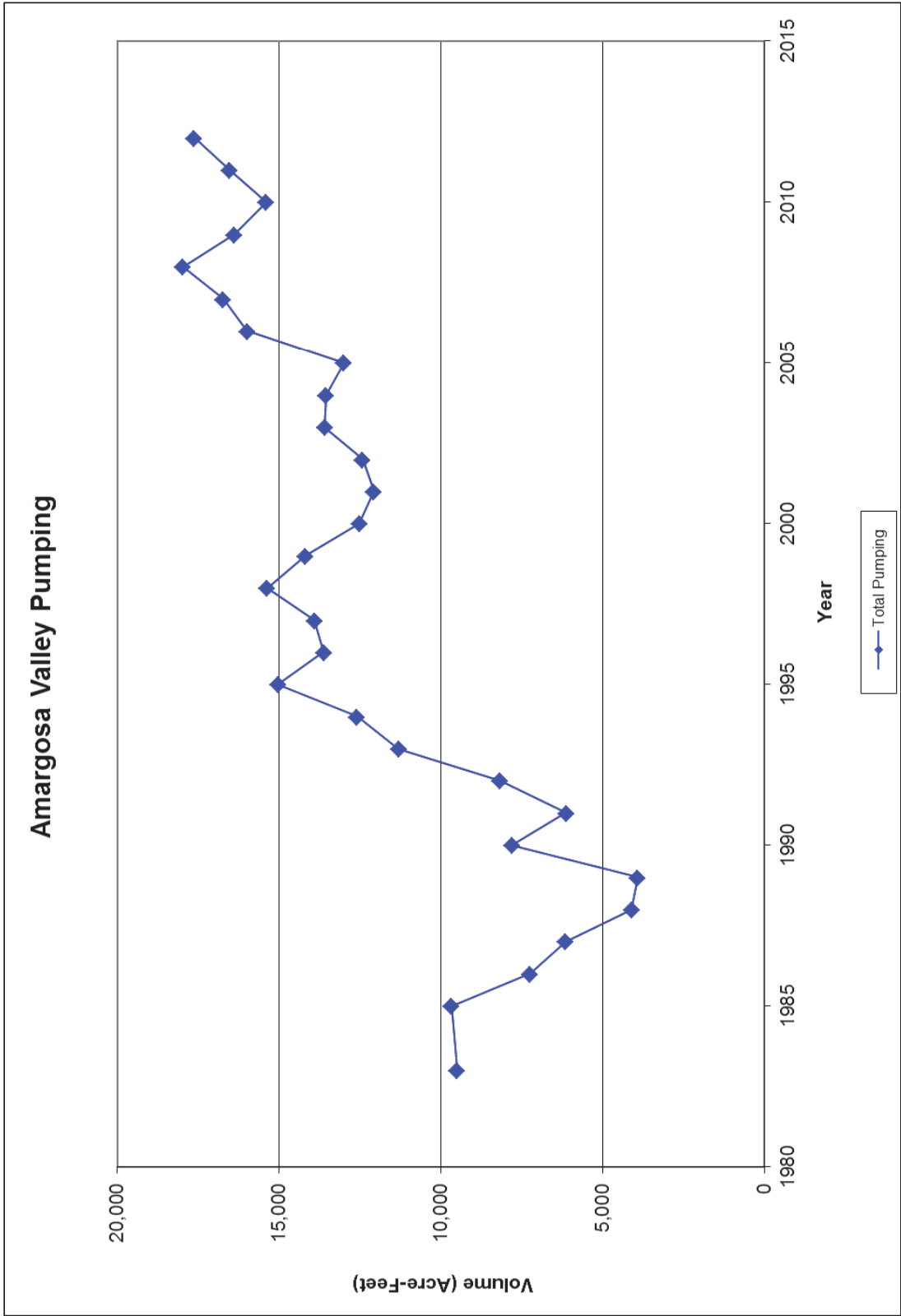
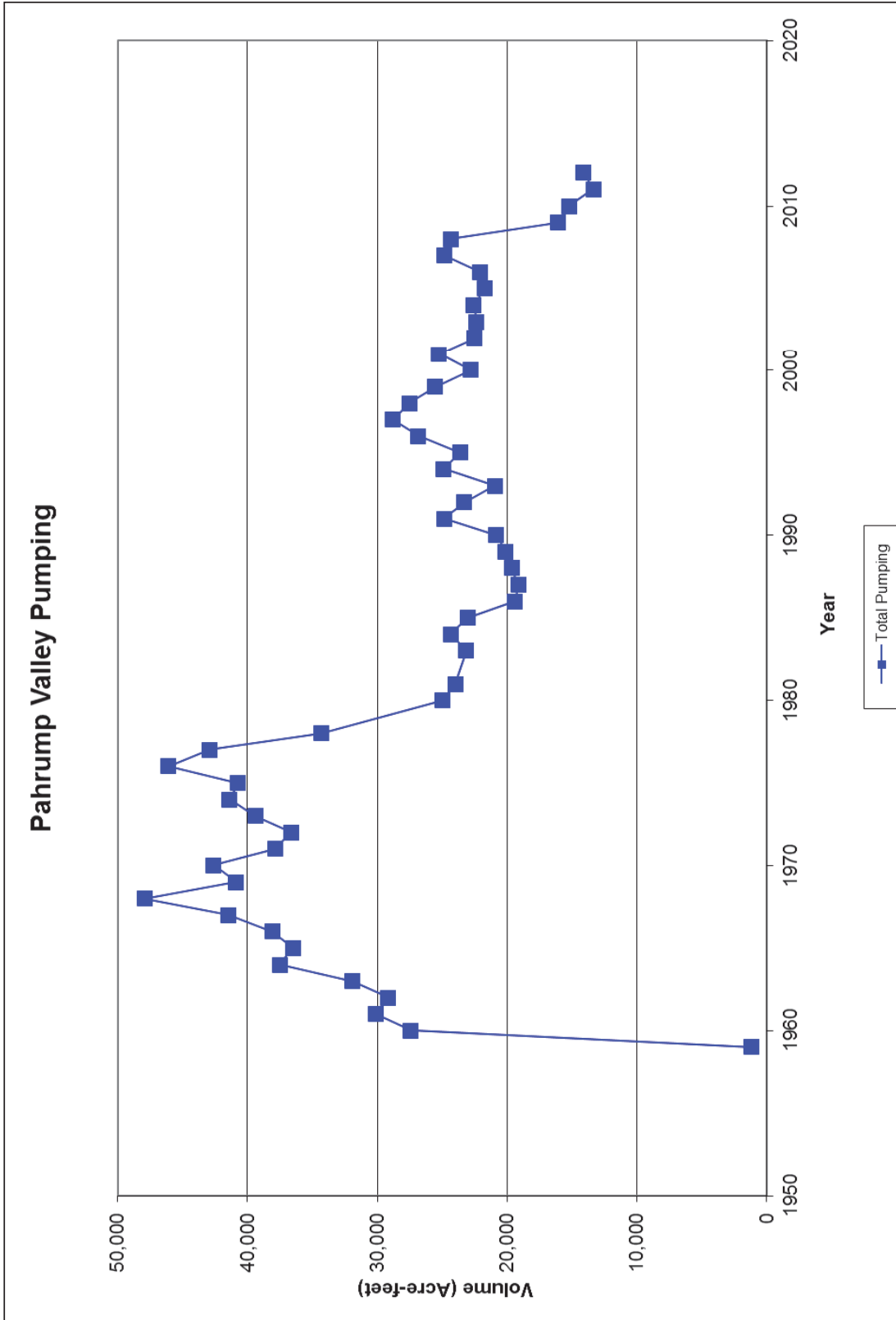


Figure 3-8. Conceptual Shallow Alluvium Flow Paths Within the Middle Amargosa River Basin



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Figure 3-9. Pumping vs. Time, Amargosa Desert Area, Nevada



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Figure 3-10. Pumping vs. Time, Pahrump Valley, Nevada

TABLES

Table 2-1
Field Reconnaissance Data Summary
 Amargosa Basin
 California/Nevada

Name	Date of Visit	Latitude	Longitude	Elevation (ft amsl)	Flow (gpm)	Flow Measurement Method*	Temp. (deg C)	Spec. Cond. (mS/cm-deg C)	TDS (mg/L)	DO (mg/L)	pH	ORP (mV)	Notes
Springs													
Amargosa Canyon Spring 1	11/17/2010	35.83937	116.22399	1,294	38	meter	23.22	1,053	685	7.42	7.93	105.3	North end of Amargosa Canyon in burned area
Amargosa Canyon Spring 1	4/25/2011	35.83937	116.22399	1,294	--	--	22.46	1,029	669	8.62	7.94	253.5	North end of Amargosa Canyon in burned area
Amargosa Canyon Spring 1	5/11/2011	35.83937	116.22399	1,294	66.1	bucket	--	--	--	--	--	--	North end of Amargosa Canyon in burned area
Amargosa Canyon Spring 1	9/21/2011	35.83937	116.22399	1,294	40.5	bucket	25.79	1,076	700	7.74	8.12	-42.4	North end of Amargosa Canyon in burned area
Amargosa Canyon Spring 1	12/22/2011	35.83937	116.22399	1,294	78	meter	18.73	1,009	666	7.96	8.22	77.4	North end of Amargosa Canyon in burned area
Amargosa Canyon Spring 1	5/1/2012	35.83937	116.22399	1,294	67.7	bucket	23.27	1,073	363	9.28	8.33	18.7	North end of Amargosa Canyon in burned area
Amargosa Canyon Spring 1	1/26/2013	35.83937	116.22399	1,294	80.2	bucket	21	1,274	828	12.32	8	61.7	North end of Amargosa Canyon in burned area
Amargosa Canyon Spring 1	4/19/2013	35.83937	116.22399	1,294	83.4	bucket	22.44	1,02	663	8.4	7.67	-106.5	North end of Amargosa Canyon in burned area
Amargosa Canyon Spring 1	9/25/2013	35.83937	116.22399	1,294	61	bucket	23.74	0,886	576	5.09	7.85	-180.4	North end of Amargosa Canyon in burned area
Amargosa Canyon Spring 1	5/6/2014	35.83937	116.22399	1,294	72.4	bucket	22.3	1,348	878	7.29	8.17	68.2	North end of Amargosa Canyon in burned area
Amargosa Canyon Spring 3	1/2/2011	35.82701	116.21942	1,262	30	visual	16.74	1,698	1,104	9.68	8.51	186.4	Southern most Amargosa Canyon spring
Amargosa Canyon Spring 3	4/25/2011	35.82701	116.21942	1,262	25-30	visual	21.1	1,506	979	9.51	8.37	261.8	Southern most Amargosa Canyon spring
Amargosa Canyon Spring 3	9/21/2011	35.82701	116.21942	1,262	16	meter	25.79	1,597	1,035	8.57	8.26	-17.8	Southern most Amargosa Canyon spring
Amargosa Canyon Spring 3	5/6/2014	35.82701	116.21942	1,262	10.4	bucket	20.9	1,861	1,229	8.88	8.55	58.5	Southern most Amargosa Canyon spring
Amargosa Canyon Spring 4	1/12/2011	35.8348	116.2226	1,382	25	visual	26.05	0,915	596	8.07	8.34	182.2	Amargosa Canyon spring emanating from east canyon wall
Amargosa Canyon Spring 4	4/25/2011	35.8348	116.2226	1,382	--	--	26.25	1.24	809	8.63	8.13	242.1	Amargosa Canyon spring emanating from east canyon wall
Amargosa Canyon Spring 4	5/11/2011	35.8348	116.2226	1,382	7.7	bucket	--	--	--	--	--	--	Amargosa Canyon spring emanating from east canyon wall
Amargosa Canyon Spring 4	9/21/2011	35.8348	116.2226	1,382	8.1	bucket	28.2	1,347	876	7.32	8.16	-18	Amargosa Canyon spring emanating from east canyon wall
Amargosa Canyon Spring 4	12/22/2011	35.8348	116.2226	1,382	9.1	bucket	26.15	1,273	828	7.34	8.33	111.3	Amargosa Canyon spring emanating from east canyon wall
Amargosa Canyon Spring 4	5/1/2012	35.8348	116.2226	1,382	7	bucket	26.11	1.22	795	9.93	8.6	28.4	Amargosa Canyon spring emanating from east canyon wall
Amargosa Canyon Spring 4	1/26/2013	35.8348	116.2226	1,382	7.9	bucket	26.39	1,537	999	9.42	8.31	55.2	Amargosa Canyon spring emanating from east canyon wall
Amargosa Canyon Spring 4	4/19/2013	35.8348	116.2226	1,382	7	bucket	26.64	1,333	867	8.4	7.86	-106.1	Amargosa Canyon spring emanating from east canyon wall
Amargosa Canyon Spring 4	9/25/2013	35.8348	116.2226	1,382	7	bucket	27.73	1.1	714	5.44	8.16	-168.5	Amargosa Canyon spring emanating from east canyon wall
Amargosa Canyon Spring 4	5/6/2014	35.8348	116.2226	1,382	-10	visual	26.4	1.64	1066	7.04	8.52	38.1	Amargosa Canyon spring emanating from east canyon wall
Beck Spring	11/19/2010	35.78359	115.9322	4,439	5	visual	17.91	0.54	351	3.97	7.14	161.6	Amargosa Canyon spring emanating from east canyon wall
Borax Spring	1/12/2011	35.88804	116.25789	1,342	6.8	bucket	30.53	3,019	1,963	0.61	9.91	-296.7	Located in the Kingston Range
Borax Spring	5/5/2011	35.88804	116.25789	1,342	6.9	bucket	--	--	--	--	--	--	
Borax Spring	9/21/2011	35.88804	116.25789	1,342	5.9	bucket	30.51	2,981	1,938	1.71	10.14	-404.7	
Borax Spring	4/30/2012	35.88804	116.25789	1,342	5.7	bucket	30.52	2.74	1,781	3.2	10.31	-217.1	pipe cracked on casing
Borax Spring	1/28/2013	35.88804	116.25789	1,342	5.8	bucket	30.02	3,451	2,242	0.99	10.08	-107.5	pipe cracked on casing
Borax Spring	4/18/2013	35.88804	116.25789	1,342	6.1	bucket	30.44	2,985	1,940	0.49	9.45	-307.2	pipe cracked on casing
Borax Spring	9/23/2013	35.88804	116.25789	1,342	6.1	bucket	30.14	2,498	1,624	0.07	9.74	-324.8	pipe cracked on casing
Borax Spring	5/12/2014	35.88804	116.25789	1,342	8.1	bucket	29.8	3,234	2,100	0.27	10.02	-260.2	pipe cracked on casing
Bore Hole Spring	11/11/2010	35.88608	116.23416	1,356	20	visual	47.77	4,156	2,704	2.28	8.62	141.4	Likely part of Tecopa Hot Spring system
Bore Hole Spring	5/2/2011	35.88608	116.23416	1,356	20	visual	43.98	4,176	2,711	1.95	8.71	109.5	Likely part of Tecopa Hot Spring system
Bore Hole Spring	9/21/2011	35.88608	116.23416	1,356	26.2	meter	47.48	4,202	2,731	1.31	8.68	-74.6	Likely part of Tecopa Hot Spring system
Bore Hole Spring	4/30/2012	35.88608	116.23416	1,356	90	bucket	47.68	3.89	2529	0.16	8.93	-13.3	Likely part of Tecopa Hot Spring system
Bore Hole Spring	1/25/2013	35.88608	116.23416	1,356	105	meter/visual	46.83	4,852	3,157	1.62	8.85	29.6	Likely part of Tecopa Hot Spring system
Bore Hole Spring	9/24/2013	35.88608	116.23416	1,356	81	meter/visual	47.75	3,571	2,323	0.46	8.47	-240	Likely part of Tecopa Hot Spring system
Bore Hole Spring	5/10/2014	35.88608	116.23416	1,356	148	USGS*	46.3	4,453	2,899	1.1	8.71	44.5	Likely part of Tecopa Hot Spring system
Chiappo Spring	11/12/2010	35.94723	116.18992	1,989	<5	visual	24.52	0.755	508	0.92	7.48	48.9	
Chiappo Spring	5/1/2011	35.94723	116.18992	1,989	<5	visual	23.23	0.755	481	3.81	7.81	82.6	
Chiappo Spring	5/9/2014	35.94723	116.18992	1,989	<5	visual	26.6	0.996	650	0.83	7.47	82.7	
Crystal Spring	11/19/2010	35.79503	115.96176	3,808	<5	visual	21.09	0.632	411	4.23	7.45	165.6	Located in the Kingston Range
Crystal Spring	4/26/2011	35.79503	115.96176	3,808	13.5	bucket	21.18	0.61	397	5.72	7.52	257.5	Located in the Kingston Range
Crystal Spring	9/22/2011	35.79503	115.96176	3,808	9.5	bucket	21.38	0.67	414	5.12	7.29	-0.4	Located in the Kingston Range
Crystal Spring	12/22/2011	35.79503	115.96176	3,808	8.3	bucket	21.3	0.607	395	4.26	7.45	153.1	Located in the Kingston Range
Crystal Spring	4/30/2012	35.79503	115.96176	3,808	5.9	bucket	21.19	0.586	381	6.06	7.61	34.2	Located in the Kingston Range
Crystal Spring	1/25/2013	35.79503	115.96176	3,808	6.8	bucket	20.96	0.732	476	5.68	7.43	50.1	Located in the Kingston Range
Crystal Spring	4/21/2013	35.79503	115.96176	3,808	5.4	bucket	21.19	0.638	415	5.26	6.93	-100.5	Located in the Kingston Range

Table 2-1
Field Reconnaissance Data Summary
 Amargosa Basin
 California/Nevada

Name	Date of Visit	Latitude	Longitude	Elevation (ft amsl)	Flow (gpm)	Flow Measurement Method*	Temp. (deg C)	Spec. Cond. (mS/cm-deg C)	TDS (mg/L)	DO (mg/L)	pH	ORP (mV)	Notes
Crystal Spring	9/24/2013	35.79503	115.96176	3,808	7.1	bucket	21.52	0.538	349	3.51	7.3	-192.7	Located in the Kingston Range
Crystal Spring	5/4/2014	35.79503	115.96176	3,808	4.3	bucket	21.2	0.949	--	3.54	7.43	--	Located in the Kingston Range
Dodge City Spring	5/4/2014	35.88018	116.29255	1,387	-20	visual	23	4.302	2785	8.2	8.79	80.4	Located near Tecopa Hot Springs
Five Springs	1/18/2011	36.46457	116.3193	2,349	30	bucket	34.44	0.923	336	3.86	7.77	107.1	Located in Ash Meadows
Five Springs	5/1/2011	36.46457	116.3193	2,349	28.6	bucket	34.52	0.693	454	4.44	7.6	179.3	Located in Ash Meadows
Five Springs	5/4/2013	36.46457	116.3193	2,349	22.1	bucket	34.52	0.664	432	5.26	7.68	30.1	Located in Ash Meadows
Five Springs	1/24/2013	36.46457	116.3193	2,349	23.8	bucket	34.18	0.826	536	4.68	7.69	38.6	Located in Ash Meadows
Five Springs	4/24/2013	36.46457	116.3193	2,349	23.8	bucket	34.41	0.718	467	4.18	7.25	-105.3	Located in Ash Meadows
Five Springs	9/23/2013	36.46457	116.3193	2,349	21	bucket	34.55	0.607	395	2.83	7.31	-195.6	Located in Ash Meadows
Five Springs	5/5/2014	36.46457	116.3193	2,349	23.5	bucket	34.3	0.873	566	3.83	7.59	97.3	Located in Ash Meadows
Horse Thief Spring	11/19/2010	35.77294	115.88824	4,637	5	visual	16.04	0.444	288	2.86	6.94	158.1	Located in the Kingston Range
Horse Thief Spring	4/26/2011	35.77294	115.88824	4,637	10.1	bucket	15.31	0.436	284	6.91	7.37	269	Located in the Kingston Range
Horse Thief Spring	9/22/2011	35.77294	115.88824	4,637	7.9	bucket	17.61	0.473	308	2.26	7.04	22.8	Located in the Kingston Range
Horse Thief Spring	12/22/2011	35.77294	115.88824	4,637	8	bucket	17.26	0.441	287	3.63	6.96	124.6	Located in the Kingston Range
Horse Thief Spring	4/30/2012	35.77294	115.88824	4,637	8.8	bucket	16.72	0.429	279	3.96	7.2	62	Located in the Kingston Range
Horse Thief Spring	1/25/2013	35.77294	115.88824	4,637	--	--	16.71	0.54	351	<4	6.7	60	Located in the Kingston Range
Horse Thief Spring	4/18/2013	35.77294	115.88824	4,637	--	--	16.64	0.5	326	2.54	6.47	-108.6	Located in the Kingston Range
Horse Thief Spring	9/24/2013	35.77294	115.88824	4,637	--	--	17.86	0.401	261	1.69	6.84	-218.4	Located in the Kingston Range
Horse Thief Spring	5/4/2013	35.77294	115.88824	4,637	10	visual	16.8	0.573	--	1.7	6.95	--	Located in the Kingston Range
Ibex Spring	11/4/2010	35.77211	116.4111	1,133	no flow	visual	18.78	2.486	1617	0.88	8.76	30.5	
Ibex Spring	4/24/2011	35.77211	116.4111	1,133	no flow	visual	16.35	2.234	1452	2.99	7.98	114.4	
Ibex Spring	5/11/2014	35.77211	116.4111	1,133	no flow	visual	16.7	2.327	1515	2.4	8.44	108.3	
Owl Hole Spring	11/16/2010	35.63931	116.64766	1,911	no flow	visual	17.01	4.098	2684	0.29	6.86	-73	
Owl Hole Spring	5/1/2014	35.63931	116.64766	1,911	no flow	visual	13.7	7.543	4901	1.06	7.49	116.2	
Resting Spring	1/23/2011	35.87728	116.15757	1,767	150	bucket	26.84	0.923	600	5.82	8.36	157.8	
Salsberry Spring	1/10/2011	35.93162	116.4182	3,410	5	visual	2.35	0.935	386	13.01	8.24	181.8	Spring water mixed with runoff from melting snow and ice
Salt Spring	11/5/2010	35.62622	116.28041	550	<5	visual	20.48	6.514	4235	0.74	7.94	-176.9	
Salt Spring	5/10/2011	35.62622	116.28041	550	<5	visual	19.46	8.944	5814	5.79	7.7	196.2	
Salt Spring	5/1/2014	35.62622	116.28041	550	<5	visual	26.3	10.429	6793	8.34	8.3	124.5	
Saratoga Spring	11/4/2010	35.6809	116.42354	207	unknown	visual	28.8	4.73	3075	2.49	7.71	259.1	
Sheep Creek Spring	11/5/2010	35.58963	116.36047	1,719	5	visual	23.1	0.614	400	8.57	9.02	62.5	
Sheep Creek Spring	4/24/2011	35.58963	116.36047	1,719	5	visual	21.4	1.216	789	7.67	7.78	188.2	
Sheephead Spring	11/17/2011	35.89979	116.40629	3,253	2	visual	11.58	0.818	531	8.59	8.22	169.8	
Shoshone Spring	1/23/2011	35.98056	116.27384	1,611	250+	meter	33.54	1.624	1056	3.75	7.79	162.7	This is from the Shoshone Spring source
Shoshone Spring	5/1/2014	35.98056	116.27384	1,611	104**	bucket	33.51	1.477	960	6.77	7.68	16.7	This is from the Shoshone Spring source
Shoshone Spring	1/29/2013	35.98056	116.27384	1,611	--	--	33.31	1.847	1201	5.85	7.66	30.7	This is from the Shoshone Spring source
Shoshone Spring	5/2/2013	35.98056	116.27384	1,611	--	--	33.47	1.601	1040	4.5	7.41	-97.1	This is from the Shoshone Spring source
Shoshone Spring	9/25/2013	35.98056	116.27384	1,611	--	--	33.62	1.35	878	2.55	7.23	-182.1	This is from the Shoshone Spring source
Shoshone Spring	5/15/2014	35.98056	116.27384	1,611	--	--	32.3	1.831	1190	2.99	7.51	149.4	This is from the Shoshone Spring source
Smith Spring	11/19/2010	35.78814	115.99752	3,066	-1	visual	21.41	0.451	293	5.36	7.81	86.9	Data from flow out of spring box
Smith Spring	4/26/2011	35.78814	115.99752	3,066	2-3	visual	--	--	--	--	--	--	Data from flow out of spring box
Smith Spring	5/9/2014	35.78814	115.99752	3,066	diy	visual	--	--	--	--	--	--	Data from flow out of spring box
Tecopa Hot Spring	11/11/2010	35.8789	116.23812	1,332	6**	bucket	40.76	4.306	2799	0.84	8.61	120.7	Sample from Amargosa Conservancy Trailer spring outlet
Tecopa Hot Spring	9/21/2011	35.8789	116.23812	1,332	5.1**	bucket	38.85	6.4	4100	2.74	9.18	-170.1	Sample from Amargosa Conservancy Trailer spring outlet
Tecopa Hot Spring	4/30/2012	35.8789	116.23812	1,332	4.9**	bucket	41.2	3.525	2311	3.84	8.96	20	Sample from Amargosa Conservancy Trailer spring outlet
Tecopa Hot Spring	1/29/2013	35.8789	116.23812	1,332	5.4**	bucket	38.02	5	3250	3.48	8.37	32.9	Sample from Amargosa Conservancy Trailer spring outlet
Tecopa Hot Spring	9/23/2013	35.8789	116.23812	1,332	5.3**	bucket	41.38	3.675	2389	1.7	8.43	-237.4	Sample from Amargosa Conservancy Trailer spring outlet
Tecopa Hot Spring	5/10/2014	35.8789	116.23812	1,332	-5	visual	40.6	4.598	2990	0.23	8.71	60.7	Sample from Amargosa Conservancy Trailer spring outlet
Thorn Spring	11/11/2010	35.85661	116.22677	1,408	5	visual	24.81	1.571	1021	2.77	7.63	148.3	Data from flowing water within the vegetation
Thorn Spring	4/30/2012	35.85661	116.22677	1,408	-2	visual	24.9	1.478	960	3.66	6.79	74.9	Data from flowing water within the vegetation
Thorn Spring	1/28/2013	35.85661	116.22677	1,408	<5	visual	28.63	1.819	1182	2.8	7.73	32.9	Data obtained near modified outflow

Table 2-1
Field Reconnaissance Data Summary
 Amargosa Basin
 California/Nevada

Name	Date of Visit	Latitude	Longitude	Elevation (ft amsl)	Flow (gpm)	Flow Measurement Method*	Temp. (deg C)	Spec. Cond. (mS/cm-deg C)	TDS (mg/L)	DO (mg/L)	pH	ORP (mV)	Notes
Thom Spring	4/30/2013	35.85661	116.22677	1,408	<5	visual	27.96	1.601	1.04	1.83	7.2	-141.5	Data obtained near modified outflow
Thom Spring	9/25/2013	35.85661	116.22677	1,408	<5	visual	29.09	1.34	87.1	1.13	7.35	-209.9	Data obtained near modified outflow
Thom Spring	5/5/2014	35.85661	116.22677	1,408	<5	visual	27.8	1.889	12.29	0.93	7.55	83	Data obtained near modified outflow
Twainville Spring	11/14/2010	36.02172	116.15531	2,240	no flow	visual	19.23	0.8	520	1.38	7.66	-141	Data from shallow puddle
Wild Bath Spring	11/11/2010	35.87277	116.21932	1,424	1.7	bucket	29.88	1.642	1067	4.69	7.9	165.5	Tube located off Furnace Creek Road behind Tecopa Hot Springs
Wild Bath Spring	9/21/2011	35.87277	116.21932	1,424	1.9	bucket	37.99	1.664	1083	5.59	7.83	-2.2	Tube located off Furnace Creek Road behind Tecopa Hot Springs
Wild Bath Spring	5/5/2012	35.87277	116.21932	1,424	1.3	bucket	34.89	1.559	1012	5.64	8.37	16.2	Tube located off Furnace Creek Road behind Tecopa Hot Springs
Wild Bath Spring	1/25/2013	35.87277	116.21932	1,424	<2	visual	36.53	1.906	1024	4.52	7.94	52.8	Tube covered with plastic tarp
Wild Bath Spring	5/4/2013	35.87277	116.21932	1,424	<2	visual	33.83	1.633	1061	3.97	7.81	-89.8	Tube located off Furnace Creek Road behind Tecopa Hot Springs
Wild Bath Spring	9/25/2013	35.87277	116.21932	1,424	<2	visual	30.76	1.403	911	5	8.07	-178.5	Tube located off Furnace Creek Road behind Tecopa Hot Springs
Wild Bath Spring	5/10/2014	35.87277	116.21932	1,424	<2	visual	35.5	1.872	1216	3.85	8.2	85.5	Tube located off Furnace Creek Road behind Tecopa Hot Springs
China Ranch Cyn Spring 1	1/13/2011	35.80335	116.14099	1,770	10	visual	13.94	1.215	789	9.34	8.5	44.5	a.k.a. Willow Canyon. 3 spring
China Ranch Cyn Spring 2	1/13/2011	35.80445	116.14235	1,767	20+	visual	21.28	0.931	606	6.22	8.17	46.6	a.k.a. Willow Canyon. 3 spring
Willow Spring 1	11/3/2010	35.80556	116.18284	1,420	28	bucket	23.73	1.502	958	5.72	8.26	3.4	Junction of spring water capture piping (above pond)
Willow Spring 1	4/28/2011	35.80556	116.18284	1,420	--	bucket	21.92	1.141	737	6.21	7.29	93.1	Junction of spring water capture piping (above pond)
Willow Spring 1	9/23/2011	35.80556	116.18284	1,420	20	bucket	--	--	--	--	--	--	Combined pond outflow and spring box
Willow Spring 2	1/18/2011	35.80098	116.19449	1,235	120-130	meter	17.98	1.91	1241	8.34	8.18	-31.1	Measurement taken at culvert
Willow Spring 2	9/23/2011	35.80098	116.19449	1,235	52.9	meter	24.16	1.028	668	8.08	8.14	-29.2	Measurement taken at culvert
Willow Spring 2	5/1/2012	35.80098	116.19449	1,235	--	--	22.33	1.164	756	8.95	8.09	16.2	Measurement taken at culvert
Willow Spring 2	4/30/2013	35.80098	116.19449	1,235	--	--	22.89	1.154	750	7.12	7.24	-116.8	Measurement taken at culvert
Willow Spring 2	9/25/2013	35.80098	116.19449	1,235	37	meter	23.64	0.837	544	5.6	8	-169.4	Measurement taken at culvert
Willow Spring 2	9/25/2013	35.80098	116.19449	1,235	4.5	USGS	--	--	--	--	--	--	Measurement taken at culvert
Amargosa River													
Amargosa River/USGS 1	11/3/2010	35.84954	116.23081	1,325	40	USGS	--	--	--	--	--	--	At the Tecopa USGS flow station
Amargosa River/USGS 1	4/29/2011	35.84954	116.23081	1,325	84	USGS	--	--	--	--	--	--	At the Tecopa USGS flow station
Amargosa River/USGS 1	9/22/2011	35.84954	116.23081	1,325	31	USGS	--	--	--	--	--	--	At the Tecopa USGS flow station
Amargosa River/USGS 1	12/22/2011	35.84954	116.23081	1,325	583	USGS	--	--	--	--	--	--	At the Tecopa USGS flow station
Amargosa River/USGS 1	4/30/2012	35.84954	116.23081	1,325	117	USGS	17.87	10.806	7024	10.28	9.36	36.3	At the Tecopa USGS flow station
Amargosa River/USGS 1	1/29/2013	35.84954	116.23081	1,325	162	USGS	5.99	14.25	9264	17.48	8.71	57.4	At the Tecopa USGS flow station
Amargosa River/USGS 1	4/29/2013	35.84954	116.23081	1,325	45	USGS	17.52	9.69	6303	10.14	8.34	-172.8	At the Tecopa USGS flow station
Amargosa River/USGS 1	9/25/2013	35.84954	116.23081	1,325	18	USGS	19.4	5.659	3681	5.4	8.58	-207	At the Tecopa USGS flow station
Amargosa River/USGS 1	5/10/2014	35.84954	116.23081	1,325	130	USGS	19.5	9.499	6142	7.98	9.2	23.5	At the Tecopa USGS flow station
Amargosa River/USGS 2	4/28/2011	35.79042	116.20777	1,094	558	meter	18.13	3.876	2520	12.65	8.52	152	At China Ranch USGS flow station
Amargosa River/USGS 2	5/10/2011	35.79042	116.20777	1,094	656	meter	15.9	3.481	2263	11.45	8.46	189.6	At China Ranch USGS flow station
Amargosa River/USGS 2	9/20/2011	35.79042	116.20777	1,094	390	USGS	23.05	3.658	2378	10.22	8.53	-33.4	At China Ranch USGS flow station
Amargosa River/USGS 2	12/22/2011	35.79042	116.20777	1,094	943	USGS	--	--	--	--	--	--	At China Ranch USGS flow station
Amargosa River/USGS 2	5/3/2012	35.79042	116.20777	1,094	487.9	meter	19.07	3.889	2534	12.03	8.69	51.8	At China Ranch USGS flow station
Amargosa River/USGS 2	12/27/2013	35.79042	116.20777	1,094	763	USGS	--	--	--	--	--	--	At China Ranch USGS flow station
Amargosa River/USGS 2	4/29/2014	35.79042	116.20777	1,094	914	meter	11.33	10.56	6863	15.83	8.57	86	At China Ranch USGS flow station
Amargosa River/USGS 2	1/27/2013	35.79042	116.20777	1,094	539	USGS	--	--	--	--	--	--	At China Ranch USGS flow station
Amargosa River/USGS 2	4/20/2013	35.79042	116.20777	1,094	399	meter	15.86	4.634	3012	14.04	8	-104.8	At China Ranch USGS flow station
Amargosa River/USGS 2	4/20/2013	35.79042	116.20777	1,094	494	USGS	--	--	--	--	--	--	At China Ranch USGS flow station
Amargosa River/USGS 2	9/24/2013	35.79042	116.20777	1,094	735	meter	15.1	3.263	2121	6.95	8.32	-184.4	At China Ranch USGS flow station
Amargosa River/USGS 2	9/24/2013	35.79042	116.20777	1,094	1436	USGS	--	--	--	--	--	--	At China Ranch USGS flow station
Amargosa River/USGS 2	5/4/2014	35.79042	116.20777	1,094	527	meter	17.8	4.443	2886	9.83	8.61	84.4	At China Ranch USGS flow station
Amargosa River/USGS 2	5/4/2014	35.79042	116.20777	1,094	444	USGS	--	--	--	--	--	--	At China Ranch USGS flow station
Willow Creek	12/22/2011	35.78757	116.20039	1,107	dry	bucket	20.75	1.474	954	9.4	8.42	190.6	Above confluence with Amargosa River
Willow Creek	5/3/2012	35.78757	116.20039	1,107	37.7	bucket	20.53	1.357	882	10.89	8.8	25.4	Above confluence with Amargosa River
Willow Creek	1/27/2013	35.78757	116.20039	1,107	33	meter/visual	14.28	1.651	1073	15.49	8.38	89.3	Above confluence with Amargosa River
Willow Creek	4/20/2013	35.78757	116.20039	1,107	47	meter	27.07	1.414	919	9.28	8.15	-107.1	Above confluence with Amargosa River
Willow Creek	9/24/2013	35.78757	116.20039	1,107	dry	visual	--	--	--	--	--	--	Above confluence with Amargosa River

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Field Reconnaissance Data Summary
 Amargosa Basin
 California/Nevada

Name	Date of Visit	Latitude	Longitude	Elevation (ft amsl)	Flow (gpm)	Flow Measurement Method*	Temp. (deg C)	Spec. Cond. (mS/cm-deg C)	TDS (mg/L)	DO (mg/L)	pH	ORP (mv)	Notes
Willow Creek	5/4/2014	35.78757	116.20039	1,107	25	meter/visual	18.1	1.421	923	10.1	8.61	106.1	Above confluence with Amargosa River
Amargosa River Confluence	4/29/2011	35.785	116.2023	1,053	662	meter	20.23	3.88	2523	9.25	8.64	205	Confluence with Willow Creek
Amargosa River Confluence	9/22/2011	35.785	116.2023	1,053	332	meter	19.24	4.226	2748	9.5	8.48	-7.2	Confluence with Willow Creek
Amargosa River Confluence	12/22/2011	35.785	116.2023	1,053	463	meter	3.77	5.657	3677	11.7	8.38	63.6	Confluence with Willow Creek
Amargosa River Confluence	5/3/2012	35.785	116.2023	1,053	395	meter	17.88	4.262	2770	10.26	8.59	-32.2	Confluence with Willow Creek
Amargosa River Confluence	1/27/2013	35.785	116.2023	1,053	561	meter	10.51	7.547	4905	15.62	7.94	89.9	Confluence with Willow Creek
Amargosa River Confluence	4/20/2013	35.785	116.2023	1,053	563	meter	14.05	5.004	3253	11.48	8.02	-111.9	Confluence with Willow Creek
Amargosa River Confluence	9/24/2013	35.785	116.2023	1,053	461	meter	14.61	3.54	2301	7.04	8.43	-147.5	Confluence with Willow Creek
Amargosa River Confluence	5/4/2014	35.785	116.2023	1,053	643	meter	17.3	4.786	3114	9.21	8.63	111.4	Confluence with Willow Creek
Amargosa River 3	1/16/2010	35.74637	116.22219	846	477	meter	19.08	4.015	2610	10.89	8.79	172.1	At Sperry Wash
Amargosa River 3	4/29/2011	35.74637	116.22219	846	462	meter	19.67	4.225	2745	10.08	8.6	202.3	At Sperry Wash
Amargosa River 3	5/5/2011	35.74637	116.22219	846	271	meter	19.4	4.198	2728	10.81	8.64	190.4	At Sperry Wash
Amargosa River 3	9/20/2011	35.74637	116.22219	846	158	meter	26.58	4.429	2979	10.18	8.91	-11.8	At Sperry Wash
Amargosa River 3	9/23/2011	35.74637	116.22219	846	119	meter	17	4.321	2809	11.03	8.6	-10.5	At Sperry Wash
Amargosa River 3	12/21/2011	35.74637	116.22219	846	389	meter	9.33	5.179	3366	11.3	8.6	130.7	At Sperry Wash
Amargosa River 3	5/4/2012	35.74637	116.22219	846	366	meter	24.22	4.388	2852	11.75	9.02	22.4	At Sperry Wash
Amargosa River 3	1/26/2013	35.74637	116.22219	846	510	meter	13.02	6.656	4326	16.55	8.32	76.2	At Sperry Wash
Amargosa River 3	4/18/2013	35.74637	116.22219	846	398	meter	25.66	5.223	3395	12.37	8.4	-102	At Sperry Wash
Amargosa River 3	9/23/2013	35.74637	116.22219	846	275	meter	22.71	4.171	2711	8.34	8.69	-157.7	At Sperry Wash
Amargosa River 3	5/4/2014	35.74637	116.22219	846	588	meter	26.2	4.831	3140	12.72	8.93	29.8	At Sperry Wash
Amargosa River 4	4/29/2011	35.69609	116.25082	649	70	meter	15.67	4.472	2904	11.88	8.93	206.3	At crossing of Dumont Dunes Road
Amargosa River 4	5/5/2011	35.69609	116.25082	649	dry	meter	--	--	--	--	--	--	At crossing of Dumont Dunes Road
Amargosa River 4	12/21/2011	35.69609	116.25082	649	dry	meter	--	--	--	--	--	--	At crossing of Dumont Dunes Road
Amargosa River 4	5/4/2012	35.69609	116.25082	649	136	meter	3.79	4.727	3073	12.35	8.6	-214.1	At crossing of Dumont Dunes Road
Amargosa River 4	1/26/2013	35.69609	116.25082	649	44	meter	27.23	4.617	3003	9.07	9.22	22.5	At crossing of Dumont Dunes Road
Amargosa River 4	4/18/2013	35.69609	116.25082	649	171	meter	12.06	6.025	3916	15.34	8.49	76.4	At crossing of Dumont Dunes Road
Amargosa River 4	9/23/2013	35.69609	116.25082	649	dry	meter	--	--	--	--	--	--	At crossing of Dumont Dunes Road
Amargosa River 4	5/4/2014	35.69609	116.25082	649	<50	visual	16.54	5.134	3338	6.8	8.95	-195.2	At crossing of Dumont Dunes Road
Amargosa River 2	11/16/2010	35.66418	116.29722	443	<50	visual	25.4	5.926	3954	7.9	9.15	79.1	At crossing of Dumont Dunes Road
Amargosa River 2	4/29/2011	35.66418	116.29722	443	256	meter	21.4	4.295	2793	8.64	8.89	126.7	At 127 crossing south of Dumont Dunes
Amargosa River 2	5/5/2011	35.66418	116.29722	443	dry	visual	--	--	--	--	--	--	At 127 crossing south of Dumont Dunes
Amargosa River 2	9/23/2011	35.66418	116.29722	443	dry	visual	--	--	--	--	--	--	At 127 crossing south of Dumont Dunes
Amargosa River 2	12/21/2011	35.66418	116.29722	443	dry	visual	--	--	--	--	--	--	At 127 crossing south of Dumont Dunes
Amargosa River 2	5/4/2012	35.66418	116.29722	443	dry	visual	--	--	--	--	--	--	At 127 crossing south of Dumont Dunes
Amargosa River 2	1/26/2013	35.66418	116.29722	443	dry	visual	--	--	--	--	--	--	At 127 crossing south of Dumont Dunes
Amargosa River 2	4/18/2013	35.66418	116.29722	443	dry	visual	--	--	--	--	--	--	At 127 crossing south of Dumont Dunes
Amargosa River 2	9/23/2013	35.66418	116.29722	443	dry	visual	--	--	--	--	--	--	At 127 crossing south of Dumont Dunes
Amargosa River 2	5/4/2014	35.66418	116.29722	443	<50	visual	--	--	--	--	--	--	At 127 crossing south of Dumont Dunes

Table 2-1
Field Reconnaissance Data Summary
 Amargosa Basin
 California/Nevada

Name	Date of Visit	Latitude	Longitude	Elevation (ft amsl)	Flow (gpm)	Flow Measurement Method*	Temp. (deg C)	Spec. Cond. (mS/cm-deg C)	TDS (mg/L)	DO (mg/L)	pH	ORP (mV)	Notes
Wells													
ARHS-1	5/25/2012	36.0773	116.2963	1,780	111.72	dtw meter	35	2.941	1910	2.04	8.26	107.3	At rt 127.6 miles north of Shoshone, CA
ARHS-1	4/24/2013	36.0773	116.2963	1,780	111.88	dtw meter	--	--	--	--	--	--	At rt 127.6 miles north of Shoshone, CA
ARHS-2	5/25/2012	35.8054	116.1825	1,430	5.79	dtw meter	24.36	0.912	593	4.2	7.54	129.8	At China Ranch
ARHS-2	1/25/2013	35.8054	116.1825	1,430	5.94	dtw meter	23.73	1.095	714	5.52	7.6	36.9	At China Ranch
ARHS-2	4/30/2013	35.8054	116.1825	1,430	6.83	dtw meter	--	--	--	--	--	--	At China Ranch
ARHS-2	9/24/2013	35.8054	116.1825	1,430	6.39	dtw meter	25.73	0.798	519	3.41	7.25	-178.8	At China Ranch
ARHS-2	5/9/2014	35.8054	116.1825	1,430	5.69	dtw meter	24.5	1.27	826	3.86	7.46	178.4	At China Ranch
ARHS-3	4/24/2013	36.0216	116.1554	2,205	18.64	dtw meter	24.6	0.77	500	5.48	6.86	-101.2	Located adjacent to 12 Mile Spring
ARHS-3	9/24/2013	36.0216	116.1554	2,205	19.34	dtw meter	24.63	0.647	421	3.72	7.42	-182.7	Located adjacent to 12 Mile Spring
ARHS-3	5/5/2014	36.0216	116.1554	2,205	18.13	dtw meter	24.3	1.087	709	5.5	7.88	81.1	Located adjacent to 12 Mile Spring
ARHS-4	9/24/2013	35.7999	116.1035	2,072	12.5	dtw meter	24.08	0.656	427	4.1	7.5	-171.6	Located adjacent to Married Mans Camp
ARHS-4	5/9/2014	35.7999	116.1035	2,072	11.94	dtw meter	22.6	1.106	722	4.96	7.52	149.6	Located adjacent to Married Mans Camp
ARHS-4	1/16/2011	35.8461	116.20478	1,447	38.87	dtw meter	20.61	0.898	584	7.1	8.5	110.4	Located in Tecopa Heights
Cynthia's Well	5/23/2011	35.8461	116.20478	1,447	40.51	dtw meter	--	--	--	--	--	--	Located in Tecopa Heights
Cynthia's Well	9/23/2011	35.8461	116.20478	1,447	42.75	dtw meter	--	--	--	--	--	--	Located in Tecopa Heights
Cynthia's Well	5/5/2012	35.8461	116.20478	1,447	40.22	dtw meter	22.31	1.163	756	3	8.36	33.9	Located in Tecopa Heights
Cynthia's Well	1/27/2013	35.8461	116.20478	1,447	39	dtw meter	--	--	--	--	--	--	Located in Tecopa Heights
Cynthia's Well	4/25/2013	35.8461	116.20478	1,447	40.95	dtw meter	23.06	1.251	813	2.75	7.36	-113.8	Located in Tecopa Heights
Cynthia's Well	5/1/2014	35.8461	116.20478	1,447	41.16	dtw meter	23.8	1.151	748	6.2	7.86	76	Located in Tecopa Heights
Eagle Mountain Well	11/4/2010	36.24987	116.3953	2,007	14.82	dtw meter	22.76	3.35	2177	4.25	8.85	54.4	Located west of Eagle Mountain
Eagle Mountain Well	5/1/2011	36.24987	116.3953	2,007	14.78	dtw meter	--	--	--	--	--	--	Located west of Eagle Mountain
Eagle Mountain Well	9/21/2011	36.24987	116.3953	2,007	14.77	dtw meter	--	--	--	--	--	--	Located west of Eagle Mountain
Eagle Mountain Well	4/30/2012	36.24987	116.3953	2,007	14.94	dtw meter	19.79	3.251	2112	7.39	8.42	36.5	Located west of Eagle Mountain
Eagle Mountain Well	1/24/2013	36.24987	116.3953	2,007	15	dtw meter	21.23	4.043	2628	7.08	8.45	41.1	Located west of Eagle Mountain
Eagle Mountain Well	4/24/2013	36.24987	116.3953	2,007	14.97	dtw meter	20.08	3.487	2267	7.05	7.93	-112.4	Located west of Eagle Mountain
Eagle Mountain Well	9/23/2013	36.24987	116.3953	2,007	14.75	dtw meter	22.8	2.984	1938	5.9	8.09	-181.4	Located west of Eagle Mountain
Eagle Mountain Well	5/9/2014	36.24987	116.3953	2,007	14.92	dtw meter	20	3.864	--	6.6	8.56	--	Located west of Eagle Mountain
Married Mans Well	11/19/2011	35.80038	116.10177	2,096	25.82	dtw meter	--	--	--	--	--	--	Locate at head of Willow Creek Wash
Married Mans Well	4/30/2012	35.80038	116.10177	2,096	25.49	dtw meter	23.96	1.255	816	3.61	7.59	-114.5	Locate at head of Willow Creek Wash
Married Mans Well	1/25/2013	35.80038	116.10177	2,096	25.51	dtw meter	--	--	--	--	--	--	Locate at head of Willow Creek Wash
Junior's Well	1/16/2011	35.8512	116.24252	1,346	NA	NA	24.29	2.04	1326	6.63	8.33	69	Located west of Amargosa River (opposite of Tecopa)
Hog Farm Well	1/28/2013	36.28748	116.37854	2,017	<5	visual	21.17	1.653	1074	0.97	8.66	39.9	Located southeast of Death Valley Junction
Hog Farm Well	4/24/2013	36.28748	116.37854	2,017	<5	visual	21.56	1.432	930	<1	7.67	-180.7	Located southeast of Death Valley Junction
Hog Farm Well	9/23/2013	36.28748	116.37854	2,017	<5	visual	21.94	1.219	792	0.4	8.48	-258	Located southeast of Death Valley Junction
Hog Farm Well	5/5/2014	36.28748	116.37854	2,017	<5	visual	21.6	1.74	1131	0.14	8.74	31.3	Located southeast of Death Valley Junction
Tecopa School Well	11/11/2010	35.84654	116.21743	1,372	NA	NA	20.06	1.372	892	4.59	7.6	161.2	Sample from spot adjacent to well head
Tule Spring Well	1/11/2010	35.81178	116.04909	1,989	10.4	dtw meter	18.85	0.855	556	0.23	7.42	-54.8	Data from well. Strong odor of decay
Tule Spring Well	4/30/2012	35.81178	116.04909	1,989	10.01	dtw meter	19.37	0.827	537	1.76	7.87	26.8	Data from well. No smell from well.
Tule Spring Well	1/25/2013	35.81178	116.04909	1,989	9.83	dtw meter	17.38	0.981	638	<2.5	7.35	66.5	Data from well. No smell from well.
Tule Spring Well	4/21/2013	35.81178	116.04909	1,989	10.8	dtw meter	20.91	0.728	473	0.37	7.42	-272.3	Data from well. Moderate odor of decay
Tule Spring Well	9/24/2013	35.81178	116.04909	1,989	9.98	dtw meter	19.2	1.234	800	0.5	7.4	59.9	Data from well. Moderate odor of decay

Notes:
 ft amsl = feet above mean sea level
 gpm = gallons per minute
 Temp. = temperature
 deg C = degrees Celsius
 mS/cm-deg C = millisiemens per centimeter degrees Celsius
 Spec. Cond. = specific conductivity

**Table 2-1
Field Reconnaissance Data Summary**

Amargosa Basin
California/Nevada

Name	Date of Visit	Latitude	Longitude	Elevation (ft amsl)	Flow (gpm)	Flow Measurement Method*	Temp. (deg C)	Spec. Cond. (mS/cm-deg C)	TDS (mg/L)	DO (mg/L)	pH	ORP (mV)	Notes
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TDS = total dissolved solids
mg/L = milligrams per liter
DO = dissolved oxygen
ORP = oxidation-reduction potential
mV = millivolts

*Flow Measurement Method = spring and river flow were measured either directly with a solid state meter (meter), indirectly using time to fill a 5-gallon bucket (bucket), or using visual estimation techniques (visual).

Table 3-1
Mean Annual Flow
 Amargosa River
 California/Nevada

Year	Discharge (cfs)				
	Station 1	Station 2	Station 3	Station 4	Station 5
1962	ND	1.04	ND	ND	ND
1963	ND	2.54	ND	ND	ND
1964	ND	0.786	ND	ND	0.011
1965	ND	1.03	ND	ND	0.019
1966	ND	7.67	ND	ND	0.000
1967	ND	0.736	ND	ND	0.776
1968	ND	1.68	ND	ND	0.249
1969	ND	9.19	ND	ND	ND
1970	ND	1.36	ND	ND	ND
1971	ND	0.648	ND	ND	ND
1972	ND	0.626	ND	ND	ND
1973	ND	ND	ND	ND	ND
1974	ND	0.596	ND	ND	ND
1975	ND	0.722	ND	ND	ND
1976	ND	9.93	ND	ND	ND
1977	ND	8.80	ND	ND	ND
1978	ND	8.59	ND	ND	ND
1979	ND	0.567	ND	ND	ND
1980	ND	4.86	ND	ND	ND
1981	ND	1.06	ND	ND	ND
1982	ND	0.948	ND	ND	ND
1983	ND	14.9	ND	ND	ND
1984	ND	ND	ND	ND	ND
1985	ND	ND	ND	ND	ND
1986	ND	ND	ND	ND	ND
1987	ND	ND	ND	ND	ND
1988	ND	ND	ND	ND	ND
1989	ND	ND	ND	ND	ND
1990	ND	ND	ND	ND	ND
1991	ND	ND	ND	ND	ND
1992	ND	3.38	ND	0.046	ND
1993	ND	11.70	ND	0.095	ND
1994	ND	0.222	0.014	0.000	ND
1995	ND	6.36	0.220	1.72	ND
1996	ND	ND	ND	ND	ND
1997	ND	ND	ND	ND	ND
1998	ND	ND	ND	ND	ND
1999	ND	ND	ND	ND	ND
2000	1.82	0.726	ND	ND	ND
2001	1.14	0.864	ND	ND	ND
2002	ND	0.724	ND	ND	ND
2003	ND	5.23	ND	ND	ND
2004	ND	1.26	ND	ND	ND
2005	ND	11.1	ND	ND	ND

Table 3-1
Mean Annual Flow
 Amargosa River
 California/Nevada

Year	Discharge (cfs)				
	Station 1	Station 2	Station 3	Station 4	Station 5
2006	ND	0.629	ND	ND	ND
2007	ND	4.89	ND	ND	ND
2008	ND	0.512	ND	ND	ND
2009	ND	0.531	ND	ND	ND
2010	ND	1.52	ND	ND	ND
2011	ND	5.04	ND	ND	ND
2012	ND	0.370	ND	ND	ND
2013	ND	0.688	ND	ND	ND

Notes:

- Station 1 = USGS 10251375 Amargosa River at Dumont Dunes near Death Valley, San Bernardino County, California (Latitude 35°41'45", Longitude 116°15'02" NAD27).
- Station 2 = USGS 10251300 Amargosa River at Tecopa, Inyo County, California (Latitude 35°50'45", Longitude 116°13'45" NAD27).
- Station 3 = USGS 10251259 Amargosa River at Hwy 127 near Nevada State Line, Inyo County, California (Latitude 36°23'12", Longitude 116°25'22" NAD27).
- Station 4 = USGS 10251218 Amargosa River at Hwy 95 below Beatty, Nevada, Nye County, Nevada (Latitude 36°52'52", Longitude 116°45'04" NAD27).
- Station 5 = USGS 10251220 Amargosa River near Beatty, Nevada, Nye County, Nevada (Latitude 36°52'01.76", Longitude 116°45'37.53" NAD83).

ND = No Data

Complete Annual Data Sets Only.

Table 3-2
Summary of Pumping
 Amargosa Desert
 Nevada

Year	Pumping (AFY)						Total Pumping
	Irrigation	Mining	Commercial	Quasi Municipal & Domestic	Other		
1983	9,105	125	20	250	NA	9,500	
1985	8,472	950	20	230	NA	9,672	
1986	6,553	550	10	125	NA	7,238	
1987	5,700	302	10	125	NA	6,137	
1988	2,978	996	10	125	NA	4,109	
1989	1,566	2,220	10	125	NA	3,921	
1990	4,953	2,720	10	125	NA	7,807	
1991	4,942	1,070	10	100	NA	6,122	
1992	5,761	2,293	10	100	NA	8,164	
1993	8,709	2,481	10	100	NA	11,300	
1994	9,977	2,508	10	100	NA	12,595	
1995	12,354	2,571	10	100	NA	15,035	
1996	11,043	2,285	205	50	30	13,613	
1997	10,454	2,506	576	366	0	13,902	
1998	12,040	2,417	537	382	0	15,376	
1999	10,835	2,389	593	364	0	14,181	
2000	9,711	1,366	1,057	378	10	12,522	
2001	9,407	1,187	1,067	396	10	12,067	
2002	9,576	1,302	1,128	415	0	12,421	
2003	10,471	1,356	1,324	437	0	13,588	
2004	10,603	1,169	1,319	453	0	13,544	
2005	10,764	438	1,332	466	4	13,004	
2006	13,124	527	1,844	491	2	15,988	
2007	14,059	377	1,793	505	2	16,736	
2008	12,356	1,108	3,984	517	2	17,967	
2009	11,477	510	3,905	487	1	16,380	
2010	9,898	313	4,683	498	1	15,393	
2011	11,258	321	4,458	499	0	16,536	
2012	13,190	174	3,756	502	0	17,622	

Responses to Letter 211: The Nature Conservancy

Response 211-1: The comments previously provided on the Notice of Preparation were considered during preparation of the PEIR and addressed in the respective environmental topic section(s) of the PEIR. Refer to Responses 211-2 through 211-9 for additional information and more detailed responses to the specific issues of ecoregional planning, groundwater protection, transmission availability, and coordination of County plans with the DRECP.

Response 211-2: It is acknowledged that biological and groundwater resources are present in the Chicago Valley and Charleston SEDAs. As such, the PEIR concludes that future solar energy development could result in potentially significant impacts to biological groundwater resources within the all of the SEDAs and the OVSA, as discussed in Section 4.4 and 4.9 of the PEIR. The PEIR includes program-level mitigation to protect such resources (outlined in Sections 4.4.5 and 4.9.5). Refer to Response 211-3 regarding the protection of groundwater resources.

Response 211-3: The County shares your concerns regarding the protection and preservation of local groundwater resources, including those associated with the Amargosa River system. It is acknowledged that the hydrologic and hydraulic characteristics of groundwater basins, including their connectivity with other basins and relationships to surface waters, are often complex. Further, the County is aware that many groundwater-dependent surface features in arid regions, such as springs and marshes, support sensitive floral and faunal species. Accordingly, based on a Program-level assessment of local groundwater resources, the PEIR identifies potentially significant impacts to groundwater resources for all eight SEDAs and the Owens Valley Study Area in Section 4.9. As outlined in Section 4.9.5, associated mitigation is identified in the form of detailed groundwater investigations that will be required prior to approval of applicable solar development under the REGPA. Specifically, this would involve detailed evaluation of factors such as local aquifer volumes and hydrogeologic characteristics, current/proposed withdrawals, inflow/recharge capacity, and potential effects to local groundwater basins and related surface water features (with the referenced mitigation on Section 4.9.5 modified to clarify the required analysis of potential effects to groundwater-dependent features such as springs and marshes from proposed groundwater use).

The PEIR addresses potential cumulative impacts to groundwater resources in Section 5.1.3.9, and notes that "...cumulative impacts to groundwater supplies and recharge would be associated with the groundwater dependent areas of the individual basins." This analysis identifies the associated mitigation in Section 4.9.5 to address these potential impacts, and concludes that "...required mitigation would address potential cumulative impacts resulting from the project in conjunction with development of other cumulative projects in the basin...With implementation of Mitigation Measure HYD-2, the REGPA would not contribute to cumulative impacts to groundwater basin supplies and recharge." It should also be noted that the referenced mitigation measure specifically requires assessment/identification of: "...existing and proposed monitoring well locations, relevant natural (e.g., springs and groundwater-dependent vegetation) and other features (e.g., reservoirs), and pre- post-project groundwater contours, *along with a description of cumulative water level changes...*" (emphasis added). Please also refer to Response 202-2 for additional discussion on this topic.

Response 211-4: The County will weigh all applicable elements in determining whether solar development is appropriate in evaluated areas, including the Charleston View and Chicago Valley SEDAs. Specifically, this will involve assessing the nature and location of proposed development, the condition of associated groundwater basins and related groundwater-dependent surface resources, technical

groundwater investigations (per Mitigation Measure HYD-2 in Section 4.9.5 of the Draft PEIR), and coordination with other land management and technical entities. From these and other relevant efforts/analyses, site-specific technical assessments and related measures would be developed to address potential concerns and ensure that groundwater and related groundwater-dependent surface water features would be appropriately protected and/or mitigated in all applicable areas (including the Charleston View and Chicago Valley SEDAs).

Response 211-5: Please refer to Response 202-2 through 202-5, 211-3 and 211-4.

Response 211-6: Mitigation Measure HYD-2 in Section 4.9.5 of the PEIR specifically includes a requirement to:

...restrict project-related groundwater withdrawals to appropriate levels to avoid significant adverse effects to local aquifers/wells and/or other groundwater-dependent uses (e.g., vegetation, springs or other related surface water features), based on thresholds approved by the RWQCB and County.

Please also refer to Responses 202-2 through 202-5, 211-3 and 211-4.

Response 211-7: The reader is directed to Responses 202-2 through 202-5, 206-10, 211-3, 211-4 and 211-6. Additionally, the REGPA Program EIR addresses the types of impacts and mitigation measures that will be implemented as part of an update to the County's General Plan and the SEDAs as defined in the EIR. All future projects under the REGPA would be subject to project-specific environmental review. This process will use the types of impacts and mitigation measures outlined in the Program EIR as guidelines. Depending on the size and location of the development and the technology used, a full EIR may be required. However, the REGPA also encourages small scale, PV technologies to be constructed which may not require a full EIR. As stated in Section 1.2 of the PEIR:

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

It should be noted that under Title 21 of the Inyo County Code concerning renewable energy development, any person who proposes to construct an electric transmission line, solar thermal renewable energy facility or a PV renewable energy facility in the County must first obtain a Renewable Energy Permit, a Renewable Energy Development Agreement or a Renewable Energy Impact Determination. A Renewable Energy Impact Determination applies to projects over which the County has limited authority because the project is located on federal or state land or is subject to the permitting jurisdiction of the California Energy Commission.

Under Title 21, the issuance of a Renewable Energy Permit is subject to CEQA, and the County Planning Commission must conduct a noticed public hearing before considering approval of such a permit. The Planning Commission must find that there has been compliance with CEQA before a permit can be issued. In addition, "as a condition to the issuance of such a permit, the Planning Commission may

impose such reasonable and feasible mitigation measures as it finds to be necessary to protect the health, safety, and welfare of the county's citizens, the county's environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project." Finally, the Planning Commission is required to impose as a condition of approval, a plan for the reclamation/revegetation of the project site at the time of decommissioning of the project and the Planning Commission shall require financial assurances from the applicant to ensure that the reclamation plan will be fully implemented.

Concerning Renewable Energy Development Agreements, Title 21 provides that such agreements may be entered into by the County and a project applicant in lieu of obtaining a Renewable Energy Development Permit. Renewable Energy Development Agreements are subject to CEQA and must be approved by an ordinance adopted by the Board of Supervisors following a noticed public hearing. Prior to approving such an agreement, the Board must find that there has been compliance with CEQA. Renewable Energy Development Agreements must include a reclamation plan, acceptable financial assurances to ensure full implementation of the reclamation plan, be consistent with the county general plan and be enforceable by injunctive relief or other enforcement mechanisms under law. In the Renewable Energy Development Agreement, the Board of Supervisors may require such mitigation measures or modifications of the project as it finds necessary to protect the health, safety, and welfare of the county's citizens, the county's environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.

See Responses 202-2 through 202-5 that address the Amargosa Wild and Scenic River.

Response 211-8: As indicated on page 3-19 in the PEIR, new substations and transmission interconnections would be necessary to export energy from the SEDAs in the Eastern Solar Energy Group (Chicago Valley, Charleston View, and Sandy Valley) into Valley Electric Association (VEA) facilities in Nevada via tie-ins to a conceptual transmission line in western Nevada. VEA facilities are already part of the California grid. The PEIR also states on the same page that "Although this potential interconnection would extend beyond the physical boundaries of the Chicago Valley SEDA and into the State of Nevada, the potential implementation of this connection line is addressed in this PEIR." Section 4.18 in the PEIR concludes that the need for new transmission lines to serve future solar development projects in the Eastern Solar Energy Group is a potentially significant impact.

Because the REGPA EIR is a PEIR, it is intended to establish a framework and process for future implementation of solar energy projects that fall within the parameters evaluated in the PEIR. Individual projects will be required to prepare a project-specific environmental analysis and associated CEQA document to evaluate the project's potential impacts, including an assessment of potential impacts associated with project-specific connections to transmission lines.

Response 211-9: The County has sought an extension to the March 31, 2015 deadline for the grant provided by the California Energy Commission for the County to prepare and process the REGPA and is related PEIR. The CEC informed the County that such an extension was not possible in January 2015. Accordingly, the County is obligated to meet the grant deadline and intends to do so, even after extending the public comment period for the PEIR to 71 days. The Board of Supervisors has adequate time to consider adoption of the REGPA and PEIR in March 2015.

Center for Biological Diversity
Range of Light Group, Toiyabe Chapter, Sierra Club

PO Box 1973
Mammoth Lakes, CA 93546
Via email and USPS

January 13, 2015

Inyo County Planning Department
168 North Edwards Street
Post Office Drawer L
Independence, California 93526
inyoplanning@inyocounty.us

RE: Comments on the Draft Programmatic Environmental Impact Report prepared for General Plan Amendment 2013-02 – Renewable Energy General Plan Amendment.

Dear Planning Department,

These comments are submitted on behalf of the Center for Biological Diversity’s 800,000 staff, members and on-line activists in California and throughout the United States, and the Sierra Club’s 2.1 million members and supporters in the U.S., including the Toiyabe Chapter Range of Light Group's 380 members in Inyo and Mono counties, regarding the Draft Programmatic Environmental Impact Report (DPEIR) prepared for General Plan Amendment 2013-02 – Renewable Energy General Plan Amendment (REGPA).

The development of renewable energy is a critical component of efforts to reduce greenhouse gas emissions, avoid the worst consequences of global warming, and to assist California in meeting its climate goals. The Center for Biological Diversity (the “Center”) and the Sierra Club strongly support the development of renewable energy production, and particularly support planning efforts to ensure that projects are sited appropriately to protect wildlife, other natural resources, air and water quality, and cultural resources. Like all types of development, renewable energy projects should be thoughtfully planned to minimize impacts to the environment. In particular, renewable energy generation and transmission projects should avoid impacts to sensitive plant and animal species and habitats, water resources, water and air quality, and cultural resources.

We strongly supported Inyo County in seeking and acquiring state funding to implement effective renewable energy planning in the County. We have also taken active interest in the crafting of the REGPA, submitted pre-scoping comments (2/19/2014 letter to Planning Commission), scoping comments (7/10/14), and providing comments at numerous public meetings on this issue. We incorporate those comments herein by reference.

212-1

We are pleased to see that the County has scaled back the development scenarios in the DPEIR from the overly-broad 2011 proposal. However, several of the proposed development areas that remain in the DPEIR appear highly inappropriate. Therefore, we submit the following comments and concerns about the process and product of the DPEIR. We have divided our comments into two categories – general comments on overarching issues with the DPEIR and SEDA specific comments

212-1
(cont'd)

General comments:

We remain concerned about specific locations of some of the Solar Energy Development Areas (SEDAs) as well as the separate, ongoing process from this DPEIR to designate SEDAs within the Owens Valley.

We are also concerned that our, the community’s and other stakeholders’ concerns expressed at meetings were overwhelmingly in support for excluding key conservation areas, Areas of Critical Environmental Concern, Desert Wildlife Management Areas, Wilderness Areas, Sensitive Species Habitat, Cultural and Historical Resources, and Scenic Resources¹ were not adequately addressed in the DPEIR. For example, wildlife corridors including avian and other migration corridors, the Amargosa River, and seeps and springs² all still appear to be impacted by the proposed SEDAs. Additionally the draft Inclusion Criteria which we and others supported called for existing transmission, degraded lands, brownfields and mines³ to be included in SEDAs but few of these are called out specifically or addressed in the DPEIR.

212-2

In the Policy Concepts section, the overwhelming community/stakeholder input supported the concept: “The proximity to existing transmission corridors to export energy without the development of new transmission lines should be a key consideration of the location of renewable energy facilities.”⁴ However, this concept is not followed for the Eastern and Southern Solar Energy Groups.

212-3

Some of the proposed SEDAs are an improvement over the previously proposed REDAs from 2011, but still overstep the County’s current jurisdiction; for example, the inclusion of public lands managed by the Bureau of Land Management. While we support cooperation between the County and other land use entities in Inyo County when planning for renewable energy, we do not believe that the inclusion of federal public lands in many of the proposed SEDAs is appropriate. The DPEIR fails to clarify what the intent of such designations would be or how the non-County land managers would be affected by the SEDA designation.

212-4

¹ REGPA Planning Commission Staff Report February 262014 at pdf pg. 5-6
² IBID
³ REGPA Planning Commission Staff Report February 262014 at pdf pg. 4-5
⁴ REGPA Planning Commission Staff Report February 262014 at pdf pg. 26

Desert Renewable Energy Conservation Plan

While we recognize that both the REGPA and the DRECP are still under development and subject to change, the documents do need to be coordinated in a more robust fashion. For example, some proposed REGPA SEDAs within the boundaries of the DRECP overlay proposed Areas of Critical Environmental Concern and National Landscape Conservation Area lands in the preferred alternative of the DRECP – this would put the proposed SEDAs in direct conflict with the proposed conservation strategy of the proposed DRECP. The DPEIR needs to clarify how the County and the DRECP agencies will work to remedy such conflicts before the REGPA and DRECP are adopted.

212-5

In our previous comments, on the issue of post-project reclamation, we requested that the REGPA should require adequate bonding in order for all project reclamation costs to be fully covered. This important safeguard was not included in the DPEIR and we request that this serious oversight be remedied.

SEDA Specific Comments:

Western Solar Energy Group

The DPEIR caps the amount of solar energy in the Western Solar Energy Group to 250 MW or 1500 acres. We support a cap on development, however, based on the increasing efficiencies of solar technology, an acreage cap may provide the most useful metric, and 1500 acres appears to be a reasonable cap for development that should include the Owens Valley Study Area. Because of the world-class natural resources located in the western part of Inyo County, conflicts with rare and endangered species and other key resources have a high potential to occur. In order to have a document that is most useful for steering future development and to be used to tier later CEQA analyses, the PEIR must provide a framework for avoidance, minimization, and if impacts still remain – full mitigation of all significant impacts.

212-6

Our comments by SEDA follow:

Pearsonville

- The SEDA is directly adjacent to the federally designated Mohave Ground Squirrel (MGS) Conservation Area on the western side, and the MGS habitat is consistent through the SEDA and onto China Lake Naval Weapons Center. As a result the private lands and Department of Defense lands likely support MGS. As such inclusion of these lands may not be appropriate. At minimum, the PEIR must require surveys for MGS, which is a California threatened and declining species, if any development is to occur within this SEDA. Because any development would impact MGS/habitat, a robust mitigation scenario that maximizes continuity with the existing MGS Conservation Area must also be developed and should be included in the final PEIR and REGPA.
- Most of the SEDA includes modeled desert tortoise habitat by USGS⁵, therefore tortoise surveys must be required for this federally and state

212-7

⁵ <http://pubs.usgs.gov/of/2009/1102/>

threatened and declining species. As with the MGS, if any development is to occur within this SEDA, a robust mitigation scenario that maximizes continuity with the existing desert tortoise habitat must also be included in the final PEIR and REGPA.

- The SC Wildlands modeled a key wildlife connectivity Linkage Network⁶ that includes the Pearsonville SEDA. Unfortunately, the SEDA overlays and bisects the connectivity linkage identified in the Desert Linkages Network. Therefore, at minimum, refinement of the SEDA is necessary in order to avoid this key east-west linkage between China Lake on the east and the MGS Conservation Area and the Sierra Nevada Mountains on the west, and the north-south linkage that occurs along bajada east of the Sierra Nevada foothills and continues up through the Rose Valley (see below).
- Because the proposed Western Solar Energy Group SEDAs would be limited to a cumulative 250MW or 1500 acres of development, the Pearsonville SEDA is not needed to meet the development target. We believe there are better locations within that group for solar development in other SEDAs (such as the Laws SEDA discussed below).
- We urge the County to eliminate the Pearsonville SEDA from the REGPA.

212-7
(cont'd)

Rose Valley

The Rose Valley is a fairly narrow valley that provides key biological connectivity and refugia for numerous species.

- The SEDA inappropriately includes BLM lands designated as MGS Conservation Area which should be eliminated from the SEDA. The SEDA needs to be reexamined to evaluate if the remaining private lands provide adequate acreage to support large-scale solar projects. If any development is to occur within this SEDA, at minimum, the PEIR must require surveys for MGS, which is a California threatened and declining species and a robust mitigation scenario that maximizes continuity with the existing MGS habitat must also be included in the final PEIR and REGPA.
- Most of this SEDA also includes USGS modeled desert tortoise habitat and tortoise are known from the general area. Therefore tortoise surveys must be required for this federally and state threatened and declining species. If any development is to occur within this SEDA, a robust mitigation scenario that maximizes continuity with the existing desert tortoise habitat must also be included in the final PEIR and REGPA.
- The SC Wildlands wildlife connectivity linkage model identifies most all of the proposed SEDA as key connectivity east-west between the Cosos and the Sierra Nevada mountains and the north-south connectivity between the Indian Wells Valley and the Owens Valley. Therefore, at minimum, refinement of the SEDA is necessary in order to avoid this key east-west linkage between the Cosos and the Sierra Nevada mountains on the west, and the north-south linkage along bajada east of the Sierra Nevada foothills between the Indian Wells Valley and the Owens Valley.

212-8

⁶ <http://www.scwildlands.org/reports/ALinkageNetworkForTheCaliforniaDeserts.pdf>

- Other sensitive species and habitats occur within the proposed SEDA, including the Owens Valley checkerbloom (*Sidalcea covillei*), the Olancho Greasewood Assemblage, which is a federally designated Unusual Plant Assemblage located in the northeastern part of the SEDA. The SEDA also includes active portions of the Olancho Dunes, are also inappropriate for solar development.
- Because the proposed Western Solar Energy Group SEDAs would be limited to a cumulative 250MW or 1500 acres of development, the Rose Valley SEDA is not needed to meet the development target.
- We urge the County to eliminate the Rose Valley SEDA from the REGPA.

212-8
(cont'd)

Laws

The Laws SEDA includes previously disturbed areas, which may be more appropriate for solar development than many other areas in the County if appropriate steps are taken to protect the values of and species that inhabit the near by Fish Slough ACEC. The Laws SEDA encompasses 18.2 square miles (over 11,500 acres). Although we understand that portions of the Laws SEDA contains irrigated lands and groundwater dependent vegetation that are protected by the Inyo-Los Angeles Long Term Water Agreement there should still be sufficient acreage to be able to accommodate 1500 acres of development (proposed acreage cap for the Western Solar Energy Group) of disturbed lands. However, numerous rare species are also known from the area, and refinement of the SEDA would facilitate avoidance and minimize threats to the sensitive species.

- Owens speckled dace (*Rhinichthys osculus* ssp. 2) and Owens sucker (*Catostomus fumeiventris*) could be negatively affected by additional water pumping/diversion for solar projects. Recent large-scale solar projects on both public and private lands have been required to install and monitor groundwater wells in order to protect species from impacts from water drawdown. Similar mechanisms should be required here along with triggers to cease water pumping as part of the conditions of project approval.
- Swainson's hawk (*Buteo swainsoni*) in northeast part and Prairie falcon (*Falco mexicanus*) in northwest part of the SEDA could be affected by large-scale solar energy development, as could the pallid bat (*Antrozous pallidus*), Foxtail thelypodium (*Thelypodium integrifolium* ssp. *complanatum*), prairie wedgegrass (*Sphenopholis obtusata*), Booth's hairy evening primrose (*Eremothera boothii* ssp. *intermedia*). The federally and state endangered southwestern willow flycatcher also occurs in southwestern part of the SEDA near the Owens River, as well as the Owens valley vole (*Microtus californicus vallicola*). If this SEDA is adopted, at minimum, safeguards must be put in place to prevent dwindling water supplies and other impacts from solar development that have potential to directly and indirectly impact these species and habitats.

212-9

Owens Valley Study Area

We recognize that the majority of the Owens Valley is under going a subsequent planning process for solar development by the County. However, we are concerned that this schedule segments the environmental review process.

212-10

As a prelude to the subsequent planning process moving forward, we remain concerned about the potential impacts to a suite of rare species and unique habitats.

- Owens Lake is an identified Important Bird Area, and may not be compatible with any large-scale solar within the lake boundaries and within a fairly large buffer area within the valley surrounding the lake based on the observed “lake effect” that has caused injury and mortality to migratory birds, and in particular water birds. Indeed, because the Owens Valley is a significant migratory corridor for avian species within the Pacific flyway, the precautionary principle leads us to believe that most areas within the Owens Valley will likely be inappropriate for large-scale solar development.
- Particular species of concern include snowy plover, mountain plover, Owens Valley vole, Owens Valley checkerbloom, nesting least Bell’s vireo (federally threatened) at south end of Owens lake; the yellow-breasted chat on the south and west side of Owens Lake and the least bittern (*Ixobrychus exilis*) also occurs on the west side of the Owens Valley Study Area (OVSA) and must be protected.
- Olancha Greasewood Assemblage, a federally designated Unusual Plant Assemblage also occurs on the south end of Owen’s Lake and must be protected.
- Owens tui chub has only a small refugia in the Owens valley that could be affected by additional water pumping from any proposed projects as could the Owen’s pupfish which occurs on the west side of the OSVA.
- Argus Mountains kangaroo rat (*Dipodomys panamintinus argusensis*) also occurs on the west side of the OVSA and could be adversely affected by projects in this area.
- Farther north in the OVSA near Lubken canyon and beyond, numerous rare species are also documented to occur including the Inyo County star-tulip (*Calochortus excavatus*), the Owens Valley checkerbloom, Wong’s springsnail (*Pyrgulopsis wongi*), Parish’s popcorn flower (*Plagiobothrys parishii*), Nevada orcytes (*Oryctes nevadensis*) and many more. The spotted bat (*Euderma maculatum*) is known from near the Owens River delta.
- We urge the County to reconsider segmenting its review of the OVSA from the rest of the REGPA and, rather, to revise the DPEIS to include any proposals for development in this area.

212-10
(cont'd)

Eastern Solar Energy Group

The Eastern Solar Energy Group as proposed currently lacks transmission and is mostly inappropriate for large-scale solar development because of numerous natural resource concerns. We believe the SEDAs as currently proposed (550 MW or 3,300 acres – DPEIR at pdf pg.164) are not developable without harming rare natural resources. The CEC proceedings for Hidden Hills confirmed that despite some level of disturbance, that proposed project site (which is now proposed as part of the Charleston View SEDA) still supports numerous rare species, including the federally and state threatened desert tortoise, sensitive burrowing owls and other species (see below). As part of that environmental review process it became apparent that the area is also a key thread of the Pacific flyway for migratory birds and a rich and iconic cultural landscape.

212-11

A recent groundwater study has confirmed that the Pahrump Valley, Charleston View and Chicago Valley areas are hydrologically connected to the Amargosa River (Zdon 2014 – see comments submitted by The Nature Conservancy for reference). Congress designated this part of the Amargosa as a “wild and scenic” river, and both the Amargosa River and its flows must be protected. We also caution the County regarding possible mitigation for water use from development—while retirement of existing water rights was discussed as mitigation for the Hidden Hills proposed project impacts, that type of mitigation would only be effective if the acquired water rights were currently *exercised* water rights, not “paper water” that are not being pumped from the aquifer.

212-12

Currently no transmission lines with adequate capacity are available to accept energy from solar projects in the proposed Eastern Solar Energy Group SEDAs. For this reason, the DPEIR needs to evaluate the impacts of new transmission lines, including impacts on lands outside of the County’s jurisdiction because they would be absolutely necessary to develop within any SEDA. Additionally, with new transmission lines would also come the growth inducing impacts of more solar projects, particularly on lands adjacent to these SEDAs in Nevada. The DPEIR needs to include the impacts of this associated solar development as well as new transmission lines in its analysis of cumulative impacts when considering the Eastern Solar Energy Group SEDAs.

212-13

Charleston View

- Because of the extensive survey and environmental review work done for the proposed Hidden Hills solar power tower project, information on the resources on that site are more abundant. Numerous rare plant species have been documented within that SEDA include the forked buckwheat (*Eriogonum bifurcatum*); gravel milkvetch (*Astragalus sabulonum*); Torrey’s mormon tea (*Ephedra torreyana*); Tidestrom’s milkvetch (*Astragalus tidestromii*); Gooding’s phacelia (*Phacelia pulchella* var. *goodingii*); Wheeler’s dune broom (*Chaetadelpa wheeleri*); Nye milkvetch (*Astragalus nyensis*); small-flowered androstephium (*Androstephium breviflorum*); Preuss’ milkvetch (*Astragalus preussii* var. *preussii*) desert wing fruit; (*Acleisanthes nevadensis*); spine-noded milkvetch (*Peteria thompsoniae*) Johnson’s bee-hive cactus (*Sclerocactus johnsonii*). For all of these rare plant species appropriate seasonal surveys must be required in this SEDA. If any development is to occur within this SEDA, a robust mitigation scenario that maximizes continuity and connectivity with the existing habitat must also be included in the final PEIR and REGPA.
- Numerous rare animals included the federally and state threatened desert tortoise; the fully protected Nelson’s bighorn sheep, American badger, desert kit fox and burrowing owls were all documented on the Hidden Hills site⁷. Additionally golden eagles nest within the adjacent mountain ranges and were routinely observed over the project site⁸. Numerous migratory birds are also known to utilize the site for forage, nesting, and breeding, and are protected by federal laws

212-14

⁷ <http://docketpublic.energy.ca.gov/PublicDocuments/Regulatory/11-AFC-2%20Hidden%20Hills/2012/DEC/TN%2068953%2012-21-12%20Final%20Staff%20Assessment.pdf>

⁸ IBID

as well as California Department of Fish and Game code⁹. For all of these wildlife species surveys must be required in this SEDA. If any development is to occur within this SEDA, a robust mitigation scenario that maximizes continuity and connectivity with the existing habitat must also be included in the final PEIR and REGPA.

- Most of this SEDA overlays modeled desert tortoise habitat by USGS¹⁰. Indeed the proposed Hidden Hills solar project included occupied desert tortoise habitat. In addition, the southern and western portion of this SEDA, the US Fish and Wildlife Service has identified key desert tortoise connectivity linkages – the Death Valley / Greenwater valley area¹¹. Therefore tortoise surveys must be required for this federally and state threatened and declining species in this SEDA. If any development is to occur within this SEDA, a robust mitigation scenario that maximizes continuity and connectivity with the existing desert tortoise habitat must also be included in the final PEIR and REGPA.
- As stated above, this SEDA overlays a key area of groundwater connectivity between the Pahrump Valley and the Amargosa River. With the Pahrump Valley already in overdraft, additional groundwater pumping from any solar projects would exacerbate impacts to the Amargosa River. If any development is to occur within this SEDA, a robust mitigation scenario that off-sets impacts to groundwater in a real way must also be included in the final PEIR and REGPA.
- The amount of land available for solar development (proposed to be capped at 300 acres) is relatively small and a similar amount of renewable energy could readily be accommodated in other parts of the County and through distributed solar development in the built environment. Due to the remoteness of the area, lack of transmission and the potential biological and cultural conflicts and potential impacts to water resources, this area is inappropriate for large-scale solar development.
- We urge the County to eliminate the Charleston View SEDA from consideration in the REGPA.

212-14
(cont'd)

Chicago Valley

- While the private lands in Chicago Valley have not been well surveyed for existing biological (or cultural) resources, we do know that mesquite bosque, a groundwater dependent vegetation type, and the rare Coyote gilia (*Aliciella triodon*) occur with in the SEDA. All of this SEDA overlays modeled desert tortoise habitat by USGS¹². As with the Charleston View SEDA, groundwater impacts will not only affect the Amargosa River, but also and likely more immediately, the mesquite bosques. All of the comments above pertaining to the Charleston View SEDA also apply to the Chicago Valley.
- The amount of land available for solar development (proposed to be capped at 300 acres) is relatively small and a similar amount of renewable energy could

212-15

⁹ IBID

¹⁰ <http://pubs.usgs.gov/of/2009/1102/>

¹¹ http://www.fws.gov/nevada/desert_tortoise/documents/publications/2013-Conserving-popln-linkages-mdt.pdf

¹² <http://pubs.usgs.gov/of/2009/1102/>

readily be accommodated in other parts of the County and through distributed solar development in the built environment. Due to the remoteness of the area, lack of transmission, the amount of land available for solar development (proposed to be capped at 300 acres), and the potential biological and cultural conflicts, potential impacts to water resources, and growth-inducing potential, this area is inappropriate for large-scale industrial solar development.

212-15
(cont'd)

We urge the County to eliminate the Chicago Valley SEDA from consideration in the REGPA.

Sandy Valley

- Numerous biological issues are known to occur in the Sandy Valley SEDA. The forked buckwheat, Gooding's phacelia, and Preuss' milkvetch all occur within the boundaries of the proposed SEDA. Parts of this SEDA, especially the northern part also overlays modeled desert tortoise habitat by USGS¹³ and includes also identified key desert tortoise connectivity linkages – the Death Valley / Greenwater valley area¹⁴. Surveys will be needed as well as refinements to protect connectivity in this area
- However some areas in Sandy Valley are also disturbed from past (and present) irrigated agricultural uses. Some of these lands may be possibly be appropriate for low-water use (photovoltaic) solar, if the water rights were retired and sensitive habitats and avian species are avoided. However, we still have concerns that because of limited available transmission capacity, development in this location could require bringing new transmission lines to this and adjacent areas, creating a de-facto SEDA in the general area, and unanalyzed cumulative impacts, into hitherto undisturbed areas of high natural resource value.

212-16

Southern Solar Energy Group

Trona

- This SEDA includes a substantial amount of public BLM lands which should be eliminated from the SEDA based on the County's lack of land use authority on BLM lands. In addition, this SEDA is literally surrounded by the BLM designated Mohave Ground Squirrel Conservation Area. If any development is to occur within this SEDA, at minimum, the PEIR must require surveys for MGS, which is a California threatened and declining species and a robust mitigation scenario that maximizes continuity with the existing MGS habitat must also be included in the final PEIR and REGPA.
- This SEDA also overlays modeled desert tortoise habitat by USGS¹⁵. Therefore tortoise surveys must be required for this federally and state threatened and declining species in this SEDA. If any development is to occur within this SEDA, a robust mitigation scenario that maximizes continuity and connectivity with the existing desert tortoise habitat must also be included in the final PEIR and REGPA

212-17

¹³ <http://pubs.usgs.gov/of/2009/1102/>

¹⁴ http://www.fws.gov/nevada/desert_tortoise/documents/publications/2013-Conserving-popln-linkages-mdt.pdf

¹⁵ <http://pubs.usgs.gov/of/2009/1102/>

- This SEDA is also quite near Searles Lake Important Bird Area which attract resident and migrating birds. Given the concerns with the “lake effect” and potential impacts to migratory birds, the precautionary principle should be utilized to eliminate this SEDA at this time.
- The amount of land available for solar development is proposed to be capped at 600 acres and includes BLM lands. This amount of renewable energy can readily be accommodated in more appropriate locations. Due to the remoteness of the area, lack of transmission, and the potential biological conflicts, this area is inappropriate for most large-scale solar development.
- We urge the County to eliminate the Trona SEDA from consideration in the REGPA

212-17
(cont'd)

Alternatives

The DEIR fails to consider a phased approach to establishing SEDAs, which we still believe is a viable alternative. Based on on-going renewable energy technological improvements, efforts to increase energy efficiency and reduce energy consumption, the impacts of new technologies like storage, and increasing distributed energy generation at the site of consumption, it is likely that the clean energy economy of tomorrow will be very different from what we plan for today.

As outlined above, each of the SEDAs have natural resource issues. The distributed generation alternative would not require modification. Some of the alternatives could be modified to maximize solar generation while minimizing environmental impacts through incorporation of the comments provided above and as follows:

- **Solar Photovoltaic Only Alternative** – clearly this technology type uses less water than other types of solar technologies – a benefit to arid Inyo County overall. However, as the DPEIR notes (pg. 4.4-91), large-scale photovoltaic (PV) installations appear to attract birds by appearing as water bodies (lake effect). This often results in injury and/or mortality to birds, and especially water birds. Because much of Inyo County, and especially the valley areas, are critically important migratory paths of the Pacific Flyway, large-scale PV installations are not an appropriate technology at this time, although it is possible that in the future a technological “fix” can be put in place that lets birds “see” that PV panels are solid objects or otherwise eliminate this threat. Without identified and scientifically tested and proven measures to address this issue, we believe that large-scale PV installations are likely inappropriate in much of the Owens Valley and surrounding areas, and therefore cannot recommend this alternative.
- **Reduced SEDA Alternative** – modifying the SEDAs (and eliminating some) as per our SEDA specific comments above could result in a feasible Reduced SEDA Alternative. We urge the County to consider further refining this alternative.

212-18

- **Solar Energy Development on Previously Disturbed Lands Only Alternative** – modifying the SEDAs to encompass only previously disturbed lands could also result in a feasible alternative but should still incorporate the SEDA specific-recommendations in these comments to avoid significant impacts to avian and terrestrial species and water resources.

212-18
(cont'd)

In addition the County should also consider including a requirement in all alternatives that for every MW of large-scale solar developed in an appropriate SEDA (see above) that an equal amount of distributed generation MW be required to be developed by the project proponent as local/community-based solar, in appropriate areas.

Cultural Resources

- Cultural resources especially as related to tribes and as raised by tribal representative on the November call with the county are clearly significant and Inyo County has an incredibly rich cultural heritage and value. Some tribal representatives asked for development of a cultural resources overlap (exclusion) map. The response from the County that this would be addressed at specific project level is unacceptable and inadequate under CEQA.
- As in the DEIR itself notes, California Government Code, Section 65352.3, requires local governments to consult with California Native American tribes for the purpose of protecting and/or mitigating impacts to cultural places. Senate Bill 18 requires formal consultation with Native American tribes as part of a project that enacts **or amends a general plan** or a specific plan. (4.5.23). Additionally, California Government Code Section 65560, 65562.5, et seq. requires local governments to conduct meaningful consultation with California Native American tribes on the contact lists maintained by the NAHC for purposes of protecting cultural places located on open space. Although the PEIR identifies the tribes who historically used present-day Inyo County, and identified recognized and unrecognized tribes in the area, the PEIR does not even mention any *coordination* with the tribes, much less consultation, nor does the PEIR state the County would at any point consult with the identified tribes prior to adopting the Renewable Energy General Plan Amendment.
- The REGPA does not adequately identify cultural resource impacts. The County relies on publicly available information, much of it outdated, and very coarse, rather than taking the time to do a true analysis using the most up-to-date information. For example, the County states the programmatic nature of the PEIR precludes performing a record search for cultural resources at the Eastern Information Center of the California Historical Resources Information System—despite the fact the SEDAs are finite and mapped. The County likewise delays to the project stage an investigation into the sacred lands database. Additionally, the County relies in large part on information obtained through the 1980 CDCA process. The CDCA has been amended multiple times since 1980, and in fact, the DRECP is proposed as a BLM land use plan amendment for both the CDCA and Bishop Resource Management Plans. The development of the DRECP has led to an updated understanding of biological and cultural resources in the California

212-19

desert, as well as new areas with protective land designations based on cultural resource values, yet Inyo County has not referenced this more recent information in their REGPA. Without current and specific information it is not possible to assess the true impacts of the REGPA on cultural resources.

- The SEDAs seem chosen without any thought of avoiding cultural resources, undermining the value of a programmatic document. Although the County's states "*the REGPA works to minimize impacts to cultural resources by constraining renewable energy development within the County in conjunction with the General Plan's existing protection for such resources.*" (4.5.25), it is difficult to see any development constraints based on cultural resource values. As discussed above, it is not possible to minimize impacts without an adequate understanding of cultural resource impacts, and the County has not taken the necessary step of coordinating or consulting with tribes, or even using up-to-date and granular publicly available information to assess these impacts. However, even using the County's own metrics, each of the SEDAs save one (Trona) are identified as having at least moderate cultural sensitivity, five of the nine areas addressed in the draft (Owens Lake, Rose Valley, Owens Valley Study Area, Chicago Valley and Charleston View) are also identified as having the highest possible cultural resource sensitivity. (4-5-31)¹⁶ Choosing SEDAs that do not avoid cultural resources negates the stated value of the REGPA in minimizing cultural resource impacts, and the value to developers of identifying lands best suited for renewable energy development based on low resource value.
- Although we are pleased to see ethnographic landscapes such as the Salt Song Landscape protected as cultural landscapes, project-specific measures include only documenting landscapes and developing and monitoring mitigation and there is no discussion of avoidance or minimization measures (4-5.37) despite serious questions of whether, and how these impacts could be mitigated. Additionally, these impacts are not included in summary list of cultural resource impacts. (4.5-45)

212-19
(cont'd)

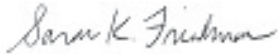
¹⁶ Indeed per the PEIR: "*the entirety of the Chicago Valley SEDA is within an area designated as sensitive for cultural resources..... The Rose Valley SEDA contains several areas of cultural sensitivity and is adjacent to the Fossil Falls ACEC, which contains important cultural resources including rock art locales. Pearsonville and Owens Lake SEDAs both are very near to sensitive areas. Additional sensitive areas are located along the eastern edge of the OVSA, but the study area itself falls outside of the CDCA (BLM 1980b). While also not in the CDCA, the Fish Slough ACEC, managed by the BLM Bishop Field Office, is immediately to the west of the Laws SEDA within the OVSA and contains important cultural resources including large rock art locales. The areas directly adjacent to the OVSA and the Owens Lake, Rose Valley, and Pearsonville SEDAs are included in the CDCA map as sensitive for Native American values. These three SEDAs are along the CDCA boundary so there are likely additional areas important to Native Americans that are not reflected on these maps. A sensitive area lies just east of the Trona SEDA. The Chicago Valley and Charleston View SEDAs are separated from each other by an area sensitive for Native American cultural values.* (4.5.28).

We appreciate the opportunity to provide comments on the DPEIR, and look forward to continuing to work with the County to develop a reasonable planning strategy to implement solar energy in Inyo County while protecting its world-class resources from degradation.

Sincerely,



Heene Anderson
Center for Biological Diversity



Sarah Friedman
Senior Campaign Representative,
Sierra Club, Beyond Coal Campaign



Malcolm Clark
Range of Light Group
Toiyabe Chapter, Sierra Club chair

cc: via email

Karen Douglas, California Energy Commission, KLdougl@energy.ca.gov
James Kenna, Bureau of Land Management; jkenna@blm.gov

Responses to Letter 212: Center for Biological Diversity and Range of Light Group, Toiyabe Chapter, Sierra Club

Response 212-1: The introduction to the letter introduces the Center for Biological Diversity (CBD), the Sierra Club, and the Toiyabe Chapter Range of Light Group, states the commenters' support of well-planned renewable energy projects, summarizes their role to date in the REGPA planning process, commends the County on scaling back the development scenarios proposed in 2011, and asserts that some of the development areas are still inappropriate. No additional response is necessary.

Response 212-2: Although the boundaries of some of the SEDAs and the OVSA overlap special status natural communities or protected natural areas, the PEIR excludes development from such areas as stated in the following mitigation measures.

Mitigation Measure BIO-21 states that solar development authorized under the REGPA shall not be sited in or within 1,000 feet of any areas determined by the County in consultation with Responsible and Trustee agencies to be Important Bird Areas, essential connectivity areas or linkages identified in the 2001 Missing Links in California's Landscape Project (Penrod et al. 2001), or tule elk and mule deer movement corridors unless potentially significant impacts are avoided. Mitigation Measure BIO-6 states that projects shall not be sited within areas identified for desert tortoise recovery or conservation according to the *Draft Revised Recovery Plan for the Mojave Population of the Desert Tortoise (Gopherus agassizii)* (USFWS 2011) (such as designated critical habitat, ACECs, DWMAAs, priority connectivity areas, and other areas or easements managed for desert tortoises). Mitigation Measure BIO-19 states that solar development authorized under the REGPA will not be sited within any special status natural communities or protected natural areas. Areas proposed for conservation designations by the DRECP as may be considered for additional protection and exclusion by the County once the DRECP is adopted. Currently the DRECP is not adopted, and therefore, using proposed designations from it in all of the County's solar designations would be premature. The County is, however, including alternatives for consideration that do reduce and eliminate SEDAs, based on proposed ACECs and NLCS designations.

Section 3.3.3 of the PEIR discusses redevelopment on previously developed or degraded areas within the SEDAs. Degraded land could include a number of developed or disturbed sites including abandoned housing or old mining sites. The former PPG Industries Barlett Plant has been identified as a potential site suitable for development on the west bank of Owens Lake. Abandoned mines are located throughout the County as well as several landfills that could be redeveloped as they become full. Portions of Owens Lake has also been identified as potential area for development given large portions of the lake have been degraded and contribute to airborne dust in the Owens Valley.

Response 212-3: The Eastern and Southern Solar Energy Groups have been included as part of the REGPA based on a suite of objectives and criteria; proximity to existing electrical conveyance facilities is one of them. Accordingly, the County has focused the development areas identified in the REGPA along the existing LADWP transmission systems and along the conceptual Valley Electric Association (VEA) system. As indicated on page 3-19 in the PEIR, new substations and transmission interconnections would be necessary to export energy from the SEDAs in the Eastern Solar Energy Group (Chicago Valley, Charleston View, and Sandy Valley) into VEA facilities in Nevada via tie-ins to a conceptual transmission line in western Nevada. VEA facilities are already part of the California grid. Section 3.3.5 of the PEIR has been updated and identifies two additional substations within 8.5 miles of the Southern Solar Energy Group (Trona) that may be utilized if upgrades are made to them, effectively reducing the need for additional transmission facilities. While every effort will be made to locate future development

projects near existing transmission facilities, the locations of SEDAs have been determined based on additional opportunities and constraints described in the Opportunities and Constraints Technical Study (Appendix D of the PEIR).

Response 212-4: It is acknowledged that much of the land within the County (approximately 92 percent) consists of federal land managed by federal agencies (refer to Table 4.1-2 in the PEIR). Solar energy projects proposed on federal lands within the SEDAs or the OVSA would be regulated by the federal agency with jurisdiction of the specific project site. Further, the County has limited influence over public, state, and other locally managed lands in the County. Section 1.2 of the PEIR has been updated to include the following statement:

The County is solely responsible for the lands under its own jurisdiction. Any future development in the SEDAs or OVSA involving public, state, and LADWP-owned lands would require coordination with the appropriate land managing agency and would be subject to environmental review and land use constraints consistent with the regulations applicable to that jurisdiction.

Response 212-5: As stated under the discussion of the DRECP in Section 2.4.3.1, the DRECP is currently under review, and although the County is under no obligation to implement the DRECP principles and policies (including the DFAs), the County has considered the DRECP in development of the REGPA. Because the DRECP was in draft form during the preparation of the PEIR, the SEDAs were not further constrained based on information contained in the DRECP. However, if the REGPA is adopted, the County will coordinate with the DRECP agencies to avoid priority conservation areas and future projects would be development consistent with the requirements of the DRECP. Under REGPA Policy MER-2.6, the County would coordinate with renewable energy solar developers and other agencies to avoid, minimize, or mitigate impacts. If the County becomes a signatory of the DRECP, future development under the REGPA within the DRECP area could be expedited by the take coverage under Section 10 of the Endangered Species Act of 1973 that is provided by the DRECP. The PEIR has been amended to acknowledge that some SEDAs are inside areas proposed as Areas of Critical Environmental Concern (ACECs) and National Conservation Lands (NCL) by the DRECP.

Areas proposed for designation by the DRECP as ACECs and NLCS may be considered for additional protection and exclusion by the County once the DRECP is adopted. Currently the DRECP is not adopted, and therefore, using proposed designations from it in all of the County's solar designations would be premature. The County is, however, including alternatives for consideration that do reduce and eliminate SEDAs, based on proposed ACECs and NLCS designations.

Sections 21.16.010, 21.16.020 and 21.16.030 of the Inyo County Code require that any person who proposes to construct an electric transmission line, solar thermal power plant, or a photovoltaic power plant must first obtain a renewable energy permit, renewable energy impact determination or renewable energy development agreement. Section 21.08.100 of the Inyo County Code requires that renewable energy development agreements include reclamation plans and acceptable financial assurances. Sections 21.20.030 and 21.20.040 require that reclamation/revegetation plans be imposed on projects subject to renewable energy permits and renewable energy impact determinations as conditions of approval and that financial assurances sufficient to assure the implementation of the reclamation/revegetation are required.

Policy MER 2.8 Reclamation Planning states that "the County shall work with Renewable Energy Solar Facility developers to provide and implement a reclamation plan to return the site of each project to

pre-project conditions or another appropriate state (i.e., native, reuse, etc.). The reclamation plan shall include financial assurances, such as bonding, for the cost of decommissioning, reclaiming and revegetating (if required) each Renewable Energy Solar Facility including removal of all equipment and accessory structures related to the facility, including but not limited to solar collector arrays, mounting posts, substations, electrical infrastructure, transmission lines, operations and maintenance buildings, appurtenant energy storage facilities and other accessory structures.”

Response 212-6: This comment supports an acreage only cap of 1500 acres for the Western Solar Energy Group, as this may be the most reasonable cap for development. It further states that the PEIR must provide a framework for avoidance, minimization, and full mitigation of all significant impacts for future tiered CEQA analyses. This is described in further detail in the following responses.

Response 212-7: The PEIR requires protocol surveys for Mohave ground squirrel for projects within or adjacent to the species’ known range that have the potential to impact the squirrel (refer to Mitigation Measure BIO-16). The PEIR also requires preparation of a management plan (refer to Mitigation Measure BIO-19) if projects would be sited in or adjacent to special status natural communities or protected natural areas or is determined to have the potential to impact any off-site special status natural communities or protected natural areas during the project level biological resources evaluation that is a requirement of Mitigation Measure BIO-1. With these measures in place, proponents of projects in the Pearsonville SEDA would be required to conduct Mohave ground squirrel studies and coordinate with USFWS and CDFW to avoid, minimize, and mitigate for any potential impacts to Mohave ground squirrel.

Mitigation Measure BIO-6 requires any solar development project(s) or related infrastructure under the REGPA that is determined during the project level biological resource evaluation (Mitigation Measure BIO-1) to have the potential to affect desert tortoise to avoid, minimize, and mitigate for impacts. With these measures in place, proponents of projects in the Pearsonville SEDA within habitat for desert tortoise would be required to coordinate with USFWS and CDFW to avoid, minimize, and mitigate for any potential impacts.

Although SEDA boundaries may contain important wildlife habitats and movement corridors, development will not be allowed in these areas (See Response 212-2). The first bullet of Mitigation Measure BIO-21 has been updated to read as follows:

- Solar development authorized under the REGPA ~~should~~ shall not be sited in or within 1,000 feet of any areas determined by the County in consultation with responsible and trustee agencies to be Important Bird Areas, essential connectivity areas or linkages identified in the 2001 Missing Links in California’s Landscape Project (Penrod et al. 2001), or USFWS identified desert tortoise priority connectivity areas or tule elk and mule deer movement corridors unless potentially significant impacts are avoided. The appropriate buffer distance shall be determined on a project-by-project basis as determined by the County in consultation with responsible and trustee agencies.

Selection of the Pearsonville SEDA was based on opportunities and constraints presented in the Opportunities and Constraints Technical Study (Appendix D of the PEIR). As discussed previously, sensitive resources have been identified within the boundaries of this SEDA but may be precluded from future development as determined by project-specific analyses. If development targets are achieved within the other SEDAs in the Western Energy Group, the need for development with the Pearsonville

SEDA may be reduced. The County further acknowledges the commenters' request to remove the Pearsonville SEDA.

Response 212-8: The PEIR requires protocol surveys for Mohave ground squirrel for projects within or adjacent to the species' known range that have the potential to impact the squirrel (refer to Mitigation Measure BIO-16). The PEIR also requires preparation of a management plan (refer to Mitigation Measure BIO-19) if projects would be sited in or adjacent to special status natural communities or protected natural areas or is determined to have the potential to impact any off-site special status natural communities or protected natural areas during the project level biological resources evaluation that is a requirement of Mitigation Measure BIO-1. With these measures in place, projects in the Rose Valley SEDA with the potential to impact Mohave ground squirrel would require protocol surveys and coordination with USFWS and CDFW to avoid, minimize, and mitigate for any potential impacts to Mohave ground squirrel. The County has also provided an alternative for consideration that reduces the Rose Valley based Mojave Ground Squirrel concerns.

Mitigation Measure BIO-6 requires any solar development project(s) or related infrastructure under the REGPA that is determined during the project level biological resource evaluation (Mitigation Measure BIO-1) to have the potential to affect desert tortoise to avoid, minimize, and mitigate for impacts. With these measures in place, projects in the Rose Valley SEDA within habitat for desert tortoise would require coordination with USFWS and CDFW to avoid, minimize, and mitigate for any potential impacts.

Although SEDA boundaries may contain important wildlife habitats, movement corridors, and sensitive natural communities such as Olancha Greasewood Assemblage and active desert dunes, development will not be allowed in these areas (See Response 212-2). See Response 212-8 as it relates to revisions to Mitigation Measure BIO-21.

Selection of the Rose Valley SEDA was based on opportunities and constraints presented in the Opportunities and Constraints Technical Study (Appendix D of the PEIR). As discussed previously, sensitive resources have been identified within the boundaries of this SEDA but may be precluded from future development as determined by project-specific analyses. If development targets are achieved within the other SEDAs in the Western Energy Group, the need for development with the Rose Valley SEDA may be reduced. The County further acknowledges the commenters' request to remove the Rose Valley SEDA; however, the SEDA will not be removed from the REGPA at this time.

Response 212-9: The PEIR has been updated to include several mitigation measures that must be implemented for solar projects proposed under the REGPA that would require groundwater pumping (see Response 202-4). These measures include, but are not limited to, groundwater monitoring and adaptive management. If projects are implemented in the Laws SEDA that have the potential to impact special status fish, a project-specific groundwater impact analysis will be required to address potential impacts to habitat for special status fish (Mitigation Measure BIO-4) along with consultation/coordination with the appropriate resource agency regulating the specific fish species.

All of the species indicated in this comment as having the potential to occur in the Laws SEDA and potentially be impacted by development in the SEDA are included in Table 4.4-3 *Sensitive Wildlife Species Known to Occur or Potentially Occurring in the Laws SEDA*. Proponents of projects in the Laws SEDA, if any such projects are proposed, will be required to evaluate the potential impacts to these special status species as required by the biological mitigation measures, beginning with Mitigation

Measure BIO-1. Numerous mitigation measures are in place in the PEIR to avoid, minimize, and/or mitigate for any such impacts.

Response 212-10: The comment notes concern for the methodology utilized in the PEIR, stating an opinion that the current method of the analysis segments the review due to the proposed subsequent planning process for the OVSA. The County is not segmenting the environmental review process by prescribing that subsequent in-depth analysis be conducted for the sensitive OVSA area; rather, potential impacts to the OVSA are still assessed in the PEIR. For example, as discussed in Section 4.4.7, “at the program level of analysis impacts to biological resources are considered significant and unavoidable for all SEDAs and the OVSA, even after all feasible mitigation....” The County is not segmenting the analysis, but rather assessing potential impacts in the PEIR with the intent to further detail the level of those significant impacts in this sensitive area.

Although SEDA boundaries may contain Important Bird Areas, development will not be allowed in these areas unless significant impacts can be avoided (See Response 212-2). The PEIR also requires preparation of a management plan (refer to Mitigation Measure BIO-19) if projects would be sited in or adjacent to special status natural communities or protected natural areas or is determined to have the potential to impact any off-site special status natural communities or protected natural areas during the project level biological resources evaluation that is a requirement of Mitigation Measure BIO-1. In addition, Mitigation Measure BIO-18 has been updated to increase the level of protection for bird species along the Pacific Flyway.

The majority of the species indicated in this comment as having the potential to occur in the OVSA and potentially be impacted by development are included in Table 4.4-3 *Sensitive Wildlife Species Known to Occur or Potentially Occurring in the Owens Valley Study Area*. Proponents of projects in the OVSA, if any such projects are proposed, will be required to evaluate the potential impacts to these special status species and any other special status species identified during the project level biological resource evaluation as having the potential to occur in the study area or be impacted by projects in the study area as required by the biological mitigation measures, beginning with Mitigation Measure BIO-1. Numerous mitigation measures are in place in the PEIR to avoid, minimize, and/or mitigate for any such impacts.

Although SEDA boundaries may contain important wildlife habitats, movement corridors, and sensitive natural communities such as Olancho Greasewood Assemblage, development will not be allowed in these areas (See Response 212-2). Any potential impacts to Owens tui chub and/or Owens pupfish would be addressed by Mitigation Measures BIO-4 and BIO-25. As discussed previously, the County does not believe that they are segmenting the environmental review of the OVSA, where impacts to the OVSA were assessed under the PEIR and further detail to the level of impacts in this area would be examined at the project level.

Response 212-11: The PEIR has analyzed the potential impacts to natural resources located in the Eastern Solar Energy Group at the programmatic level (see Sections 4.1 through 4.18 of the PEIR). If any future projects were to be proposed under the REGPA for the SEDAs in the Eastern Solar Energy Group, the project(s) would be required to avoid special status natural communities or protected natural areas as outlined in Response 212-2. All future projects under the REGPA would be subject to project-specific environmental review. Depending on the size and location of the development and the technology used, a full EIR may be required. However, the REGPA also encourages small scale, PV technologies to be constructed which may not require a full EIR. As stated in Section 1.2 of the PEIR:

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

It should be noted that under Title 21 of the Inyo County Code concerning renewable energy development, any person who proposes to construct an electric transmission line, solar thermal renewable energy facility or a PV renewable energy facility in the County must first obtain a Renewable Energy Permit, a Renewable Energy Development Agreement or a Renewable Energy Impact Determination. A Renewable Energy Impact Determination applies to projects over which the County has limited authority because the project is located on federal or state land or is subject to the permitting jurisdiction of the California Energy Commission.

Under Title 21, the issuance of a Renewable Energy Permit is subject to CEQA, and the County Planning Commission must conduct a noticed public hearing before considering approval of such a permit. The Planning Commission must find that there has been compliance with CEQA before a permit can be issued. In addition, “as a condition to the issuance of such a permit, the Planning Commission may impose such reasonable and feasible mitigation measures as it finds to be necessary to protect the health, safety, and welfare of the county’s citizens, the county’s environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.” Finally, the Planning Commission is required to impose as a condition of approval, a plan for the reclamation/revegetation of the project site at the time of decommissioning of the project and the Planning Commission shall require financial assurances from the applicant to ensure that the reclamation plan will be fully implemented.

Concerning Renewable Energy Development Agreements, Title 21 provides that such agreements may be entered into by the County and a project applicant in lieu of obtaining a Renewable Energy Development Permit. Renewable Energy Development Agreements are subject to CEQA and must be approved by an ordinance adopted by the Board of Supervisors following a noticed public hearing. Prior to approving such an agreement, the Board must find that there has been compliance with CEQA. Renewable Energy Development Agreements must include a reclamation plan, acceptable financial assurances to ensure full implementation of the reclamation plan, be consistent with the county general plan and be enforceable by injunctive relief or other enforcement mechanisms under law. In the Renewable Energy Development Agreement, the Board of Supervisors may require such mitigation measures or modifications of the project as it finds necessary to protect the health, safety, and welfare of the county’s citizens, the county’s environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.

This PEIR would provide a framework for these subsequent project analyses, but specific projects would still be assessed on an individual level; all projects under CEQA are legally afforded the same public review process.

Response 212-12: The PEIR has been updated to include a discussion of the hydrologic connectivity of the Charleston View and Chicago Valley SEDAs to the Amargosa River (including the portion of the river designated by Congress as “Wild and Scenic”) and watershed (see Section 4.4 of the PEIR). The PEIR has

also been updated to include several mitigation measures that must be implemented for solar projects proposed under the REGPA that would require groundwater pumping (see Response 202-4). New Mitigation Measure BIO-25 includes a requirement for the project applicant to purchase and retire currently exercised water rights along the same flow path as the water being used by the facility.

Response 212-13: As indicated in Section 3.3.5 the PEIR, new substations and transmission interconnections would be necessary to export energy from the SEDAs in the Eastern Solar Energy Group (Chicago Valley, Charleston View, and Sandy Valley) into Valley Electric Association (VEA) facilities in Nevada via tie-ins to a conceptual transmission line in western Nevada. VEA facilities are already part of the California grid. The PEIR also states on the same page that “Although this potential interconnection would extend beyond the physical boundaries of the Chicago Valley SEDA and into the State of Nevada, the potential implementation of this connection line is addressed in this PEIR.” Section 4.18 in the PEIR concludes that the need for new transmission lines to serve future solar development projects in the Eastern Solar Energy Group is a potentially significant impact.

Because the REGPA EIR is a PEIR, it is intended to establish a framework and process for future implementation of solar energy projects that fall within the parameters evaluated in the PEIR. Individual projects would be required to prepare a project-specific environmental analysis and associated CEQA document to evaluate the project’s potential impacts, including an assessment of potential impacts associated with project-specific connections to transmission lines (see Response 212-11).

Response 212-14: As stated in Mitigation Measure BIO-2, prior to the approval of any solar development projects or related infrastructure under the REGPA, a CDFW-approved botanist shall evaluate the potential for special status plant species to occur on the site and conduct surveys, if necessary, to determine presence or infer absence of special status plants on the site following the November 24, 2009 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* or the most current guidelines. The following bullet was added to Mitigation Measure BIO-2 to require preparation of a mitigation and monitoring plan if special status plants are identified in a project area and complete avoidance of direct and indirect impacts is not feasible as determined by the County:

- A mitigation and monitoring plan shall be developed by a qualified botanist/ restoration ecologist and submitted to CDFW for approval prior to approval of the proposed project. The mitigation and monitoring plan will dictate appropriate avoidance and minimization measures, compensatory mitigation, and monitoring requirements as pertinent to the specific species and level of impact(s). Mitigation shall include, but is not limited to 1) protection of special status plant populations not directly impacted by construction or implementation of the project as stated above; 2) transplantation and/or collection of seed from impacted plants if feasible, as stated above; and 3) the preservation in perpetuity of an equivalent or larger off-site population for every individual or population of special status plant impacted including sufficient land surrounding the preserved population to ensure its survival in perpetuity as determined by a qualified botanist/ restoration ecologist. The qualified botanist/ restoration ecologist shall include plans to restore and enhance the preserved populations to the extent feasible.

Proponents of projects in the Charleston View SEDA, if any such projects are proposed, would be required to evaluate the potential impacts to any special status species identified during the project level biological resource evaluation as having the potential to occur in the project area or be impacted

by projects in the area as required by the biological mitigation measures, beginning with Mitigation Measure BIO-1. Focused surveys will be conducted (as determined necessary by a qualified biologist) to identify special status species and natural communities present or having the potential to occur on the site. The biological resource evaluation will include an evaluation of the extent of those habitats, an evaluation of the potential for impacts to each special status species and/or habitat, and shall prescribe specific mitigation measures to avoid impacts to biological resources to the maximum extent practicable. Numerous other biological mitigation measures are in place in the PEIR to avoid, minimize, and/or mitigate for any such impacts.

Mitigation Measure BIO-6 states that projects shall not be sited within areas identified for desert tortoise recovery or conservation according to the *Draft Revised Recovery Plan for the Mojave Population of the Desert Tortoise (Gopherus agassizii)* (USFWS 2011) (such as designated critical habitat, ACECs, DWMAs, priority connectivity areas, and other areas or easements managed for desert tortoises). In addition, Mitigation Measure BIO-6 requires any solar development project(s) or related infrastructure under the REGPA that is determined during the project level biological resource evaluation (Mitigation Measure BIO-1) to have the potential to affect desert tortoise to avoid, minimize, and mitigate for impacts. With these measures in place, projects in the Charleston View SEDA within habitat for desert tortoise would require coordination with USFWS and CDFW to avoid, minimize, and mitigate for any potential impacts.

As stated in Response 212-12, the PEIR has been updated to include a discussion of the hydrologic connectivity of the Charleston View and Chicago Valley SEDAs to the Amargosa River and watershed (see Section 4.4 of the PEIR). The PEIR has also been updated to include several mitigation measures that must be implemented for solar projects proposed under the REGPA that would require groundwater pumping (see Response 202-3).

It is acknowledged that biological, cultural, and groundwater resources are present in the Charleston View SEDA and may potentially be impacted. The PEIR includes program-level mitigation that has been further updated to protect such resources (outlined in Sections 4.4.5 and 4.9.5). Future projects within the SEDA will be required to undergo project-specific analyses to determine additional impacts and would be analyzed in light of this FEIR. The County further acknowledges the commenter's request to remove the Charleston View SEDA; however, the County has decided not to remove the SEDA from the REGPA at this time.

Response 212-15: Because the lands in the Chicago Valley SEDA, among others, have not been well surveyed, the PEIR requires that each proposed project under the REGPA be evaluated for the potential to impact biological resources (See Mitigation Measure BIO-1). As stated in Mitigation Measure BIO-2, a CDFW-approved botanist shall evaluate the potential for special status plant species to occur on the site and conduct surveys, if necessary, to determine presence or infer absence of special status plants on the site. Mitigation Measures BIO-1 and BIO-2 would ensure that a thorough inventory of biological habitats and special status plant and animal species would occur prior to any development.

As stated in Response 212-12, the PEIR has been updated to include a discussion of the hydrologic connectivity of the Charleston View and Chicago Valley SEDAs to the Amargosa River and watershed (see Section 4.4 of the PEIR). The PEIR has also been updated to include several mitigation measures that must be implemented for solar projects proposed under the REGPA that would require groundwater pumping (see Response 202-3).

Mitigation Measure BIO-19 has been updated to state that projects in the Chicago Valley SEDA could negatively impact off-site mesquite bosque by altering drainage patterns or altering groundwater levels. Because the PEIR requires preparation of a management plan (refer to Mitigation Measure BIO-19 *as*) if projects would be sited in or adjacent to special status natural communities or protected natural areas or is determined to have the potential to impact any off-site special status natural communities or protected natural areas during the project level biological resources evaluation (that is a requirement of Mitigation Measure BIO-1), potential impacts to mesquite bosque will be evaluated if any projects are proposed in the Chicago Valley SEDA.

Measures referenced in Response 212-14 would also be implemented as necessary for projects in the Chicago Valley SEDA.

It is acknowledged that biological, cultural, and groundwater resources are present in the Chicago Valley SEDA and may potentially be impacted; however, this SEDA does not contain essential connectivity areas, missing links, or Important Bird Areas. The PEIR includes program-level mitigation that has been further updated to protect such resources (outlined in Sections 4.4.5 and 4.9.5 of the PEIR). All future projects under the REGPA would be subject to project-specific environmental review. Depending on the size and location of the development and the technology used, a full EIR may be required. However, the REGPA also encourages small scale, PV technologies to be constructed which may not require a full EIR. As stated in Section 1.2 of the PEIR:

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs, as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

This PEIR would provide a framework for these subsequent project analyses, but specific projects would still be assessed on an individual level; all projects under CEQA are legally afforded the same public review process.

Response 212-16: As discussed in Response 212-15, a thorough inventory of biological habitats and special status plant and animal species will occur prior to any development in the Sandy Valley SEDA, if any is proposed.

This comment supports small-scale PV solar in the southwest portion of Sandy Valley within already disturbed agricultural lands. It is known that potential groundwater land use conflicts potentially exist in the Sandy Valley SEDA and therefore appropriate mitigation has been designed and discussed further in Section 4.9 of the PEIR. While every effort will be made to site future projects in close proximity to existing transmission facilities, it is known and further discussed on Section 3.3.5 PEIR that it may be necessary for new substations and transmission interconnections be built to connect the Eastern Group which includes the Sandy Valley SEDA. Future projects within the SEDA would be required to undergo project-specific analyses to determine additional impacts and will be analyzed in light of the PEIR.

Response 212-17: The PEIR requires protocol surveys for Mohave ground squirrel for projects within or adjacent to the species' known range that have the potential to impact the squirrel (refer to Mitigation

Measure BIO-16). The PEIR also requires preparation of a management plan (refer to Mitigation Measure BIO-19) if projects would be sited in or adjacent to special status natural communities or protected natural areas or is determined to have the potential to impact any off-site special status natural communities or protected natural areas during the project level biological resources evaluation that is a requirement of Mitigation Measure BIO-1. With these measures in place, projects in the Trona SEDA with the potential to impact Mohave ground squirrel would require protocol surveys and coordination with USFWS and CDFW to avoid, minimize, and mitigate for any potential impacts to Mohave ground squirrel.

Mitigation Measure BIO-6 states that projects shall not be sited within areas identified for desert tortoise recovery or conservation according to the *Draft Revised Recovery Plan for the Mojave Population of the Desert Tortoise (Gopherus agassizii)* (USFWS 2011) (such as designated critical habitat, ACECs, DWMAs, priority connectivity areas, and other areas or easements managed for desert tortoises). In addition, Mitigation Measure BIO-6 requires any solar development project(s) or related infrastructure under the REGPA that is determined during the project level biological resource evaluation (Mitigation Measure BIO-1) to have the potential to affect desert tortoise to avoid, minimize, and mitigate for impacts. With these measures in place, projects in the Trona SEDA within habitat for desert tortoise would require coordination with USFWS and CDFW to avoid, minimize, and mitigate for any potential impacts.

Although SEDA boundaries may contain Important Bird Areas, development will not be allowed in these areas unless significant impacts can be avoided (see Response 212-2). The PEIR also requires preparation of a management plan (refer to Mitigation Measure BIO-19 *Minimize impacts to special status natural communities and protected natural areas*) if projects would be sited in or adjacent to special status natural communities or protected natural areas or is determined to have the potential to impact any off-site special status natural communities or protected natural areas during the project level biological resources evaluation that is a requirement of Mitigation Measure BIO-1. In addition, Mitigation Measure BIO-18 has been updated to increase the level of protection for bird species along the Pacific Flyway.

Although the development potential of the Trona SEDA is approximately 600 acres, it is being considered as part of the FEIR due to the availability of previously disturbed land and the potential to have less of an impact on sensitive resources. The County acknowledges the commenter's request to remove the Trona SEDA; however, the County has decided not to remove the SEDA from the REGPA at this time.

Response 212-18: The comment correctly states that the draft PEIR does not consider a phased approach to establishing SEDAs; the comment also asserts that this type of phased approach is a viable option. The SEDA boundaries depicted in the PEIR were identified based on the opportunities and constraints described in the Opportunities and Constraints Technical Study (Appendix D of the PEIR), and further refined based on feedback received through the agency scoping and public planning process (Section 3.1.1 of the PEIR). Although alternatives are discussed in PEIR, a main purpose of the PEIR is to analyze and discuss potential impacts of the proposed project as proposed; the SEDAs were identified prior to the initiation of the PEIR process. As discussed in Section 6.0 of the PEIR, a range of project alternatives were considered and compared against the factors outlined in Section 15126(f) of the State CEQA Guidelines for feasibility. The comment does not explain what is meant by a phased approach to establishing SEDAs; the list of alternatives outlined and analyzed in Section 6.3 of the PEIR includes: No Project Alternative, Solar PV Only Alternative, Commercial Scale Only Alternative (referred to as the

Distributed Generation Only Alternative in the Draft PEIR), Reduced SEDA Alternative, and Solar Energy Development on Previously Disturbed Lands Only Alternative.

The comment also asserts that the future of the clean energy economy would likely be different from what we plan for today. Note that the REGPA and the PEIR do not propose the construction of any specific renewable energy projects. Overall, the REGPA and this PEIR would help direct and constrain future proposed solar development within the County, and each specific future project would be assessed under a project-level environmental analysis. As renewable energy technology evolves, the framework that the REGPA provides for future project-level analysis would remain relevant. Future projects that could involve new or different technology would be subject to project-level environmental review to ensure that impacts would be avoided or reduced to the maximum extent practicable.

Additionally, the comment asserts that each of the SEDAs have natural resource issues, and discusses the potential implementation of some of the alternatives proposed in the PEIR; the comment also suggests modifications to some of the proposed alternatives with the goal of maximizing solar generation and minimizing environmental impacts.

For the Solar Photovoltaic (PV) Only Alternative, the comment notes that, as discussed in the PEIR, while this type of technology uses less water, large scale PV installations attract birds by appearing as water bodies. The comment asserts that this technology, as it currently is, is inappropriate in much of Owens Valley and the surrounding areas, particularly because the importance of the valley areas to migratory birds. This alternative is assessed in Section 6.3.2 of the PEIR; note that although this alternative may still result in some impacts, selection of this alternative would remove the more controversial types of solar energy projects from consideration; solar thermal applications would be denied by the County outright. This alternative would likely result in slightly less substantial impacts to aesthetics, biological resources, and cultural resources, although it would not reduce the impacts to below a level of significance

The comment also discusses the Reduced SEDA alternative and the Solar Energy Development on Previously Disturbed Lands Only Alternative, and notes a preference for modifications to these and other alternatives; the County decision makers will consider the adoption of the proposed project and/or project alternatives at a public hearing in March 2015.

Response 212-19: The comment states that the lack of specific impact analysis for cultural resources is a deficiency of the PEIR, as the County has a rich cultural heritage; however, the Program-level EIR for the REGPA reflects a tiered approach to environmental analysis, specifically endorsed by State CEQA Guidelines Section 15152. As described in the Guidelines (Section 15152(c)), “Where a lead agency is using the tiering process in connection with an EIR for a large-scale planning approval..., the development of detailed, site-specific information may not be feasible but can be deferred, in many cases, until such time as the lead agency prepares a future environmental document in connection with a project of more limited geographic scale...” The Guidelines (Section 15152(b)) further provide that “the level of detail contained in the first tier EIR need not be greater than that of the program, plan, policy, or ordinance being analyzed.” Program-level analysis of specific plans is common CEQA practice. As no individual projects have been proposed yet, it is not yet known where specific and detailed cultural resources assessments would need to be conducted. However, this PEIR prescribes multiple program-level mitigation measures which would help reduce potential project-specific impacts to cultural resources. Mitigation Measure CUL-1a through CUL-1g mandates a series of prescribed actions that future solar energy developers must follow prior to seeking approval of their individual project.

These mitigation measures include data collection and resource inventory by qualified experts. Subsequent project-level CEQA analyses would include the evaluation of potential project-specific effects, including effects on archeological and other cultural resources; these project-level analyses would occur in advance of decisions about whether to approve or reject a proposed project.

Pursuant to Senate Bill 18 (SB 18) and Government Code Section 65352.3, on September 17, 2013 the County requested a list of Native American contacts from the California Native American Heritage Commission (NAHC) from whom to request consultation regarding the Renewable Energy General Plan Amendment. The NAHC transmitted a list of Native American contacts to the County on October 7, 2013 for purposes of SB18 consultation regarding the Renewable Energy General Plan Amendment. In October 2013 the County initiated Native American Consultation pursuant to the California Government Code Sections 65040.2, 65092, 65351, 65352.3, 65352.4, 65562.5, with the Big Pine Paiute Tribe of the Owens Valley, Bishop Paiute Tribe, Fort Independence Community of Paiute, Timbisha Shoshone, and the Lone Pine Paiute Shoshone. Only the Big Pine Paiute Tribe of the Owens Valley requested consultation. The County is, however, available to meet with the Tribe upon their request.

As a program level environmental analysis is appropriate for the assessment of the REGPA, (as described above and in the CEQA Guidelines, Section 15152[c]), a record search for cultural resources or an investigation into the sacred lands database would be inappropriate at this stage of analysis; in order to determine the appropriate areas where a this research would be necessary, specific projects must first be proposed. As cultural resources are location specific they cannot be fully identified, evaluated, and all impacts recognized within a programmatic document. The information used was sufficient for an analysis of this programmatic nature. This PEIR serves to streamline renewable energy development but does not absolve project-specific analysis. At this stage in the renewable energy development streamlining process it is not necessary to complete record searches of the SEDAs and Owens Valley Study Area. Those would be completed during later stages of the process, including project-specific studies.

The Sacred Lands File of the Native American Heritage Commission is very sensitive database. It is more appropriate to request inquiries into the Sacred Lands Files and to consult with Native American tribes when project locations are known, as it is important to not expose sensitive information without there being a project that may affect the sacred places.

The County is well aware of the research and updated understanding of cultural resources provided in the Desert Renewable Energy Conservation Plan. Information from the DRECP was considered during the writing of the cultural resources section, but the Draft PEIR was published prior to the release of the public draft of the DRECP

The PEIR uses available resources and information to complete the program level analysis (including the CDCA), but ensures that future impacts would be reduced for individual projects (none of which are currently proposed) by including the mitigation measures detailed in the cultural sections that require data collection and resource inventory by qualified experts. Subsequent project-level CEQA analyses would include the evaluation of potential project-specific effects, including effects on archeological and other cultural resources, and the analyses would occur in advance of decisions about whether to approve or reject a proposed project.

With regard to the DRECP, note that (as stated in Section 2.4.3.1 of the PEIR) the DRECP is currently under review, and the County has considered the DRECP in development of the REGPA, although the

County is under no obligation to implement the DRECP principles and policies. The County is well aware of the research and updated understanding of cultural resources provided in the Desert Renewable Energy Conservation Plan. Information from the DRECP was considered during the writing of the cultural resources section, but the Draft PEIR was published prior to the release of the public draft of the DRECP.

The assertion in the comment that it is not possible to assess true impacts of the REGPA on cultural resources without current and specific information is inaccurate because, as previously stated, no specific projects are currently proposed; subsequent project-level CEQA analyses would include the evaluation of potential project-specific effects, and the analyses would occur in advance of decisions about whether to approve or reject a proposed project.

The SEDAs had been previously selected through an analysis of geographic, physical, political, cultural, environmental, and socioeconomic opportunities and constraints. This planning level exercise informed the determination of the SEDAs prior to the development of the PEIR. Within the opportunities and constraints analysis, cultural resources were only one of many selection factors. The purpose of the cultural resources section of the PEIR is to provide an analysis of the potential impact to cultural resources across the entire County as well as the sensitivity of the SEDAs. Ultimately, this PEIR serves to streamline renewable energy development but does not absolve project-specific analysis, as cultural resources are location specific and cannot be fully identified, evaluated, and all impacts recognized within a programmatic document.

The SEDAs had been previously selected through an analysis of geographic, physical, political, cultural, environmental, and socioeconomic opportunities and constraints. This planning level exercise informed the determination of the SEDAs prior to the development of the PEIR. Within the opportunities and constraints analysis, cultural resources were only one of many selection factors. The purpose of the cultural resources section of the PEIR is to provide an analysis of the potential impact to cultural resources across the entire County as well as the sensitivity of the SEDAs. Ultimately, this PEIR serves to streamline renewable energy development but does not absolve project-specific analysis, as cultural resources are location specific and cannot be fully identified, evaluated, and all impacts recognized within a programmatic document.

The majority of the SEDAs were identified as being highly sensitive for cultural resources, with only two ranked as low to moderate or moderately sensitive (see Table 4.5-2). However, it is beyond the scope of this document to address specific resources or the potential impacts to them, as the nature and particular location of projects is currently unknown. This document has been prepared as a program-level EIR pursuant to Section 15168 of the State CEQA Guidelines. State CEQA Guidelines 15168(c)(1) state that "Subsequent activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared." As cultural resources are location specific, these subsequent activities would need to identify and evaluate the impacts to cultural resources during project specific analysis

The comment notes that there is no discussion of avoidance or minimization measures related to cultural landscapes, and that potential impacts related to cultural landscapes are not specifically included in the summary list of cultural impacts. Note that although no specific projects have been proposed, construction of solar facilities could potentially affect cultural landscapes depending upon the location of specific future projects. Text has been added to Section 4.5.3.3 of the PEIR describing potential impacts of the proposed project to cultural landscapes. The text has been modified as follows:

Historical Resources and Cultural Landscapes

Construction of solar facilities could potentially affect historical resources and cultural landscapes when resulting excavations and other activities alter the existing surface within the SEDAs and the OVSA. Such activities could include operation of heavy equipment, trenching for utilities, grading and vegetation clearing for access roads, site leveling, and foundation excavations. These activities would have the potential to adversely affect significant cultural resources including historical resources and cultural landscapes. Temporary impacts to the visual setting could result from construction vehicles and increased dust generated during ground disturbances. Long-term impacts to the visual setting of historical resources and cultural landscapes could occur from the permanent presence of project structures. Depending on the type of solar resource and the topography, visual impacts may be visible for many miles. Solar power tower technology includes towers that are several hundred feet high and that can be viewed for many miles away; see Section 4.1. If these community scale developments occur on existing built environment infrastructure, such as paved areas or buildings, they are highly unlikely to impact buried resources; however, these activities may still impact cultural landscapes, along with the integrity of design, setting, materials, workmanship, or feeling of historical resources, particularly historic period buildings. Substantial adverse changes in the existence of a recognized cultural landscape would result in a potentially significant impact. Additionally ~~Substantial adverse changes in to the significance of~~ a historical resource, as defined in Section 15064.5 of the State CEQA Guidelines, would be a potentially significant impact.

As previously discussed in Section 4.5.3.3 of the Draft PEIR, general types of mitigation (including mitigation related to cultural landscapes) have been prescribed; note this section has been moved to Section 4.5.5 of the Final PEIR and identified as Mitigation Measure CUL-1. Additionally, a bullet has been added to this section specifically noting that avoidance and minimization methods are the preferred means by which the County would prevent potential impacts to cultural resources. The following text has been added:

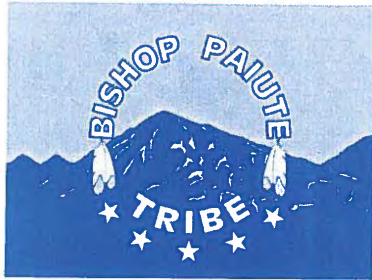
MM CUL-1: Minimize impacts to cultural resources.

Avoidance and minimization are the preferred means by which the County would prevent potential impacts to cultural resources, including cultural landscapes. Preservation in place is the preferred manner to avoid and minimize impacts to historical and archaeological resources. All impacts to cultural resources that are eligible or potentially eligible for listing on the CRHR shall be avoided, to the greatest extent possible. Preservation in place may be accomplished by, but is not limited to, the following: Avoidance of significant or potentially significant cultural resources through project redesign and the relocation of project element.



COMMENTS FROM TRIBAL GOVERNMENTS
Series 300 Responses to Comments





BISHOP TRIBAL COUNCIL

January 8, 2015

Inyo County Board of Supervisors
PO Box N
Independence, CA 93526

Sent via regular mail and email

RE: Draft Program attic Environmental Impact Report – Inyo County Renewable Energy General Plan Amendment (REGPRA)- Request for comment deadline extension and government-to-government consultation

Dear County of Inyo Board of Supervisors;

It has come to our attention that the above referenced document currently out for public review has included a shift in scope that has grown to include impacts to a larger area than originally described. On behalf of our tribal government, I have concerns that the proposed shift in county land use policy currently being studied may lead to permitting and even encourage dramatic changes in land use over a large area of our aboriginal homeland which we hold in common with other local tribal governments.

301-1

In a related development, our tribal government and members of the local community are currently being asked to comment by February 23 on the Desert Renewable Energy Conservation Plan (DRECP) a regional planning effort addressing renewable energy development overlapping lands addressed in Inyo County REGPRA. It is unclear, and is of great concern, on why Inyo County is proposing to amend their General Plan to have the potential to encourage more area to be zoned, and land use to be potentially changed and developed, for large renewable energy projects above that which is being proposed and accommodated for by the DRECP plans. These renewable energy areas seem to offer little benefit to local economy and are large in scale that could potentially exploit and change the character and have negative impacts on the environment of the valley.

301-2

Based on the above reasoning, and to enable our tribal government to give meaningful attention to this matter, I respectfully request that your comment deadline currently set for January 14, 2015, to be extended until a point in time where appropriate government-to-government consultation, including face-to-face meetings can occur between elected officials of the County of Inyo and the federally recognized government of the Bishop Paiute Tribe.

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PHONE (760) 873-3584 • FAX (760) 873-4143

On behalf of the Bishop Paiute Tribe I extend my invitation to engage in a government- to government consultation between representatives members of the Inyo County Board of Supervisors and our Tribal Council so that questions and concerns may be addressed regarding this proposed policy. Please feel free to contact me or if I am not available, our Tribal Administrator Mervin Hess at 760-873-3584 at your earliest convenience so that we can discuss details on how this meeting can be arranged as soon as possible.

301-3

Respectfully,



Gerald Howard
Chairman, Bishop Paiute Tribe

CC: Mervin Hess, Tribal Administrator
Tribal Environmental Protection Agency – Bishop Paiute Tribe
Tribal Historic Preservation Office – Bishop Paiute Tribe
Honorable Tribal Council
Inyo County Planning Department

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PHONE (760) 873-3584 • FAX (760) 873-4143

Responses to Letter 301 – Bishop Tribal Council

Response 301-1: The SEDAs presented in the Draft PEIR are reduced from development areas previously presented to the Inyo County Planning Commission in February 2014. As described in Section 3.1.1 of the Draft PEIR, the Inyo County Board of Supervisors conducted a series of workshops between March and May 2014 and requested changes to the REGPA that resulted in removing wind energy from consideration and constricting the proposed development areas to utilize only transmission facilities in the County's western portion; the remaining potential development areas (SEDAs) were greatly reduced based on public input. The Owens Valley was removed as a SEDA, and is included in the currently proposed REGPA as a study area for which specific criteria may be applied. The OVSA as shown on the figures in the PEIR is a depiction of the general valley area, and does not correlate with a proposed development area.

Response 301-2: The DRECP is a multi-jurisdictional regional planning effort to conserve and manage plant and wildlife communities in the Colorado and Mojave Deserts of California while facilitating the timely permitting of compatible renewable energy projects. The DRECP is currently under review, and although the County is not currently a signatory of the DRECP and is under no obligation to implement the DRECP principles and policies, the County has considered the DRECP in development of the REGPA. Because the DRECP was in draft form during the preparation of the PEIR, the SEDAs were not further constrained based on information contained in the DRECP. However, if the DRECP and the REGPA are adopted, the County would coordinate with the DRECP agencies to avoid priority conservation areas and future projects in the County would be developed consistent with the requirements of the DRECP. Under REGPA Policy MER-2.6, the County would coordinate with renewable energy solar developers and other agencies to avoid, minimize, or mitigate impacts. If the County becomes a signatory of the DRECP, future development under the REGPA within the DRECP area could be expedited by the "take" coverage under Section 10 of the Endangered Species Act of 1973 and state take coverage under Section 2835 of the California Fish and Game Code for species listed under the California Endangered Species Act as threatened, endangered, or candidates. The PEIR identified and analyzed potential impacts of solar energy development, including economic impact and the environment of the Owens Valley.

The public comment period for the Draft PEIR opened on November 5, 2014 and was originally slated to close on December 19, 2014, meeting the mandated 45-day comment period per Section 15105 of the State CEQA Guidelines. However, the County received multiple requests from potential reviewers of the document to extend the comment period. Accordingly, on December 4, 2014 the County approved the extension of the public comment period to January 14, 2015 (a total comment period of 71 days).

Response 301-3: The County transmitted correspondence to the Tribe offering to meet and discuss issues brought forth by the Tribe, and continues to be available to meet.

Pursuant to Senate Bill 18 (SB 18) and Government Code Section 65352.3, on September 17, 2013 the County requested a list of Native American contacts from the NAHC from whom to request consultation regarding the Renewable Energy General Plan Amendment. The NAHC transmitted a list of Native American contacts to the County on October 7, 2013 for purposes of SB18 consultation regarding the Renewable Energy General Plan Amendment. In October 2013 the County initiated Native American Consultation pursuant to the California Government Code Sections 65040.2, 65092, 65351, 65352.3, 65352.4, 65562.5, with the Big Pine Paiute Tribe of the Owens Valley, Bishop Paiute Tribe, Fort Independence Community of Paiute, Timbisha Shoshone, and the Lone Pine Paiute Shoshone. Only the Big Pine Paiute Tribe of the Owens Valley requested consultation. The County is, however, available to meet with the Tribe upon their request.



BISHOP TRIBAL COUNCIL

July 10, 2014

Planning Department
168 North Edwards Street
Post Office Drawer L
Independence, California 93526
Att: Cathreen Richards, Senior Planner

RE: Notice of Preparation (NOP) – Program Environmental Impact Report – General Plan Amendment
2013-02/Inyo County Renewable Energy

- 1) As a federally recognized tribal government located in Inyo County that includes much of aboriginal homeland we appreciate the opportunity to comment on this proposed general plan amendment regarding renewable energy development. | 302-1
- 2) As hydroelectric and wind energy are not included in the amendment the renewable energy title of the amendment should be changed to solar energy. | 302-2
- 3) Similar to addressing surficial disturbance from a mining project, the PEIR should fully address the environmental impact of projects that may exist after decommissioning. In particular it should specify specific mitigation goals that need to be achieved to reclaim disturbed land after completion of a project. This analysis should include a detailed inventory of soil and vegetation conditions before project disturbance. The environmental review should take into account the effect of long lasting soil erosion, air pollution, invasive weed issues that could potentially exist long after the project is completed should reclamation plans not be strictly enforced by the county. | 302-3
- 4) The environmental analysis should include an analysis of cumulative effects | 302-4
- 5) The definition of Community Scale projects state that they shall only generate electricity for the use of specified communities and only import energy as a part of a net metering plan. However it does not give a limit or proportion of the total power generated that can be exported. As the | 302-5

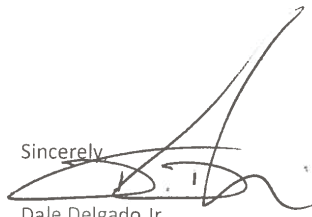
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amendment allows community scale projects to be constructed outside of a RGPA there would exist a potential incentive for developers to submit proposals to site these projects in environmentally sensitive areas outside RGPAs for generation for reasons other than community scale projects. | 302-5
(cont'd)

6) New economic development policy. The cumulative economic and social impacts should be thoroughly evaluated for this proposed new policy. | 302-6

7) Based on unique habitat, visual and cultural resources all Utility scale solar development should be excluded from all areas within the Owens Valley and Deep Rose areas as these impacts cannot be reduced or mitigated. | 302-7

If you have any questions please contact our Environmental Management Office at 760-873-3584 x 237.

Sincerely,

Dale Delgado Jr.
Tribal Chairman, Bishop Paiute Tribe

Attachment:
Comments draft DEIR Solar Ranch Project

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PHONE (760) 873-3584 • FAX (760) 873-4143

Responses to Letter 302 – Bishop Tribal Council

Response 302-1: The comment acknowledges the County’s public planning efforts and identifies the tribal council’s interest in the project.

Response 302-2: Based upon comments received by the County during the Notice of Preparation period, the County elected to remove wind energy from the REGPA proposal. However, the County opted to maintain the original name of the General Plan Amendment.

Response 302-3: Proposed REGPA Mineral and Energy Resources Policy MER-2.8 requires that project-specific reclamation plans be developed for future projects under the REGPA to return the project site to pre-project conditions or another appropriate state. Project-specific analysis shall be conducted, and the reclamation plan shall include post-reclamation standards based on baseline conditions. The draft PEIR analyzed the potential impacts from project implementation as it relates to air pollution, biological resources, and soils/geology.

Response 302-4: Please refer to Section 5.1 of the PEIR for an evaluation of cumulative effects.

Response 302-5: Community scale projects by definition are intended to generate energy for a specific community’s use and would be located near the community it serves. Although no megawatt cap was described for community scale projects in the Draft PEIR, a cap of 6 megawatts has been added to the definition of community scale in the Final PEIR. Future community scale projects will be evaluated appropriately if proposed in environmentally sensitive areas.

Response 302-6: Please refer to Section 5.1.3.16 of the PEIR for an evaluation of cumulative socioeconomic impacts.

Response 302-7: The SEDA boundaries depicted in the Draft PEIR have been identified based on the Opportunities and Constraints Technical Study (Appendix D of the Draft PEIR), and further refined based on feedback received through the agency scoping and public planning process (Section 3.1.1 of the PEIR). As described in the Draft PEIR, although the SEDAs have been identified to direct and constrain utility-scale and commercial scale solar development in the County, not all areas within the proposed SEDA boundaries may be suitable for development. Therefore, the SEDA boundaries as presented in the Draft PEIR are not modified for the Final PEIR – rather, constraints within the SEDAs will be identified through subsequent, project-specific environmental review and planning processes, as outlined in the PEIR. The Owens Valley is not a SEDA but instead was identified as a study area; any potential future solar energy project proposed for this area would be subject to a General Plan Amendment and further CEQA analysis and public comment as outlined in the PEIR.



BIG PINE PAIUTE TRIBE OF THE OWENS VALLEY

Big Pine Paiute Indian Reservation

P.O. Box 700 · 825 South Main Street · Big Pine, CA 93513

(760) 938-2003 · fax (760) 938-2942

www.bigpinepaiute.org

January 14, 2015

Inyo County Board of Supervisors
PO Drawer N
Independence, CA 93526

Inyo County Planning Department
PO Drawer L
168 N. Edwards Street
Independence, CA 93526

(sent Jan. 14, 2015, via email to: inyoplanning@inyocounty.us)

RE: Draft Renewable Energy General Plan Amendment Program Environmental Impact Report

Dear Board of Supervisors and Planning Department:

The Big Pine Paiute Tribe of the Owens Valley (Tribe), a federally recognized Tribe, submits the following comments regarding the Draft Renewable Energy General Plan Amendment Program Environmental Impact Report (DPEIR).

SB 18 Consultation

California Senate Bill 18 (SB 18) requires counties to initiate consultation with area Native American Indian tribes when considering amendments to county General Plans. The Tribe has requested and at times engaged in SB 18 Consultation with Inyo County regarding the Renewable Energy General Plan Amendment (REGPA) since it was first proposed as an amendment in 2010. When the county resumed work on the REGPA in 2013, consultation meetings were held between members of the Tribal Council and Supervisor Tillemans on February 13, 2014, June 9, 2014, and November 6, 2014. During this time, the Tribe submitted written comments, including a “scoping” letter dated July 10, 2014, responding to the Notice of Preparation of the draft Program Environmental Impact Report (DPEIR) on the REGPA. Most recently, a meeting was held on December 11, 2014, to consult on the REGPA. However, Supervisor Tillemans was absent during that agenda item, so no consultation was able to be conducted, and Inyo County staff in attendance declined to discuss the Tribe’s concerns with the REGPA. It was unfortunate that Inyo County was unable to consult on the REGPA at this meeting that had been scheduled after the DPEIR had been released, because the Tribe had specific questions regarding how its July scoping comments were utilized in developing the DPEIR. Since consultation

303-1

on the REGPA has not been formally concluded by either the Tribe or Inyo County, it is essential that SB 18 Consultation continue on this important matter. | 303-1
(cont'd)

Unaddressed Scoping Comments

During the “scoping” phase allowed by the California Environmental Quality Act (CEQA), the Tribe submitted several comments (letter dated July 10, 2014, as mentioned above¹), but the DPEIR is not clear as to whether the Tribe’s concerns were addressed, and if so, how. The Tribe raised concerns about: | 303-2

- The potential for a “Program” EIR to be a superficial and thus inadequate document to address the large proposed solar energy development areas (SEDAs)
- The need for the DPEIR to seriously consider small-scale development as a viable alternative to the SEDA approach
- The need to remain consistent with county planning goals of avoiding adverse environmental impacts when designating areas suitable for industrial-scale renewable energy facilities
- Significant impacts to cultural resource that would occur should the proposed SEDAs and the REGPA approach be selected as the preferred alternative
- The confusing status of the Owens Valley under the REGPA
- The wording of the amendment proposed for the Land Use section of the General Plan; specifically, the statement that the county will seek compensation from agencies, organizations, landowners, or individuals.

With the release of the DPEIR, the Tribe’s comments herein expand on the concerns raised during scoping and present additional concerns.

Overall Comment

The Tribe recommends Inyo County not pursue the REGPA (for reasons presented below) and instead investigate viable trends in solar energy development that would benefit the citizens of Inyo County while conserving precious resources for future generations. The Tribe’s analysis of the DPEIR revealed many flaws in the document and the REGPA approach, and several of the Tribe’s concerns are discussed. | 303-3

Abandon the REGPA Approach

The REGPA is a top-down rather than a bottom-up approach, and as such -- as the DPEIR admits -- significant adverse environmental impacts will result from its adoption. The Tribe understands that, a few years ago, the county’s General Plan did not directly address solar energy development in Inyo County; however, the county recently adopted Inyo County Code Title 21, which does accommodate proposals to develop solar and wind energy in Inyo County. With Title 21, the REGPA is not needed, but the county wishes to adopt the REGPA to streamline permitting and installation of utility-scale solar energy facilities in large areas of Inyo County (see DPEIR p. 3-3 for example). By adopting the REGPA, Inyo County effectively invites investors to develop facilities in Inyo County where energy will be produced and exported from the county, and permanent damage to our environment will result². The investors and developers reap the profits, customers in far-away places consume the energy, and | 303-4

¹ The Tribe notes its scoping letter is part of the PDEIR Appendix A.

² Page ES-3 of the PDEIR states, “significant and unavoidable impacts could occur with respect aesthetics, biological resources, and cultural resources.”

Inyo County is left with scraped, dusty ground with few if any native species, desecration to the cultural landscape, and marred aesthetics.

303-4
(cont'd)

The Tribe suggests the REGPA is contrary to current trends regarding the future of electricity in California. Throughout the state, on- or off-grid roof-top solar panels and small scale arrays in the built environment (e.g. Big Pine School and Inyo County Courthouse) are increasing in popularity as support for exploitation of vast areas of open land to construct remote solar power plants has waned. The Tribe views Inyo County's acquiescence to industrial scale solar facilities on county lands as an out of date response, which will result in harm, not benefit. If Inyo County moves forward with the REGPA and pursues this approach, it will leave Inyo citizens at an economic and technologic disadvantage compared with others in California, and it perpetuates the unfortunate resource colony situation the county and its citizens currently endure.

303-5

Resources such as Office of Planning and Research, (http://www.opr.ca.gov/s_renewableenergy.php) and the California Energy Efficiency Strategic Plan" (CEESP) (<http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/eesp/>) show Inyo County's REGPA approach is not consistent with the state's goals of Energy Efficiency and deployment of renewable energy production in general. For example, programs such as PACE (Property Assessed Clean Energy), may provide "A way for local governments to finance energy efficiency and renewable energy systems on private buildings using municipal bonds or other funds; the loan is secured and is repaid on the property tax bill, and the repayment obligation runs with the land." Tribal staff provided Inyo County Planning Department staff with information about the City of Lancaster's and Sonoma County's progressive approaches to community scale renewable energy, which are reported to benefit local governments and citizens.

A final reason to abandon the REGPA is that the REGPA directly conflicts with Inyo County's General Plan (adopted in 2000 and amended). Lands designated as Open Space were to be managed according to certain goals and policies. Some examples where the REGPA would be in direct opposition to the General Plan include:

303-6

- For Mineral Resources (section 8.4.4), Inyo County has: Policy MER-1.1 regarding Resource Extraction and the Environment: "Support the production of mineral resource where it would not significantly impact sensitive resources as defined by CEQA and this General Plan." *does this not apply for industrial scale solar?*
- Section 8.6.4, GOAL BIO-1: "Maintain and enhance biological diversity and healthy ecosystems throughout the County."
- Section 8.7.4, GOAL CUL-1: "Preserve and promote the historic and prehistoric cultural heritage of the County."
- Policy CUL-1.5 Native American Consultation: "The County and private organizations shall work with appropriate Native American groups when potential Native American resources could be affected by development proposals."
- Section 8.8.4, GOAL VIS-1: "Preserve and protect resources throughout the County that contribute to a unique visual experience for visitors and quality of life for County residents."
- Under Land Use Element, Policy LU-1.6, specific to Sandy Valley: "The County shall preserve agricultural and related open space uses on private lands in Sandy Valley and will not designate additional land for rural residential development."
- Policy LU-1.16, Inyo – LADWP Enhancement and Mitigation Projects: "All General Plan land use designations shall allow for the implementation of Enhancement/Mitigation Projects and/or mitigation measures as described in the Inyo County-Los Angeles Long Term Ground Water

Consider Alternative Approach to Solar Development in Inyo County

The Tribe supports renewable energy alternatives, as well as energy conservation, in the country’s search to minimize dependence on fossil fuels and reduce greenhouse gas emissions. Despite the Tribe’s opposition to the REGPA, the Tribe is supportive of better planning for solar energy production. The Tribe suggests alternatives, such as: 303-7

- Amend the General Plan (if needed) to accommodate solar energy development in areas of the county already zoned for commercial and/or industrial development.
- Implement county code Title 21 and evaluate proposed solar projects on a case-by-case basis. Each EIR would be produced at the project proponent’s expense, then carefully analyzed by the public (including the Tribe) to assess environmental advantages and impacts.
- Create county policy that clearly states that Inyo County is *not* available for industrial solar.
- Designate more Inyo County Environmental Resource Areas (ERAs). This could be done by following through with the county’s General Plan commitment to establish more ERAs in the county. The Tribe and perhaps many in the general public may be interested in assisting in this effort, and conservation areas proposed in the Desert Renewable Energy Conservation Plan (DRECP, currently available in draft form for public review), for example, could be used to accomplish this. ERAs would attract tourists.
- Assign county staff to seek grant funding to assist/incentivize installing of solar panels on local businesses, offices, residences, etc. within our built environment. Develop the PACE approach or a similar model.

The above are suggestions, and there are probably other ways in which Inyo County could be proactive in embracing and implementing solar technology. The days in which Inyo County reacts by accommodating development by institutions outside the county, at the expense of the county’s resources and long-term livelihood, must be ended.

The Draft Program EIR Should be Withdrawn

The DPEIR should be withdrawn because it is insufficient for the proposed project, it is internally inconsistent, and it contains flaws. 303-8

The Program EIR approach has weaknesses. Inyo County chose to prepare a Program EIR for the project. CEQA guidelines Section 15168 state, “A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either: (1) Geographically, (2) A[s] logical parts in the chain of contemplated actions, (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or (4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.”³

A Program EIR should disclose the effects of the program as specifically and comprehensively as possible, state the extent to which projects resulting from the program will be held to full public disclosure according to CEQA, or both. Program EIRs may be effective in providing an overview and guiding future environmental review under CEQA, or they may purposely or inadvertently understate the potential significant effects of a program such that the public cannot fully understand the impacts.

³ http://resources.ca.gov/ceqa/docs/2014_CEQA_Statutes_and_Guidelines.pdf

For many Program EIRs, such as the REGPA DPEIR, the program is implemented over a long time period, which also serves to obscure impacts as they occur gradually.

303-8
(cont'd)

One problem with the REGPA draft Program EIR (DPEIR) is that it fails to clearly inform the Tribe or public whether an EIR will be required for individual projects. Is Inyo County using a “tiered” approach? If Inyo County intends to hold future developers of solar projects to going through a meaningful CEQA process, this expectation needs to be clearly stated. Throughout the DPEIR, there are statements or suggestions that future environmental review requirements for both “small scale” (less than 20 megawatts = MW) and larger projects, will be determined by Inyo County and will probably be less stringent due to adoption of this Program EIR. The Tribe is concerned Inyo County will only require “mitigation” from future developers and hold them to simply following the closed review and permitting process that’s envisioned under Inyo County Code Title 21. Statements such as: “Additional avoidance and mitigation strategies for individual resources will be applied in the second-tier, project-level analyses” on p. 4.5-43 and “small scale solar energy projects are considered to result in no impacts under CEQA” on p. 4.5-38 exemplify how this DPEIR consistently refuses to state that a project level EIR will be required in the future.

Program analysis is insufficient to prescribe mitigation. Although the DPEIR admits to significant, unavoidable impacts (p. ES-3), the impacts are not described in a manner sufficient to allow the public or decision makers to assess the extent or severity of future impacts which would occur when projects are built. As a result, it is impossible at this stage for the DPEIR to propose meaningful mitigation. Regardless, that is what the DPEIR mainly does (for 81 pages in the Executive Summary, for example): It recommends “mitigations.” If the REGPA is adopted, developers may be allowed to completely circumvent CEQA; instead, the county Planning Department will assign developers certain “mitigations” to carry out prior to being awarded a permit to proceed with industrial scale projects. To the Tribe, this is a misuse of the Program EIR approach.

303-9

Program Objectives Reveal Internal Inconsistency. A clear example of internal inconsistency occurs in Section ES.2, p. ES-2 of the DPEIR and in more detail in Section 3.2. Here, the county states seven objectives related to the purpose of the proposed project. The first objective is to provide solar energy generation opportunities to meet goals established by California State legislation (p. ES-2 and p. 3-3). The Tribe understands that the legislation in question is not a mandate for counties. Counties are not required to meet specific goals for increasing the Renewable Portfolio Standard; instead, the legislation is intended to apply to utilities (see DPEIR sections 2.4.1.1 and 2.4.1.4). Inyo County officials have consistently voiced concern over the fact that they have limited decision making authority within county boundaries because of federal, state and Los Angeles lands. However, by erroneously adopting a directive not meant for a county and establishing this as an objective, Inyo County is voluntarily subjecting itself to State legislation and further limiting its own authority with regard to use and protection of county resources.

303-10

Inyo County adopted a vision statement⁴ to “provide responsive decision making while supporting cultural and historical values, the natural environment and rural quality of life.” Priorities for action as a part of the 2020 vision for Inyo County include maintaining Inyo County’s natural environment and rural quality of life, as well as, supporting and expanding tourism in Inyo County. These values are also important to the Tribe and the public, as evidenced by public testimony during the development of the DPEIR. The shared vision was bolstered by faith that county decision makers would be guided by the vision into the future. However, the preferred project shared in the DPEIR is inconsistent with Inyo County’s vision. The preferred project is also inconsistent with the third objective stated on p.

⁴ Inyo County Vision Statement, http://www.inyocounty.us/Admin/vision_statement.htm

ES-2 and p. 3-4 of the DPEIR, to “minimize direct and indirect impact from future solar energy development.” The DPEIR discloses that the preferred project, the REGPA, will create significant and unavoidable impacts to aesthetics, biological resources and cultural resources. Because the preferred project will create significant and unavoidable impacts, the DPEIR is unable meet its second objective to “focus future solar energy development projects” in appropriate locations because the areas being considered for development are not suitable.

303-10
(cont'd)

The fourth objective (p. ES-2 and p. 3-5) was to effectively collaborate with others. Section 3.1.1 (p. 3-5) of the DPEIR describes stakeholder meetings and other outreach which provided input to the county on the purpose, draft criteria, and policy concepts for the REGPA. The workshops were to be used as a tool to assist in developing suitable criteria so that the county could focus renewable energy development in appropriate areas. Unfortunately, in reading the DPEIR, the criteria developed for REGPA was not appropriately applied and as a result the collaboration process was not effective. If criteria were applied appropriately, then the preferred project would not include areas which would have significant and unavoidable impacts. The three remaining objectives in this list of seven are merely sub-tasks of the first four objectives.

Based on the analysis of the objectives for the DPEIR and the consequent preferred project, the DPEIR did not meet its objectives. The DPEIR, even in its very limited analysis of the SEDAs, showed that development in those areas will create significant and unavoidable impacts leading to a need to do more detailed CEQA analysis at the project level or leading to the conclusion that the REGPA should be rejected.

Problems with DPEIR Evaluation of Distributed Generation. During scoping of the DPEIR, the Tribe had requested that Inyo County consider distributed generation in the REGPA. Unfortunately, the county in its consideration of distributed generation in the DPEIR applied a very broad definition of distributed generation then proceeded to develop a strategy to allow distributed generation facilities without any environmental review.

303-11

The DPEIR defines distributed generation as “a renewable energy solar facility that produces 20 MW or less of electricity for off-site use, consumption and/or sale” (DPEIR, p. 3-7). The State of California through the Governor’s Office and California Energy Commission has accepted a much narrower view of distributed generation. According to the California Energy Commission (CEC), distributed generation is electricity production that is on-site or close to a load center and is inter connected to the utility distribution system. The CEC does not say that 20MW defines a distributed generation system, but that in practical terms, systems larger than 20MW would be interconnected at sub-transmission or transmission system voltages (CEC Staff Report - Distributed Generation and Cogeneration Policy 2007). The Governor’s Office shares that distributed generation is generally defined as 20MW or fewer, interconnected on-site or close to load, that can be constructed quickly with no new transmission lines and typically with no environmental impact (Governors Clean Energy Jobs Plan 2010). The Governor’s Clean Energy Jobs Plan places a higher priority on creation of distributed generation facilities than utility scale renewable energy facilities by seeking more megawatts from distributed generation (12,000 MW) than utility scale facilities (8,000 MW). The Governor’s goal is to see more renewable energy development projects sited in areas where they can meet the local loads needs of its siting location.

The definition of distributed generation in the DPEIR does not include the “interconnected on-site or close to load” verbiage which truly distinguishes a distributed generation facility from a utility scale facility. By broadening the definition of distributed generation, Inyo County creates an avenue for

developers to string multiple “distributed generation” systems together forming a utility scale project without the need to do environmental analysis.

303-11
(cont'd)

The DPEIR allows for an exemption of CEQA analysis for solar energy projects up to 20MW (DPEIR, p. ES-7). It is misleading for the DPEIR to suggest that projects that produce up to 20 MW or projects described as “small scale,” will not result in environmental impacts. A solar project producing near 20 MW may occupy a footprint of 100 to 150 acres; to the Tribe, this is nearly half the size of the entire Big Pine Indian Reservation. Although the Tribe may see benefits of distributed generation projects relative to utility scale projects, neither should be allowed to proceed without CEQA analysis. Each site is unique. There will be cases when impacts will be insignificant and other cases where impacts will be significant and unavoidable. As a result, every project needs to have a CEQA analysis completed so that impacts are known and projects are not sited in inappropriate areas.

The Tribe strongly recommends that the county adopt a definition of distributed generation which is consistent with the California Energy Commission and California Governor’s Office, and not exempt distributed generation projects from CEQA review.

Allowing Significant Impacts is a Flawed Approach. It is not appropriate for Inyo County to adopt the REGPA given its potential for significant unavoidable impacts to biological resources, cultural resources, and aesthetics, among others (see Table ES-1 pp. ES-9 to ES-90 in the DPEIR). Among effects to biological resources, the preferred alternative would allow “take” for:

303-12

- All state or federally-listed plant species (four of these were identified as potentially located in the SEDAs: Fish Slough milk-vetch, Mojave tarplant, Ash Meadows gumplant, and Owens Valley checkerbloom. Sixteen others are CNPS List 1B plants.)
- All state or federally-listed fish species (DPEIR identifies Owens pupfish and Owens tui chub)
- All state or federally-listed amphibian species
- Desert Tortoise
- All federally-listed bird species (including western snowy plover, western yellow-billed cuckoo, Inyo California towhee, and bank swallow)
- Southwestern Willow Flycatcher
- Least Bell’s Vireo
- Bald Eagle and Golden Eagle
- All state or federally-listed bighorn sheep
- Sierra Nevada Red Fox
- Mohave Ground Squirrel

The Tribe notes that CEQA Guidelines (Section 15021 (a) (1) and (2), see footnote #3) say:

(1) In regulating public or private activities, agencies are required to give major consideration to preventing environmental damage.

(2) A public agency should not approve a project as proposed if there are feasible alternatives or mitigation measures available that would substantially lessen any significant effects that the project would have on the environment.

The DPEIR indicates (p. 1-3, for example) Inyo County is seriously considering adopting the REGPA as the preferred alternative and preparing a “statement of overriding considerations.” Overriding considerations are very serious and require meaningful balancing. The Tribe could envision situations in which a small degree of impact may need to be tolerated by a project, such as in improving a sewer system or stabilizing a slope or road, but the REGPA is entirely discretionary, there are viable alternatives, and the proposed sacrifice of irreplaceable resources is definitely not warranted for the REGPA.

Development of Solar Facilities in All Proposed SEDAs Affects the Ethnographic Landscape. The DPEIR discloses significant unavoidable impacts to cultural and aesthetic resources in all eight proposed SEDAs. The Tribe agrees with this finding, and concludes the REGPA should be rejected. The Laws and Owens Lake SEDAs are part of the Owens Valley Paiute Ethnographic Landscape and any utility scale solar development in these areas will desecrate this cultural resource. Utility scale solar development in the Rose Valley SEDA would desecrate a significant Shoshone/Paiute cultural landscape which is part of a regional complex of cultural resources such as Coso Hot Springs and the Coso Rock Art National Historic Landmark. Utility scale solar development in the Charleston View SEDA would significantly impact the Pahrump Paiute Ethnographic Landscape and the Old Spanish Trail, a National Historic Trail, to a level which cannot be mitigated. The Pearsonville, Trona, Sandy Valley, and Chicago Valley SEDAs are not on degraded lands and would impact visual resources.

303-13

Owens Valley Study Area Needs to Be Eliminated. There was almost unanimous opposition to utility scale solar development in Owens Valley during public meetings held 2013-14 regarding the proposed REGPA; thus no study is needed, and no utility scale solar development should occur in Owens Valley. Any utility scale industrial solar development in the valley would desecrate the Owens Valley Ethnographic Landscape and impact visual resources to a degree which cannot be mitigated. Major conflicts with existing management plans such as the Inyo/LA Long Term Water Agreement, the Lower Owens River Project, and LADWP’s Land Management Plan, which all include mitigations requiring management for natural vegetation, agriculture, wetlands, recreation, protection of sensitive species habitat, and sustainable resource management.

303-14

It is unfair and contrary to CEQA for the DPEIR to superficially address the Owens Valley, by designating it the OVSA (Owens Valley Study Area). The proposed REGPA Policy LU-1.19 - Renewable Energy Solar Development in the OVSA – says, “Renewable Energy Solar Development in the OVSA will be subject to a set of criteria identified through further planning efforts for identifying and mapping areas appropriate within the OVSA for solar energy development, and pursuant to [ICC] Title 21.” (The Tribe notes that this policy does not specify CEQA.) The reader of a Program EIR is already at a disadvantage, because a PEIR need not fully address all future impacts and mitigations that could occur from projects resulting from the program, because they are unknown. In this DPEIR, the Tribe and public cannot understand if Inyo County is including or perhaps excluding Owens Valley. This matters! The unique and powerful Owens Valley landscape needs to be preserved for present and future generations. The Tribe requests Owens Valley be omitted from further consideration.

Elimination of New Land Use Implementation Measure. Number 3 of the New Land Use Implementation Measures (p. 3-8) is particularly alarming. It states,

“The County shall consider seeking compensation for the loss of revenues from potential Renewable Energy Solar Facilities that are not developed within the County due to possible impacts on military readiness, special status species, and aesthetics, and/or other barriers to development of appropriate Renewable Energy Solar Facilities. Methods of compensation include but are not limited to Payment-in-lieu of Taxes (PILT) or similar programs.”

This measure is not consistent with other elements of the General Plan and should be eliminated from consideration. This measure may force private land owners to either develop their lands for solar projects or pay Inyo County for the right to not develop their lands for solar projects. Alternatively, the county may invoke this measure to seek compensation from the military or an organization with a mission to protect certain resources. In addition to not being consistent with other elements of the General Plan, this measure is not consistent with Objective 3 and many of the proposed mitigation measures of the DPEIR which state that under the preferred alternative, efforts will be made to avoid

303-15

or minimize impacts to resources such as special status species and aesthetics. If the project developers have already avoided significant impacts or mitigated them to less than significant, as should occur with any development in Inyo County, then there is no need for this measure. The Tribe has previously requested and once more requests this New Land Use Implementation Measure be eliminated.

303-15
(cont'd)

Conclusion

The Tribe looks forward to continued SB 18 Consultation as Inyo County grapples with solar energy matters and respectfully submits these comments with the hope of working together on a better vision for Inyo County. The Tribe's ancestors lived in harmony with the vast resources of the eastern Sierra region since time immemorial: It is not acceptable to sacrifice cultural sites, endangered species, native vegetation, water, aesthetics and other resources for projects that will occupy the landscape for perhaps one or two human generations and which do not make best use of the resources for humankind. The Tribe encourages Inyo County to continue to collaborate and work together with people and groups who strive to use resources efficiently and respectfully while preserving the beauty and ecological integrity of our homeland.

303-16

Please contact the Tribal Administrator if there are questions or concerns regarding these comments.

Sincerely,



Genevieve A. Jones
Tribal Chairwoman

Responses to Letter 303 – Big Pine Paiute Tribe of the Owens Valley

Response 303-1: The County has been in consultation with the Big Pine Tribe pursuant to Senate Bill 18 (SB 18) throughout the REGPA process, where County representatives have been and will continue to be available to meet with Tribal representatives. County staff consulted with Tribal representatives on December 11, 2015; included was a discussion regarding their input on the Notice of Preparation (NOP) as well as other issues brought forth by the Tribe. County staff appreciates the Tribe's past and continuing interest and participation in the REGPA planning process.

Pursuant to SB 18 and Government Code Section 65352.3, on September 17, 2013 the County requested a list of Native American contacts from the California Native American Heritage Commission (NAHC) from whom to request consultation regarding the Renewable Energy General Plan Amendment. The NAHC transmitted a list of Native American contacts to the County on October 7, 2013 for purposes of SB 18 consultation regarding the Renewable Energy General Plan Amendment. In October 2013 the County initiated Native American Consultation pursuant to the California Government Code Sections 65040.2, 65092, 65351, 65352.3, 65352.4, 65562.5, with the Big Pine Paiute Tribe of the Owens Valley, Bishop Paiute Tribe, Fort Independence Community of Paiute, Timbisha Shoshone, and the Lone Pine Paiute Shoshone. Only the Big Pine Paiute Tribe of the Owens Valley requested consultation. To date the County and the Tribe have met in consultations on five occasions: February 13, 2014, June 09, 2014, September 11, 2014 November 06, 2014 and December 11, 2014. Consultation opportunity is still available to the Tribe and will remain available throughout the adoption process.

In response to a request by the Big Pine Tribe's Historic Preservation Officer, County staff prepared and read responses to the concerns about the scoping comments on November 6, 2014.

County staff is obligated to follow State Law regarding SB 18. SB 18 requires that prior to the adoption or amendment of a city or county's General Plan, the city or county conduct consultations with California Native American Tribes for the purpose of preserving specified places, features and objects that are located within the city or county's jurisdiction. To date, the Tribe has not offered information about specific places, features or objects. County staff has, at every consultation conducted with the Tribe, offered to work with the tribe to identify and map, where appropriate, places, features and objects with regard to REGPA planning efforts and has met the obligations set forth in SB 18 for consultation. The County also remains available to meet with the Tribe to do so upon their request.

SB 18 states that the bill also required, by March 1, 2005 guidelines be developed, in consultation with the Native American Heritage Commission, for consulting with California Native American Tribes for the preservation of, or mitigation of impacts to, specified Native American places, features and objects. In Part B 'When and How to Consult with California Native American Tribes', page 16: Items to Consider When Conducting Consultation – Bullet 2: Consultation does not necessarily predetermine the outcome of the plan or amendment. In some instances, local governments may be unable to reach agreement due to other state laws or competing public policy objectives. With regard to staff declining to discuss in detail elements of the PEIR at the December, 2014 consultation, staff was advised by legal counsel, who was present, not to discuss details of the PEIR as it was still out for public comment and doing so could be in conflict with California Environmental Quality Act provisions. The issue of the County not changing the project description or proposed REGPA based specifically on the Tribes comments does not mean that consultation was not conducted per the SB-18 Guidelines Page 16, Bullet 2 (see above).

With regard to the assertion that consultation was unable to be conducted based on the fact that a County Supervisor was not present, in Part B of the Guidelines, ‘When and How to Consult with California Native American Tribes’, page 16: Items to Consider When Conducting Consultation - Bullet 6: Government leaders of the two consulting parties may consider delegating consultation responsibilities (such as attending meetings, sharing information, and negotiating the needs and concerns of both parties) to staff. Per SB 18 Guidelines, the absence of the Supervisor does not mean that consultation was unable to be conducted.

Response 303-2: The bulleted responses listed below correspond with the bulleted list of comments contained in the letter.

- As stated in Section 3.2 of the Draft PEIR, the overall purpose of the REGPA is to regulate and direct the type, siting, and size of potential future solar energy development within the County through adoption of land use policies that are consistent with and meet the broader goals and visions for the County as expressed in the Inyo County General Plan. The SEDA boundaries depicted in the Draft PEIR have been identified based on the Opportunities and Constraints Technical Study (Appendix D of the PEIR), and further refined based on feedback received through the agency scoping and public planning process (Section 3.1.1 of the PEIR). As described in the Draft PEIR, although the SEDAs have been identified to direct and constrain utility-scale and commercial scale solar development in the County, not all areas within the proposed SEDA boundaries may be suitable for development. Conducting on-the-ground analyses of potential impacts at the planning level is not feasible without project-specific information. Therefore, the County determined a program-level EIR is the appropriate level of analysis for the REGPA. As stated in Sections 1.1 and 1.2, potential future solar development proposals within the SEDAs would be subject to subsequent, project-specific environmental compliance under CEQA.
- The Draft PEIR analyzed five project alternatives, all of which are effectively “smaller-scale” than the proposed project (excluding the no project alternative). The Draft PEIR identified the scale and distribution of potential solar energy development in Section 3.3.4. Small-scale solar energy is defined as energy generated for on-site use from roof-top and/or ground-mounted PV panels. This scale of solar development is already allowed in the County and will continue to be allowed inside and outside of the proposed SEDAs and any zoning district under ICC Title 18.
- The REGPA reiterates the County’s goals of avoiding adverse environmental impacts. Please refer to the new Mineral and Energy Resources Goal MER-2 under the REGPA that is proposed to ensure that solar energy solar development is conducted appropriately to avoid, minimize, and/or mitigate the impacts from such development on the social, economic, visual, and environmental resources of the County (Section 3.3.1 of the PEIR). Policy MER-2.6 states that “The County shall work with renewable energy solar developers and other agencies to avoid, minimize, or mitigate impacts to the social, economic, visual, and environmental resources of the County from renewable energy solar facility development.”
- As stated in Section 3.3.2 of the Draft PEIR, the OVSA is not an identified SEDA, but rather a separate and distinct study area. A separate set of potential criteria for development siting in the OVSA has been formulated: (1) only utilize existing transmission facilities and corridors; (2) guide the development to disturbed lands, including over and along the Los Angeles Aqueduct; (3) consider encouraging development at solid waste and wastewater treatment

facilities, on private lands, in small-scale (e.g. ,roof tops) and commercial scale (20 MW or less) arrays, and around communities in smaller arrays (10 MW or less); (4) mitigate potential impacts to the environment, society, culture, and economy of the County; (5) work to avoid significant alterations to visual resources; and, (6) minimize intertie facilities. Any solar development proposed in the OVSA would require a General Plan Amendment and would be subject to additional CEQA analysis and public comment.

- The third “New Land Use Implementation Measures” outlined in Section 3.3.1 of the Draft PEIR has been deleted as follows:

~~The County shall consider seeking compensation for the loss of revenues from potential Renewable Energy Solar Facilities that are not developed within the County due to possible impacts on military readiness, special status species, and aesthetics, and/or other barriers to development of appropriate Renewable Energy Solar Facilities. Methods of compensation include but are not limited to Payment in lieu of Taxes (PILT) or similar programs.~~

Response 303-3: The comment recommends that the County not pursue the REGPA. The County’s responses to the comments supporting this recommendation are in contained in responses 303-4 through 303-15.

Response 303-4: The comment states an opinion that the REGPA is not needed, and that, as discussed in the Draft PEIR, the project would result in significant adverse environmental impacts. Potentially significant impacts that could occur as a result of renewable energy projects being developed in the identified SEDAs were identified at a programmatic level and all feasible mitigation is prescribed in the PEIR; however, without project-specific information coupled with a project-level analysis under CEQA, it can’t be stated with certainty that these potential impacts would be reduced to below a level of less than significant at a programmatic level. That is why the PEIR reaches the conservative conclusion that impacts from future projects remain potentially significant and unavoidable.

As described in Section 2.4, the Renewable Portfolio Standards (RPS) is the primary driver for new utility scale renewable energy development in California, where implementation of the REGPA would effectively help California achieve its renewable energy targets set forth by the California Public Utilities Commission. The County will prepare a Statement of Overriding Considerations per Section 15093 of the State CEQA Guidelines that identifies the significance and influence of the RPS on the REGPA as well as the economic, legal, social, and/or technological benefits of implementing the proposed project in light of the unavoidable impacts identified in the PEIR. This Statement will be considered along with the Draft PEIR by the County Board of Supervisors in late March 2015.

Response 303-5: Section 3.3.4 of the Draft PEIR identified the scale and distribution of potential solar energy development. Small-scale solar energy is defined as energy generated for on-site use from roof-top and/or ground-mounted PV panels. This scale of solar development is already allowed in the County and will continue to be allowed inside and outside of the proposed SEDAs and in any zoning district under ICC Title 18. Industrial scale solar energy development may also be allowed under the proposed REGPA following additional project-specific environmental analysis and public review per the State CEQA Guidelines for subsequent projects. The County’s proposed REGPA is consistent with the State’s Renewable Portfolio Standard (RPS); the REGPA does not address energy efficiency (which is the focus of the CEESP) as this is not an aspect of the project description; the County continues to encourage energy efficiency and has implemented numerous programs that are available on the County’s Planning

Department webpage (<http://inyoplanning.org/ERRE.htm>). Community scale solar energy development, such as the examples provided by the Big Pine Paiute Tribe of Owens Valley, are allowed and encouraged under the REGPA.

Response 303-6: The REGPA is a proposed amendment to and is consistent with the General Plan. The REGPA would allow the County to consider utility scale and commercial scale solar energy facilities within any zoning district under ICC Title 18 and pursuant to ICC Title 21. Development within areas zoned for open space would be required to comply with the minimum development standards as outlined in Section 18.12.050 of the Inyo County Code, unless modified pursuant to Title 21.

The goals and policies of the General Plan identified in the comment are intended to direct and constrain development in the County through consideration of the resources present (Policy MER-1.1, Goal BIO-1, Goal CUL-1, Goal VIS-1), and in consultation with Native American groups as appropriate (Policy CUL-1.5). The REGPA has been evaluated in light of these goals and policies in Chapter 4 of the PEIR, and the REGPA reiterates these goals of avoiding adverse environmental impacts (refer to the third bullet in response 303-2). New Visual Resources policies in the REGPA (Policy VIS-1.8 and 1.9, and Visual Resources or Economic Development Implementation Measure) relate to avoiding, minimizing, and mitigating for impacts to visual resources, and balancing the effects on visual resources with the potential effects on tourism in the County.

The REGPA includes new General Plan policies for responsible renewable energy development. The policies may set the limits of where, when, how, and even if, renewable energy generation facilities will be built in the Sandy Valley SEDA. The policies include provisions for actual sites identified in the County that may be appropriate for renewable energy development, what specific factors must be met before development can commence, under what conditions a facility can be built, and requirements for the termination, decommissioning, and reclamation of a facility. The General Plan Land Use Policy LU-1.6 pertains to designation of rural residential development, not potential siting of future solar energy facilities. The proposed REGPA is not in conflict with this Land Use Policy; equally, the County is required to remain consistent with Land Use Policy LU-1.16 as it relates to the implementation of enhancement/mitigation project and/or mitigation measures as described in the Inyo County-Los Angeles Long Term Water Management Agreement and the EIR for said agreement.

Response 303-7: The bulleted responses listed below correspond with the bulleted list of comments contained in the letter.

- A range of project alternatives was considered for detailed evaluation in the Draft PEIR, and compared against the factors outlined in Section 15126(f) of the State CEQA Guidelines for feasibility. The list of alternatives outlined and analyzed in Section 6.3 of the Draft PEIR include: No Project Alternative, Solar PV Only Alternative, Commercial Scale (20 MW or less) Only Alternative, Reduced SEDA Alternative, and Solar Energy Development on Previously Disturbed Lands Only Alternative. As summarized in Section 6.5, the No Project Alternative would potentially result in an exacerbation of the potential impacts in relation to the proposed project. The remaining alternatives were identified as being environmentally superior to the proposed project, but would all potentially result in significant and unavoidable impacts to aesthetics, biology, and cultural resources.
- If approved, all future utility-scale projects under the REGPA would be examined in light of the PEIR and would be subject to project-specific environmental review under CEQA. Depending on

the project's potential environmental effects, the size and location of the development and the technology used, a full EIR may be required. However, the REGPA also encourages that small-scale, PV technologies be constructed which may not require a full EIR if they would not likely result in the significant impacts that are anticipated with the large and utility scale developments. As stated in Section 1.2 of the Draft PEIR,

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

- The REGPA is a long term planning policy intended to direct and constrain utility-scale and commercial scale solar development in the County. Although the County does not specifically advocate the development of utility-scale solar facilities within the County, it will not preclude permitting development in areas deemed suitable through subsequent project-specific analysis, and as long as the development is consistent with the goals and policies of the General Plan and REGPA, if approved.
- Designating Inyo County Environmental Resource Areas is beyond the scope and intent of the REGPA.
- A range of project alternatives were considered for detailed evaluation in the Draft PEIR, and compared against the factors outlined in Section 15126(f) of the State CEQA Guidelines for feasibility. The list of alternatives outlined and analyzed in Section 6.3 of the Draft PEIR includes the Commercial Scale (20 MW or less) Only Alternative as the comment suggests. This alternative is identified as being environmentally superior to the proposed project, but would still potentially result in significant and unavoidable impacts to aesthetics, biology, and cultural resources. The County encourages small-scale and commercial scale development in the County and will assign staff to look for appropriate and applicable funding, as staff is available.

Response 303-8: Noted inadvertent inconsistencies and flaws of the PEIR have been rectified by the County during preparation of the Final PEIR; no inconsistencies or flaws were discovered that would require re-circulation of the draft PEIR. All changes made to the document appear in strike-out/underline format for ease of reference to the reader.

If approved, all future utility-scale projects under the REGPA would be examined in light of the PEIR and would be subject to project-specific environmental review under CEQA. Depending on the size and location of the development and the technology used, a full EIR may be required. However, the REGPA also encourages that small-scale, PV technologies be constructed which may not require a full EIR if they would not potentially result in the significant impacts that are anticipated as a result of large and utility scale developments. As stated in Section 1.2 of the Draft PEIR,

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document

must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

The process outlined in the PEIR does not preclude CEQA review of a small-scale solar energy project if a qualified County planner finds that it may result in significant impacts, but it does allow for discretionary judgment on the part of the qualified County planner in the assessment of the likelihood of such impacts and the appropriate level of documentation required.

Response 303-9: The Draft PEIR contains mitigation for the purpose of establishing requirements and performance standards for subsequent projects under the REGPA to ensure that future projects prove avoidance, minimization, and/or mitigation for potential significant impacts to the extent practicable. Section 15168 of the State CEQA Guidelines stipulates that “(c) Subsequent activities in the program must be examined in the light of the Program EIR to determine whether an additional environmental document must be prepared. (2) If the agency finds that pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required.” As such, the PEIR is consistent with the State CEQA Guidelines regarding use with later activities and is the primary purpose under CEQA to implement a program EIR.

Response 303-10: Contributing to the goals established by the state under the Renewable Portfolio Standard is one of the objectives of the proposed project as identified in the Draft PEIR. The proposed project is consistent with the stated project objectives in that the County is attempting to direct and constrain future solar development by identifying and establishing SEDAs that are the most appropriate areas for solar energy development.

The PEIR identifies that significant and unavoidable impacts would potentially occur in the areas of aesthetics, biology, and cultural resources. This is a conservative conclusion based on the uncertainty, at a Program EIR level, of a subsequent project’s actual impacts. The SEDA boundaries depicted in the Draft PEIR have been identified based on information described in the Opportunities and Constraints Technical Study (Appendix D of the PEIR). The SEDAs are intended to direct and constrain future solar developments to areas in the County identified as possibly supporting a lower level of resource sensitivity, and that are located near existing transmission facilities. Potentially significant impacts that could occur as a result of renewable energy projects being developed in the identified SEDAs were identified at a programmatic level and all feasible mitigation is prescribed in the PEIR; however, without project-specific information coupled with a project-level analysis under CEQA, it can’t be stated with certainty that these potential impacts would be reduced to below a level of less than significant at a programmatic level. That is why the PEIR reaches the conservative conclusion that impacts remain potentially significant and unavoidable. The County has prepared a Statement of Overriding Considerations per Section 15093 of the State CEQA Guidelines that identifies the economic, legal, social, and/or technological benefits of implementing the proposed project in light of the unavoidable impacts identified in the PEIR. This document will be considered along with the Final PEIR by the Inyo County Board of Supervisors in late March 2015.

The County conducted a thorough and exhaustive public outreach campaign that aimed at informing and guiding the County as to REGPA development. The SEDAs presented in the Draft PEIR are reduced

from the development areas previously presented to the Inyo County Planning Commission in February 2014. As described in Section 3.1.1 of the Draft PEIR, the Inyo County Board of Supervisors conducted a series of workshops between March and May 2014 and requested changes to the REGPA that resulted in removing wind energy from consideration and constricting the proposed development areas to utilize only existing transmission facilities in the County's western portion; the remaining potential development areas (SEDAs) were greatly reduced based on public input. The proposed project, as outlined and presented in the Draft PEIR, meets the project objectives.

Response 303-11: The County has removed the title "distributed generation" from the PEIR, and has titled any solar energy facility that produces 20 MW or less of electricity for off-site use, consumption, and/or sale as "commercial scale renewable energy solar facility (20 MW or less)." The County currently processes most renewable energy facilities 20 MW or less through Title 18 and Title 21 of the Inyo County Code. All future projects under the REGPA would be subject to project-specific environmental review. Depending on the size and location of the development and the technology used, a full EIR may be required. However, the REGPA also encourages small scale, PV technologies to be constructed which may not require a full EIR. As stated in Section 1.2 of the Draft PEIR:

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

This PEIR would provide a framework for these subsequent project analyses, but specific projects would still be assessed on an individual level; all projects under CEQA are legally afforded the same public review process.

Response 303-12: The REGPA is a General Plan Amendment, therefore, no USFWS Biological Opinion or Incidental Take permit will need to be issued in conjunction with the REGPA. Individual projects will be required to undergo project-specific analysis of impacts to protected species, and, as appropriate, would be required to consult with USFWS (and/or any other appropriate agencies) and obtain the appropriate "take" permits prior to project approval.

The PEIR identifies that significant and unavoidable impacts would potentially occur in the areas of aesthetics, biology, and cultural resources. This is a conservative conclusion based on the uncertainty, at a Program EIR level, of a subsequent project's actual impacts. The SEDA boundaries depicted in the Draft PEIR have been identified based on information described in the Opportunities and Constraints Technical Study (Appendix D of the PEIR). The SEDAs are intended to direct and constrain future solar developments to areas in the County identified as possibly supporting a lower level of resource sensitivity, and that are located near existing transmission facilities. Potentially significant impacts that could occur as a result of renewable energy projects being developed in the identified SEDAs were identified at a programmatic level and all feasible mitigation is prescribed in the PEIR; however, without project-specific information coupled with a project-level analysis under CEQA, it can't be stated with certainty that these potential impacts would be reduced to below a level of less than significant at a programmatic level. That is why the PEIR reaches the conservative conclusion that impacts remain potentially significant and unavoidable. The County has prepared a Statement of Overriding

Considerations per Section 15093 of the State CEQA Guidelines that identifies the economic, legal, social, and/or technological benefits of implementing the proposed project in light of the unavoidable impacts identified in the PEIR. This document will be considered along with the Draft PEIR by the County Board of Supervisors in late March 2015.

A range of project alternatives was considered for detailed evaluation in the Draft PEIR, and compared against the factors outlined in Section 15126(f) of the State CEQA Guidelines for feasibility. The list of alternatives outlined and analyzed in Section 6.3 of the Draft PEIR include: No Project Alternative, Solar PV Only Alternative, Commercial Scale (20 MW or less) Only Alternative, Reduced SEDA Alternative, and Solar Energy Development on Previously Disturbed Lands Only Alternative. As summarized in Section 6.5, the No Project Alternative would potentially result in an exacerbation of the potential impacts in relation to the proposed project. The remaining alternatives were identified as being environmentally superior to the proposed project, but would all result in significant and unavoidable impacts to aesthetics, biology, and cultural resources.

Response 303-13: The SEDA boundaries depicted in the Draft PEIR have been identified based on the Opportunities and Constraints Technical Study (Appendix D of the PEIR), and further refined based on feedback received through the agency scoping and public planning process (Section 3.1.1 of the PEIR). As described in the Draft PEIR, although the SEDAs have been identified to direct and constrain utility-scale and commercial scale solar development in the County, not all areas within the proposed SEDA boundaries may be suitable for development. Constraints within the SEDAs will be identified during subsequent, project-specific environmental review and planning processes, as outlined in the PEIR. Section 4.5 of the Draft PEIR prescribes Mitigation Measure CUL-1a that requires a cultural resources inventory, evaluation of cultural resources, preparation of a Cultural Resources Management and Treatment Plan, and implementation of any required plans and project-specific mitigation in advance of adoption of any potential, individual solar energy development project. Section 4.1 of the Draft PEIR prescribes nine mitigation measures relevant to aesthetics and visual resources, including Mitigation Measure AES-1: preparation of visual studies and an evaluation of potential impacts to existing visual resources.

Response 303-14: As described in Section 3.1.1 of the Draft PEIR, the Inyo County Board of Supervisors conducted a series of workshops between March and May 2014 and requested changes to the REGPA that resulted in removing wind energy from consideration and constricting the proposed development areas to utilize only existing transmission facilities in the County's western portion; the remaining potential development areas (SEDAs) were greatly reduced based on public input. The Owens Valley was removed as a development area, and is included in the currently proposed REGPA as a study area for which specific criteria apply. The OVSA as shown on the figures in the PEIR is a depiction of the general valley area, and does not correlate with a proposed development area.

A separate set of potential criteria for development siting in the OVSA has been formulated: (1) only utilize existing transmission facilities and corridors; (2) guide the development to disturbed lands, including over and along the Los Angeles Aqueduct; (3) consider encouraging development at solid waste and wastewater treatment facilities, on private lands, in small-scale (e.g., roof tops) and commercial scale (20 MW or less) arrays, and around communities in smaller arrays (6 MW or less); (4) mitigate potential impacts to the environment, society, culture, and economy of the County; (5) work to avoid significant alterations to visual resources; and, (6) minimize intertie facilities. Any solar development proposed in the OVSA would require a General Plan Amendment and would be subject to additional CEQA analysis and public comment.

Response 303-15: The third “New Land Use Implementation Measures” outlined in Section 3.3.1 of the Draft PEIR has been deleted as follows:

~~The County shall consider seeking compensation for the loss of revenues from potential Renewable Energy Solar Facilities that are not developed within the County due to possible impacts on military readiness, special status species, and aesthetics, and/or other barriers to development of appropriate Renewable Energy Solar Facilities. Methods of compensation include but are not limited to Payment in lieu of Taxes (PILT) or similar programs.~~

Response 303-16: Closing statement. No additional response is necessary.



January 7, 2015

George Gholson,
Chairman

Inyo County Planning Department
Inyo County, California

Earl Frank,
Vice Chairman

Eleanor Jackson,
Secretary/Treasurer

Dear Planning Department:

White Dove
Kennedy,
Council Member

On behalf of the Timbisha Shoshone Tribe of Death Valley, California, I offer these comments in regard to Inyo County's solar REGPA plans.

Dora Jones,
Council Member

The Timbisha Tribal Council wants consultation if a project should be planned, to take place in and near our aboriginal territories. It is our interest to be aware of projects that can affect our lands, water and cultural sites. The view shed and cultural resources of our valleys and mountains must be protected.

304-1

Sincerely,

George Gholson
Chairman
Timbisha Shoshone Tribe

Timbisha Shoshone Tribe – 621 W. Line St., Suite #109 – Bishop CA, 93514
Phone: 760-872-3614 Fax: 760-690-4486

Response to Letter 304 – Timbisha Shoshone Tribe

Response 304-1: Inyo County greatly appreciates the Timbisha Shoshone Tribal Council’s interest in consulting with the County on future projects in and around their aboriginal territory. The County is committed to maintaining its positive relationship with the Tribe and will consult on any renewable energy project that may impact tribal lands.



January 13, 2015

Mr. Joshua Hart, AICP
 Inyo County Planning Director/Inyo LAFCO Executive Officer
 Yucca Mountain Repository Assessment Office
 168 North Edwards
 PO Drawer L
 Independence, CA 93526

**Re: Comments to the Draft Program Environmental Impact Report (PEIR)-
 Renewable Energy General Plan Amendment (REGPA)**

Lone Pine Paiute-Shoshone Reservation (LPPSR) appreciates the opportunity to comment on this very important amendment to the Inyo County General Plan. In reviewing the comments, we would like to remind the County government officials of their Vision Statement: ***“The vision of Inyo County government for its public is to provide responsive decision making while supporting cultural and historic values, the natural environment and rural quality of life.”*** The industrialization of Owens Valley and the Highway 395 corridor would render this vision meaningless.

305-1

Narrative:

In general, the megawatt and acreage limits placed on designed SEDAs were acceptable as initially determined by the Inyo County Supervisors after public outcry concerning the first draft of this REGPA. We will argue that the caps were intended to be absolute and not in addition to any projects already in process or completed. Of equally great concern is the Owens Valley Study Area (OVSA) as potential designation for approved construction following a separate study which is not open to the public in its scope, purpose or process. Our community is inextricably tied to this land; maintaining it in sustainable condition for many

305-2

thousands of years. We are often frustrated with the short-sighted methods of 'utilization' of local resources which inevitably accept significant impacts as progress. | 305-2
(cont'd)

The PEIR does not include any new, in-depth professional surveys, yet accepts findings that cultural, biological and paleontological resources will have 'significant and unavoidable impacts'. Our recommendation is that the SEDAs be reduced to only areas where there will be **no** anticipated significant impacts at the PEIR level, and a full EIR be required for any project proposed. SEDAs are meant to be acceptable for future development, therefore should not presuppose significant impacts as a starting point. The EIR process is the only way to effectively daylight the projects before any other commitments are made. In our judgment, proposed projects should all be subject to specific, on-site analysis by objective professionals independent of Inyo County or the developer. These hired experts should be well familiar with the pre-historic and biological research of this sensitive environment. Future negative declaration determination for anything except rooftop and community-level development should not be in the General Plan. | 305-3

The timing of REGPA coincides with the BLM's DRECP draft. In that draft, the preferred alternatives within Inyo County show little overlap in acceptable developable lands. DRECP's Development Focus Areas (DFAs) are outside of the REGPA's Laws, Owens Lake, Chicago Valley, Sandy Valley and Pearsonville SEDAs; with portions of overlap for Rose Valley and Charleston View. Most SEDA areas are designated as conservation, protected species and otherwise not appropriate for development. REGPA mentions prior comment on BLM's Land Management Solar Energy Program wherein Inyo County objected to lack of designation of a Solar Energy Zone (SEZ) within this county. "BLM contended that their planning efforts did meet the objectives set forth in the PEIS, which were based on numerous federal orders and mandates and that BLM's work was consistent with officially approved or adopted resource-related plans of Native American tribes, other federal agencies, and state and local governments to the extent that the resource-related plans agreed with FLPMA and other federal laws and regulations they were operating under...". Because the REGPA PEIR is not comprehensive, we are concerned that county planners missed or dismissed the important environmental, biological and cultural resources that BLM has access to. We suspect this REGPA draft is factually inadequate. Such promotion of utility-scale development is contrary to the current Board of Supervisor's public comments since that time (2010). The more recent policy should be stated. It is our understanding that IC is no longer actively recruiting development of utility-scale renewable energy inside its borders. | 305-4

Inyo County, in public meeting, challenges the Los Angeles Department of Water and Power's position that their lands in Inyo County are not under the jurisdiction of Inyo County General Plan. This assertion should be stated. It is frustrating to | 305-5

the citizens of this county that its elected and regulatory officials refuse to take a stand on this issue and continue allowing LADWP to operate resource extraction with impunity. California general plan guidelines address this environmental justice issue, stating: *Geographic inequity describes a situation in which the burdens of undesirable land uses are concentrated in certain neighborhoods while the benefits are received elsewhere. It also describes a situation in which public amenities are concentrated only in certain areas.* In our case, the burdens are concentrated here, while the benefits (resource and taxes) are received in Los Angeles. Whichever General Plan LADWP claims to follow, Environmental justice should be included as an element or incorporated within the required elements to avoid the further resource colonization of Owens Valley.

305-5
(cont'd)

LPPSR objects to #3 of the new Land Use Implementation Measure, included in this draft, which 'threatens' any and all challengers to a particular development. This policy reads like extortion to guarantee income incorporated within the new Economic Development policies (pg 3-9). If a development is legally and successfully challenged, the county *shall* consider requiring compensation for revenues they did not receive. Is Inyo County really prepared to punish land owners who do not want development, the federal government for established test flight paths, groups who invoke laws protecting wildlife and endangered plants, tribes who successfully protect their heritage? More than poorly written, this measure is a blatant threat to anyone opposing development in any SEDA for any reason. CEQA is the law. Challenging an inadequate analysis or significant impact should not be revenue enhancement opportunity for the county.

305-6

Specific items to address:

1. **Project Objectives, item 6. Identify the total allowable capacity and developable acreages per solar energy group and SEDA. Pg 3-5** "These caps are based on an analysis of capacity of the existing transmission facilities in the County, and the location of the SEDA relative to the transmission facility." At the April 1, 2014 Board of Supervisor's meeting, comments by the individual supervisors clearly indicated intentions to a cap in the western region that is inclusive of any project in process to that time. The representatives who spoke and heard the redirection by the Board assumed this intent was total development and not in addition to projects in process. Subsequent correspondence with IC Planning has exposed a contradiction (accidental or otherwise) that undermines the values which this 250 MW cap was designed to protect. The approximately 404 MWs of proposed and/or approved projects within the Western Solar Energy Group are not included in the cap as written in the PEIR. We have not been able to get specific definition of what stage or status a project must be at prior to the adoption of REGPA, so can expect at least 2 more FiT projects awarded by LADWP will be added to the above total. At any time, more proposals can become 'grandfathered' into this amendment cap. The 250 MW cap would allow > 700 MW

305-7

development within the Western Group if the Inyo-Rinaldi transmission line is upgraded at any time. 305-7
(cont'd)

Wording of the REGPA caps must be improved to specify **total** MW or calculated acreage in any SEDA, regardless of when the proposals began.

2. **Table ES-1** We object to the inclusion of significant and unavoidable impacts as acceptable under this PEIR. We recommend the programmatic design remove any known or assumed land where significant impacts of CEQA review elements are likely to occur. Set a higher standard of protection for Inyo County prior to development proposal. Developers will have no legal incentive to mitigate impacts that have been determined 'unmitigable' by this document. Beginning the process with a low standard will likely ensure further reductions in resource protection as environmental and cultural issues arise during construction. Further, we recommend establishing an EIR for every proposal. Given the cursory and incomplete CEQA data in this document, the discretion to determine negative declaration for any RE except rooftop is an environmental injustice. This list, extracted from Table ES-1 in the Executive Summary, of identified *significant and unavoidable impacts* is acquiescent to negative consequences in advance of any legitimate proposal: 305-8

AESTHETICS: Future solar energy developments within the SEDAs and OVSA could result in potentially significant visual impacts related to: (1) scenic vistas and scenic resources; (2) degradation of the existing visual character or quality of the site and its surroundings;

BIOLOGICAL RESOURCES: Implementation of the REGPA (including implementation of utility scale, distributed generation, community scale, and/or facilities) could result in potentially significant impacts related to sensitive biological resources. Potential impacts to specific resource areas are described below. Impacts to special status wildlife species could occur as a result of implementation of the REGPA if construction and/or operation of the future solar developments would occur within or adjacent to suitable habitat. This includes potential impacts to special status fish, amphibians, reptiles, birds, and mammals. Implementation of the REGPA has the potential to result in significant impacts to special status plants and wildlife, riparian habitats and other sensitive natural communities, and waters of the US, and/or state.

CULTURAL RESOURCES: Implementation of future projects associated with the REGPA has the potential to cause a substantial adverse change in the significance of a historical or archaeological resource as defined in Section 15064.5 of the State CEQA Guidelines. Implementation of future projects associated with the REGPA may disturb human remains, including those interred outside of formal cemeteries.

<p>PALEONTOLOGICAL: Implementation of future projects associated with the REGPA has the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.</p>	<p>305-8 (cont'd)</p>
<p>3. 4.4.1.13 Habitat Conservation Plans, Desert Renewable Energy Conservation Plan, pg 4.4-75 <i>“Should the County choose to participate in the DRECP as a signatory agency, then implementation of the DRECP may further reduce impacts to biological resources analyzed in this PEIR”</i>. We urge the County to participate as a signatory agency so that the REGPA and DRECP are consistent with protecting biological resources.</p>	<p>305-9</p>
<p>4. 4.2.1 Existing Conditions, pg 4.2-2 <i>“LADWP owned and BLM-managed lands are not under County jurisdiction.”</i> All counties and cities in California must have a jurisdictional general plan. The City properties in Owens Valley seem to be excluded from Los Angeles County General Plan and the City of Los Angeles General Plan. By default, Inyo County General Plan should apply. Please incorporate how REGPA specifically affects LADWP land in this county under the Inyo County General Plan or identify which general plan jurisdiction LADWP is working under. The often-quoted statement may not be accurate. Please provide the background.</p>	<p>305-10</p>
<p>5. Pg 4.5-17 A typo with remnant text reference to <i>“Owens Valley SEDA”</i>.</p>	<p>305-11</p>
<p>6. New Land Use Implementation Measures, number 3, pg 3-8 An obvious design to discourage challenges to development and ensure financial benefit from nothing. We recommend this item be stricken from the list of measures.</p>	<p>305-12</p>
<p>7. 1.2 PURPOSE AND LEGAL AUTHORITY, pg 1-2: <i>“Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs, in which case a Supplemental EIR or other CEQA document may be required.”</i> We challenge REGPA to exempt 20MW development from CEQA. Construction on 120 acres site is substantial. No specific proposals are included in this PEIR, yet its inadequate CEQA analysis could exempt further EIR requirements from future proposals inside and outside the designated SEDAs.</p> <p><i>“Subsequently proposed individual solar energy projects 20 MW and greater, which are located within the SEDAs described in this PEIR and which are consistent with the REGPA, will undergo project specific analysis and will be examined in light of this PEIR to determine whether any additional environmental document must be prepared”</i>. This wording</p>	<p>305-13</p>

would allow discretion for negative declaration to be declared and no further analysis performed. The cursory CEQA conclusions admit to "significant and unavoidable impacts". Avoidance of a comprehensive evaluation for all proposed construction all but ensures unmitigable damage to resources, and eliminates legal protections late into the process. In both cases, we recommend an EIR be required prior to each proposed development.

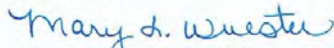
305-13
(cont'd)

8. **Bureau of Land Management Solar Energy Program, pg 2-14** *"BLM contended that their planning efforts did meet the objectives set forth in the PEIS, which were based on numerous federal orders and mandates and that BLM's work was consistent with officially approved or adopted resource-related plans of Native American tribes, other federal agencies, and state and local governments to the extent that the resource-related plans agreed."* We agree with the BLM's rationale and request that Inyo County be at least as protective of lands within its borders as this agency. Promotion of large-scale utilities in the Highway 395 corridor seems antithetical to the statements made by the current Board of Supervisors, tribes and the many citizens in 2014.

305-14

Once again, LPPSR appreciates the opportunity to comment on this very important amendment to the Inyo County General Plan.

Sincerely,



Mary L. Wuester, Tribal Chairperson
Lone Pine Paiute-Shoshone Reservation

Responses to Letter 305 – Lone Pine Paiute-Shosone Reservation

Response 305-1: This comment reiterates the County’s vision statement from the General Plan. The REGPA does not propose the industrialization of the Owens Valley or Highway 395 corridor.

Response 305-2: The megawatt and acreage caps indicated in the Draft PEIR for the proposed SEDAs apply to both currently proposed (e.g., Munro Solar Project and LADWP’s Solar Ranch) and future projects after adoption of the REGPA by the County. If the REGPA is adopted, any proposed solar energy development that would exceed the cap would require a General Plan Amendment, further CEQA analysis, and public comment.

As described in Section 3.1.1 of the Draft PEIR, the Inyo County Board of Supervisors conducted a series of workshops between March and May 2014 and requested changes to the REGPA that resulted in removing wind energy from consideration and constricting the proposed development areas to utilize only transmission facilities in the County’s western portion; the remaining potential development areas (SEDAs) were greatly reduced based on public input. The Owens Valley was removed as a development area, and is included in the currently proposed REGPA as a study area for which specific criteria apply. The OVSA as shown on the figures in the PEIR is a depiction of the general valley area, and does not correlate with a proposed development area.

Response 305-3: The SEDA boundaries depicted in the Draft PEIR have been identified based on the Opportunities and Constraints Technical Study (Appendix D of the PEIR), and further refined based on feedback received through the agency scoping and public planning process (Section 3.1.1 of the PEIR). As described in the Draft PEIR, although the SEDAs have been identified to direct and constrain utility-scale and commercial scale solar development in the County, not all areas within the proposed SEDA boundaries may be suitable for development. Constraints within the SEDAs will be identified through subsequent, project-specific environmental review and planning processes, as outlined in the PEIR.

Response 305-4: As stated in the Draft PEIR in Section 2.4.3.1, the DRECP is currently under review, and although the County is not currently a signatory of the DRECP and is under no obligation to implement the DRECP principles and policies, the County has considered the DRECP in development of the REGPA. Because the DRECP was in draft form during the preparation of the PEIR, the SEDAs were not further constrained based on information contained in the DRECP. However, if the DRECP and the REGPA are adopted, the County would coordinate with the DRECP agencies to avoid priority conservation areas and future projects in the County would be developed consistent with the requirements of the DRECP. Under REGPA Policy MER-2.6, the County would coordinate with renewable energy solar developers and other agencies to avoid, minimize, or mitigate impacts. If the County becomes a signatory of the DRECP, future development under the REGPA within the DRECP area could be expedited by the “take” coverage under Section 10 of the Endangered Species Act of 1973 and state take coverage under Section 2835 of the California Fish and Game Code for species listed under the California Endangered Species Act as threatened, endangered, or candidates. The Draft PEIR and REGPA are not factually inadequate.

Although the County does not specifically advocate the development of utility-scale solar facilities within the County, it will not preclude permitting development in areas deemed suitable, and as long as the development is consistent with the goals and policies of the General Plan and REGPA, if approved.

Response 305-5: The County’s General Plan provides for policy direction on public lands not managed by the County.

Response 305-6: The third “New Land Use Implementation Measures” outlined in Section 3.3.1 of the Draft PEIR has been deleted as follows:

~~The County shall consider seeking compensation for the loss of revenues from potential Renewable Energy Solar Facilities that are not developed within the County due to possible impacts on military readiness, special status species, and aesthetics, and/or other barriers to development of appropriate Renewable Energy Solar Facilities. Methods of compensation include but are not limited to Payment in lieu of Taxes (PILT) or similar programs.~~

Response 305-7: The megawatt and acreage caps indicated in the Draft PEIR for the proposed SEDAs apply to both currently proposed (e.g., Munro Solar Project and LADWP’s Solar Ranch) and future projects after adoption of the REGPA by the County. If the REGPA is adopted, any proposed solar energy development that would exceed the cap would require a General Plan Amendment, further CEQA analysis, and public comment.

Response 305-8: The PEIR states that significant and unavoidable impacts would potentially occur in the areas of aesthetics, biology, and cultural resources. This is a conservative conclusion based on the uncertainty, at a Program EIR level, of a subsequent project’s actual impacts. The SEDA boundaries depicted in the Draft PEIR have been identified based on information described in the Opportunities and Constraints Technical Study (Appendix D of the PEIR). The SEDAs are intended to direct and constrain future solar developments to areas in the County identified as possibly supporting a lower level of resource sensitivity, and that are located near existing transmission facilities. Potentially significant impacts that could occur as a result of renewable energy projects being developed in the identified SEDAs were identified at a programmatic level and all feasible mitigation is prescribed in the PEIR; however, without project-specific information coupled with a project-level analysis under CEQA, it can’t be stated with certainty that these potential impacts would be reduced to below a level of less than significant at a programmatic level. That is why the PEIR reaches the conservative conclusion that impacts remain potentially significant and unavoidable. The County has prepared a Statement of Overriding Considerations per Section 15093 of the State CEQA Guidelines that identifies the economic, legal, social, and/or technological benefits of implementing the proposed project in light of the unavoidable impacts identified in the PEIR. This document will be considered along with the Draft PEIR by the County Board of Supervisors in late March 2015.

Response 305-9: The County acknowledges that LPPSR advocates the County becoming a signatory of the DRECP.

Response 305-10: As stated in Section 4.2.2 of the Draft PEIR, LADWP owned and BLM managed lands are not under County jurisdiction; however, the County coordinates with the LADWP and BLM to help guide development in the County and advocates for its General Plan policies when projects on these lands are proposed.

Response 305-11: The Draft PEIR has been amended to correct the two incorrect references from the “Owens Valley SEDA” to “Owens Lake SEDA.”

Response 305-12: The third “New Land Use Implementation Measures” outlined in Section 3.3.1 of the Draft PEIR has been deleted as follows:

~~The County shall consider seeking compensation for the loss of revenues from potential Renewable Energy Solar Facilities that are not developed within the County due to possible impacts on military readiness, special status species, and aesthetics, and/or other barriers to development of appropriate Renewable Energy Solar Facilities. Methods of compensation include but are not limited to Payment in lieu of Taxes (PILT) or similar programs.~~

Response 305-13: All future projects under the REGPA would be subject to project-specific environmental review. Depending on the size and location of the development and the technology used, a full EIR may be required. However, the REGPA also encourages small scale, photovoltaic (PV) technologies to be constructed which may not require a full EIR. As stated in Section 1.2 of the Draft PEIR:

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

This PEIR would provide a framework for these subsequent project analyses, but specific projects would still be assessed on an individual level; all projects under CEQA are legally afforded the same public review process.

Response 305-14: The commenter's request is acknowledged by County.

ENVIRONMENTAL MANAGEMENT OFFICE

January 14, 2014

Joshua Hart, Planning Director
Inyo County Planning Department
P. O. Drawer L
168 N. Edwards Street
Independence, California 93526

inyoplanning@inyocounty.us
inyoplanning@inyocounty.us

RE: Comments on draft PEIR – County of Inyo REGPRA – (comment deadline 1/14/15)

Dear Mr. Hart,

In addition to the Tribe’s recent written request for deadline extension, comment and request for government to government consultation submitted electronically on 1/13/14 and by mail on today’s date I am transmitting comments from the Bishop Paiute Tribe’s Environmental Protection Agency (TEPA)– a governmental agency of the Bishop Paiute Tribal government. I request to that these comments be added and addressed in the current effort to complete a PEIR for the project. These comments are being submitted both electronically and in writing.

306-1

The during the process of the PEIR the scope of alternatives and the development areas has changed. The current PEIR REGPRA is inadequate as a full range of alternatives of permitted development activity is not presented. Specifically it does not include a restrictive alternatives that permits development of solar energy projects only on "currently developed land". It is unacceptable to our TEPA that the "least alternative" being examined incorporates “previously disturbed land”, as lands meeting this definition this could potentially add to be a large area as currently defined, and some of the areas are currently being restored.

306-2

The addition of a restrictive alternative would be similar to the "previously disturbed lands" alternative but instead be narrowly limited to small project projects only on lands that meet strict definitions of "currently developed" with the intention that only intensively developed lands such as those currently paved, and developed, such as currently existing parking lots, commercial and residential structures in areas currently zoned for such uses. Projects permitted would be limited to small parking lot solar and rooftop solar systems on currently paved and developed lands, for on-site use only with express restriction on off-site transmission. Through the alternative addition of this currently developed lands alternative could have an effect of encouraging

existing landowners of currently intensively paved and developed land to pursue rooftop and carport solar as an electricity alternative to current grid transmission sources while at the same time protecting the environmentally and scenic open lands from the effects of large land used intensive development generation projects and off site transmission.

306-2
(cont'd)

The residents and governments of Owens Valley already have made a large contribution to federal and state renewable energy mandates through years of allowing extensive exploitation of hydroelectric and geothermal power sources and should now stand together to address land intensive solar farm projects that could threaten to damage the character and environment of the Owens Valley. Thank you.

306-3

Sincerely,

Brian Adkins
Environmental Director
Bishop Paiute Tribe

CC: Honorable Tribal Council – Bishop Paiute Tribe
Bishop Paiute Tribe Environmental Protection Agency
Tribal Historic Preservation Office – Bishop Paiute Tribe
File

Responses to Letter 306 – Bishop Paiute Tribe

Response 306-1: This comment is an introduction statement that summarizes previously submitted comments, provides an introduction to the Bishop Paiute Tribe’s Environmental Protection Agency, and acknowledges the CEQA planning process. No additional response is necessary.

Response 306-2: A range of project alternatives was considered for detailed evaluation in the Draft PEIR, and compared against the factors outlined in Section 15126(f) of the State CEQA Guidelines for feasibility. The list of alternatives outlined and analyzed in Section 6.3 of the Draft PEIR include: No Project Alternative, Solar PV Only Alternative, Commercial Scale (20 MW or less) Only Alternative, Reduced SEDA Alternative, and Solar Energy Development on Previously Disturbed Lands Only Alternative. As summarized in Section 6.5, the No Project Alternative would potentially result in an exacerbation of the potential impacts in relation to the proposed project. The remaining alternatives were identified as being environmentally superior to the proposed project, but would all potentially result in significant and unavoidable impacts to aesthetics, biology, and cultural resources.

Response 306-3: Closing statement. No additional response is necessary.



COMMENTS FROM PRIVATE CITIZENS
Series 400 Responses to Comments



Kristen Luetkemeier
331 N Washington
Independence, CA 93526
January 14, 2015

Ms. Cathreen Richards
Senior Planner
Inyo County Planning Department
P. O. Drawer L
168 N. Edwards Street
Independence, California 93526

Dear Cathreen:

Below, please find my comments on the REGPA PEIR, grouped by topic. I appreciate your consideration of them!

Alternatives

I prefer the photo-voltaic-only alternative in combination with the disturbed-lands-only alternative to the project. If future technology evolves to present a more environmentally friendly alternative to photo voltaic, I would support reevaluating the REGPA to potentially include the new technology. To assist with applying the disturbed-lands alternative, Inyo County should prepare a disturbed-lands study to accompany the REGPA. Disturbed-lands with ecological value, e.g. bat habitat encompassing abandoned mines, should not be available for development.

401-1

Impacts and Proposed Mitigation

I support a strengthening of the language throughout the impacts and proposed mitigation sections. Protection of biological and cultural resources, as well as the related geologic and hydrologic characteristics, aesthetics, and dark skies are of particular concern to me.

401-2

An example of the types of changes I propose uses the measures for BIO. On page ES-15, in BIO-1, please remove "or reduce" from the second sentence, which begins with: "The biological resource evaluation." Also on page ES-15, please replace the third sentence, which begins with: "The level of analysis will be based on factors such as" with: "All project proposals should be mapped at the Alliance level, using the standards in A Manual of California Vegetation, by Sawyer, Keeler-Wolf, and Evans." On page ES-16, please replace the first sentence, which begins with: "For projects with the potential to impact special species or habitats," with: "Projects with the potential to impact special status species or habitats will not be approved." On page ES-19, in BIO-2, please remove "if feasible" from the second bullet, which begins with: "The project shall be redesigned."

Particularly when rooftops and degraded sites remain undeveloped, I oppose damaging our valued and defining landscapes and habitats through energy development. Proposed projects that will harm our resources should be denied.

Ms. Cathreen Richards
January 14, 2015
Page 2

SEDAs

If such stronger language is not approved, and because of the groundwater and habitat concerns raised by the Center for Biological Diversity and others, I support removing the Charleston Valley, Pearsonville, and Rose Valley SEDAs from the REGPA. Since the Owens Valley study is a separate process, I also support removing the OVSA from the REGPA, leaving the Owens Valley as an area in which the county does not currently support solar development.

401-3

Mapping

In April 2014 comments on the REGPA, the Bristlecone Chapter of the California Native Plant Society urged the county to develop an up-to-date vegetation map and provided details of how to accomplish this. I support the requests outlined in the Bristlecone Chapter's comments, and urge the county to require that all project areas are mapped in advance of the project at the Alliance level as detailed in A Manual of California Vegetation, 2nd Edition, by Sawyer, Keeler-Wolf, and Evans, published in 2009.

401-4

I have heard repeated assertions by knowledgeable residents that mapping of cultural resources is also lacking. I support thorough and accurate examinations of archeological and other cultural resources in potential SEDAs in advance of decisions about whether to approve or reject proposed projects in those areas.

401-5

Western Solar Energy Group Megawatt Cap

Given what seems to be the desire of the individual participants in the REGPA review process as well as the Board of Supervisors, I urge that language about a cap on the western solar energy group reference a "250 megawatt," not "existing capacity," cap on development, and that the cap include projects proposed and/or approved before the REGPA's adoption.

401-6

Other Comments

I think inclusion of what, after REGPA adoption, will occur from project proposal to project approval or denial would be a helpful component in public and/or board meetings regarding the PEIR.

401-7

Sincerely,

Kristen Luetkemeier

Responses to Letter 401: Kristen Luetkemeier

Response 401-1: The comment notes a preference for the Solar PV Only Alternative and the Solar Energy Development on previously Disturbed Lands Only Alternative. Under the Solar PV Only Alternative, other types of solar energy projects would be eliminated which would likely reduce impacts to aesthetics, biological resources, and cultural resources while continuing to meet the goals of the project. The Disturbed Land Only Alternative would only partially meet the objectives of the project and the feasibility of providing adequate project sites is unknown. This alternative would also likely substantially reduce impacts to aesthetics, biological resources, and cultural resources. Inventorying disturbed lands in the County is a future goal, but is beyond the bounds of the current REGPA planning effort.

Response 401-2: The comment proposes a strengthening of language in the several sections of the PEIR, including biological resources, cultural resources, geology, hydrology, and aesthetics. All of these issues areas were discussed and analyzed in the PEIR, with specific mitigation measures prescribed for issues areas where potentially significant impacts were noted. All issue areas were found to be reduced to below a level of significance with the exception of aesthetics, biological resources, and cultural resources. With regard to Mitigation Measure BIO-1, the comment notes a preference to strengthen the language of this mitigation measure by removing the words “or reduce” from the second sentence. The language of this mitigation measure has been amended to incorporate the commenter’s preference with the intent of strengthening the mitigation measure as follows:

“... and shall prescribe specific mitigation measures to avoid ~~or reduce~~ impacts to biological resources to the maximum extent practicable.”

The comment also notes a preference to alter the sentence in Mitigation Measure BIO-1 that states “For projects with the potential to impact special species or habitats, a project-specific biological resources mitigation and monitoring plan shall be prepared in cooperation with and that meets the approval of permitting agencies.” to instead state “Projects with the potential to impact special status species or habitats will not be approved.” This suggested change will not be made. The County’s current approach is to actively consult and coordinate with the applicable public resource agencies and this change to the mitigation measure language is not warranted.

Additionally, the comment requests an alteration of the wording in Mitigation Measure BIO-2. The County has amended the mitigation measure based on this comment, and others, and directs the reader to the Final PEIR for the changes to the text.

It should be noted that the intent of the PEIR is to analyze impacts at a program level in order to provide a framework for future renewable energy project applications countywide. For individual projects, the County must conduct a project-specific environmental analysis and an associated CEQA document to evaluate potential impacts (refer to Response No. 401-7 below for additional information). Project specific documents prepared in accordance with CEQA would be subject to public and resource agency review.

Response 401-3: The comment notes a preference for eliminating from the REGPA several of the SEDAs that are being considered for future development. Specific resource impacts have been analyzed for the proposed SEDAs throughout the PEIR and a suite of criteria (including project-specific environmental review) will be applied before any consideration is given to individual project proposals. The specific issues raised in the comment related to groundwater and habitat concerns would be further assessed in

subsequent project-level analyses. It must also be noted that approval for development in specific portions of the SEDAs is neither being requested nor offered at this time. The SEDA boundaries depicted in the Draft PEIR have been identified based on the Opportunities and Constraints Technical Study (Appendix D of the PEIR), and further refined based on feedback received through the agency scoping and public planning process (refer to Section 3.1.1 of the PEIR). As described in the PEIR, although the SEDAs have been identified to direct and constrain utility scale and commercial scale (referred to as distributed generation in the Draft PEIR) solar development in the County, not all areas within the proposed SEDA boundaries may be suitable for development. This PEIR provides a framework for the subsequent project analyses, but specific projects would still be assessed on an individual level. Furthermore, as stated in the comment, the OVSA will be analyzed in detail during an independent planning process using a separate set of criteria for development siting.

Response 401-4: The comment expresses support for mapping every project area in advance of project development at the Alliance level as detailed in *A Manual of California Vegetation, 2nd Edition*, by Sawyer, Keeler-Wolf, and Evans, published in 2009 as well as a cultural resources inventory. According to Mitigation Measure BIO-2, which has been updated since the public release of the PEIR, a CDFW-approved botanist shall evaluate the potential for special status plant species to occur on the site and conduct surveys, if necessary, to determine presence or infer absence of special status plants on the site following the November 24, 2009 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* or the most current guidelines.

Response 401-5: This PEIR prescribes multiple program-level mitigation measures which would help reduce potential project-specific impacts to cultural resources. Mitigation Measures CUL-1a through CUL-1g mandates a series of prescribed actions that future solar energy developers must follow prior to seeking approval of their individual project. These mitigation measures include data collection and resource inventory by qualified experts. As requested in the comment, and as discussed in Response No. 401-4, subsequent project-level CEQA analyses would include the evaluation of potential project-specific effects, including effects on archeological and other cultural resources; these project-level analyses would occur in advance of decisions about whether to approve or reject a proposed project.

Response 401-6: Refer to Table 3-1 of the PEIR that summarizes the total allowable development in the Western Energy Group. This is described in greater detail under the discussion of the transmission requirements for the Western Solar Energy Group in Section 3.3.5. As outlined in the PEIR, the total allowable capacity and developable area for the Western Solar Energy Group is 250 MW/1,500 acres. Should the REGPA be approved by the Board of Supervisors, this cap could not be exceeded without an amendment to the County's General Plan. The megawatt and acreage caps indicated in the PEIR for the proposed solar energy group areas apply to both current and future project proposals after adoption of the REGPA by the County.

Response 401-7: The comment requests information regarding what would occur from project proposal to project approval or denial. All future projects under the REGPA would be subject to project-specific environmental review. This process will use the types of impacts and mitigation measures outlined in the Program EIR as guidelines. Depending on the size and location of the development and the technology used, a full EIR may be required. However, the REGPA also encourages small scale, PV technologies to be constructed which may not require a full EIR. As stated in Section 1.2 of the PEIR:

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document

must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

It should be noted that under Title 21 of the Inyo County Code concerning renewable energy development, any person who proposes to construct an electric transmission line, solar thermal renewable energy facility or a photovoltaic renewable energy facility in the County must first obtain a Renewable Energy Permit, a Renewable Energy Development Agreement or a Renewable Energy Impact Determination. A Renewable Energy Impact Determination applies to projects over which the County has limited authority because the project is located on federal or state land or is subject to the permitting jurisdiction of the California Energy Commission.

Under Title 21, the issuance of a Renewable Energy Permit is subject to CEQA, and the County Planning Commission must conduct a noticed public hearing before considering approval of such a permit. The Planning Commission must find that there has been compliance with CEQA before a permit can be issued. In addition, “as a condition to the issuance of such a permit, the Planning Commission may impose such reasonable and feasible mitigation measures as it finds to be necessary to protect the health, safety, and welfare of the county’s citizens, the county’s environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.” Finally, the Planning Commission is required to impose as a condition of approval, a plan for the reclamation/revegetation of the project site at the time of decommissioning of the project and the Planning Commission shall require financial assurances from the applicant to ensure that the reclamation plan will be fully implemented.

Concerning Renewable Energy Development Agreements, Title 21 provides that such agreements may be entered into by the County and a project applicant in lieu of obtaining a Renewable Energy Development Permit. Renewable Energy Development Agreements are subject to CEQA and must be approved by an ordinance adopted by the Board of Supervisors following a noticed public hearing. Prior to approving such an agreement, the Board must find that there has been compliance with CEQA. Renewable Energy Development Agreements must include a reclamation plan, acceptable financial assurances to ensure full implementation of the reclamation plan, be consistent with the county general plan and be enforceable by injunctive relief or other enforcement mechanisms under law. In the Renewable Energy Development Agreement, the Board of Supervisors may require such mitigation measures or modifications of the project as it finds necessary to protect the health, safety, and welfare of the county’s citizens, the county’s environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.

Cathreen Richards
Inyo County Planning Department
P.O. Drawer L
Independence, CA 93526

January 14, 2015

RE: REGPA Program Environmental Impact Report

Dear Ms. Richards,

Thank you for the opportunity to comment on Inyo County’s Renewable Energy General Plan Amendment (REGPA). I am pleased with our Board of Supervisors who responded in a real way to comments from the public on the earlier REGPA proposal. Their guidance to the Inyo Planning Department is shown in this PEIR.

402-1

My comments on specific areas in the PEIR.

LAWS:

An inadequacy is shown in the map for the area. The reader (public) is not able to evaluate this area without being able to see the how the 1991 Inyo County/Los Angeles Long Term Water Agreement (LTWA) applies to it. Most all of the Laws area is regulated by the LTWA. There are vegetation monitoring sites, enhancement/mitigation projects, irrigated agriculture (grazing pastures) that are not shown on the map. No solar projects could be considered without agreement between Inyo County and Los Angeles. The reader needs this information to accurately evaluate Laws as a renewable location.

402-2

ROSE VALLEY:

Currently Rose Valley is being pumped for geothermal injection by Coso Geothermal. Their Conditional Use Permit could allow the use of the entire recharge of this basin although it is at present set at a lower volume of pumping. Concerns in Rose Valley are impacts to the private property of the Little Lake Ranch (a private duck club). This unique and priceless wetland could be harmed by overdrafting of the groundwater basin. In addition to the geothermal pumping, Los Angeles Department of Water and Power has also expressed interest in groundwater pumping south of Haiwee Reservoir to reclaim water that it feels is leaking subsurface from the reservoir. If allowed, this pumping would be overdrafting the basin.

402-3

Renewable energy projects that would use water at any significant level would pose unacceptable threat of harm to the groundwater basin in Rose Valley and to the Little Lake Ranch.

Highway 395 northbound from Little Lake is signed as a 'Scenic Byway'. The visual blight of renewable energy projects would be unmitigable, mocking the highway designation. 402-4

The Rose Valley area should be dropped from consideration.

CHICAGO VALLEY:

This private 'island' of land on the floor of the valley has two private land owners. One lives on site and has a trailer park for rentals. This family, the Messers, opposes renewable development in Chicago Valley. The other landowner does not live on site and favors renewable energy. Inyo County should support the local residents living in Chicago Valley who have express opposition, instead of an absentee owner who lives out of the area. 402-5

Chicago Valley also has a well-developed mesquite bosque, a plant community that is uncommon in Inyo County outside of protected areas. Mesquite bosques are havens for wildlife in arid lands and should be protected at all costs. They are irreplaceable. 402-6

Chicago Valley should be dropped from consideration.

CHARLESTON VIEW:

Development of the Charleston View area, where the former Brightsource thermal solar project was proposed, threatens the fragile tourism based job base in that part of Inyo County. The hydrological study recently submitted by Andy Zdon has shown a clear connection between the Charleston View area and nearby areas of springs and wetlands – Resting Springs and China Ranch/Amargosa River. Inyo County should not propose development at Charleston View and thereby threaten jobs and residents at China Ranch and Shoshone/Tecopa. The 'other side' of our county has worked hard to develop a local economy based on tourism and sustainability. They have invested both time and money that shouldn't be put at risk for speculative renewable development. 402-7

China Ranch supports commercial date growing and habitat for rare and endangered wildlife. Thousands of people visit China Ranch every year. Shoshone has seen a rebirth over the years and has created some of the only jobs in the area along with China Ranch. Both of the owners at China Ranch and Shoshone oppose renewable development in their part of the county that would threaten their livelihoods. Inyo County should support that. 402-8

Charleston View should be dropped from consideration.

Sincerely,

Michael Prather
Lone Pine, CA

Responses to Letter 402: Michael Prather

Response 402-1: The commenter thanks the County for the opportunity to comment on the REGPA, and for responding to comments from the public on the earlier REGPA proposal. No additional response is warranted.

Response 402-2: The comment notes concerns related to the application of the 1991 Inyo County/ Los Angeles Long Term Water Agreement (Agreement) on the Laws SEDA. The Agreement is discussed in Sections 2.4.3.3, 4.2.1.4, and 4.9.1.3 (under the description of the County's Groundwater Extraction Permit Ordinance [Ord. 394 § 1, 1980]). The Agreement was developed to manage ground and surface water resources while maintaining healthy groundwater dependent vegetation communities found in the Owens Valley and while providing a reliable supply of water for export to Los Angeles and for use in Inyo County. To accomplish this, the Agreement contains management strategies for preventing long term groundwater mining from the aquifers, as well as avoiding of minimizing impacts to vegetation as a result of groundwater pumping or changes in surface water management practices. Vegetation is used as the principal indicator of environmental quality associated with ground and surface water activities in the Owens Valley. As part of this effort, vegetation in the Owens Valley has been classified (as described in Section 2.4.3.3 of the PEIR), and the County maintains maps of the classified vegetation. Management maps depicting the information described by the commenter can be found on the Inyo County Water Department's website (refer to http://www.inyowater.org/Water_Resources/water_agreement/agr_exh.htm). Individual projects would be subject to all applicable federal, state, and local regulations including the Agreement. The Agreement maps from the Inyo County Water Department would be used in the future during project-level analyses, which would ensure that proposed projects would not be located in an area that would conflict with the Agreement.

Response 402-3: Section 4.9.1.2, Project Area Hydrological Environment, of the PEIR provides an overview of groundwater resources and uses in Rose Valley, including recent monitoring results from groundwater extraction at the nearby Hay Ranch Water Extraction and Delivery Project that is associated with the Coso geothermal field use referenced by the commenter. The impact assessment for the Rose Valley SEDA in Section 4.9.3.1 of the PEIR concludes that potential impacts to groundwater supplies in Rose Valley would be significant, due primarily to the fact that the REGPA PEIR is a program-level document and potential site-specific solar development (and related groundwater use) is unknown at this time. Accordingly a conservative approach was taken by the County and a significant impact identified. Associated mitigation for significant potential project-related impacts to groundwater resources (including in the Rose Valley SEDA) is provided in Section 4.9.5 of the PEIR, with applicable individual projects required to prepare project-specific groundwater analysis prior to approval. This would involve detailed evaluation of factors such as local aquifer volumes and hydrogeologic characteristics, current/proposed withdrawals, inflow/recharge capacity, and potential effects to local groundwater basins and related surface water features. From these site-specific groundwater assessments, associated measures would be developed to address potential concerns and ensure that groundwater resources and groundwater-dependent surface water features would be appropriately protected and/or subject to applicable mitigation.

Response 402-4: Section 4.1.1.4 of the PEIR identifies the officially designated scenic byways and state scenic highways within Inyo County. A 20-mile-long segment of US 395 between Fort Independence and Fish Springs Road is an officially designated State scenic highway. While the portion of US 395, between Little Lake and Topaz Lake at the California – Nevada border is identified and signed as a scenic drive

(Eastern Sierra Scenic Byway), it is not an officially designated scenic byway. This 250-mile-long stretch of US 395 includes signage that identifies scenic turnouts and interpretive displays. The Eastern Sierra Scenic Byway is a partnership project supported and sponsored by the Coalition for Unified Recreation in the Eastern Sierra.

Impacts to visual resources were analyzed in Section 4.1 of the Draft PEIR. The PEIR concludes that significant and unavoidable impacts would potentially occur related to aesthetics. This is a conservative conclusion based on the uncertainty, at a program level, of a subsequent project's actual impacts. Potentially significant impacts that could occur as a result of renewable energy projects being developed in the identified SEDAs were identified at a programmatic level and all feasible mitigation is prescribed in the PEIR; however, without project-specific information coupled with a project-level analysis under CEQA, it can't be stated with certainty that these potential impacts would be reduced to below a level of significance at a programmatic level. That is why the PEIR reaches the conservative conclusion that impacts remain potentially significant and unavoidable. The County has prepared a Statement of Overriding Considerations per Section 15093 of the State CEQA Guidelines that identifies the economic, legal, social, and/or technological benefits of implementing the proposed project in light of the unavoidable impacts identified in the PEIR. This Statement will be considered along with the PEIR by the County Board of Supervisors in late March 2015. Because this document is a program-level EIR, it is intended to establish a framework and process for future implementation of solar energy projects that fall within the parameters evaluated in the PEIR. Individual projects proposed within the County, including within Rose Valley SEDA, will be required to prepare a project-specific environmental analysis and associated CEQA document to evaluate potential impacts, including a visual analysis. Project-specific analysis will use the types of impacts and mitigation measures outlined in the PEIR as guidelines, including Mitigation Measure AES-1, which requires project specific visual analysis.

Response 402-5: The comment notes concern over opposing interests related to renewable development by two private property owners within the Chicago Valley. Because this comment does not raise specific issues related to the adequacy of the PEIR, however, no further response is required.

Response 402-6: The County acknowledges the commenter's concern regarding the loss of mesquite bosque. Impacts to biological resources were evaluated in Section 4.4 of the Draft PEIR, which states that this type of habitat has a conservation status global ranking of vulnerable (G3) and a state ranking of very threatened (S2.1). Plants with a special status ranking like the mesquite bosque are protected under both the California Endangered Species Act and Federal Endangered Species Act. Additionally, the following language has been added to Mitigation Measure BIO-19 to address potential off-site, indirect effects of solar development projects in the Chicago Valley SEDA on mesquite bosque (refer to the mitigation measure in Section 4.4.5 of the Final PEIR for all revisions).

Solar development authorized under the REGPA will not be sited within any special status natural communities or protected natural areas. If solar development is sited adjacent to any special status natural communities or protected natural areas or is determined to have the potential to impact any off-site special status natural communities or protected natural areas during the project level biological resources evaluation (e.g., projects in the Laws SEDA could impact the hydrology of Critical Habitat for Fish Slough milk-vetch; projects in the Chicago Valley SEDA could negatively impact off-site mesquite bosque by altering drainage patterns or altering groundwater levels; projects in the Charleston View and Chicago Valley SEDAs could impact down-watershed habitats in the Amargosa Watershed (including habitats within the portion of the Amargosa River

that has been designated by Congress as “Wild and Scenic.”), a management plan will be developed in consultation with CDFW and/or USFWS.

Response 402-7: The County acknowledges the commenter’s concern about impacts to tourism and the local economy. As discussed in Section 4.16.1.4 in the PEIR, the County’s economy has historically relied on natural resources as its base, including cattle ranching during the gold rush, extracting a wide variety of minerals found in the County, sheepherding, growing orchard and vegetable crops, and tourist-based activities that take advantage of the unique landscapes and wildlife the County has to offer. In recent times, the County has relied more on tourist-based activities and services, as well as, government and land management as its main economic drivers. Renewable energy development, however, has also played a role in the County’s economy associated with the Coso Geothermal Power Plant and several hydroelectric generating facilities. Additional renewable energy development also has the potential to add to the County’s economic base. As indicated in Section 4.16.3.3, future solar energy development could provide an initial boost to the local economy during construction in the form of an increase in the labor force that requires goods and services, land sales, and the use of local materials. In the long term, it can provide higher property and sales tax revenues to the County, the continued use of local materials, and the provision of some long term jobs that can, in turn, generate a permanent increase in the procurement of local goods and services.

While these economic effects would potentially benefit the local economy, the concern raised by the commenter is that solar energy development could negatively affect the natural and scenic resources that attract tourists to the County, as well as the local economy based on tourism. Solar energy development could result in changes to scenic views and vistas from public vantage points within the County. Accordingly, the PEIR concludes that significant and unavoidable impacts would potentially occur related to aesthetics due to the introduction of solar energy infrastructure within the existing landscape. Future energy solar development could consist of large-scale facilities that would substantially contrast with the existing visual environment, even with all feasible mitigation prescribed in the PEIR, without project-specific information coupled with a project-level analysis under CEQA, it can’t be stated with certainty that these potential impacts would be reduced to below a level of less than significant at a programmatic level. This is a conservative conclusion based on the uncertainty, at a Program EIR level, of a subsequent project’s actual impacts. Without project-specific information coupled with a project-level analysis under CEQA, it can’t be stated with certainty that these potential impacts would be reduced to below a level of significance at a programmatic level. That is why the PEIR reaches the conservative conclusion that impacts remain potentially significant and unavoidable. Individual projects proposed within the County, including within Rose Valley SEDA, will be required to prepare a project-specific environmental analysis and associated CEQA document to evaluate potential impacts, including visual analysis. Project-specific analysis will use the types of impacts and mitigation measures outlined in the PEIR as guidelines, including Mitigation Measure AES-1, which requires a project specific visual analysis. In addition, new Visual Resources policies in the REGPA (Policies VIS-1.8 and -1.9, and Visual Resources or Economic Development Implementation Measure) relate to avoiding, minimizing, and mitigating for impacts to visual resources, and balancing the effects on visual resources with the potential effects on tourism in the County.

The PEIR also concludes that future solar energy development could result in potentially significant impacts to biological and groundwater resources within the all of the SEDAS and the OVSA, as discussed in Section 4.4 and 4.9 of the PEIR, respectively. The PEIR includes program-level mitigation to protect such resources (outlined in Sections 4.4.5 and 4.9.5).

Response 402-8: The comment notes the China Ranch area supports commercial date growing and habitat for rare endangered wildlife, and that thousands of people visit this area each year. The comment also notes that the owners of China Ranch and Shoshone oppose renewable energy development in "...their part of the county that would threaten their livelihoods." The SEDA boundaries depicted in the PEIR have been identified based on the Opportunities and Constraints Technical Study (Appendix D of the PEIR), and further refined based on feedback received through the agency scoping and public planning process (Section 3.1.1 of the PEIR). As described in the PEIR, although the SEDAs have been identified to direct and constrain utility scale and commercial scale (referred to as distributed generation in the Draft PEIR) solar development in the County, not all areas within the proposed SEDA boundaries may be suitable for development. This PEIR provides a framework for the subsequent project analyses, but specific projects would still be assessed on an individual level.

From: Daniel Pritchett <skypilots@telis.org>
Sent: Sunday, November 23, 2014 9:59 AM
To: InyoPlanning
Subject: Comment on REGPA: extend comment period

Dear Planning Department:

Please consider this my first comment on the REGPA PEIR.

The comment period should be extended by at least 30 days. It is not realistic for most residents to read and understand a document of this magnitude and complexity in the time allotted, especially considering that the review period includes the Thanksgiving and portions of the Christmas holiday seasons.

403-1

I will submit more comments in the future.

Sincerely,
Daniel Pritchett
Bishop, CA

Response to Letter 403: Daniel Pritchett

Response 403-1: This comment is requesting that the comment period be extended. The public comment period for the Draft PEIR opened on November 5, 2014 and was originally slated to close on December 19, 2014, meeting the mandated 45-day comment period per Section 15105 of the State CEQA Guidelines. However, the County received multiple requests from potential reviewers of the document to extend the comment period. Accordingly, on December 4, 2014 the County approved the extension of the public comment period to January 14, 2015 (a total comment period of 71 days).

TO: Inyo County Planning Department From: Earl Wilson, Lone Pine, CA
 Attn: Cathreen Richards, Senior Planner

Comments for “Draft - Renewable Energy General Plan Amendment
 Program Environmental Impact Report – Nov. 2014”

EXECUTIVE SUMMARY

ES.1 PROJECT LOCATION (para-1)

Inyo County is located on the east side of the Sierra Nevada, in the east-central part of California. Inyo County is approximately 10,200 square miles and is largely undeveloped. The County has identified Solar Energy Development Areas (SEDA) and the Owens Valley Study Area (OVSA) which comprise the project area of this PEIR. The SEDAs are divided into solar energy groups based on their location in the County and the associated transmission and distribution facilities. The Western Solar Energy Group is comprised of SEDAs in Laws, Owens Lake, **Rose Valley**, and Pearsonville; it also includes the OVSA.

404-1

- 1) *This SEDA should be renamed “Rose Valley / Olancha” through out the document. The Olancha area is geophysically separate from Rose Valley, separated from Rose Valley by the Haiwee Ridge and ends N’ly at SR-190 which includes the majority of the Olancha Area.*

ES-2: PROJECT DESCRIPTION

1. Provide for solar energy development opportunities in Inyo County to generate electricity from solar resources in accordance with the **goals established by California State legislation** and local policies regarding renewable energy.

404-2

- 2) *Isn’t there also a Federal legislative component that should be included ??*
- 3) *ADD: (See 2.4)*

Table ES-1 IMPACTS AND PROPOSED MITIGATION

AESTHETICS

AES-5: Prepare lighting plan that **informs** ways to reduce night lighting during construction and operation.

- 4) *Suggestion: Prepare lighting plan according to best management practices (BMP)s from the Renewable Energy Action Team’s (REAT’s) Best Management Practices and Guidance Manual (REAT 2010) that **informs** describes ways that will be used to reduce night lighting during construction and operation. The plan should include a mechanism to address complaints.*

404-3

Bullet – 2 Lighting shall incorporate fixture hoods/shielding with light directed **downward** ~~or~~ **toward the area to be illuminated.**

- 5) *Light fixtures should be installed horizontally.*
- 6) *“Toward the area to be illuminated” could be a sign or side of a building. The ground should be the only thing to be illuminated. Change the word OR to AND. This would imply “the ground”.*

(Bullet – 3) Project lighting shall be kept off when not in use whenever feasible and consistent with safety and security.

- 7) *Project lighting (suggest add) “after construction has been completed”*

BIOLOGICAL RESOURCES

BIO-20: Minimize impacts to waters of the US/State, including wetlands. (Page ES-59)

404-4

If wetlands are filled or disturbed as part of the **highway project**, compensation will be implemented for the loss of wetland habitat to ensure no net loss of habitat functions and values. Compensation ratios shall be based on site-specific information and determined through coordination with state and federal agencies (including CDFW, USFWS, and USACE).

- 8) *This is a Solar Energy Project*

CULTURAL RESOURCES

CUL-1a: Designate project Cultural Resources Staff. (Page ES – 63)

404-5

Project Cultural Resources Specialist. Prior to the approval of a Renewable Energy Permit, Renewable Energy Development Agreement, or Renewable Energy Impact Determination by the County Planning Department, a cultural resources specialist whose training and background conforms to the US Secretary of Interior’s Professional Qualifications Standards, as published in Code of Federal Regulations Title 36, part 61 shall be retained by the project owner to conduct a cultural resources inventory, evaluate **an** resources, produce a Cultural Resources Management and Treatment Plan and other

- 9) *Typo: should be “any”.*
- 10) *Local historical knowledge should be included for this position.*

GREENHOUSE GAS EMISSIONS

GHG-1: Prepare Site-Specific Greenhouse Gas Report. (Page ES – 73)

404-6

Prior to approval of a Renewable Energy Permit, Renewable Energy Development Agreement, or Renewable Energy Impact Determination for a solar energy project, a site-specific greenhouse gas technical report will be prepared and approved by the County. The site-specific technical report will identify project-specific emissions to ensure **compliance with the interim SCAQMD GHG thresholds**, as well as measures to reduce operational greenhouse gas emissions. The technical report will be completed and approved by the County prior to the County’s action.

- 11) *No mention of GBUAPCD review here. Are we deferring to the “South Coast AQMD” regulations for our air resources ??*

HYDROLOGY AND WATER QUALITY

HYD-2: Conduct site-specific groundwater investigations. (Page ES – 80)

404-7

Groundwater Recharge Capacity: (1) reduce the area of on-site impervious surface if appropriate, through increased use of surfacing materials such as gravel, decomposed granite, or pervious pavement; and (2) use facilities such as retention/percolation basins and unlined drainage facilities to increase local infiltration and groundwater recharge.

- 12) *Water injection should be specifically excluded as a method of recharge.*

PUBLIC SERVICES

PUB-3: Pay mitigation fees for public safety and protection services. (Page ES – 87)

404-8

The County shall require project proponents to pay established County development mitigation fees for fire and police protection services. Said fees shall be used to maintain proper staffing levels for **fire and police protection services** and to sustain adequate response times as required by the County.

- 13) *Can we include Emergency Services i.e. Ambulance since it is no longer part of Fire?*

1.0 INTRODUCTION

Draft Program Environmental Impact Report (Page I – 4, para -2)

404-9

This document is the Draft PEIR. It was prepared with assistance from a consulting firm pursuant to a contract with the County, as the lead agency, **ADD** consistent with Section 15084 of the State CEQA Guidelines.

- 14) *Source of funding from CEC should be included.*

2.0 PROJECT LOCATION AND SETTING

2.1.1 SEDAs Comprising the Western Solar Energy Group (Page 2 – 1, para 4 & 5)

The Owens Lake SEDA is located in the west-central portion of the County, between the Census Designated Places (CDPs) of Lone Pine and Olancho. Its boundaries are generally bordered by US 395 to the west and **State Route (SR) 136 to the east**. SR 190 follows the southern boundary, just inside the SEDA boundary line.

15) Replace: *State Route (SR) 136 to the east and includes the CDP of Keeler.*

The Rose Valley SEDA is located south of Olancho. From Olancho, the SEDA follows US 395 southward for approximately 19 miles. The Pearsonville SEDA is located at the CDP of Pearsonville. Its southern boundary is the southern County boundary with Kern County. From the County line, the SEDA follows US 395 northward for approximately 5.5 miles.

16) Replace: *The Rose Valley SEDA includes outlying areas of the community of Olancho and continues south from its northerly boundary at SR 190 and a small portion of the Owens Lake SEDA.*

404-10

2.2 REGIONAL SETTING

2.2.1.1 Owens Valley (Page 2 – 2, para 2 & 3)

The Owens Valley is a north-south trending valley in both Mono and Inyo Counties bounded by faults and the uplifted blocks of the Sierra Nevada to the west and the White and Inyo Mountains to the east. The floor of the valley is at approximately **4,500 feet amsl**, and varies in width from 6 to 15 miles.

17) *Elevation varies from 3700 amsl in the south at Lone Pine to 4500 in Bishop.*

The predominant land uses in the Owens Valley are ranching and recreation, with little development outside of the established communities. A large portion of the valley floor is used as rangeland for cattle and livestock. A majority of the land on the Owens Valley floor is undeveloped and is owned by LADWP. The BLM and the USFS also manage portions of land within the valley. LADWP owns and operates the Los Angeles Aqueduct through the valley, which **diverts water from the Owens River**.

18) *Owens River and its tributaries .*

2.2.3.2 Los Angeles Department of Water and Power (Page 2 – 5, para -2)

LADWP owns and operates the 230-kV Inyo-Rinaldi Transmission System that extends from the Owens River Gorge substation to the Rinaldi Receiving Station in San Fernando Valley. In Inyo County, the transmission line is located on the east side of the Owens Valley, and the distribution network supplies power in the Owens Valley at a service voltage below 55 kV (typically 33 kV or 12 kV in the County). **The LADWP system also includes a separate 500-kV direct current system from Oregon to Los Angeles that passes through Inyo County without a local connection (LADWP 2013a).**

16) *Include specific source of this power.*

17) *Is the production of this power renewable ??*

18) *Is this transmission line running at capacity ??*

19) *Provide a map of all current and proposed bulk export transmission corridors within the Western Solar Energy group.*

404-11

2.2.3.4 Local Lines (Page 2 – 6, para -1)

Local lines can be found throughout Inyo County. Although these lines are far from each other and serve specific, isolated, areas, they have the potential to be upgraded or to have new higher capacity transmission located in their right-of-ways that could ultimately serve future renewable energy generation facilities. These lines run from main lines, including but not limited to: Deep Springs, **Panamint**, Darwin, Death Valley Junction and Tecopa.

404-11
(cont'd)

20) *Only the southern part of Panamint Valley has any local transmission lines.*

2.3 PROJECT SITE CHARACTERISTICS (Page 2 – 6, para -5)

The overall project site is comprised of eight SEDAs and the OVSA which are generally located in relatively flat valley bottoms of a semi-arid environment. These areas are largely undeveloped and support varied habitats and vegetation communities, including desert scrub, **chaparral**, riparian, and alkali grasslands.

404-12

21) *I am not aware of any location in Inyo County that contains “chaparral”.*

2.3.1 Western Solar Energy Group

SEDAs in the Western Solar Energy Group are situated along the existing LADWP transmission lines located along the east side of the Owens Valley.

404-13

22) *and some portions of the western side of the valley.*

2.3.1.2 Owens Lake SEDA (Page 2 – 7, para -3)

Existing SCE and LADWP electrical lines generally follow the perimeter of the SEDA. BLM lands in the southeastern portion of the SEDA are under a BLM grazing allotment. Refer to Figure 2-4b for the characteristics of the Owens Lake SEDA.

404-14

23) *Local transmission lines follow the easterly and southeasterly perimeter. Bulk transmission lines follow the westerly portion.*

2.3.1.3 Rose Valley SEDA (Page 2 – 7, para - 4)

This SEDA is largely undeveloped, with some traveler amenities (e.g., rest stop, gas station, etc.) near the **Sykes/Gill Station Coso Road junction with US 395, and isolated residential developments and industrial buildings located along the highway corridor.** Agricultural lands are located in the northern portion of the SEDA, east of US 395. Undeveloped areas are characterized by desert scrub giving way to mountains to the east and the west. The SEDA is largely BLM lands under grazing allotment. Refer to Figure 2-4c for the characteristics of the Rose Valley SEDA.

404-15

23) *“Sykes” is a non-existent and long abandoned railroad siding. The northern part of the SEDA also contains large agricultural operations, the community of Grant with a private airfield, motels and trailer parks.*

2.4 RENEWABLE ENERGY DEVELOPMENT POLICIES, PLANNING AND PROGRAMS

(Page 2 – 7, para -3)

California and Inyo County have numerous policies designed to support renewable energy development. Regional planning efforts and programs guide renewable energy development in the region. The following sections provide a brief overview of these policies. **Refer to Figure 2-4i for the characteristics of the Sandy Valley SEDA.**

404-16

24) *This belongs on the previous page !!*

2.4.3.2 Land Use Planning (Pages 2 – 17 & 18) | 404-17

**California Desert Conservation Area Plan
West Mojave Plan
Northern and Eastern Mojave Plan**

25) *There are no maps delineating these areas.*

4.1 AESTHETICS

4.1.1.3 Project Area Visual Setting | 404-18

Owens Valley Study Area (Page 4.1 – 5, para - 1)

The OVSA covers a large area of approximately 355,131 acres (555 square miles) that extends from the northern County boundary to north of Owens Lake. Most of the population centers within the County occur along US 395 within the OVSA , including Lone Pine, Independence, Big Pine, and Bishop, with other, smaller communities located further off of US 395 such as Wilkerson, Aberdeen, **Black Rock, and Dolomite.**

26) *Neither are communities. Black Rock is a fish hatchery. Dolomite is a mining property.*

4.1.3.1 Site Characterization (Page 4.1 – 15, para -4) | 404-19

There are no SEDAs located within Death Valley National Park **or along officially designated scenic highways.**

27) *This is incorrect !! Not only along but completely encompassing sections of US 395 in Rose Valley and the OVSA.*

4.10.1.2 Project Area Land Use Setting

Western Solar Energy Group | 404-20

Owens Lake Solar Energy Development Area (Page 4.10 – 1, para -3)

Existing Land Uses

Existing land uses within the Owens Lake SEDA consist of the unincorporated community of Keeler, Owens Lake, and undeveloped land.

28) *Also includes mining property on the lake playa.*

Rose Valley Solar Energy Development Area

Existing Land Uses (Page 4.10 – 4, para -3) | 404-21

The Rose Valley SEDA consists mostly of undeveloped land, designated as BLM grazing allotment. Some agricultural uses and a hydropower plant are located in the eastern portion of the SEDA. Small parcels of development occur along US 395, most consisting of a few residential lots, a highway rest stop, and/or small isolated industrial buildings. These uses include the communities of Dunmavin and a portion of the **community of Haiwee**. Dunmavin consists of unused commercial buildings and a 10-parcel subdivision (Inyo County 2001, as amended). **Haiwee covers 2,100 acres and is divided into two sections – one that fronts along US 395 (within the SEDA) and one that sits beside Sage Flat Drive in the Sierra foothills (outside of the SEDA).** The Los Angeles Aqueduct traverses the Rose Valley SEDA from the northwest portion in a southeasterly direction.

29) *There is no community at Haiwee only DWP reservoir operations buildings.*

30) *This does not make sense. If you mean the Haiwee Res. – neither are within the Rose Valley SEDA.*

31) *If you are referring to subdivided private lands the second at Sage Flat Dr. is partial within the SEDA.*

Owens Valley Study Area (Page 4.10 – 6, para -2)

Existing Land Uses

404-22

The OVSA covers a large area, with a variety of existing land uses. US 395 traverses the middle of the OVSA, in a north-south direction. Most of the population centers for the County occur along US 395 in the OVSA, including Lone Pine, Independence, Big Pine, and Bishop. The OVSA contains other, smaller communities/population centers located further off of US 395. These include the communities of Wilkerson and Aberdeen. Some agricultural uses are located in the OVSA, just south of Big Pine, east of US 395, and south of Bishop, west of US 395. Keough Hot Springs, the largest natural hot springs pool in the Eastern Sierra, is located in the OVSA, west of US 395. The Bishop, Independence, and Lone Pine airports are located within the OVSA. The Bishop Airport is located east of the City; the Independence Airport is located just north of the community of Independence; and, the Lone Pine Airport is located just south of the Lone Pine community. The Los Angeles Aqueduct traverses in a north-south direction through the OVSA. **A variety of water bodies are located within the OVSA, including the Tinemaha Reservoir, Calvert Lake, Twin Lakes, and Diaz Lake.**

32) *Klondike Lake just north of Big Pine should be included.*

Adjacent Land Use (Page 4.10 – 6, para -2)

404-23

Land adjacent to the west consists almost entirely of land associated with the Inyo National Forest. This land is rugged and undeveloped, with dispersed campground areas. The unincorporated communities of Rovana, Round Valley, and Mustang Mesa are located adjacent to the west of the OVSA, in the northwestern portion of the County. Some minor agricultural uses and the Pleasant Valley Reservoir are also located in the northwestern portion of the County, west of the OVSA. Mono County is located north of the OVSA. Land within Mono County adjacent to the OVSA is undeveloped, with the nearest land use consisting of the unincorporated community of Chalfant Valley, located over 4 miles north of the OVSA's northern boundary. **Land to the east** of the OVSA consists of undeveloped land with rugged terrain. **This area includes** Inyo National Forest Land and BLM land, both of which are undeveloped. The Owens Lake SEDA is located adjacent to the south.

32) *Lands to the west should be described and Manzanar should be included as managed by the US Park Service.*

Southern Solar Energy Group

Trona Solar Energy Development Area

404-24

Adjacent Land Uses

The Trona SEDA is located along the southern boundary of the County, with land adjacent to the south located within San Bernardino County. In San Bernardino County, adjacent land uses include the community of Trona and undeveloped land. Searles Lake is also located south of the Trona SEDA along with the communities of Searles Valley and Argus. The Trona SEDA has an irregular border, with a portion of the border sharing the Inyo/San Bernardino County line and a portion of the border located farther north of the County line. The portion of land south of the Trona SEDA that is located in Inyo County consists of undeveloped land. **Land adjacent to the north, east, and west of the Trona SEDA is undeveloped.**

32) *Lands are BLM and Death Valley National Park controled.*

Thank you for the opportunity to make comments and also for extending the comment period,

Earl Wilson POB 830, Lone Pine, CA

Responses to Letter 404: Earl Wilson

Response 404-1: Paragraph 1 of the Executive Summary of the PEIR has been amended to include the Rose Valley SEDA in the Western Solar Energy Group. Although Olancho is not geographically within Rose Valley, the name of the SEDA was chosen to reflect the majority of its area and provide a convenient label for that portion of the area covered by the REGPA. The name is not intended to rigorously define the geographical extent of the SEDA.

Response 404-2: The Executive Summary section of the PEIR has been amended to include the recommended reference to California State legislation. A reference has also been added to Section 2.4 for a detailed discussion of applicable policies.

Response 404-3: On Table ES-1, Mitigation Measure AES-5 has been amended to include the suggested changes as referenced by the comment.

Response 404-4: On Table ES-1, Mitigation Measure BIO-20, “highway” has been changed to “solar.”

Response 404-5: On Table ES-1, Mitigation Measure CUL-1a was amended to include the suggested changes.

Response 404-6: As described in Section 4.7.2 of the PEIR, “Neither the GBUAPCD nor the County has yet established specific quantitative significance thresholds for GHG emissions evaluated under CEQA. In the absence of adopted local or statewide thresholds, the general methodology in this PEIR follows the interim guidance provided by the South Coast Air Quality Management District (SCAQMD).” No change has been made to the PEIR related to this comment.

Response 404-7: On Table ES-1, Mitigation Measure HYD-2 has been amended to note that the County may allow water injection as a method of groundwater recharge.

Response 404-8: On Table ES-1, Mitigation Measure PUB-3 has been amended to include emergency services.

Response 404-9: In Section 1.0 of the PEIR, the first paragraph has been updated to reference the funding by CEC.

Response 404-10: Section 2.1.1 of the PEIR has been updated based on the proposed changes outlined in the comment.

Response 404-11: Section 2.2.1.1 of the PEIR has been amended with the suggested changes outlined in the comment. Section 2.2.3.4 has been amended to refer to the southern part of Panamint Valley. Please note, on a given transmission line, it is impossible to determine whether the power is from renewable energy sources or not; equally the County does not have access to the market data necessary to state whether the line is fully utilized. The line in question, known as the Pacific DC Intertie, connects the Bonneville Power Administration, which markets electricity from the hydroelectric projects in the Columbia River Basin to the Sylmar Converter Station in Los Angeles. This system is rated for 3,100 MW, and that capacity is shared between SCE, LADWP, and other municipal utilities in Los Angeles County.

Response 404-12: Section 2.3 of the PEIR has been amended to replace “chaparral” with “Great Basin scrub.”

Response 404-13: Section 2.3.1 has been amended to state that SEDAs in the Western Solar Energy Group are situated along the existing LADWP transmission lines located in the Owens Valley.

Response 404-14: Section 2.3.1.2 has been amended to specify the western perimeter of the Owens Lake SEDA.

Response 404-15: Section 2.3.1.3 has been amended to reflect the suggested changes outlined in the comment.

Response 404-16: Section 2.4 has been amended to move the reference to Sandy Valley SEDA to Section 2.3.3.3.

Response 404-17: Figures showing the areas covered by the California Desert Conservation Area Plan, West Mojave Plan, and Northern and Eastern Mojave Plan have not been included because those plan areas extend beyond the boundaries of the proposed REGPA, and the portions of the REGPA plan included in them are described in the text. No changes have been made to the PEIR based on this comment.

Response 404-18: Section 4.1.1.3 has been amended to remove Black Rock and Dolomite from the list of communities outlined in the comment.

Response 404-19: Section 4.1.3.1 has been amended to correctly reflect that some SEDAs contain officially designated scenic highways. This change does not substantially alter the content or analysis of the PEIR.

Response 404-20: Section 4.10.1.2 has been amended to include acknowledgement of mining activities on the lake playa.

Response 404-21: Section 4.10.1.2 – Rose Valley SEDA has been amended to clarify the nature of the subdivided private lands originally referred to as the community of Haiwee.

Response 404-22: Section 4.10.1.2 – OVSA has been amended to include mention of Klondike Lake.

Response 404-23: Section 4.10.1.2 – OVSA has been amended to include mention of Manzanar National Historic Site and the Alabama Hills Recreation Area in the description of land uses west of the OVSA.

Response 404-24: Section 4.10.1.2 – Trona SEDA has been amended to include mention of BLM and NPS administration of adjacent lands.

From: Katherine Little <klittle93514@gmail.com>
Sent: Saturday, January 03, 2015 2:51 PM
To: Cathreen Richards
Subject: Comments for Renewable Energy EIR

Please take note of my comments and suggestions (from a concerned citizen of Bishop, CA).

- 1) Renewable energy development needs to be balanced with the local values of the Eastern Sierra including the economic benefits of recreational opportunities, our outstanding scenery and viewscapes, the conservation of our desert fish, plant and wildlife species, and the preservation of Inyo County's cultural and historical heritage. | 405-1
- 2) Support only small scale Photovoltaic (PV) solar development, with a 20mw cap on each project, sited on already disturbed lands. | 405-2
- 3) Utilize existing transmission infrastructure and eliminate areas from development consideration that will require additional transmission corridors. | 405-3
- 4) Review and consider endorsing National Conservation Lands and other areas slated for protection under the DRECP. | 405-4

I have been a resident of the Eastern Sierra for the past 45 years and have many areas that I would hate to see disturbed by energy development, yet I see the need for balanced, thoughtful decisions.

Sincerely,
Katherine Little
563 Hammond St, Bishop, CA 93514

Responses to Letter 405: Katherine Little

Response 405-1: The County acknowledges the commenter’s position on balancing renewable energy development with the local values of the Eastern Sierra community. The intent of the REGPA is to direct and constrain the locations where renewable energy development could be implemented within the County so that the area’s resources are managed and conserved appropriately. The PEIR analyzes the potential impacts from the proposed project on aesthetics (Section 4.1), biological resources (Section 4.4), cultural resources (Section 4.5), recreation (Section 4.15), and socioeconomics (Section 4.16).

Response 405-2: The comment notes a preference for small scale photovoltaic solar development on disturbed lands only as described in Section 6, Project Alternatives, of the PEIR. Pursuant to Section 15126.6(a) of the State CEQA Guidelines, the PEIR discusses five alternatives to the proposed project that could feasibly accomplish a majority of the proposed project objectives including the Commercial Scale Only Alternative (referred to in the Draft PEIR as the Distributed Generation Only Alternative) which would include solar projects producing 20 MW or less of electricity for off-site use, and the Solar Energy Development on Previously Disturbed Lands Only Alternative in which the majority of project would be sited on previously disturbed lands within the eight proposed SEDAs.

Response 405-3: The comment notes a preference for the utilization of existing transmission infrastructure, and the elimination of areas from development consideration that would require additional transmission corridors. One of the seven objectives of the REGPA, as described in detail in Section 3.2 of the PEIR, is to locate future development near existing electrical conveyance facilities (Objective 5) which is consistent with the commenter’s suggestion to utilize existing transmission infrastructure. As described for Objective 5 in this section the PEIR, the energy load needed by Inyo County is relatively small compared to the potential solar energy generation from utility scale developments. Therefore, the majority of potential solar electric energy generated in the County would serve areas outside of the County, which requires adequate transmission facilities to transfer the energy to the outside areas. Accordingly, the County has focused the development areas identified in the REGPA along the existing LADWP transmission systems and along the conceptual Valley Electric Association, Inc. (VEA) system to minimize time-consuming and costly upgrades and new facility construction. These would be the least costly and most time effective conveyance systems for development.

Response 405-4: The County is committed to the conservation and protection of the natural resources while pursuing thoughtful, sustainable renewable energy development. The County recognizes the value of National Conservation Lands, and areas that meet the criteria for inclusion would be given further consideration. As stated in Section 2.4.3.1 of the PEIR, the DRECP is currently under review, and although the County is currently under no obligation to implement the DRECP principles and policies (including the DFAs), the County has considered the DRECP in development of the REGPA. Because the DRECP was in draft form during the preparation of this PEIR, the SEDAs were not further constrained based on information contained in the DRECP. However, if the DRECP and the REGPA are adopted, the County would coordinate with the DRECP agencies to avoid priority conservation areas and future projects in the County would be developed consistent with the requirements of the DRECP. Under REGPA Policy MER-2.6, the County would coordinate with renewable energy solar developers and other agencies to avoid, minimize, or mitigate impacts. If the County becomes a signatory of the DRECP, future development under the REGPA within the DRECP area could be expedited by the “take” coverage under Section 10 of the Endangered Species Act of 1973 and state take coverage under Section 2835 of

the California Fish and Game Code for species listed under the California Endangered Species Act as threatened, endangered, or candidates.

Comments on the Renewable Energy General Plan Amendment by David Wagner, Lynn Johnson, and Dr. Mark Basgall January 14, 2015

Inyo County is proposing to amend its general plan to include new policies for development of solar power in the County. The Inyo County Planning Department (herein referred to as the County) has prepared the amendment which is referred to as the project called the Renewable Energy General Plan Amendment or REGPA. The County has identified eight areas called Solar Energy Development Areas (SEDAS) where renewable energy development "...may be appropriate..." In addition to the SEDAS, the County has identified the Owens Valley Study Area (OVSR). In the REGPA released in 2014, the Owens Valley was identified as a SEDA but in response to intense pressure from the public against industrial-scale renewable energy development in Owens Valley, the County decided to study the area in more detail using as yet unidentified criteria. A Programmatic Environmental Impact Report (PEIR) prepared by the County purports to contain an environmental analysis of the impacts of the project. Our comments will address the appropriateness of the PEIR in general and more specifically address the analysis of cultural resources.

406-1

The PEIR concludes that significant and unavoidable impacts to aesthetics, biological resources, and cultural resources could occur from renewable energy development. On the basis of that conclusion alone, a full EIR should be required for all energy development, except in the case of roof top solar panels. The PEIR however, gives the planning department discretion over whether environmental analysis in addition to that offered in the PEIR would be required. In the PEIR detailed analyses that are normally required for an EIR pursuant to CEQA, are presented as mitigation measures that may or may not be implemented at the discretion of a County planner. Recent experience has demonstrated that when the County decides full environmental analysis is not required for development, lawsuits are the result. It is important that decisions regarding treatment of threatened cultural resources be made with full knowledge of the value of said properties, and that any such determinations be made after close consultation with regional specialists. To do otherwise virtually ensures that irreplaceable resources could be impacted or destroyed without adequate documentation.

We have major concerns about the treatment of cultural resources in the PEIR. The discussion of the Cultural Setting is seriously outdated and does not draw upon the abundant new research in investigations completed for CALTRANS during still ongoing improvements to HWY 395. This is not simply a matter of having obsolete bibliographic references, but it fails to acknowledge important advances in regional research over the past decade. New research issues have been advanced and the criteria by which individual sites might be considered significant are considerably altered. Without taking recent studies into consideration, the County might well ignore extremely valuable resources or give undue consideration to those of limited importance.

406-2

Particularly troubling in this respect is the methodology employed in the preparation of maps showing the Intersected Areas of High Prehistoric Sensitivity (Figure 4.5-1) and Areas of Heightened Prehistoric Sensitivity (Figure 4.5-2). Both of these maps are reproduced below. Public comment on the first draft included concerns regarding the inadequacy of the maps produced in the report, which are still difficult to read. The consultants cite references supporting the notion that prehistoric people tended to live along streams and lake shorelines. There is nothing inherently wrong with this notion but, unfortunately, the consultant used modern hydrographic data that show locations of the streams and lake shorelines in historic time. Nearly all of the perennial streams flowing into Owens Valley from the Sierra Nevada have been rerouted by ranchers, developers, and/or Los Angeles Department of Water and Power. The water levels of Owens Lake have fluctuated significantly over the last 12,000 years.

406-3

Shorelines were as far north as Manzanar when the lake levels were high and the lake has completely dried up as many as four times during the time people have occupied the Owens Valley (see the attached abstract by Wagner, Johnson and Bacon). Prehistoric people would have lived along streams as they were then, not now, and they would have followed the shorelines of Owens Lake as they migrated in response to fluctuations in water levels. This argues that both the Owens Lake SEDA and the OVSR should be shown as sensitive in their entirety.

406-3
(cont'd)

Finally, recent research has clearly shown that factors other than water influenced the location and intensity of past land use in Owens Valley. Particularly important are the lower reaches of alluvial fan formations, where loose sediments supported numerous economic plants that were exploited for thousands of years. Site densities are often very high in such situations, which contain midden deposits, bedrock features, rock art, and burial areas. Prehistoric people targeted many resources such as mesquite, chia, ricegrass, and mentzelia that tend to occur in patches away from perennial water sources. Water is an important consideration in arid climates, but it was not always the only or even most important variable that influenced where people conducted their activities. The water-centric perspective offered in the PEIR is itself outdated and reflects a superficial appreciation of such issues.

It is difficult to understand how Inyo County can afford to fast track industrial development in such a fragile, biologically diverse, and culturally sensitive desert environment based on the cursory analysis presented in the PEIR.

Recommendations:

Programmatic EIRS have utility in revising county general plans but Inyo County is especially sensitive; REGPA should require environmental impact reports for all renewable energy development involving ground disturbance prior to issuance of permits.

406-5

The County should consider establishing a peer review group consisting of local experts who would advise the county of the adequacy of an EIR submitted by environmental consultants. Peer review is standard practice for publication of research papers in professional journals. Review is required by state law for reports addressing public safety (i.e. Alquist-Priolo Earthquake Hazard Zones, Seismic Safety of Hospitals and Schools).

406-6

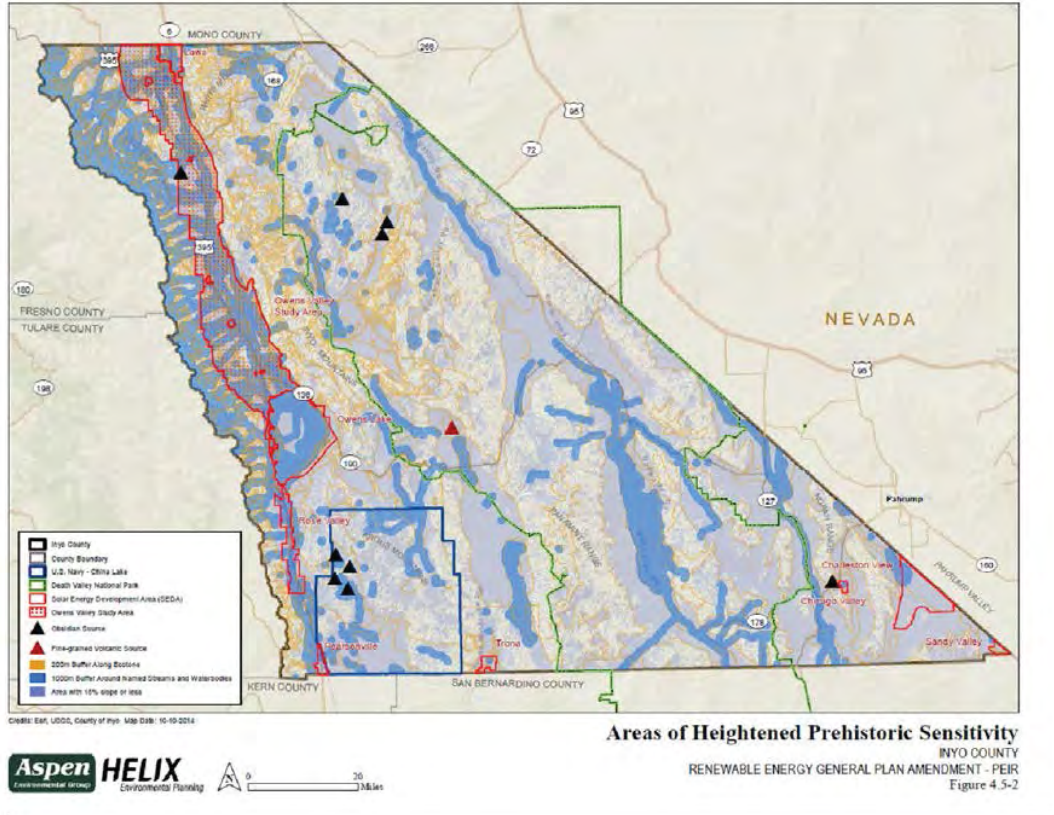
Commentors' background:

Dave Wagner resides in Independence and is a licensed professional geologist (PG 3440) and Certified Engineering Geologist (CEG 1028) and has completed geoarchaeological investigations for Cultural Resource Management firms working for CALTRANS in Inyo and Marin counties.

Lynn Johnson resides in Independence and for the past 18 years has worked for Cultural Resource Management firms that have conducted cultural resource investigations in Inyo. She has authored archaeology and ethnography reports for the Bureau of Land Management and Caltrans in the Owens Valley, the U.S Navy at China Lake, the National Park Service in Death Valley, and the U.S. Air Force at Nellis Air Force Base.

Dr. Mark Basgall is Director of the Archaeological Research Center at California State University, Sacramento and part-time resident of Independence. Dr. Basgall is a leading authority on the prehistoric archaeology of the western Great Basin and Mojave Desert.





Abstract of a paper presented at the Keeler Conference, August 2014

Holocene and Latest Pleistocene Shoreline Fluctuations of Owens Lake: Implications for the distribution of cultural resources in southern Owens Valley.

David L. Wagner and Lynn Johnson, 336 Rosedale Dr. Independence, CA 93526; Steven N. Bacon, Desert Research Institute, Reno NV 89512

During the Late Pleistocene Owens Lake was a perennial freshwater lake that at times overflowed the south end of its basin. The relatively soft sill at the overflow is currently at an elevation of 1145 m. Lake levels were between 1155 and 1160 m during much of the last glacial maximum (~20,000-30,000 years ago) providing water for lakes to the south prior to down-cutting at the sill. Lake levels fluctuated dramatically during deglaciation after about 19,000 years ago with the lake desiccating at least twice before a last overflow at the terminal Pleistocene. After the last overflow, Owens Lake became a closed basin that supported shallow- and moderate-sized lakes reflecting radically fluctuating surface levels through the terminal Pleistocene into the early Holocene. A major desiccation that lasted nearly 3,000 years corresponds with the mid Holocene "altithermal." Owens Lake rose again in the late Holocene around 3500 cal yr B.P., with a possible desiccation during the Medieval Thermal Anomaly, and finally drying in the 1920s due to the diversion of the Owens River into the Los Angeles Aqueduct.

During early Holocene high stands, the delta of Owens Lake was positioned as far north as near Manzanar. The Draft Environmental Impact Report prepared by the Los Angeles Department of Water and Power for the Southern Owens Valley Solar Ranch reported the presence of Pinto and Lake Mohave artifacts on the proposed project site. Our investigations have revealed an ancient surface exposed in deflation pans amid sand dunes and sheets at elevations ranging from 1128 to 1132 m, but most commonly at 1130 m. Abundant pebbles of obsidian, vesicular basalt, and scoria from the Big Pine Volcanic Field, and well-rounded pebbles of Bishop tuff indicate the presence of fluvial sediments deposited by the Owens River. The presence of vesicular tufa indicates a near-shore lacustrine environment. Interbedded lacustrine and fluvial sediments are exposed in the cut banks of the Owens River to the west, indicating these are deltaic deposits. The existing lake-level curve of Owens Lake and preliminary new data on three shoreline features between 1128 and 1132 m indicate that the two latest highstands at elevation of 1130 m likely occurred at ~11,500 cal yr B.P. and as recently as ~7700 cal yr BP, which was the culmination of a series of paleoclimatic-driven transgressive-regressive cycles. Based on this, we interpret the study area as a deltaic to delta plain environment conducive to human occupation throughout the early Holocene. We conclude that there is a high potential for early Holocene archeological sites in the Owens River meander belt in areas not affected by younger river erosion, from at least the Reward-Manzanar Road to at least the Mazourka Canyon Road.

Responses to Letter 406: David Wagner, Lynn Johnson, and Dr. Mark Basgall

Response 406-1: This comment is introductory and summarizes the intent of the PEIR. Section 3.3.2 of the PEIR includes a description of the OVSA, including the list of separate criteria for development siting in the area, which has been revised as follows:

(1) only utilize existing transmission facilities and corridors; (2) guide the development to disturbed lands, including over and along the Los Angeles Aqueduct; (3) consider encouraging development at solid waste and wastewater treatment facilities, on private lands, in small scale (e.g., roof tops) and ~~distributed generation~~ commercial scale (20 MW or less) arrays, and around communities in smaller arrays (~~10-6~~ MW or less); (4) mitigate potential impacts to the environment, society, culture, and economy of the County; (5) work to avoid significant alterations to visual resources; and (6) minimize intertie facilities.

The commenter suggests that all solar development projects, aside from roof top solar panels, should require a full EIR. All future projects under the REGPA would be subject to project-specific environmental review. This process will use the types of impacts and mitigation measures outlined in the PEIR as guidelines. Depending on the size and location of the development and the technology used, a Subsequent EIR may be required. However, the REGPA also encourages small scale, photovoltaic (PV) solar facilities to be constructed which may not require a full EIR. As stated in Section 1.2 of the PEIR:

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

It should be noted that under Title 21 of the Inyo County Code concerning renewable energy development, any person who proposes to construct an electric transmission line, solar thermal renewable energy facility or a PV renewable energy facility in the County must first obtain a Renewable Energy Permit, a Renewable Energy Development Agreement or a Renewable Energy Impact Determination. A Renewable Energy Impact Determination applies to projects over which the County has limited authority because the project is located on federal or state land or is subject to the permitting jurisdiction of the California Energy Commission.

Under Title 21, the issuance of a Renewable Energy Permit is subject to CEQA, and the County Planning Commission must conduct a noticed public hearing before considering approval of such a permit. The Planning Commission must find that there has been compliance with CEQA before a permit can be issued. In addition, "as a condition to the issuance of such a permit, the Planning Commission may impose such reasonable and feasible mitigation measures as it finds to be necessary to protect the health, safety, and welfare of the county's citizens, the county's environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project." Finally, the Planning Commission is required to impose as a condition of approval, a plan for the reclamation/revegetation of the project site at the time of decommissioning of the project and the

Planning Commission shall require financial assurances from the applicant to ensure that the reclamation plan will be fully implemented.

Concerning Renewable Energy Development Agreements, Title 21 provides that such agreements may be entered into by the County and a project applicant in lieu of obtaining a Renewable Energy Development Permit. Renewable Energy Development Agreements are subject to CEQA and must be approved by an ordinance adopted by the Board of Supervisors following a noticed public hearing. Prior to approving such an agreement, the Board must find that there has been compliance with CEQA. Renewable Energy Development Agreements must include a reclamation plan, acceptable financial assurances to ensure full implementation of the reclamation plan, be consistent with the county general plan and be enforceable by injunctive relief or other enforcement mechanisms under law. In the Renewable Energy Development Agreement, the Board of Supervisors may require such mitigation measures or modifications of the project as it finds necessary to protect the health, safety, and welfare of the county's citizens, the county's environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.

Response 406-2: As a programmatic document, it is beyond the scope of this PEIR to include in-depth discussion of all research issues across the entire county. These issues would be addressed in project-specific identification efforts, as specified in Section 4.5.3. Recent research regarding Owens Valley was used in the production of this document, including Meyer, Young, and Rosenthal 2010; Eerkens and Spurling 2008; Faull 2007; Polson 2009; and others. Additionally, as outlined in Section 4.5.3.2 of the Draft PEIR, the County used the results of buried sensitivity modelling and mapping prepared in 2010 to determine the potential for encountering buried archaeological resources. This information was used to help guide development of the SEDA boundaries and potential sensitivity of the areas for buried resources. Moreover, two cultural resource predictive models were employed during preparation of the Opportunities and Constraints Technical Report (Appendix D of the Draft PEIR). These models identify areas sensitive to encountering prehistoric resource as well as historical period archaeological and built environment resources.

As this is a programmatic document, there is no discussion of the significance criteria for particular types of sites. Additionally, as the PEIR deals with the entirety of Inyo County, it was beyond the scope of the document to focus on the regional research issues.

Response 406-3: Maps within the cultural resources section of the PEIR (Figure 4.5-1 and Figure 4.5-2) are not intended to show all of the potential factors for determining sensitivity, rather only general sensitivity that can be modelled on a programmatic level. As discussed in "General Sensitivity Conclusions" in Section 4.5.3.2, the sensitivity of the SEDAs and the Owens Valley Study Area was determined qualitatively and not based solely on the predictive model depicted on Figures 4.5-1 and 4.5-2. A variety of data were used to make the determinations of cultural resource sensitivity, including: a Caltrans buried resource predictive model, previously identified cultural resources sensitive areas, areas identified as culturally sensitive by Native American informants, and proximity to known cultural resources. Together these sources were used to determine sensitivity for each of the SEDAs and Owens Valley Study area and presented on Table 4.5-2, rather than depicting an overwhelming amount of data on the maps.

As shown in Table 4.5-2, the results of the sensitivity analysis were that the Owens Lake SEDA and the Owens Valley Study Area are highly sensitive for encountering significant cultural resources

Response 406-4: At a programmatic level it is not possible to account for all variables and potentially sensitive areas. Proximity was chosen as a variable due to the readily available information regarding water bodies and its demonstrated importance to life in the past. There was no intention to privilege this particular variable over all the possible variables regarding site formation and prehistoric habitation, only an intention to highlight areas that may be more sensitive than others. As stated in Section 4.5.3, “This information has only been developed as a general guide to sensitivity and the possibility of encountering cultural resources within SEDAs may occur in areas that are not expected to have high sensitivity.”

Specific cultural resources and impacts will be identified and evaluated on a project-by-project basis as discussed under *Preliminary Project Specific Resource Identification* in Section 4.5.3. Project-specific cultural resource identification and evaluation efforts could, as appropriate, include literature reviews, resource sensitivity modeling, pedestrian surveys, formal government-to-government tribal consultation with state lead agencies, and engagement with Native American communities. After which, any adverse effects to CRHP-eligible cultural resources would be resolved on a project-specific level.

As described in Section 4.5.5 of the PEIR, all individual solar energy facility project applications shall be reviewed by the County for their potential to impact cultural resources. Individual small, community scale, or commercial scale solar developments may be determined by a qualified County planner to have no potential effect on cultural resources (i.e., roof top solar projects may not affect cultural resources). For utility scale and smaller projects with the potential to affect cultural resources that are proposed to be located in a “Low to Moderate,” “Moderate,” “Moderate to High” or “High” cultural resources sensitivity zone on Table 4.5-2 of the PEIR (titled *Cultural Resources Sensitivity by Location*), the applicant shall conduct and submit an inventory and evaluation of all cultural resources within the project area to the County and other relevant agencies for review and approval. The inventory and evaluation shall be conducted as provided under the subsection titled *Preliminary Project Specific Resource Identification* which is a part of Section 4.5.3.2 of the Final PEIR. Based upon the results of the inventory and evaluation, appropriate conditions on the project and mitigation measures, as identified in the subsection titled *General Types of Mitigation* which is a part of Section 4.5.3.3, *Impacts*, and Section 4.5.5, *Mitigation Measures*, of the Final PEIR, will be imposed upon the project.

Response 406-5: All future projects under the REGPA would be subject to project-specific environmental review. This process will use the types of impacts and mitigation measures outlined in the PEIR as guidelines. Depending on the size and location of the development and the technology used, a Subsequent EIR may be required. However, the REGPA also encourages small scale, photovoltaic (PV) solar facilities to be constructed which may not require a full EIR. As stated in Section 1.2 of the PEIR:

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

It should be noted that under Title 21 of the Inyo County Code concerning renewable energy development, any person who proposes to construct an electric transmission line, solar thermal

renewable energy facility or a PV renewable energy facility in the County must first obtain a Renewable Energy Permit, a Renewable Energy Development Agreement or a Renewable Energy Impact Determination. A Renewable Energy Impact Determination applies to projects over which the County has limited authority because the project is located on federal or state land or is subject to the permitting jurisdiction of the California Energy Commission.

Under Title 21, the issuance of a Renewable Energy Permit is subject to CEQA, and the County Planning Commission must conduct a noticed public hearing before considering approval of such a permit. The Planning Commission must find that there has been compliance with CEQA before a permit can be issued. In addition, “as a condition to the issuance of such a permit, the Planning Commission may impose such reasonable and feasible mitigation measures as it finds to be necessary to protect the health, safety, and welfare of the county’s citizens, the county’s environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.” Finally, the Planning Commission is required to impose as a condition of approval, a plan for the reclamation/revegetation of the project site at the time of decommissioning of the project and the Planning Commission shall require financial assurances from the applicant to ensure that the reclamation plan will be fully implemented.

Concerning Renewable Energy Development Agreements, Title 21 provides that such agreements may be entered into by the County and a project applicant in lieu of obtaining a Renewable Energy Development Permit. Renewable Energy Development Agreements are subject to CEQA and must be approved by an ordinance adopted by the Board of Supervisors following a noticed public hearing. Prior to approving such an agreement, the Board must find that there has been compliance with CEQA. Renewable Energy Development Agreements must include a reclamation plan, acceptable financial assurances to ensure full implementation of the reclamation plan, be consistent with the county general plan and be enforceable by injunctive relief or other enforcement mechanisms under law. In the Renewable Energy Development Agreement, the Board of Supervisors may require such mitigation measures or modifications of the project as it finds necessary to protect the health, safety, and welfare of the county’s citizens, the county’s environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.

Response 406-6: The County acknowledges the suggestion to establish a peer review group of local experts to advise the County regarding subsequent EIRs. The County underwent a lengthy public outreach campaign prior to and during development of the REGPA and the Draft PEIR to gather information and craft the proposed project and alternatives. The Draft PEIR was prepared by the County and qualified technical consultants that have expertise in the preparation of CEQA documentation. The Draft PEIR was prepared and circulated for public review according to the State CEQA Guidelines and the Final PEIR will be considered for adoption by the Lead Agency, along with the REGPA, in March 2015. As this comment does not raise specific issues related to the adequacy of the PEIR; no further response is required.

From: kgoss <kgoss@qnet.com>
Sent: Tuesday, January 13, 2015 3:33 PM
To: Cathreen Richards
Subject: Comments on REGPA PEIR

Kathy Goss
PO Box 9
Darwin CA 93522
760-876-8313
kgoss@qnet.com
To: Inyo County Planning Department
Attention: Ms. Cathreen Richards, Senior Planner
Re: Comments on REGPA PEIR
Date: January 13, 2015

After all the public meetings, draft documents, and deliberations about REGPA, I am convinced that the County’s best course is to discourage all large-scale renewable energy development in the lands over which it has some oversight.

I agree with the Amargosa Conservancy and Owens Valley Committee that Inyo County is “not an appropriate place for industrialized energy production.” There is no justifiable need to designate SEDAS for potential utility-scale solar development. The designation of SEDAS would only be construed as encouragement of such activity.

407-1

I have visited some of the more remote proposed SEDAS, and I can see no reason why these rare, unspoiled places should be disturbed by large-scale development and the possible attendant need for new transmission corridors.

The current obfuscation concerning the Owens Valley Study Area is another cause for concern. Please do not consider any large-scale energy development anywhere within this Study Area, including Owens Lake itself. The increasing industrialization of the surface of the dry lake is creating a permanent visual scar on the landscape, presenting a disheartening view for the thousands of locals and visitors who gaze down on it from our famed Sierras every year. A sea of solar panels could potentially be even more disfiguring than the present roads, berms, and rectilinear terraforming.

407-2

Rather than open the door for utility-scale renewable energy development, I recommend that Inyo County make every effort to encourage distributed generation, both within the County and in the urban areas that are the intended beneficiaries of large-scale solar developments in our remote and thus-far unspoiled desert. Within the County, distributed generation facilities should be sited on rooftops, brownfields, and other already-disturbed lands.

407-3

While there are appropriate locations for large-scale wind energy development, Inyo County is not such a place. I believe that the Planning Department has already acknowledged that industrial-scale wind energy plants should not be permitted by the County. The same goes for massive solar thermal projects.

Renewable energy technology is evolving rapidly. Industrial-scale installations beginning construction today could well prove obsolete before they went on line. Our cities are waking up to the tremendous potential of rooftop solar. The current decline in the price of petroleum-based fuels will possibly discourage further massive solar and wind development for a while. Let’s all take a breath and let our urban neighbors, and our utility companies, come to their senses before we inflict irreversible damage upon our precious unspoiled spaces.

407-4

Thank you for this opportunity to comment on the PEIR.
Kathy Goss

Responses to Letter 407: Kathy Goss

Response 407-1: The commenter expresses opposition to large-scale renewable energy development within the County. The comment also states an opinion that there is no justifiable need to designate SEDAS for potential utility scale solar development as it would be construed as encouragement of such activities. Under the proposed project, utility scale solar energy development may occur; however, the intent of the REGPA is to provide a framework for future renewable energy project applications Countywide. A main objective of the REGPA is to restrict the siting of future potential projects to areas that would have lesser impacts. Without implementation of the REGPA, solar energy projects could potentially be proposed in additional areas throughout the County (including areas with sensitive resources), with the REGPA framework intended to help restrict the siting of potential future projects to more suitable locations. The reader is directed to Section 6.0 of the PEIR where the County identified and analyzed project alternatives that would exclude industrial scale solar energy development.

The commenter states an opinion that there is no reason for the unspoiled places within the County to be disturbed by large-scale development; in 2002, the State of California passed SB 1078, the California Renewables Portfolio Standard (RPS). Originally, the RPS required that investor-owned utilities, electric service providers, and community choice aggregators procure 20 percent of electricity from eligible renewable energy resources by 2017. In 2006 the RPS was accelerated by SB 107 to meet the 20 percent goal by 2010, and in 2011 it was expanded under SB X1-2 to require 33 percent by 2020. On January 5, 2015, Governor Jerry Brown announced his intent to raise the RPS target to 50 percent by 2030 in his inaugural speech. In order to meet the goals of the State, renewable energy generation projects must be constructed. Accordingly, the REGPA is intended both to identify the most appropriate areas for such potential development, and to ensure that when renewable energy projects are proposed within the County they would be subject to appropriate environmental analysis. Project-level CEQA analyses would still occur for future projects proposed to tier off of this PEIR, as required by CEQA.

Response 407-2: The comment states that no large-scale energy development should be considered anywhere within the OVSA. The OVSA will be analyzed separately through independent planning processes that use a separate set of criteria for development siting.

Section 3.3.2 of the PEIR includes a description of the OVSA, including the list of separate potential criteria for development siting, which has been revised as follows:

- (1) only utilize existing transmission facilities and corridors;
- (2) guide the development to disturbed lands, including over and along the Los Angeles Aqueduct;
- (3) consider encouraging development at solid waste and wastewater treatment facilities, on private lands, in small scale (e.g., roof tops) and ~~distributed generation~~ commercial scale (20 MW or less) arrays, and around communities in smaller arrays (~~10-6~~ MW or less);
- (4) mitigate potential impacts to the environment, society, culture, and economy of the County;
- (5) work to avoid significant alterations to visual resources; and
- (6) minimize intertie facilities.

Response 407-3: The comment also recommends that the County make every effort to encourage distributed generation (which is referred to as commercial scale in the Final PEIR) and that these facilities be sited on rooftops, brownfields and other already-disturbed lands. Future projects located on previously disturbed lands and/or near existing transmission lines would be strongly encouraged through the adoption of the REGPA. The comment also notes that the County is not an appropriate

place for large-scale wind energy development. In response to extensive input from the public, wind energy was removed from consideration in mid-2014, prior to the completion of the Draft PEIR.

Response 407-4: This comment states that renewable energy technology is evolving rapidly, and that industrial-scale installations beginning construction today could well prove obsolete before they go online. The REGPA and the Draft PEIR do not propose the construction of any specific renewable energy projects. Overall, the REGPA and this Draft PEIR would help direct and constrain future proposed solar development within the County, and each specific future project would be assessed under a project-level environmental analysis. As renewable energy technology evolves, the framework that the REGPA provides for future project-level analysis would remain relevant. Future projects that could involve new or different technology would be subject to project-level environmental review to ensure that impacts would be avoided or reduced to the maximum extent practicable.

January 14, 2015

Inyo County Planning Department
P.O. Drawer L
168 N. Edwards St
Independence, CA 93526

Re: Comment Letter on Inyo County Renewable Energy General Plan Amendment (REGPA)
Draft Programmatic Environmental Impact Report (PEIR)

408-1

We, the undersigned, are concerned business owners and merchants in Eastern Inyo County, and we feel that the Chicago Valley and Charleston View are not appropriate areas to develop utility-scale solar energy.

The economy of Eastern Inyo County is dependent on tourism. All year long, tourists from around California, the United States, and around the globe visit our area. Many of these tourists are attracted to Eastern Inyo County because it is remote and undeveloped. They share their stories about how refreshing it is to come to a place so far from the trappings of civilization and the industrialized cityscapes many of them call home.

Permitting the development of utility-scale solar energy facilities in the Chicago Valley and Charleston View would change the character of our region. Eastern Inyo County would no longer feel undeveloped and remote—instead tourists would arrive to find industrialized energy production zones.

We are concerned that the development of utility-scale solar energy in our region would have a negative impact on our local economy. If the landscape of Eastern Inyo County changes from remote to industrialized, tourists might be inclined to spend their leisure time elsewhere. This could mean less business, less tax revenue for Inyo County, and a decrease in employment levels and opportunities in our area.

Please do not permit utility-scale solar energy development in Chicago Valley or Charleston View.

Signed,

Concerned Eastern Inyo County business owners and merchants

(please see signatories below)

Suzi Dennett
Death Valley Chamber of Commerce

Brian Brown
China Ranch Date Farm

Susan Sorrells
Shoshone Development Inc.

Amy Noel
Tecopa Hot Springs Resort

Nancy Good
New Light Foto Design

Karin Pine
Tecopa Hot Springs Therapeutic Massage

Response to Letter 408: Suzi Dennet, Brian Brown, Amy Noel, Nancy Good, Karin Pine

Response 408-1: As discussed in Section 4.16.1.4 in the Draft PEIR, the County's economy has historically relied on natural resources as its base, including cattle ranching during the gold rush, extracting a wide variety of minerals found in the County, sheepherding, growing orchard and vegetable crops, and tourist-based activities that take advantage of the unique landscapes and wildlife the County has to offer. In recent times, the County has relied more on tourist-based activities and services, as well as, government and land management as its main economic drivers. Renewable energy development, however, has also played a role in the County's economy associated with the Coso Geothermal Power Plant and several hydroelectric generating facilities located within the County. Additional renewable energy development has the potential to add to the County's economic base. As indicated in Section 4.16.3.3, future solar energy development could provide an initial boost to the local economy during construction in the form of an increase in the labor force that requires goods and services, land sales, and the use of local materials. In the long term, it can provide higher property and sales tax revenues, the continued use of local materials, and the provision of some long term jobs that can, in turn, generate a permanent increase in the procurement of local goods and services.

While these economic effects would potentially benefit the local economy, the concern raised by the commenter is that solar energy development could negatively affect the natural and scenic resources that attract tourists to the County, as well as the local economy based on tourism. Solar energy development could result in changes to scenic views and vistas from public vantage points within the County. Accordingly, the PEIR concludes that significant and unavoidable impacts would potentially occur related to aesthetics due to the introduction of solar energy infrastructure within the existing landscape. Future energy solar development could consist of large-scale facilities that would substantially contrast with the existing visual environment. This is a conservative conclusion based on the uncertainty, at a Program EIR level, of a subsequent project's actual impacts. Without project-specific information coupled with a project-level analysis under CEQA, it can't be stated with certainty that these potential impacts would be reduced to below a level of significance at a programmatic level. That is why the PEIR reaches the conservative conclusion that impacts remain potentially significant and unavoidable. Individual projects proposed within the County, including within Rose Valley SEDA, will be required to prepare a project-specific environmental analysis and associated CEQA document to evaluate potential impacts, including a visual analysis. Project-specific analysis will use the types of impacts and mitigation measures outlined in the PEIR as guidelines, including Mitigation Measure AES-1, which requires project specific visual analysis. In addition, new Visual Resources policies in the REGPA (Policy VIS-1.8 and 1.9, and Visual Resources or Economic Development Implementation Measure) relate to avoiding, minimizing, and mitigating for impacts to visual resources, and balancing the effects on visual resources with the potential effects on tourism in the County.

From: InyoPlanning
Sent: Thursday, November 13, 2014 4:22 PM
To: Cathreen Richards
Subject: FW: DRAFT PIER REGPA review deadline

From: Betsy Perluss [mailto:betsy@psycheandnature.com]
Sent: Thursday, November 13, 2014 11:38 AM
To: InyoPlanning
Subject: DRAFT PIER REGPA review deadline

Dear Inyo County Planning Commission,

As someone who spends a great deal of time in our precious Owens Valley, I strongly urge you to extend the deadline of December 18 for any comments to the draft PEIR. The current deadline does not give enough space to review the massive document and all its implications. As a concerned citizen, please extend the comment period deadline. Thank you.

409-1

Sincerely,

Elizabeth Perluss
Big Pine and Grass Valley, CA

Response to Letter 409: Elizabeth Perluss

Response 409-1: The public comment period for the Draft PEIR opened on November 5, 2014 and was originally slated to close on December 19, 2014, meeting the mandated 45-day comment period per Section 15105 of the State CEQA Guidelines. However, the County received multiple requests from potential reviewers of the document to extend the comment period. Accordingly, on December 4, 2014 the County approved the extension of the public comment period to January 14, 2015 (a total of 71 days).

From: InyoPlanning
Sent: Thursday, November 13, 2014 4:22 PM
To: Cathreen Richards
Subject: FW: Extension of deadline of draft PEIR

From: School [mailto:lostborders@gmail.com]
Sent: Thursday, November 13, 2014 10:31 AM
To: InyoPlanning
Subject: Extension of deadline of draft PEIR

Dear Sir/Madam,

I urge you to extend the deadline of December 18 for any comments to the draft PEIR. As a small wilderness program non-profit in the Owen's Valley, we use and love the wild areas of our valley. Any alteration of our amazing landscape needs to be carefully considered and thoroughly thought through. The current deadline does not give enough space to review the massive document and all its implications.

410-1

Sincerely,

Petra

Petra Lentz-Snow
Office of Lost Borders
school@lostborders.org

Visit our Web Page
Visit our Facebook Page
Sign up for our Newsletters

Response to Letter 410: Petra Lentz-Snow

Response 410-1: The public comment period for the Draft PEIR opened on November 5, 2014 and was originally slated to close on December 19, 2014, meeting the mandated 45-day comment period per Section 15105 of the State CEQA Guidelines. However, the County received multiple requests from potential reviewers of the document to extend the comment period. Accordingly, on December 4, 2014 the County approved the extension of the public comment period to January 14, 2015 (a total of 71 days). The Draft PEIR discussed and analyzed all environmental issue areas per Appendix G of the State CEQA Guidelines.

From: Joshua Hart
Sent: Tuesday, November 18, 2014 4:40 PM
To: Cathreen Richards
Subject: FW: Inyo REGPA comment extension request letter & an additional request
Attachments: InyoREGPA extension request, 11-18-2014.pdf

Fyi

Josh

From: Sally Miller [mailto:sallym@qnet.com]
Sent: Tuesday, November 18, 2014 3:17 PM
To: Joshua Hart
Cc: Kevin Carunchio
Subject: Inyo REGPA comment extension request letter & an additional request

Hi Josh,

Attached is a letter requesting an extension of time to comment on the REGPA. I'll be on vacation starting 12/13 until 1/4 and I know many others will be out at year's end, too. Adding to the complication of reviewing this already-complex document is the need to compare it with DRECP recommendations for Inyo County. We aim to provide substantive and constructive comments and really hope you will grant an extension of 45 days so we (and others) have time to do our due diligence.

411-1

Thank you & Happy Thanksgiving!

Sally

p.s. kevin let's catch up when you have time, maybe post-Thanksgiving?

Sally Miller
Senior Regional Conservation Representative | CA
The Wilderness Society
P.O. Box 22, Lee Vining, CA 93541
cell: 415.518.7679
www.wilderness.org

Facebook: www.facebook.com/TheWildernessSociety
Twitter: twitter.com/Wilderness

We protect wilderness and inspire Americans to care for our wild places

Response to Letter 411: Sally Miller

Response 411-1: The public comment period for the Draft PEIR opened on November 5, 2014 and was originally slated to close on December 19, 2014, meeting the mandated 45-day comment period per Section 15105 of the State CEQA Guidelines. However, the County received multiple requests from potential reviewers of the document to extend the comment period. Accordingly, on December 4, 2014 the County approved the extension of the public comment period to January 14, 2015 (a total of 71 days).

Letter 412

From: InyoPlanning
Sent: Monday, November 17, 2014 8:11 AM
To: Cathreen Richards
Subject: FW:

-----Original Message-----

From: Gigi Coyle: Nature of Council [mailto:virginiascoyle@gmail.com]
Sent: Thursday, November 13, 2014 7:44 PM
To: InyoPlanning
Subject:

please extend the time for comment re solar project

| 412-1

file:///S:/PROJECTS/C/COI-ALL/COI-01_InyoCo_REGPA/CEQA/PEIR_Comment_Letter/400_Private/412_PRIV_FW%20PRV_.txt[1/19/2015 11:36:49 AM]

Response to Letter 412: Gigi Coyle

Response 412-1: The public comment period for the Draft PEIR opened on November 5, 2014 and was originally slated to close on December 19, 2014, meeting the mandated 45-day comment period per Section 15105 of the State CEQA Guidelines. However, the County received multiple requests from potential reviewers of the document to extend the comment period. Accordingly, on December 4, 2014 the County approved the extension of the public comment period to January 14, 2015 (a total of 71 days).

From: InyoPlanning
Sent: Thursday, January 15, 2015 8:08 AM
To: Cathreen Richards
Subject: FW: Regarding proposed solar development in Eastern Inyo County

From: Cody Hanford [mailto:cody.transitionhabitat@gmail.com]
Sent: Wednesday, January 14, 2015 8:19 PM
To: InyoPlanning
Subject: Regarding proposed solar development in Eastern Inyo County

The Amargosa River Watershed is an area of critical ecological, hydrological, and cultural importance, and it is not an appropriate area for utility-scale solar development.

413-1

The economy of Eastern Inyo County is entirely reliant on tourism. Visitors from around California, the United States, and the world visit the Death Valley Region for its scenic landscape, its unique ecology, and its remote and undeveloped character. These visitors, as evidenced by a recent Change.org petition sponsored by the Amargosa Conservancy which has collected almost 400 signatures, would be hesitant to continue to return to the area for visits if it was transformed into an industrial energy production zone as proposed in the Inyo County REGPA. Should tourism decline, the economy of Eastern Inyo County could be decimated.

Groundwater resources are the most critical element which binds together the ecosystem of the Amargosa River Watershed. Recent work by Andy Zdon & Associates, the Nature Conservancy, and the Amargosa Conservancy make clear the vital interconnectedness of the Amargosa Watershed and the Pahrump Valley aquifer. Groundwater pumping in Charleston View and/or the Chicago Valley would imperil the vital springs and seeps upon which most natural and human communities in the Amargosa Watershed rely.

413-2

The Amargosa Vole, which lives in the Tecopa Marsh, is a critically endangered and listed species whose very existence is reliant on stable groundwater flows into the springs. Any further reductions in the Amargosa hydrological system could result in the catastrophic loss of habitat for this species, potentially extirpating the last individuals. The Least Bell's vireo, another listed endangered species, is another species whose mesquite bosque habitat is entirely reliant on stable groundwater flows. Both of these species are of paramount concern, and have been the subject of millions of dollars of conservation efforts by a collaborative group of partners. Impacts to these species or their critical habitat due to groundwater withdrawal associated with utility-scale solar development absolutely need to be evaluated in both the PEIR, and in site-specific environmental reviews for future proposed projects. Their sensitivity mandates that no groundwater withdrawals should be permitted if any future projects are proposed. Should groundwater withdrawals inadvisably be permitted, significant mitigation should be required in the form of 3:1 acquisition of currently exercised water rights within the same watershed.

There are numerous other reasons that Eastern Inyo County is inappropriate for this sort of development. There is no existing transmission to these areas, so new gen-tie lines would have to be built, potentially dozens of miles long. There are unmitigable cultural resources conflicts: the mesquite bosque in Chicago Valley is a treasure trove of artifacts and Charleston View is sacred land to the Pahrump Paiute. Additionally, the federally protected Old Spanish Trail runs through the Charleston View area, and solar development would likely obliterate sections of historic trail. Finally, people live here. The citizens of Chicago Valley and Charleston View would have their lives changed dramatically by these developments. Many are opposed to such development, because their property values would decline precipitously, and they would be subject to

413-3

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numerous problems such as blowing dust, increased construction traffic, and potential glare issues.

413-3
(cont'd)

This is not a comprehensive list of the resource conflicts in these areas. Due to the numerous conflicts present, I feel that the Charleston View and Chicago Valley SEDAs are inappropriate areas for utility-scale solar development in Inyo County.

Sincerely,

Cody Hanford
Joshua Tree, California

file:///S:/...tter/400_Private/413_PRIV_FW%20Regarding%20proposed%20solar%20development%20in%20Eastern%20Inyo%20County.txt[1/19/2015 11:37:05 AM]

Responses to Letter 413: Cody Hanford

Response 413-1: As discussed in Section 4.16.1.4 in the PEIR, the County's economy has historically relied on natural resources as its base, including cattle ranching during the gold rush, extracting a wide variety of minerals found in the County, sheepherding, growing orchard and vegetable crops, and tourist-based activities that take advantage of the unique landscapes and wildlife the County has to offer. In recent times, the County has relied more on tourist-based activities and services, as well as, government and land management as its main economic drivers. Renewable energy development, however, has also played a role in the County's economy associated with the Coso Geothermal Power Plant and several hydroelectric generating facilities located within the County. Additional renewable energy development has the potential to add to the County's economic base. As indicated in Section 4.16.3.3, future solar energy development could provide an initial boost to the local economy during construction in the form of an increase in the labor force that requires goods and services, land sales, and the use of local materials. In the long term, it can provide higher property and sales tax revenues, the continued use of local materials, and the provision of some long term jobs that can, in turn, generate a permanent increase in the procurement of local goods and services.

While these economic effects would potentially benefit the local economy, the concern raised by the commenter is that solar energy development could negatively affect the natural and scenic resources that attract tourists to the County, as well as the local economy based on tourism. Solar energy development could result in changes to scenic views and vistas from public vantage points within the County. Accordingly, the PEIR concludes that significant and unavoidable impacts would potentially occur related to aesthetics due to the introduction of solar energy infrastructure within the existing landscape. Future energy solar development could consist of large-scale facilities that would substantially contrast with the existing visual environment. This is a conservative conclusion based on the uncertainty, at a Program EIR level, of a subsequent project's actual impacts. Without project-specific information coupled with a project-level analysis under CEQA, it can't be stated with certainty that these potential impacts would be reduced to below a level of less than significant at a programmatic level. That is why the PEIR reaches the conservative conclusion that impacts remain potentially significant and unavoidable. Individual projects proposed within the County, including within Rose Valley SEDA, will be required to prepare a project-specific environmental analysis and associated CEQA document to evaluate potential impacts, including visual analysis. Project-specific analysis will use the types of impacts and mitigation measures outlined in the PEIR as guidelines, including Mitigation Measure AES-1, which requires project specific visual analysis. In addition, new Visual Resources policies in the REGPA (Policy VIS-1.8 and 1.9, and Visual Resources or Economic Development Implementation Measure) relate to avoiding, minimizing, and mitigating for impacts to visual resources, and balancing the effects on visual resources with the potential effects on tourism in the County.

Response 413-2: The commenter expresses concerns about groundwater pumping in the Amargosa watershed, and its effects on Amargosa vole, least Bell's vireo, and groundwater-dependent resources.

Section 4.4.1.10 of the PEIR has been amended to include discussion of the hydrological connections between the Eastern Solar Energy Group SEDAs and the Amargosa River, including the portion of the river designated as Wild and Scenic by Congress and habitat for the Amargosa Vole. The Sensitive Species discussions for Chicago Valley and Charleston View include discussion of all listed and special-status species associated with groundwater-dependent ecosystems in the Amargosa River. These discussions have been further amended to include the potential for groundwater pumping in the Eastern Solar Energy Group SEDAs to negatively affect these species and ecosystems.

Mitigation Measure BIO-2 has been amended to include requirements for hydrological studies in the Charleston View and Chicago Valley SEDAs for potential effects to groundwater-dependent resources, and to require mitigation for any effects to groundwater-dependent resources outside of the SEDAs. Mitigation Measure BIO-3 has been amended to include a requirement for hydrological studies for projects in the Charleston View and Chicago Valley SEDAs, review of potential off-site indirect impacts to sensitive species in groundwater-dependent ecosystems, and review and mitigation as dictated by agencies with jurisdiction over those resources. Mitigation Measure BIO-4 has been amended to include requirements for analysis of impacts to groundwater-dependent resources off-site, and to require review and mitigation per agency dictates. Mitigation Measure BIO-19 has been amended to include discussion of off-site impacts to groundwater-dependent resources. Also refer to Response No. 202-4.

Response 413-3: As stated in the PEIR, future solar energy development within the Eastern Solar Energy Group SEDAs would likely require connection with either an existing transmission line located along SR 160 in Nevada or a planned transmission line in western Nevada. Connections to existing and planned lines would consist of underground connections where feasible in compliance with General Plan PSU-1.7. If undergrounding of the utility connections is not feasible, overhead connection would be required. This potential impact has been analyzed and determined to be a significant and unavoidable impact in the PEIR, even with implementation of all feasible mitigation measures.

Section 4.5.3.2 of the PEIR presents the methodology employed to conduct the cultural resources assessment contained in the document, including site sensitivity analysis. As presented in Table 4.5-2 of the PEIR, both the Chicago Valley and Charleston View SEDAs have been determined to have a high level of sensitivity due to the presence of the Pahrump Cultural Landscape, the Pahrump Metapatch Mesquite Woodland-Coppice Dune Archaeological Landscape, the Salt Song Trail, and Old Spanish Trail. The reader is further directed to Section 4.5.1.1 of the PEIR that presents the overall cultural setting of the County.

As described in Section 4.5.5 of the PEIR, all individual solar energy facility project applications shall be reviewed by the County for their potential to impact cultural resources. Individual small, community scale, or commercial scale solar developments may be determined by a qualified County planner to have no potential effect on cultural resources (i.e., roof top solar projects may not affect cultural resources). For utility scale and smaller projects with the potential to affect cultural resources that are proposed to be located in a “Low to Moderate,” “Moderate,” “Moderate to High” or “High” cultural resources sensitivity zone on Table 4.5-2 of the PEIR (titled *Cultural Resources Sensitivity by Location*), the applicant shall conduct and submit an inventory and evaluation of all cultural resources within the project area to the County and other relevant agencies for review and approval. The inventory and evaluation shall be conducted as provided under the subsection titled *Preliminary Project Specific Resource Identification* which is a part of Section 4.5.3.2 of the Final PEIR. Based upon the results of the inventory and evaluation, appropriate conditions on the project and mitigation measures, as identified in the subsection titled *General Types of Mitigation* which is a part of Section 4.5.3.3, *Impacts*, and Section 4.5.5, *Mitigation Measures*, of the Final PEIR, will be imposed upon the project.

While this comment is not specific to analysis provided within the PEIR, the concern is that property values might decline as a result of deterioration of aesthetic quality, real or perceived health effects, or changes to existing land use patterns as a result of solar energy development. Such determinations prove speculative as many studies on this subject conclude mixed findings regarding the impacts electric generation facilities and transmission infrastructure have on property values. While environmental concerns and public perceptions in some areas may lead a property owner to believe future renewable

energy development would have a negative impact to their property values, in other locations property values might increase because of access to employment opportunities associated with renewable energy development.

Because many factors can affect property values, an evaluation of potential impacts due to a renewable energy facility requires project-specific details. Additionally, to accurately evaluate property values with and without a renewable energy facility, the facility would need to be constructed and before/after appraisals and sales data tracked for all properties potentially affected. Therefore, the needed data required to make an accurate determination for areas both within and surrounding the Charleston View and Chicago Valley SEDAs (with REGPA implementation) are not realistically available at this time, and any conclusions regarding effects on property values from implementation of renewable energy facilities would be speculative.

Section 4.16 of the PEIR identifies the multiple goals, strategies, and policies identified in the REGPA to alleviate negative socioeconomic effects from solar energy development.

From: InyoPlanning
Sent: Wednesday, January 14, 2015 2:31 PM
To: Cathreen Richards
Subject: FW: REGPA Comments

Importance: High

From: atomictoadranch@netzero.net [atomictoadranch@netzero.net]
Sent: Wednesday, January 14, 2015 11:09 AM
To: InyoPlanning
Subject: REGPA Comments
Greetings,

Please accept these comments on the Renewable Energy General Plan Amendment (REGPA).

We would like to ask Inyo County to reconsider the decision to sacrifice vast tracts of the county to short-term gain renewable energy projects. After the construction of one of these projects is complete, only about 10 to 15 full time jobs are created. However, if a massive solar project fills up the view of a region like Sandy Valley, you get less and less people wanting to move there and pay property taxes. By sentencing a region to only one inefficient use, you are hurting the people that you represent who live in the area as well as your economy.

414-1

Solar and wind farms do not only damage property values but destroy natural resources including bird fauna and habitat for other desert flora and fauna.

Inyo County opposed the Hidden Hills Solar Project and later supported it after accepting a 12 million dollar payment from BrightSource Energy, the Developer. We later have found out that the Ivanpah Project, built by BrightSource, is not running on near the capacity that the developer promised. See this article:
<http://www.kcet.org/news/define/rewire/solar/concentrating-solar/ivanpah-solar-plant-owners-want-to-burn-a-lot-more-natural-gas.html>

We would be very disappointed to see the county give a green light to massive industrialization of Chicago Valley, Sandy Valley, Charleston View, Serels Valley near Homewood Canyon, Owens Dry Lake, etc.

We believe it is an economic bottleneck to destroy so much scenery which has so much tourism potential for projects that only produce about a dozen full time jobs each.

We believe you are favoring corporate developers from far away over your very own residents by selecting so much land for industrial development, but it is your job to better represent the local residents of the county.

Instead of developing culturally and biologically significant landscapes in Inyo County which are highly valued by tourists, Inyo County should instead make every effort to first support the state priority for renewable energy development on rooftops and in urbanized areas. The California Energy Efficiency Strategic Plan (CEESP) is state law establishing energy efficiency as the highest priority resource in meeting California's energy needs. The CEESP presents a "single roadmap to achieve maximum energy savings across all major groups and sectors in California," by implementing rooftop solar, and bold appliance and building efficiency standards.

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(<http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/eesp/>). California's utilities developed the CEESP cooperatively with the California Public Utilities Commission California Public Utility Commission. The current version is available online at:
http://www.energy.ca.gov/ab758/documents/CAEnergyEfficiencyStrategicPlan_Jan2011.pdf.
This is a much better alternative for reaching state renewable energy goals, instead of degrading Inyo County wild lands with large-scale renewable energy projects.

414-1
(cont'd)

Thanks for the opportunity to comment,

Kevin Emmerich
Laura Cunningham
Basin and Range Watch
102551 Cedar Canyon Road, Cima CA 92323

Heavy rains mean flooding
Anywhere it rains it can flood. Learn your risk. Get flood insurance.
floodsmart.gov

file:///S:/...C/COI-ALL/COI-01_InyoCo_REGPA/CEQA/PEIR_Comment_Letter/400_Private/414_PRIV_FW%20REGPA%20Comments.txt[1/19/2015 11:37:18 AM]

Response to Letter 414: Kevin Emmerich and Laura Cunningham

Response 414-1: The commenter expresses opposition to the development of renewable energy projects, and states that potential job creation associated with renewable energy projects in the County would not justify certain negatives associated with this type of development, including the potential damage to scenery and tourism. The comment also cites the potential for damaged property values as well as natural resource destruction. The intent of this PEIR is to analyze environmental effects at a programmatic level to provide a framework for the review of future renewable energy project applications countywide. No specific projects have yet been proposed or approved under this PEIR, and additional project-level analysis would occur in advance of decisions to approve or reject future proposed solar projects.

Additionally, a main objective of the REGPA is to direct and constrain the siting of future potential projects to areas that would have lesser environmental impacts, and to minimize potential adverse effects to the natural environment and sensitive resources in the County. The REGPA provides policy guidance to the County and potential project applicants and without that guidance the County has less influence about where projects may be developed.

The comment also states a preference that instead of developing areas that would potentially impact cultural and biological resources throughout the region, the County should support renewable energy development on rooftops and in urbanized areas, and should work towards establishing energy efficiency rather than supporting new renewable energy development. The County agrees that energy efficiency and smaller scale renewable energy development on rooftops and urbanized areas will play an important role in meeting the State's goal under SB 2 to achieve 33 percent of electricity generated from eligible renewable energy resources by 2020. Section 6.0 of the PEIR includes a discussion and analysis of several project alternatives, one of which is identified as the Commercial Scale Only Alternative (referred to as Distributed Generation Only Alternative in the Draft PEIR).

From: InyoPlanning
Sent: Thursday, November 13, 2014 4:21 PM
To: Cathreen Richards
Subject: FW: REGPA decision

-----Original Message-----

From: Meredith Little [mailto:lostbrdrs@gmail.com]
Sent: Thursday, November 13, 2014 8:59 AM
To: InyoPlanning
Subject: REGPA decision

I want to join in asking for more time to review this report past the December 19th date. This has a potentially serious impact on our valley, and the proposal is complicated. I need more time to consider before intelligently commenting.

415-1

Thank you

Meredith Little
Big Pine

Response to Letter 415: Meredith Little

Response 415-1: This comment requests that the comment period be extended beyond the original deadline. The public comment period for the Draft PEIR opened on November 5, 2014 and was originally slated to close on December 19, 2014, meeting the mandated 45-day comment period per Section 15105 of the State CEQA Guidelines. However, the County received multiple requests from potential reviewers of the document to extend the comment period. Accordingly, on December 4, 2014 the County approved the extension of the public comment period to January 14, 2015 (a total comment period of 71 days).



January 14, 2014

Inyo County Planning Department
via email: inyoplanning@inyocounty.us

Re: REGPA/PEIR & Proposed “Green” Energy Projects

In response to proponents of solar/wind projects in pristine lands and to those who might be asking “what's the deal?” ... Here's the deal, not all “green” energy proposals are in fact that. Placing renewable or “green” energy projects in pristine area of the desert (or in any other pristine lands for that matter), doesn't quite line up with the oft-stated and underlying intent of creating and utilizing renewable energy resources. When we look at how we can stay the effects of climate change, we also must look directly at whether our choices are, in fact, “green.” If for-profit energy companies had their way, changes to these pristine lands would be this:

416-1

Hundreds of miles of added roads in areas that experience severe, road-destroying flash floods dozens of times every year. As there is nothing energy companies (or the government) can do to stop the rains that sweep through this area year after year, ongoing repairs would add pollution to a presently unpolluted area and would ultimately be a losing proposition.

416-2

Thousands of acres of land that is already home to kit foxes, desert tortoises, owls, eagles, burros, big horn sheep and more would be decimated. This land is an important migratory corridor for wildlife, both in the air and on the ground, but ultimately this destruction appears to be of no real concern to renewable energy companies, as evidenced by past solar and wind projects. They simply do what they wish, despite the fact that there are other alternatives. Remember, these pristine lands, once destroyed, are not exactly "renewable."

416-3

These areas would change with regard to historic recreational use such as hiking, camping, off-road travel, nor would they remain sought after film and commercial locations. Unique and incredible viewsheds would be destroyed forever.

416-4

Historic routes critical to our country's early growth (and the founding of the west) such as the Old Spanish Trail and the Mormon Trail would be threatened.

416-5

New power transmission lines would have to be erected, which in turn would disturb additional lands from these pristine sites to the next-closest transmission lines, reaching far outside of the utility sites and traveling through wilderness areas, private property, and forever changing the viewshed people seek when they travel to these untouched lands.

416-6

We also would lose places where the people come to unwind, to restore, to reconnect with the often unreachable peace we seek in our cities. We would lose places where we can breathe and slow down, where our blood pressure normalizes with the mesquite breezes, where we can see raptors soaring and hear coyotes howling, where we can understand survival through harsh times, or where our children learn again to connect to something bigger than iPhones, video games, TVs, and instant gratification.

416-7

Finally, let's look at how much we champion the recycling of used goods, but yet we (private companies, governmental entities and even citizens) don't promote the recycling of used property. Why would energy companies seek pristine lands with no existing infrastructure in place to handle these utilities when there are huge swaths of non-pristine, previously-disturbed land already for sale along interstate and highway corridors? Or why wouldn't energy companies look at the huge empty warehouses and factories also along interstate and highway corridors that are resting empty and unused for years? Why wouldn't energy companies seek out abandoned military bases or airports? Finally, why wouldn't energy companies see the value (and practicality) of putting their projects close to where the energy is needed, i.e. within or right next to the large cities they are seeking to serve? To put an energy project out in the remote desert is akin to a newspaper boy living in Baker, but accepting a route in Los Angeles because he can still drive there. It makes no sense and it certainly isn't "green."

416-8

I respectfully request that these remote desert lands, i.e. Charleston View, Chicago Valley and Sandy Valley be removed from consideration the final Inyo County REGPA. Thank you.

Sincerely,

Nancy Good

Responses to Letter 416: Nancy Good

Response 416-1: It is the opinion of the commenter that the renewable energy projects are a misnomer and should not be located in areas considered to be pristine. This comment is introductory in nature and is intended to preface subsequent comments. The PEIR that was prepared for the REGPA discussed and analyzed all environmental issue areas that could be impacted with project implementation per State CEQA Guidelines. As this comment does not raise specific issues related to the adequacy of the PEIR, no further response is required.

Response 416-2: This comment discusses the potential for the construction of roads in areas that experience heavy rains, which the comment states would result in increased pollution due to damage caused to these roads by flash floods, as well as the subsequent need for ongoing repairs. Specific projects under the REGPA requiring the construction of new roads may be subject to a number of federal, state, and local regulatory requirements related to effects including erosion, as described in Section 4.9.1.3 of the PEIR. Specifically, this would involve mandatory conformance with applicable requirements under the National Pollutant Discharge Elimination System (NPDES), including the Construction General Permit, which mandates (among other requirements) project-specific water quality protection.

Response 416-3: This comment discusses the potential for renewable energy development to have extensive effects on lands that are home to various animal species (including kit foxes, desert tortoises, owls, eagles, burros, bighorn sheep and more). Section 4.4 of the PEIR analyzes and discloses potential impacts to biological resources under the proposed project. As described therein, future renewable energy development projects implemented under the REGPA would be required to prepare project-specific environmental analyses on the impacts to biological resources, and would be required to comply with all applicable federal, state, and local regulations. Even after implementation of all feasible mitigation measures, impacts related to birds from solar flux and luminosity associated with solar thermal towers would remain significant and unavoidable. Additional project alternatives have been analyzed through the PEIR and may be considered by County decision makers in the adoption of the REGPA.

Response 416-4: The comment notes the potential for solar projects to change historical recreational areas, and to destroy unique viewsheds. Impacts to recreation resources have been evaluated in Section 4.15 of the PEIR; impacts to aesthetics (visual resources) were analyzed in Section 4.1. In determining and identifying the proposed SEDAs, the County identified areas that may be appropriate for solar energy development projects through qualitative analysis of geographic, physical, cultural, and environmental constraints and opportunities. Among these considerations, areas containing formally established recreational uses and resources were generally not included in the SEDAs so that direct impacts to existing recreational resources would be avoided; impacts to recreational resources were found to be less than significant. Future projects would be required to comply with a number of federal, state, and local regulations that prevent impacts to recreation resources, and would undergo project-level analysis.

Response 416-5: Impacts to cultural resources have been evaluated at the program level in Section 4.5 of the PEIR and identified the potential for related impacts to occur. Adverse effects to historical resources (including the Old Spanish Trail-Mormon Road) would be resolved on a project-specific level, through efforts including development/implementation of a treatment plan for historical resources.

This treatment plan would include applicable data recovery efforts to address potential impacts to NRHP/CRHR-eligible cultural resources prior to development.

Additional mitigation has been included in the PEIR to further reduce impacts to cultural resources to the maximum extent feasible, although this environmental issue area was identified as remaining significant and unavoidable even after implementation of all feasible mitigation. Should the County decide to adopt the REGPA, then a Statement of Overriding Considerations would have to be adopted to weigh the economic, legal, social, technological, or other benefits of implementing the proposed project against the identified, unavoidable impacts.

As described in Section 4.5.5 of the PEIR, all individual solar energy facility project applications shall be reviewed by the County for their potential to impact cultural resources. Individual small, community scale, or commercial scale solar developments may be determined by a qualified County planner to have no potential effect on cultural resources (i.e., roof top solar projects may not affect cultural resources). For utility scale and smaller projects with the potential to affect cultural resources that are proposed to be located in a “Low to Moderate,” “Moderate,” “Moderate to High” or “High” cultural resources sensitivity zone on Table 4.5-2 of the PEIR (titled *Cultural Resources Sensitivity by Location*), the applicant shall conduct and submit an inventory and evaluation of all cultural resources within the project area to the County and other relevant agencies for review and approval. The inventory and evaluation shall be conducted as provided under the subsection titled *Preliminary Project Specific Resource Identification* which is a part of Section 4.5.3.2 of the Final PEIR. Based upon the results of the inventory and evaluation, appropriate conditions on the project and mitigation measures, as identified in the subsection titled *General Types of Mitigation* which is a part of Section 4.5.3.3, *Impacts*, and Section 4.5.5, *Mitigation Measures*, of the Final PEIR, will be imposed upon the project.

Response 416-6: As one of the primary objectives of the REGPA, locations of SEDAs have been determined, in part, based on their proximity to existing electrical transmission facilities. As described for Objective 5 in Section 3.2 of the PEIR, the County has focused the development areas identified in the REGPA along the existing LADWP transmission systems and along the conceptual Valley Electric Association, Inc. (VEA) system to minimize time-consuming and costly upgrades and new facility construction. These would be the least costly and most time effective conveyance systems for development. Potential effects of transmission lines for proposed projects would also be assessed on a project-level basis. Based on the measures in Objective 5 of the REGPA and the fact that future projects would undergo project-specific analysis, impacts related to transmission lines would be reduced to the maximum extent feasible.

Response 416-7: The comment describes an array of potential effects of development that are related to reducing the accessibility of the natural environment in the Eastern Sierra landscape. It is the overall intent of the REGPA to regulate and direct the type, siting, and size of future renewable projects so that the County’s resources are preserved and maintained. Specific sites for renewable development have not been proposed, but future project-level environmental analyses (which would occur in advance of decisions to approve or reject a future proposed project) would help to ensure that potential environmental impacts would be avoided or reduced to the maximum extent feasible.

Response 416-8: The commenter supports the siting of solar development projects on previously disturbed lands and close to the large cities they seek to serve. It is the intent of the REGPA to help ensure that future renewable energy development projects are sited in areas that would have the least amount of impacts; as no individual projects have been proposed yet, it is not yet known where energy

companies would seek to develop solar projects. The PEIR includes an alternative that would restrict future solar development projects to previously disturbed lands. Although also identified as priority development areas under the proposed project, this alternative would limit project siting to degraded lands, abandoned mines, and former landfills, thereby constraining areas allowable for development and avoiding potential impacts to pristine lands.



January 14, 2015

Inyo County Planning Department

Dear Inyo County Planning,

I would like to add the following comments in regards to the REGPA.

- 1. According to the EIR, the areas chosen for solar energy development were based on existing transmission lines. The option that does not seem to have been fully explored is one in which an area or small group of areas could be utilized for solar development *away* from sensitive areas by building relatively short transmission lines that would connect to existing transmission corridor/s. For this reason, I do not believe the EIR is complete in its analysis. Although the document states that Inyo County is committed to limiting construction of new transmission lines, as an alternative to the plans described the impacts to sensitive resources may be greatly lessened if suitable sites for highly concentrated solar development can be found. 417-1

- 2. In the section ES.4 SUMMARY OF PROJECT ALTERNATIVES, the reasoning behind the conclusions on alternatives *Solar Energy Development on Previously Disturbed Lands Only Alternative* and *Reduced SEDA Alternative* are not fully explored, given the large impacts to many high biological and aesthetic areas. 417-2

Thank you,

Kevin Nelson

Nature Commission
949-939-9372
<http://naturecommission.org> | PO Box 73126, San Clemente, Ca 92673

Responses to Letter 417: Kevin Nelson

Response 417-1: The comment notes a preference for utilizing locations away from sensitive areas while still locating them close enough to existing electrical transmission facilities, stating that the PEIR did not fully explore this option. The locations of the proposed SEDAs have been determined by a variety of criteria, including proximity to existing electrical transmission facilities. As described for Objective 5 in Section 3.2 the PEIR, the County has focused the development areas identified in the REGPA along the existing LADWP transmission systems and along the conceptual Valley Electric Association, Inc. (VEA) system to minimize time-consuming and costly upgrades and new facility construction. Additionally, mitigation measures provided in the PEIR have been designed to avoid and minimize impacts to sensitive resources

Response 417-2: The comment states an opinion that in the Executive Summary (Section ES.4, Summary of Project Alternatives) the reasoning behind the conclusions on the *Solar Energy Development on Previously Disturbed Lands Only Alternative* and the *Reduced SEDA Alternative* are not fully explored. The executive summary is intended to provide a concise synopsis of the full analyses conducted in the environmental document. Section 6.0, Project Alternatives, includes more detailed analysis of these alternatives, including how potential environmental effects (such as aesthetics, biological resources, cultural resources, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, and socioeconomics) compare to the potential effects of the proposed project. Refer to Section 6.3.4 for details of the environmental analysis of the *Reduced SEDA Alternative* and Section and Section 6.3.5 for details of the environmental analysis of the *Solar Energy Development on Previously Disturbed Lands Only Alternative*.

401 E. Yaney St., Bishop CA 93514
(760) 873-3790/ smanning@telis.org
January 14, 2015

Inyo County Planning Department
P. O. Drawer L
168 N. Edwards Street
Independence, CA 93526

submitted via email

Subject: Comments on Draft Renewable Energy General Plan Amendment
Program Environmental Impact Report

Dear Planning Department:

Please accept these comments on Inyo County’s draft Program Environmental Impact Report (dPEIR) on the proposed Renewable Energy General Plan Amendment (REGPA).

418-1

Overall

After reviewing the dPEIR, and consistent with comments I submitted during the CEQA scoping phase of the REGPA (letter dated July 9, 2014, which is part of Appendix A of the dPEIR), I respectfully request the Planning Department withdraw the dPEIR and consider an alternative that accommodates renewable energy in the General Plan but which does not destroy irreplaceable biological, cultural, aesthetic, and other resources. Inyo County is too special a place to consider marring its landscapes with industrial solar power generating facilities. Please consider approaching renewable energy in Inyo County in a manner that benefits both the environment and local residents. If this approach is followed, everyone benefits, even people who don’t live in Inyo but just come to visit.

Paradoxes

In my review, I find at least two noteworthy paradoxes among the documents and their evolution over the years. First I will summarize steps leading up to the current REGPA, and next I’ll discuss the Desert Renewable Energy Conservation Plan.

(1) REGPA evolution: the closer we look, the more we find. (This is some background which is *not* disclosed in Section 3.1.1 of the dPEIR.!) I recall having grave concerns about earlier versions of the county’s plans for designating areas for renewable energy development when I first heard about this subject in about 2010. In those days, the Planning Department was touting maps designating huge areas of Inyo County as suitable for wind and solar renewable energy development, which they called REDAs. Places such as Deep Springs Valley, Fish Lake Valley, Death Valley junction, Panamint Valley, and Centennial Flat were designated, in addition to Owens Valley, Laws, Owens Lake, Rose Valley, Charleston View, Pearsonville, and Trona. When Planning Department staff was repeatedly asked about the criteria used to delineate these vast areas as suitable for utility-scale projects, the staff repeatedly answered that “many criteria” were applied in selecting these areas. They proceeded to assure the public that resource conflicts were

418-2

minimal within the REDAs they had designated.

On December 15, 2010, the Planning Dept. released a IS/MND on the first version of the REGPA. It concluded that there was some chance of adverse impacts to resources (such as aesthetics, farmland, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, and utilities - Wow!) within the vast REDAs due to the proposed General Plan Amendment (GPA). However, the Planning Director attested it was his opinion that all of the potential impacts could be mitigated to less than significant. The overall conclusion in the IS/MND was:

The proposed GPA works to enhance and protect the quality of the County's environment, and will not result in direct impacts on the physical environment. Development of individual projects may have the potential to result in significant indirect impacts. As discussed throughout this Initial Study, the Inyo County General Plan addresses potential issues, and identifies goals, policies, and implementation measures to minimize those impacts. The proposed GPA is intended to compliment [sic] the General Plan and other renewable energy planning efforts and address renewable wind and solar energy development comprehensively to avoid, minimize, and eliminate potential impacts. The proposed GPA requires that site-specific studies and appropriate environmental review be conducted to minimize environmental, social, and economic impacts. The Best Management Practices and Guidance Manual for Desert Renewable Energy Projects incorporates BMPs and guidance for renewable wind and solar energy projects, as do BLM's EISs prepared for wind, solar, and transmission. Overall, the extensive menu of mitigation measures developed through these multiple planning processes are anticipated to preclude significant impacts on the quality of the environment, substantial reductions in the habitat of any fish or wildlife species, any fish or wildlife population dropping below self-sustaining levels, threats to eliminate any plant or animal community, reductions in the number or restrictions in the range of any rare or endangered plant or animal, or eliminations of important examples of the major periods of California history or prehistory. No significant direct or indirect project-specific or cumulative impacts on the environment or human beings are anticipated, provided that mitigation is developed based on site-specific studies and applied to projects to preclude impact. Compliance with BMPs, the Inyo County General Plan, the Renewable Energy Ordinance, and other relevant local, State, and federal rules, regulations, policies, and procedures will work to ensure less than significant impacts.

[Note: I underlined some phrases for emphasis.]

At the April 26, 2011, Inyo Board of Supervisors meeting, the Supervisors unanimously adopted a resolution certifying this first version of the REGPA. Fortunately, this action was legally challenged by two organizations who filed suit on May 26, 2011. The Inyo County Planning Department website subsequently reported, "In November 2011, the County was forced to rescind the REGPA due to California Environmental Quality Act (CEQA) litigation. This litigation was brought forth by the Center for Biological Diversity and the Sierra Club. Their argument was based on the idea that a Program Environmental Impact Report (PEIR) should have been prepared for the REGPA. The County contended that it was not necessary as any, and every, proposed renewable energy generation project would be required to include a project EIR. The County; however, lacked the resources to defend its position against the well-financed complaints."

Another way to interpret the motives of the two organizations that had the wherewithal to

418-2
(cont'd)

legally challenge the county's REGPA and its IS/MND, is that the desire was to require Inyo County to perform a more thorough CEQA analysis of the REGPA and public disclosure of potential impacts, and thereby allow an opportunity for much broader public input into this change to the General Plan that may result in huge changes to the precious landscape and many fragile resources of Inyo County.

418-2
(cont'd)

Late in 2013, Inyo County Planning Department returned to the public with a slightly modified version of the REGPA. Some REDAs had been eliminated, but overall the project was virtually the same as the 2010-11 version. This time, however, Inyo County carried out a longer public outreach and preliminary CEQA process. Based on public meetings and public input, the REGPA was trimmed somewhat and consideration of wind energy facilities was removed to result in the current proposal which is the preferred alternative. In November 2014, Inyo County and its consultants completed the draft Program EIR on the REGPA.

The 2014 REGPA designates eight SEDAs and Owens Valley, and most SEDA footprints cover lands included in the previous REDAs. Even though the current version of the REGPA covers less acreage than the 2011 version, upon carrying out the more thorough CEQA analysis for these lands, the dPEIR now finds, p. ES-3 "that **significant and unavoidable impacts could occur with respect aesthetics, biological resources, and cultural resources**" if the REGPA is implemented [bold face is mine].

This shows that the closer the county looks into development of these precious lands, the more resource conflicts it will find. Because the current dPEIR is at a Program level, it is known that even more significant impacts will be identified at the project level.

It is a relief that in 2011 the two organizations had the sense and wherewithal to challenge the first REGPA. We now know the Planning Director in 2011 grossly underestimated the degree to which environmental damage would result throughout Inyo County had the original General Plan Amendment been implemented and development within the REDAs allowed to proceed. My hope now is there is someone or some organization prepared to challenge the current dPEIR.

(2) Despite "coevolution" there are discrepancies between the Desert Renewable Energy Conservation Plan and the REGPA. A project proceeding concurrently with the county's REGPA is the California multi-agency Desert Renewable Energy Conservation Plan (DRECP). The draft EIR/EIS on the DRECP was released to the public in September 2014, at least a month prior to the county's November 2014 release of the REGPA dPEIR, so there should have been an attempt by the county to review and perhaps reconcile the two documents. Apparently this did not happen, and apparently, the REGPA as the county's preferred method of steering industrial solar is almost entirely in conflict with the DRECP's preferred alternative.

418-3

The REGPA dPEIR, p. 4.4-75, says, "Should the County choose to participate in the DRECP as a signatory agency, then implementation of the DRECP may further reduce impacts to biological resources analyzed in this PEIR." This sentence is not explained: What does it mean? If Inyo County becomes signatory to the DRECP and its preferred alternative, hardly any of Inyo's SEDAs could be developed. The DRECP boundary comes into southern parts of Inyo County valleys. The DRECP preferred alternative shows Development Focus Areas (DFAs) in Rose Valley, around Lone Pine, and in Charleston View. Nearly all the rest of the huge acreage within the DRECP boundary in Inyo County would be designated as conservation areas of one category or another! (Some are already off limits due to National Park or wilderness status.) The DRECP's designations are generally good for those who agree these lands are worthy of conservation, but the preferred alternative would be in direct conflict with Inyo County's REGPA. The Trona, Sandy

Valley, Chicago Valley, Owens Lake, and Pearsonville SEDAs would become moot. Is this what the Inyo County dPEIR means when it says impacts to biological resources could be reduced using the DRECP approach? Outside of the DRECP boundary, Inyo County's REGPA could still capture the northern Owens Valley including Laws, but this raises the question: If these areas should be considered for industrial renewable energy development, why were these lands omitted in the DRECP analysis? Obviously, agencies like BLM, US Fish and Wildlife Service, and California Department of Fish and Game (the preparers of the DRECP) see more value in conserving Inyo County lands than Inyo County staff and officials see.

418-3
(cont'd)

Comments on the REGPA dPEIR

In reviewing the draft EIR, I was having difficulty figuring out how Inyo County can justify proceeding with the REGPA when its own analysis “concluded that significant and unavoidable impacts could occur with respect [to] aesthetics, biological resources, and cultural resources” (p. ES-3). There could also be significant impacts to air quality, water resources, agriculture, recreation, noise, etc.

418-4

A primary purpose of CEQA is for project proponents to evaluate and publicly disclose the potential environmental impacts of a project. The lead agency is supposed to adopt projects that avoid significant adverse impacts, and they can call for changes to projects in order to achieve this outcome. For the REGPA, Inyo County is the lead agency and project proponent. The county's guidance comes from existing public policy, such as the county's General Plan, as well as extensive public input. Inyo County is supposed to work to protect resources and public values throughout the region they govern, and they have discretion and the responsibility to reject projects that harm valued resources or may cause adverse impacts.

The lengthy table below summarizes the Significant Unavoidable Impacts (from DPEIR Table ES-1, Impacts and proposed mitigation).

RESOURCE	MITIGATION MEASURE	SIGNIFICANCE AFTER MITIGATION
Aesthetics	AES-1: Prepare visual studies that include existing views, scenic vistas, and visual resources and evaluate the potential impacts to existing visual resources.	Significant and Unavoidable
	AES-2: Reduce potential effects of glare by preparing site-specific glare studies that inform project design.	Significant and Unavoidable
	AES-3: Minimize visual contrast using colors that blend with surrounding landscape and do not create excessive glare.	Significant and Unavoidable
	AES-4: Install natural screens to protect ground-level views into the project.	Significant and Unavoidable
	AES-5: Prepare lighting plan that informs ways to reduce night lighting during construction and operation.	Significant and Unavoidable
	AES-6: Treat PV solar panel glass with anti-reflective coating.	Significant and Unavoidable
	AES-7: Coordinate with the Federal Aviation Administration when considering the use of audio visual warning systems.	Significant and Unavoidable
	AES-8: Projects on federal land will comply with the	Significant and

RESOURCE	MITIGATION MEASURE	SIGNIFICANCE AFTER MITIGATION
	respective federal agency's visual guidelines and policies.	Unavoidable
	AES-9: The project will implement best management practices and measures during construction to reduce impacts to project site and surrounding area.	Significant and Unavoidable
	AES-10: Projects requiring overhead electrical transmission connections will consider design and installation techniques that reduce visual impacts.	Significant and Unavoidable
Biological Resources	BIO-1: Prepare project level biological resources evaluation and mitigation and monitoring plan.	Significant and Unavoidable
	BIO-3: Minimize impacts to special status wildlife.	Significant and Unavoidable
	BIO-4: Minimize impacts to special status fish.	Significant and Unavoidable
	BIO-5: Minimize impacts to amphibians.	Significant and Unavoidable
	BIO-6: Minimize impacts to desert tortoise.	Significant and Unavoidable
	BIO-7: Minimize impacts to special status reptiles (except desert tortoise).	Significant and Unavoidable
	BIO-8: Minimize impacts to Swainson's hawk.	Significant and Unavoidable
	BIO-9: Minimize impacts to burrowing owl.	Significant and Unavoidable
	BIO-10: Minimize impacts to western snowy plover, western yellow-billed cuckoo, Inyo California towhee, and bank swallow.	Significant and Unavoidable
	BIO-11: Minimize impacts to southwestern willow flycatcher.	Significant and Unavoidable
	BIO-12: Minimize impacts to bald and golden eagle.	Significant and Unavoidable
	BIO-13: Minimize impacts to least Bell's vireo.	Significant and Unavoidable
	BIO-14: Minimize impacts to bighorn sheep.	Significant and Unavoidable
	BIO-15: Minimize impacts to Sierra Nevada red fox.	Significant and Unavoidable
	BIO-16: Minimize impacts to Mohave ground squirrel.	Significant and Unavoidable
	BIO-17: Minimize impacts to American badger and kit fox.	Significant and Unavoidable
	BIO-18: Minimize impacts to other special status birds, raptors, migratory birds, nesting birds and bats.	Significant and Unavoidable
	BIO-23: Implement general design guidelines to minimize impacts to biological resources.	Significant and Unavoidable
Cultural Resources	CUL-1a: Designate project Cultural Resources Staff.	Significant and Unavoidable
	CUL-1b: Draft a Historical Resources Treatment Plan.	Significant and Unavoidable
	CUL-1c: Draft a Monitoring and Treatment Plan.	Significant and Unavoidable
	CUL-1d: Authority to halt project activities.	Significant and Unavoidable

RESOURCE	MITIGATION MEASURE	SIGNIFICANCE AFTER MITIGATION
	CUL-1e: Cultural Resources Worker Environmental Awareness Program.	Significant and Unavoidable
	CUL-1f: Cultural Resources Reporting.	Significant and Unavoidable
	CUL-1g: Curation of Cultural Resources Collections.	Significant and Unavoidable
	CUL-2: Incidental Discovery of Human Remains.	Significant and Unavoidable
	PALEO-1a: Protect Paleontological Resources.	Significant and Unavoidable

418-4
(cont'd)

To add to the above, the REGPA mitigations, pages ES-9 - ES-91 would allow “take” for at least all of the following:

- * All state or federally-listed plant species, including *Astragalus lentiginosus* var. *piscinensis*, *Grindelia fraxinipratensis*, *Deinandra mohavensis*, and *Sidalcea covillei*
- * All state or federally-listed fish species (e. g. Owens pupfish and Owens tui chub)
- * All state or federally-listed amphibian species
- * Desert Tortoise
- * All federally-listed bird species (including western snowy plover, western yellow-billed cuckoo, Inyo California towhee, and bank swallow)
- * Southwestern Willow Flycatcher
- * Least Bell’s Vireo
- * Bald Eagle and Golden Eagle
- * All state or federally-listed bighorn sheep
- * Sierra Nevada Red Fox
- * Mohave Ground Squirrel

Here we have Inyo County presenting its own dPEIR which foresees significant unavoidable impacts on many fronts, yet the county thinks it is entitled to proceed with the project. Is this a betrayal of public trust? What is Inyo County doing? I think the reasoning is that, by claiming at this stage that many valuable resources would be destroyed, altered, or compromised with industrial solar projects, this dPEIR protects future developers, not those who truly care about the resources. I expect Inyo County officials will use this dPEIR when a developer arrives on the doorstep. It conveniently contains a hefty 81 pages of pre-packaged mitigation measures! The developer will simply be asked to carry out a selection of mitigation measures appropriate to the site, and they’ll be free to build. The measures appear to consist of things that normally would be done during a project-level CEQA review: hiring professionals, performing resource surveys, analyzing and reporting on the results, and recommending strategies to avoid or minimize impacts. I would characterize this strategy as a misapplication of CEQA’s Program EIR model; to me, it is a CEQA “switcheroo”! Rather than doing all the studies and disclosure before a decision is made to allow a specific project, the county will allow developers to build as long as they perform these measures, regardless of what they find. Developers will do the mitigation before we know the extent of needed mitigation. For developers, it will be Dessert before Dinner, while we the public watch without a voice.

To many of us, and to future residents of this planet, it will appear to be insanity to allow solar projects to proceed in Inyo County that would: evict bighorn sheep, foxes, bats, burrowing owls, badgers, and tortoises; “take” birds, fish, sheep, foxes, squirrels, and reptiles; transplant plants offsite; permanently remove archaeological artifacts; destroy fossils; and which create visual blight in an otherwise wild and open world-class landscape, rather than have the ultimate customers of the electricity generated in the wake of this destruction simply install solar panels over urban parking lots, on commercial buildings in their communities, and on their own roofs!

418-4
(cont'd)

The dPEIR’s superficial handling of Owens Valley is difficult to comprehend. The public called for Owens Valley to be excluded, the Board of Supervisors said they would exclude it, but it has slipped back in as some sort of “study area,” which is really what all the SEDAs are. The study can end now, because the Inyo/Los Angeles Water Agreement, the Lower Owens River Project, and the DWP Land Management Plan all call for measures which would be in direct conflict with development of renewable energy on these lands. (For BLM land in Owens Valley, BLM management plans and the DRECP would influence future use.)

418-5

The dPEIR lumps virtually all of Inyo County’s valley floor plant communities as “desert scrub.” However, intact native vegetation – including, yes, communities dominated by “desert” shrubs -- is rich, diverse, interesting, and irreplaceable. Some valley floor plant assemblages have developed in situ, relatively undisturbed, over the centuries since the end of the Pleistocene when lakes in our Great Basin region receded or desiccated. These are plant assemblages and soils that are valuable on their own because they have a lot to teach humans about the earth. They are also impossible to replicate, because they are a complex “package deal” with plants of different age classes and sizes, unique soils, a seed bank, and animal species that inhabit them or visit seasonally (such as hummingbirds and butterflies). To assume these communities are expendable and can be re-made once a solar project has destroyed them is completely naïve. All humans can do is plant a few plants and hope they survive: it would take eons to reestablish what was lost, and it may never happen under current climatic conditions.

418-6

Summary

Many more comments could be submitted in hopes of stopping this poorly crafted REGPA. Many have already been made during meetings and comment periods in 2010-11 and again in 2013-14, but it is disheartening to see in the dPEIR how little Inyo County staff and leadership listened to and addressed public comment. I urge county leaders to withdraw the REGPA and this dPEIR. The approach is not forward-thinking, and if implemented, many see it will lead to permanent damage to the county’s environment and economy. The REGPA is a losing proposition for Inyo County and for California. Please consider these and all other comments received, and do the right thing and stop this program.

418-7

Sincerely,

Sara J. “Sally” Manning, Ph.D.
(submitted by email)

Responses to Letter 418: Sarah Manning

Response 418-1: This portion of the comment letter provides an introduction and includes a request to withdraw the PEIR and consider alternatives resulting in less environmental impacts. A range of project alternatives were considered for detailed evaluation in the PEIR, and compared against the factors outlined in Section 15126(f) of the State CEQA Guidelines for feasibility. The list of alternatives outlined and analyzed in Section 6.3 of the PEIR include: No Project Alternative, Solar PV Only Alternative, Commercial Scale Only Alternative (referred to as Distributed Generation Only Alternative in the Draft PEIR), Reduced SEDA Alternative, and Solar Energy Development on Previously Disturbed Lands Only Alternative. As summarized in Section 6.5, the No Project Alternative would result in an exacerbation of the potential impacts in relation to the proposed project. The remaining alternatives were identified as being environmentally superior to the proposed project, but would all result in significant and unavoidable impacts to aesthetics, biology, and cultural resources.

Response 418-2: The comment summarizes the history of the REGPA, with a comparison of the findings of the current PEIR with previous analyses. The County did originally adopt the Initial Study/Mitigated Negative Declaration noted in the comment, but subsequently rescinded it. The PEIR identifies potentially significant and unavoidable impacts to the following environmental issue areas even after implementation of all feasible mitigation: aesthetics, biological resources, and cultural resources. Should the County decide to adopt the REGPA, a Statement of Overriding Considerations will have to be adopted to weigh the economic, legal, social, technological, or other benefits of implementing the proposed project against the identified unavoidable impacts.

Response 418-3: As stated in the PEIR in Section 2.4.3.1, the DRECP is currently being circulated for public review, and although the County is under no obligation to implement the DRECP principles and policies (including the DFAs), the County participated in the DRECP preparation process and has considered the DRECP in development of the REGPA. Because the DRECP was in draft form during the preparation of the PEIR, the SEDAs were not further constrained based on information contained in the DRECP. However, if the DRECP and the REGPA are adopted, the County would coordinate with the DRECP agencies to avoid priority conservation areas and future projects in the County would be developed consistent with the requirements of the DRECP. Under REGPA Policy MER-2.6, the County would coordinate with renewable energy solar developers and other agencies to avoid, minimize, or mitigate impacts. If the County becomes a signatory of the DRECP, future development under the REGPA within the DRECP area could be expedited by the “take” coverage under Section 10 of the Endangered Species Act of 1973 and state take coverage under Section 2835 of the California Fish and Game Code for species listed under the California Endangered Species Act as threatened, endangered, or candidates.

Response 418-4: The PEIR concluded that significant and unavoidable impacts would potentially occur in the areas of aesthetics, biology, and cultural resources. This is a conservative conclusion based on the uncertainty, at a PEIR level, of a subsequent project’s actual impacts. The SEDA boundaries depicted in the PEIR have been identified based on information described in the Opportunities and Constraints Technical Study (Appendix D of the PEIR). The SEDAs are intended to direct and constrain future solar developments to areas in the County identified as possibly supporting a lower level of resource sensitivity, and that are located near existing transmission facilities.

Potentially significant impacts that could occur as a result of renewable energy projects being developed in the identified SEDAs were identified at a programmatic level and all feasible mitigation is prescribed

in the PEIR; however, without project-specific information coupled with a project-level analysis under CEQA, it can't be stated with certainty that these potential impacts would be reduced to below a level of less than significant at a programmatic level. That is why the PEIR reaches the conservative conclusion that impacts from future projects remain potentially significant and unavoidable.

As described in Section 2.4, the Renewable Portfolio Standards (RPS) is the primary driver for new utility scale renewable energy development in California, where implementation of the REGPA would effectively help California achieve its renewable energy targets set forth by the California Public Utilities Commission. The County will prepare a Statement of Overriding Considerations per Section 15093 of the State CEQA Guidelines that identifies the significance and influence of the RPS on the REGPA as well as the economic, legal, social, and/or technological benefits of implementing the proposed project in light of the unavoidable impacts identified in the PEIR. This Statement will be considered along with the Draft PEIR by the County Board of Supervisors in late March 2015. Mitigation measures prescribed in the PEIR are mandatory for future, proposed solar energy development projects seeking entitlement under the REGPA that have potential significant impacts identified during subsequent environmental review (see State CEQA Guidelines Section 15168 for a complete description of PEIRs).

Response 418-5: The Owens Valley is not a SEDA but instead was identified as a study area (OVSA) demarcated by a geographic boundary of the general valley area which does not correlate with a proposed development area. Any potential future solar energy project proposed for this area would be subject to a General Plan Amendment and further CEQA analysis and public comment as outlined in the PEIR. Due to the unique and sensitive resources present, multiple jurisdictions and existing planning and land management policies dictate land uses in the Owens Valley.

Section 3.3.2 of the PEIR includes a description of the OVSA, including the list of separate potential criteria for development siting, which has been revised as follows:

(1) only utilize existing transmission facilities and corridors; (2) guide the development to disturbed lands, including over and along the Los Angeles Aqueduct; (3) consider encouraging development at solid waste and wastewater treatment facilities, on private lands, in small scale (e.g., roof tops) and ~~distributed generation~~ commercial scale (20 MW or less) arrays, and around communities in smaller arrays (~~10-6~~ MW or less); (4) mitigate potential impacts to the environment, society, culture, and economy of the County; (5) work to avoid significant alterations to visual resources; and (6) minimize intertie facilities.

Future solar energy projects under the REGPA will undergo project specific analysis, which will include an evaluation of consistency with existing plans and regulatory framework such as the 1991 LADWP/Inyo County Long Term Water Agreement (Agreement), the 1997 Memorandum of Understanding (MOU), and the Owens Valley Land Management Plan. The Agreement is discussed in Sections 2.4.3.3, 4.2.1.4 and 4.9.1.3 (under the description of the County's Groundwater Extraction Permit Ordinance [Ord. 394 § 1, 1980]). The Agreement was developed to manage ground and surface water resources while maintaining healthy groundwater dependent vegetation communities found in the Owens Valley and while providing a reliable supply of water for export to Los Angeles and for use in Inyo County. To accomplish this, the Agreement contains management strategies for preventing long term groundwater mining from the aquifers, as well as avoiding of minimizing impacts to vegetation as a result of groundwater pumping or changes in surface water management practices. Vegetation is used as the principal indicator of environmental quality associated with ground and surface water activities in the Owens Valley. As part of this effort, vegetation in the Owens Valley has been classified (as described

in Section 2.4.3.3 of the PEIR), and the County maintains maps of the classified vegetation. The management strategies are intended to avoid significant decreases in live vegetation cover of vegetation classified for management under the Agreement. Individual projects would be subject to all applicable federal, state, and local regulations including the Agreement. The Agreement maps from the Inyo County Water Department would be used in the future during project-level analyses, which would ensure that proposed projects would not be located in an area that would conflict with the Agreement. Future solar projects on LADWP-owned lands or management areas in the OVSA would be subject to the terms and conditions of the Agreement and MOU.

Response 418-6: Vegetation cover described in the PEIR is described at a programmatic level in Section 4.4. Without project-specific information, it is not feasible to classify vegetative cover in the SEDAs and OVSA at an on-the-ground level of detail and not practicable as circumstances may change in some instances. Individual projects will be required to prepare a project-specific environmental analysis that would include habitat classification and an evaluation of potential impacts to the biological resources present as prescribed in the biological resources mitigation measures. Protected biological resources, including sensitive habitats, wildlife, and plant species would be avoided to the extent practicable. Where complete avoidance is not feasible, the appropriate minimization and mitigation measures would be developed in accordance with the appropriate regulatory agency (CDFW and/or USFWS).

Response 418-7: The letter's closing statement expresses opposition to the proposed REGPA. The County undertook an extensive public outreach and information gathering campaign prior to and during preparation of the Draft PEIR. The public comment period for the Draft PEIR opened on November 5, 2014 and was originally slated to close on December 19, 2014, meeting the mandated 45-day comment period per Section 15105 of the State CEQA Guidelines. However, the County received multiple requests from potential reviewers of the document to extend the comment period. Accordingly, on December 4, 2014 the County approved the extension of the public comment period to January 14, 2015 (a total comment period of 71 days). The County is providing responses to all written comments received during the public comment period, in accordance with CEQA.

From: Beth Porter <bsennettporter@yahoo.com>
Sent: Tuesday, January 13, 2015 10:01 PM
To: Cathreen Richards
Subject: Public Comment on REPGA Draft PEIR
Attachments: SolarEnergy.gif

Inyo County Planning Department
Cathreen Richards, Senior Planner
PO Drawer L
Independence, CA 93526

REF: REPGA Draft PEIR – Public Comment

Dear Ms. Richards,

Thank you for the opportunity to comment on the Inyo County REGPA Draft PEIR. I will present my most heartfelt comment first. It is evident from the pages of the Planning Department website that the County feels this PEIR is an unnecessary document written only to appease the Center for Biological Diversity. Recent actions taken by the County to approve solar projects fly in the face of any intent to preserve or defend the natural beauty of ALL of Inyo County – especially the Munroe Solar Project in Olancha. Figure 2-4c of the PEIR outlines the areas that have been examined as suitable for consideration for renewable energy development. The area encompassed by the Munroe Solar Project is NOT within the boundary of any area being considered for potential development.

419-1

The residents of Olancha objected vehemently to the location of this project and were IGNORED by all concerned in the County and most especially by our own representative, Matt Kingsley. In light of this action there is nothing in this massive document to make me feel confident that the County will EVER consider the opinions of the residents of Olancha/Cartago in any future development projects. Many people in our community feel that we have been bullied and insulted by the County Administration. It has been expressed by many that it is the County's intent to industrialize Olancha and destroy its value as a residential community. Development projects, such as the Munroe Solar Project, don't happen in Bishop, Big Pine, Independence, or Lone Pine; but no one seems to care about the Olancha/Cartago area or those who live here. Our voices and needs are ignored as our tax dollars are sucked into the County coffers.

I would like to make it very clear that I am not unfamiliar with documents of this sort, as I have in the past been involved in producing such documents. This particular document, however, is so massive that it is virtually unreadable and defies understanding. There is so much 'legalese' and convoluted verbiage that much of it makes no sense and is impossible to follow. There is very little of substance that can even be commented on. It is evident that the County is merely doing this as an exercise in appeasement; this is the lesser of two financial evils – paying for a PEIR or paying attorneys to fight the Center for Biological Diversity.

This plan is nothing but a very large ZONING regulation indicating what areas are open to renewable energy development. The County has already shown that they can, at will, re-zone any area in the County to serve whatever purpose they want. The Munroe Project is a perfect example of this. The project area was originally zoned residential, not suitable for an industrial solar project. A zoning change is a discretionary action,

file:///S:/..._REGPA/CEQA/PEIR_Comment_Letter/400_Private/419_PRV_Public%20Comment%20on%20REPGA%20Draft%20PEIR.txt[1/19/2015 11:38:41 AM]

thus the proponent had to persuade you (County Planning) to change it. It simply isn't true that Inyo County had no choice; this teaches me that if you are willing to do it here, in Olancha/Cartago, that you are willing to do it anywhere.

419-1
(cont'd)

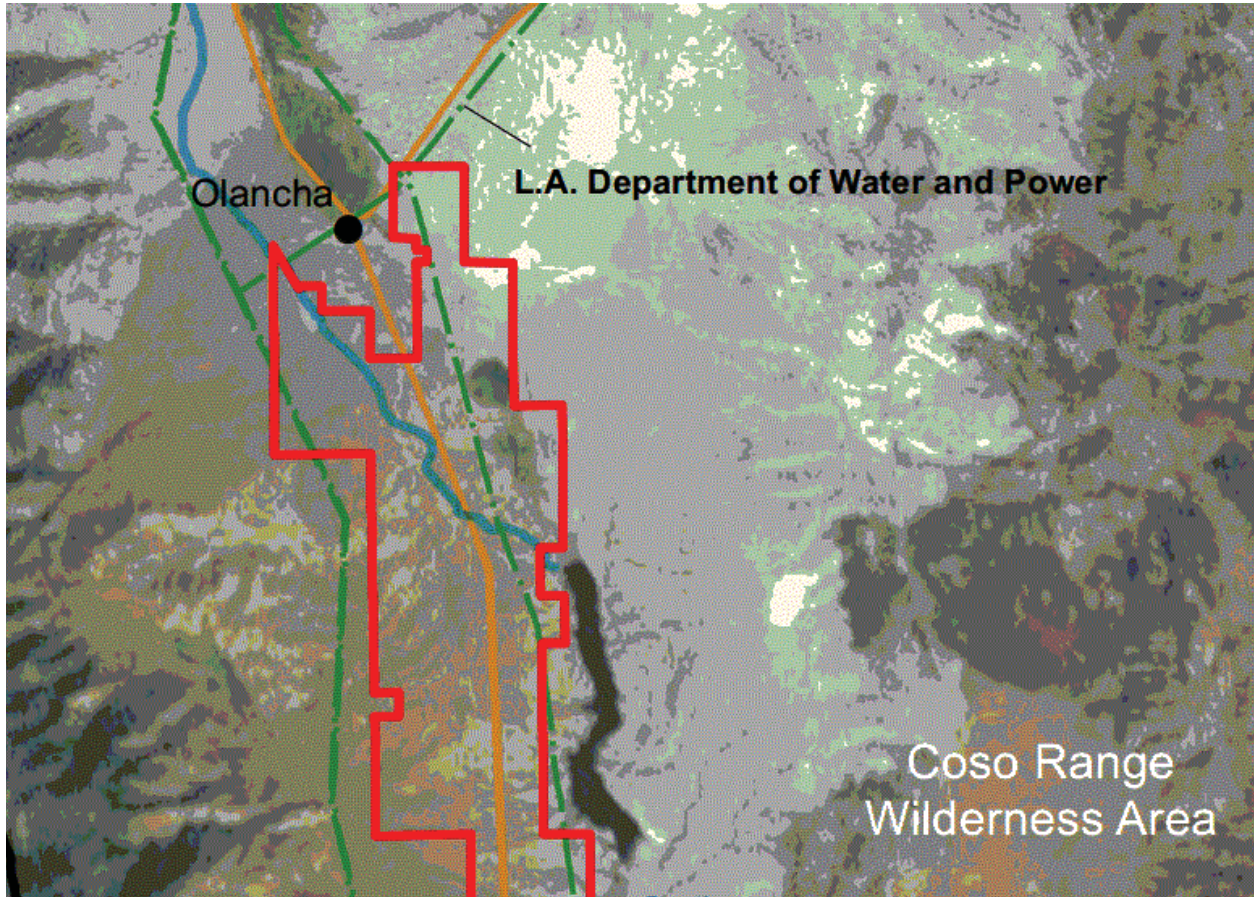
We can object, but have no say because we CANNOT VOTE on any changes. People who do not care about our community make all the decisions. Sort of flies in the face democracy; like taxation without representation.

Sincerely,

Beth Porter Olancha, CA

A hard copy of this letter has been mailed to your address.

file:///S:/..._REGPA/CEQA/PEIR_Comment_Letter/400_Private/419_PRV_Public%20Comment%20on%20REGPA%20Draft%20PEIR.tx[1/19/2015 11:38:41 AM]



SEDA Location: Rose Valley

INYO COUNTY

RENEWABLE ENERGY GENERAL PLAN AMENDMENT - PEIR

Figure 2-4c

Response to Letter 419: Beth Porter

Response 419-1: In 2011, the first REGPA was adopted and later rescinded due to litigation over the adequacy of the CEQA document that addressed it. The intent of this PEIR is to provide a comprehensive analysis of the potential environmental impacts associated with the new REGPA. It is the intent of the REGPA to direct and constrain where potential future renewable energy projects may be located to minimize impacts to resources, especially from large-scale solar projects. The SEDAs have been identified to direct and constrain utility scale and commercial scale (referred to as distributed generation in the Draft PEIR) solar development, such as the Munro Solar Project in the County. The Munro Solar Project is a 4 MW, alternating current solar PV generating facility located on private land south of Olancho. Power generated from this project would be distributed locally using existing power lines, and would take advantage of LADWP's feed-in-tariff program. Development projects like the Munro Solar Project are generally considered to have fewer impacts to resources than larger utility scale projects. It should be noted that the REGPA is a General Plan Amendment and as such does not present or analyze zoning information.

The comment states that the PEIR is substantial in size and difficult to understand. The analyses and information presented in the PEIR, a program level document, is intended to provide a framework to help guide and constrain future renewable energy development within the County. Accordingly, the PEIR provides extensive background information on a number of pertinent topics to create a framework upon which future, project-specific, environmental analyses would be tiered. The associated information is provided in the most concise manner feasible, although incorporation of a certain amount of discussion is required to appropriately describe the wide range of resources present in the County and comply with applicable County and State guidelines for environmental analysis.

The public comment period for the Draft PEIR opened on November 5, 2014 and was originally slated to close on December 19, 2014, meeting the mandated 45-day comment period per Section 15105 of the State CEQA Guidelines. However, the County received multiple requests from potential reviewers of the document to extend the comment period. Accordingly, on December 4, 2014 the County approved the extension of the public comment period to January 14, 2015 (a total comment period of 71 days).

From: philipana@aol.com
Sent: Wednesday, January 14, 2015 5:45 PM
To: Cathreen Richards
Subject: RE: REGPA comment

Catherine
Richards
Philip Anaya
Inyo County
Planning
48 Longview Dr

23

Bishop ,Ca. 93514

January 14, 2015

Dear Ms .Richards ,

The following is a comment regarding the PEIR REGPA:

The PEIR REGPA Documents do not include a glossary of terms and Definitions needed for adequate understanding of both the REGPA process and the Documents . Please consider an inclusion of a glossary in the Final REGPA PEIR and these definitions of the three main types of Renewable Energy Projects that are being considered for inclusion into the Inyo General Plan.

420-1

Distributed Generation Projects .

Projects in this category are intended for on-site utilization of the renewable energy generated. The size of the Projects are limited to that on-site utilization to the energy generated . Grid tie systems are permitted but these projects are not intended for the local or the distant utilization of the energy generated.

Feed in-Tariff Generation Projects.

Projects in this category are intended for local community distribution of the energy generated . The size of the Projects are to comply with the availability of the feed in-tariff program of the local Utility Provider and the local consumption of energy generated. These projects are not intended for Interconnection to Transmission Lines for the export of energy generated .

Industrial Scale Generation Projects (Utility Scale)

Projects in this category are for the generation of renewable energy and Interconnection to transmission lines for export to distant localities. The energy generated is not intended for local distribution . The size of the Projects are to be limited in all of Inyo County by the available capacity in the existing Transmission Lines . It is the intent of this category of Projects to help meet the California Goals of Renewable Energy Generation and at the same time maintain the current Inyo County Land Use Designations that protect and maintain the landscapes and character of Inyo County as described in the Introduction and Description of the Inyo County General Plan.

The intent of this comment is to provide for a consistent and clear understanding of the Process and the technical terms of this REGPA. Further there is currently an adequate

420-2

file:///S:/...S/COI-ALL/COI-01_InyoCo_REGPA/CEQA/PEIR_Comment_Letter/400_Private/420_PRIV_RE%20REGPA%20comment.txt[1/19/2015 11:38:58 AM]

supply of renewable energy generation that meets our Inyo County needs . Inyo County serves the interests of California best by being an accessible destination of the process and the wonders of nature and of the evolution of the earth and the PEIR REGPA should a viable alternative that reflects those goals and objectives.

420-2
(cont 'd)

these comments, Philip Anaya

Thank You for consideration of

file:///S:/...S/C/COI-ALL/COI-01_InyoCo_REGPA/CEQA/PEIR_Comment_Letter/400_Private/420_PRIV_RE%20REGPA%20comment.txt[1/19/2015 11:38:58 AM]

Responses to Letter 420: Phillip Anaya

Response 420-1: The comment requests the inclusion of a glossary in the Final PEIR. A list of acronyms and abbreviations is included in the document immediately following the table of contents. Additionally, definitions for terms that require clarification are provided throughout the document. Specifically, Section 3.0, Project Description, provides definitions for the terms described by commenter, including Distributed Generation Projects (which are referred to as commercial scale projects in the Final PEIR), Feed in-Tariff Generation Projects, and Industrial Scale Generation (Utility Scale) Projects.

Response 420-2: The comment includes the opinion that the current supply of renewable energy produced in the County is sufficient, and notes that the County best serves the interests of California by being an accessible natural environment destination; the comment also states that the REGPA and the associated PEIR should reflect this objective. A main objective of the REGPA is to direct and constrain the siting of potential future projects to areas that would have lesser impacts, and to reduce potential adverse effects to the natural environment in the County. Without the implementation of the REGPA, solar energy project could be proposed throughout the County (including areas with sensitive resources), with the REGPA framework intended to help restrict the siting of potential future projects.

Letter 421

From: Phyllis Murakawa <synerchi@aol.com>
Sent: Friday, November 14, 2014 6:44 PM
To: Cathreen Richards
Subject: Re: Renewable Energy General Plan Amendment - Public Comment Hearing

Thank you

| 421-1

Sent from my iPad

On Nov 14, 2014, at 4:59 PM, Cathreen Richards <crichards@inyocounty.us> wrote:

<PN for Draft PEIR Comment Hearing December 3 2014.pdf>

file:///S:/...21_PRV_Re%20Renewable%20Energy%20General%20Plan%20Amendment%20-%20Public%20Comment%20Hearing%20.txt[1/19/2015 11:39:26 AM]

Response to Letter 421: Phyllis Murakawa

Response 421-1: This comment does not raise substantive environmental issues relating to the PEIR and therefore further response is not required.

From: Gann Matsuda <gmatsuda@icloud.com>
Sent: Friday, November 14, 2014 11:50 PM
To: Cathreen Richards
Subject: Re: Renewable Energy General Plan Amendment - Public Comment Hearing

Given the bullshit they wrote in the PEIR, you're going to have to head up to Independence again...

| 422-1

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Gann Matsuda
gmatsuda@icloud.com

> On Nov 14, 2014, at 4:59 PM, Cathreen Richards <crichards@inyocounty.us> wrote:
>
>
> <PN for Draft PEIR Comment Hearing December 3 2014.pdf>

file:///S:/...ate/422_PRIV_Re%20Renewable%20Energy%20General%20Plan%20Amendment%20-%20Public%20Comment%20Hearing.txt[1/19/2015 11:39:58 AM]

Response to Letter 422: Gann Matsuda

Response 422-1: This comment does not raise substantive environmental issues relating to the PEIR and therefore further response is not required.

January 14, 2015

Josh Hart, Inyo County Planning Director

Re: REGPA comments

Mr. Hart;

I appreciate the opportunity to comment on the current REGPA Draft EIR. To have a renewable energy element in the General Plan is positive, as it narrows the possibilities for random project proposals throughout the county. I feel very strongly that this draft must go through another revision before it is acceptable. There remain many unclear and disturbing details in this version. With time constraints, I will address only a few of my issues: 423-1

1. The SEDA placement should be reduced to areas that would be free from “Significant and Unavoidable impacts”. This is a low standard for a PEIR that is intended to have eliminated sensitive areas of development. 423-2

2. Each project proposal should have a full EIR performed prior to permitting. There should be no instance where this very cursory PEIR would allow a negative declaration determination made without thorough field surveys. Please remove this option from the document. Distributed projects of <20MW also need an EIR performed. It is easy to foresee several 120 acre sites leveled and cleared without the proper environmental and cultural reviews. Desert ecosystem is sensitive and unrecoverable to industrialization. 423-3

3. The alternatives for *PV Only* and *Distributed Only* were too easily dismissed. Neither violated the stated objectives. There is no listed objective for thermal solar. You will find that thermal solar is very strongly rejected by the citizens of Inyo County. By dismissing *PV Only* based on this false criterion, IC is actively promoting a type of energy plant that is unacceptable to IC voters. 423-4

4. The megawatt cap set for the Western Solar Energy Group was clearly intended as an absolute cap for distributed and greater renewable energy. The 250MW was taken from the available excess capacity of the Inyo-Rinaldi Transmission Line, therefore would discourage LADWP from increasing the line’s capacity or the building of new transmission through the Owens Valley and the 395 corridor. Projects in production or in review should be limited by this cap and not allowed as additions to it. Nothing in the Board of Supervisors’ comments asking for the draft revision would indicate otherwise. The position to not include current RE projects in the cap is totally arbitrary and should be removed from the amendment. 423-5

5. There is no calculation of the line loss due to great distances the generated electricity must travel to destinations in the Los Angeles area. Please add this information to the evaluation of needed renewable energy. 423-6

6. GHG emission is included in the CEQA air quality element. The carbon sequestering losses from removal of desert plants and carbon release from the plants as well as nonorganic clays were not evaluated. Please evaluate the carbon emission impact trade off of open desert clearing with energy from fossil fuel energy. 423-7

7. Removal of Owens Valley SEDA does not protect Owens Valley, as it turns out, because of the unilateral determination that current proposals are outside REGPA. This is not the understanding the public had at the time OV was removed. The process of the current Owens Valley Study Area is secretive and suspicious. It is unnerving to see its size dramatically increased from the original, as well.

423-8

I look forward to your response of these concerns.

Sincerely,

April Zrelak
aoz@qnet.com

Responses to Letter 423: April Zrelak

Response 423-1: A main objective of the REGPA is to direct and constrain the siting of future renewable energy projects to areas that would have lesser impacts, and to reduce potential adverse effects to the natural environment in the County. Without the implementation of the REGPA, solar energy project could be proposed anywhere in the County (including areas with sensitive resources), with the REGPA framework intended to help restrict the siting of potential future projects.

Response 423-2: The PEIR identifies that significant and unavoidable impacts would potentially occur in the areas of aesthetics, biology, and cultural resources. This is a conservative conclusion based on the uncertainty, at a PEIR level, of a subsequent project's actual impacts. The SEDA boundaries depicted in the Draft PEIR were identified based on information described in the Opportunities and Constraints Technical Study (Appendix D of the PEIR). The SEDAs are intended to direct and constrain future solar developments to areas in the County identified as possibly supporting a lower level of resource sensitivity, and that are located near existing transmission facilities.

Potentially significant impacts that could occur as a result of renewable energy projects being developed in the identified SEDAs were identified at a programmatic level and all feasible mitigation is prescribed in the PEIR; however, without project-specific information coupled with a project-level analysis under CEQA, it can't be stated with certainty that these potential impacts would be reduced to below a level of less than significant at a programmatic level. That is why the PEIR reaches the conservative conclusion that impacts from future projects remain potentially significant and unavoidable.

As described in Section 2.4, the Renewable Portfolio Standards (RPS) is the primary driver for new utility scale renewable energy development in California, where implementation of the REGPA would effectively help California achieve its renewable energy targets set forth by the California Public Utilities Commission. The County will prepare a Statement of Overriding Considerations per Section 15093 of the State CEQA Guidelines that identifies the significance and influence of the RPS on the REGPA as well as the economic, legal, social, and/or technological benefits of implementing the proposed project in light of the unavoidable impacts identified in the PEIR. This Statement will be considered along with the Draft PEIR by the County Board of Supervisors in late March 2015.

Response 423-3: All future projects under the REGPA would be subject to project-specific environmental review. This process will use the types of impacts and mitigation measures outlined in the PEIR as guidelines. Depending on the size and location of the development and the technology used, a Subsequent EIR may be required. However, the REGPA also encourages small scale, photovoltaic (PV) solar facilities to be constructed which may not require a full EIR. As stated in Section 1.2 of the PEIR:

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

It should be noted that under Title 21 of the Inyo County Code concerning renewable energy development, any person who proposes to construct an electric transmission line, solar thermal renewable energy facility or a PV renewable energy facility in the County must first obtain a Renewable Energy Permit, a Renewable Energy Development Agreement or a Renewable Energy Impact Determination. A Renewable Energy Impact Determination applies to projects over which the County has limited authority because the project is located on federal or state land or is subject to the permitting jurisdiction of the California Energy Commission.

Under Title 21, the issuance of a Renewable Energy Permit is subject to CEQA, and the County Planning Commission must conduct a noticed public hearing before considering approval of such a permit. The Planning Commission must find that there has been compliance with CEQA before a permit can be issued. In addition, "as a condition to the issuance of such a permit, the Planning Commission may impose such reasonable and feasible mitigation measures as it finds to be necessary to protect the health, safety, and welfare of the county's citizens, the county's environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project." Finally, the Planning Commission is required to impose as a condition of approval, a plan for the reclamation/revegetation of the project site at the time of decommissioning of the project and the Planning Commission shall require financial assurances from the applicant to ensure that the reclamation plan will be fully implemented.

Concerning Renewable Energy Development Agreements, Title 21 provides that such agreements may be entered into by the County and a project applicant in lieu of obtaining a Renewable Energy Development Permit. Renewable Energy Development Agreements are subject to CEQA and must be approved by an ordinance adopted by the Board of Supervisors following a noticed public hearing. Prior to approving such an agreement, the Board must find that there has been compliance with CEQA. Renewable Energy Development Agreements must include a reclamation plan, acceptable financial assurances to ensure full implementation of the reclamation plan, be consistent with the county general plan and be enforceable by injunctive relief or other enforcement mechanisms under law. In the Renewable Energy Development Agreement, the Board of Supervisors may require such mitigation measures or modifications of the project as it finds necessary to protect the health, safety, and welfare of the county's citizens, the county's environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project. This PEIR provides a framework for these subsequent project analyses, but specific projects would still be assessed on an individual level; all projects under CEQA are legally afforded the same public review process.

Response 423-4: Project alternatives are discussed and analyzed in Section 6.0 of the PEIR. The County agrees that there is no project objective requiring solar thermal development. It should be noted that none of the alternatives have been dismissed, as the County Board of Supervisors will consider adoption of either the proposed project or a project alternative during a public hearing in March 2015. As stated in Section 6.3.2, the Solar Photovoltaic Only Alternative would meet all of the project objectives outlined in Section 4.2 of the PEIR. This alternative would remove the more controversial types of solar energy projects from consideration because solar thermal applications would be denied by the County outright. This alternative would likely result in less impacts to aesthetics, biological resources, and cultural resources, although it would not reduce the impacts to below a level of significance.

As stated in Section 6.3.3, the Commercial Scale Only Alternative (referred to as the Distributed Generation Only Alternative in the Draft PEIR) would not meet all of the project objectives because by

limiting projects to 20 MW and smaller, the alternative would be less supportive of the State's goal of reduced reliance on petroleum-based energy sources in favor of renewable energy resources. This alternative would result in fewer impacts to all environmental topic areas analyzed in the PEIR, but some impacts would remain significant and unavoidable. Section 6.3.3 has been amended to delete an incorrect reference that this alternative would result in less than significant impacts. Table 6-2 correctly shows that the impacts to aesthetics would remain similar to the proposed project, while impacts related to biological and cultural resources would be less than the proposed project (but still significant and unavoidable).

Response 423-5: The megawatt and acreage caps for the proposed solar energy group areas would apply to both existing and future project proposals after adoption of the REGPA by the County.

Response 423-6: The transmission analysis conducted for the County is included in the Opportunities and Constraints Technical Study which is Appendix D of the Draft PEIR. As outlined in the discussion of Transmission versus Distribution in Section 4.3 of the OCTS, "the Energy Information Administration estimates that annual electricity transmission and distribution losses average about 7 percent of the electricity that is transmitted in the U.S. The California Energy Commission has estimated an average of 5.4 to 6.9 percent system loss in California between 2002 and 2008. Because renewable energy developed in Inyo County would be a large distance from load centers, transmission losses would be at the higher end of the typical range."

Response 423-7: Greenhouse gas emissions are evaluated in Section 4.7 of the PEIR. The thresholds of significance evaluated are based on Appendix G of the State CEQA Guidelines, and do not include an evaluation of carbon sequestering loss from vegetation removal and releases related to vegetation and nonorganic clays. The analysis does include, however, potential GHG-related impacts from the construction-related equipment that may be involved in vegetation removal. The carbon sequestration potential lost due to renewable energy development would be expected to be minimal and offset by the carbon reductions of the proposed renewable energy facility. Also, carbon sequestration could continue on sites on which vegetation is retained and/or enhanced. The amount of actual vegetation that might be removed is project specific and cannot be evaluated at the programmatic level. Mitigation measures have been prescribed in Section 4.4.5 of the PEIR to avoid, minimize, and/or mitigate the removal of vegetation.

Response 423-8: The Owens Valley is included in the currently proposed REGPA as a study area for which specific criteria apply demarcated by the boundary of the general valley area, and does not correlate with a proposed development area. Due to the unique and sensitive resources present, multiple jurisdictions and existing planning and land management policies dictate land uses in the Owens Valley.

Section 3.3.2 of the PEIR includes a description of the OVSA, including the list of separate potential criteria for development siting, which has been revised as follows:

- (1) only utilize existing transmission facilities and corridors;
- (2) guide the development to disturbed lands, including over and along the Los Angeles Aqueduct;
- (3) consider encouraging development at solid waste and wastewater treatment facilities, on private lands, in small scale (e.g., roof tops) and ~~distributed generation~~ commercial scale (20 MW or less) arrays, and around communities in smaller arrays (~~10-6 MW~~ or less);
- (4) mitigate potential impacts to the environment, society, culture, and economy of the County;

(5) work to avoid significant alterations to visual resources; and (6) minimize intertie facilities.

Inyo County Planning Department
 P. O. Drawer L
 168 N. Edwards Street
 Independence, California 93526

January 14, 2015

Dear Inyo Planning:

I now reside 2,500 miles from Inyo County and mostly over water at that. Long canoe trip. This note concerns the Inyo County Renewable Energy General Plan Amendment. Why write? Renewable energy is not just a local issue it's a global one. Also I was, and to some extent still am, concerned about the economic health of some of the small towns in the county especially Independence. "Disadvantaged Community" is not a nice phrase. Renewable energy is pretty unique, it is truly renewable. Solar and wind are not going away unlike many other natural resources.

424-1

So it makes sense to have a plan for a county with an abundance of renewable energy resources. Of the big three, solar, wind, and geothermal too bad the county wants to eliminate wind from the REGPA. The wind will still blow, and wind turbines are very beautiful and taxable! Geothermal is covered in planning leaving solar and it is the Big Kahuna.

What is really important is to look at this part of the planning process, the REGPA alternatives, in the long term and as a start. What will solar energy technology look like in 20 years? Almost certainly not like what is available today, especially considering some new advances in and clever ideas for storing energy. Some changes in solar will be for the better economically too.

So, I (still) favor planning, and the Preferred Project is also my preferred alternative. I hope for some future development in Owens Valley which has, as I have stated before, the resource, transmission, towns that can benefit, and some of the most beat up land in the county. Pristine it is not. Those who claim so have not seen the really stunning parts of the county, or are just plain lying.

Strangely enough I also like the No Project Alternative. It appeals to my libertarian side. By default it leaves the county more open to renewable energy development. *"No Project Alternative would not include General Plan policy updates for solar energy development within the County. Significant portions of the County could be impacted by the development of solar and/or wind energy projects (all of which would be subject to CEQA review). The County would be limited in its ability to discourage project applicants from submitting renewable energy development proposals due to lacking regulatory guidance on the location, siting and size of such projects."* Interesting. That's from the PEIR and it is not restrictive like the Preferred Project. But the Preferred Project nudges it out.

I looked at quite a bit of the PEIR details and overall it looks like a suitable CEQA document. Lots to quibble about in details but overall a good environmental assessment of impacts and mitigation.

Here is what I am sure many of your REGPA comments will say about renewable energy.



It's an Inyo County thing. Go planning!

Sincerely,

James M. Stroh

Response to Letter 424: James M. Stroh

Response 424-1: The comment letter recognizes the planning efforts put forth by the County to develop renewable energy opportunities. The comment notes a preference for the Preferred Alternative as well as the No Project Alternative; this comment does not raise specific environmental issues or contest the adequacy of the Draft PEIR and further response is not required.

Dear Inyo County Planning Department,

I am writing to comment on the Inyo County Renewable Energy General Plan Amendment. I was born in Bishop and grew up in Lee Vining, and I will forever consider the Eastern Sierra to be my home. The aesthetic beauty and biological richness of the Eastern Sierra are arguably the most valuable assets of our region—not only for the quality of life of Inyo County residents, but also for our tourism-based economy. Renewable energy development will impact Inyo County’s scenery and biological resources, and I applaud your efforts to create a General Plan to guide appropriate energy development in the region.

425-1

I fully agree that renewable energy is crucial to the future of our society and must be developed. However, in much of California, we have thoughtlessly fast-tracked large solar projects (like the Ivanpah solar array) that destroy undeveloped, often relatively pristine, areas. These projects not only destroy much-needed habitat for desert plants and animals, but also disrupt the vistas and solitude that people go to the desert to enjoy. Ivanpah also uses destructive thermal-solar technology that uses unsustainable amounts of precious desert water, and literally fries birds that fly through its ultra-heated beams of light reflected off of mirrors. Projects like these help us to use less carbon, but can hardly be called “green” as they destroy habitat and directly kill wildlife. The recognition that better planning is necessary for desert renewable energy has led to such laudable planning efforts as the Inyo County REGPA.

Inyo County, through the current General Plan amendment process, has the opportunity to be a leader in developing appropriate renewable energy—the kind that helps us address global warming without sacrificing our local environment, wildlife, and tourist economy. Excellent methods exist for the implementation of appropriate renewable energy, all of which are listed as options in the REGPA. Specifically, the REGPA mentions the options of

- Pursuing renewable energy development only on previously disturbed land, including not building new transmission lines
- Only pursuing solar photovoltaic development (and excluding solar-thermal)
- Encouraging development of distributed solar
- Solar arrays atop or adjacent to the Los Angeles Aqueduct

The current REGPA document acknowledges that the plan as proposed will have unavoidable negative consequences for both scenic and biological values in Inyo County, and that the “Development on Previously Disturbed Lands Only” and “Solar Photovoltaic Only” alternatives would be environmentally superior. I implore you to take this recommendation to heart and change the plan to a combination of these superior alternatives, in which only solar photovoltaic is allowed, and only on previously disturbed land.

Why only solar-photovoltaic? Because solar-photovoltaic does not waste water and fry wildlife like solar-thermal does. Water is a precious commodity in Inyo County and we can’t afford to pump more groundwater just to boil it away to spin turbines.

Why only on previously disturbed land? Because tourism is the life-blood of our entire region, and our undeveloped wild lands are why people visit the Eastern Sierra. Most Californians do not have the opportunity to look out at 100 miles of wild mountains and desert—and when they come to Inyo

County they fall in love with it precisely because it feels untamed and free. Put an industrial solar array in the middle of view and it won't feel the same. Another good reason is that with global warming threatening our wildlife and plants, they will need all the habitat they can get, in order to adapt to changing conditions.

425-1
(cont'd)

In following with the suggestion of only building on degraded land, I feel strongly that the Solar Energy Development Areas that do not have previously existing power transmission lines nearby should be excluded from the REGPA. The REGPA states that several of the SEWAs would tie into a "conceptual" transmission line in Nevada—I do not feel that a conceptual transmission line should be considered the same as an existing transmission line, and therefore feel that the Charleston View or Sandy Valley SEDAs should be considered inappropriate for development and removed. The REGPA also states that "viewer sensitivity within the [Trona, Charleston View, Chicago Valley, and Sandy Valley REGPAs] would be expected to be lower than the SEDAs along 395". I strongly disagree with this statement, and feel that viewer sensitivity is even greater for motorists and other visitors to the more remote areas of Inyo County—people seeking out these more remote areas are probably doing so because they value the vistas, possibly more so than the average motorist passing through on 395. The negative visual impact is another good reason to exclude the Charleston View and Sandy Valley SEWAs.

425-2

I also recommend that, to preserve unique biological and geological resources, the Owens Lakebed (Owens Lake SEWA), areas adjacent to Fish Slough (i.e. Laws SEWA), and the Fossil Falls area (Rose Valley SEWA) be excluded from renewable energy development. The remnant wetlands of Owens Lake provide critical wildlife habitat, as evidenced by the extensive list of special status species listed for this area in the REGPA. Fish Slough is critical habitat for several species that are only found in the Owens Valley worldwide, such as the Owens pupfish and Fish Slough milk-vetch, and industrial development adjacent to this area would be irresponsible, especially solar thermal which would use extensive amounts of water. Lastly, Fossil Falls is an incredible and unique place that I visited as a child. I still remember being astonished at the incredible geology there, including the visual impact of Red Hill, and distinctly remember my wonder at the fairy shrimp that appear in ephemeral pools there after infrequent desert rains. Development in or near Fossil Falls would rob future generations of a similar experience of wonder for the secrets of the desert.

425-3

In conclusion, I very much appreciate your effort to responsibly guide renewable energy development in Inyo County. Much is at stake, for once we develop the Eastern Sierra, we will never be able to get back the aesthetic and biological resources we lose. I hope these suggestions are helpful, and that during the planning process you deeply consider the importance of vast desert vistas, incredible animals unique to Inyo, and the wonder of children and adults alike that such a fantastic, wild place as Inyo County still exists.

Sincerely,
Ryan Carle

Responses to Letter 425: Ryan Carle

Response 425-1: The comment notes an opinion that better planning is necessary for desert renewable energy development, and supports planning efforts to improve renewable development such as the REGPA. The comment also notes the potential negative effects of renewable energy on the sensitive resources within the County, and expresses concerns related to certain types of renewable energy development, such as solar-thermal technology, noting potential effects on water and biological resources (addressed in Sections 4.9 and 4.4, respectively). The comment also notes support for a number of renewable energy methods described in the alternatives section of the PEIR, such as renewable energy on disturbed lands, PV only, and distributed generation (referred to as commercial scale in the Final PEIR), stating that these options would result in fewer environmental effects while still achieving many of the benefits afforded through renewable energy. Section 6.0, Project Alternatives, of the PEIR examines these alternatives in depth, and notes that while some of the alternatives presented may result in fewer negative environmental effects as compared to the preferred alternative, none of the alternatives discussed would meet the project objectives to the same degree as the project.

Response 425-2: The commenter states that future renewable energy development projects should only be located near existing transmission lines (excluding conceptual transmission lines) so that their impacts are minimal. The commenter suggests that the Charleston View and Sandy Valley SEDAs be removed since they are not immediately located near an existing transmission facility. It is the intent of the REGPA, as outlined in Objective 5, to locate future renewable energy projects in close proximity to existing transmission facilities in order to reduce impacts to sensitive resources.

The commenter disagrees with a statement in the PEIR that viewer sensitivity would be lower within several of the SEDAs that have no major highways. The PEIR notes that there are fewer viewers in the Trona, Charleston View, Chicago Valley, and Sandy Valley SEDAs than there are in the Laws, Owens Lake, Rose Valley, Pearsonville SEDAs and the OVSA. Although individual visual effects to persons driving down rural roads in the SEDAs would remain potentially significant, the magnitude and scale of the negative environmental effects would generally be lower in areas with fewer people to view the development. Additionally, the PEIR concludes in Section 4.1, Aesthetics, that future utility scale, commercial scale, and community scale solar energy projects under the REGPA could result in potentially significant visual impacts in all SEDAs, including the SEDAs described as having “fewer viewers.”

Response 425-3: The comment notes a request for the exclusion of the Owens Lake, Laws, and Rose Valley SEDAs to prevent biological and geological impacts. The PEIR assesses biological resources (Section 4.4) and geological impacts (Section 4.6) associated with the REGPA at the program level, and prescribes that individual projects proposed under the REGPA will require future project-specific environmental analysis to prevent potential effects to these resources to the maximum extent practicable. Projects will be subject to federal, state, and local regulations including the California Endangered Species Act (CESA) and Federal Endangered Species Act (FESA), where all listed species like the Owens pupfish are afforded protection. Furthermore, the County recognizes the geologic uniqueness of the area and the experience that it provides to both residence and visitors. The County is committed to preserving the unique characteristics of the natural environment through responsible planning and development, and therefore has proposed the REGPA which would constrain potential renewable energy development to areas that would have lesser impacts, and which requires project-level assessment for future individual proposed projects.

January 14, 2015
REGPA PEIR Comments

1) The PEIR (pp 2-10 - 2-23), neither acknowledges the existence of the “California Energy Efficiency Strategic Plan (CEESP) <http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/eesp/>) nor advances its implementation. The PEIR preferred alternative should further the implementation of the CEESP by promoting energy efficiency and point-of-use-generation. Instead, the PEIR’s preferred alternative does the opposite – it undermines the CEESP by promoting construction of remote, non-point-of-use generation facilities with inefficient, long-distance transmission. The PEIR should be withdrawn until a CEESP-compliant preferred alternative can be developed and analyzed.

426-1

The CEESP sets explicit priorities for how California’s energy needs should be met. Notwithstanding its omission from the PEIR, the CEESP is state policy and, per Public Utilities Code Section 454.5(b) (9)(C), it requires that utilities first attempt to meet resource needs “through all available *energy efficiency and demand reduction* resources ...”[italics added] Energy efficiency (which includes rooftop solar) is the top priority because, among other reasons, it is “the most environmentally sensitive resource” for meeting energy needs. In other words, state policy articulated in CEESP makes the building of environmentally destructive, remote, non-point-of use electric generation facilities with associated inefficient, long-distance transmission a last resort for meeting energy needs.

Unfortunately, the draft PEIR treats construction of environmentally destructive, remote, non-point-of-use generation facilities as a first resort in Inyo County and so stands California energy policy on its head. All PEIR alternatives encourage construction of these facilities without regard to the question of whether equivalent volumes of energy could be acquired through increases in efficiency, as required by CEESP. Even the draft PEIR’s “Distributed Generation Only Alternative” -- which, by its name, would appear to facilitate only point-of-use generation -- in fact, encourages non-point-of-use facilities producing up to 20 MW.

Increases in energy efficiency can produce far more electricity, with no significant impacts in Inyo County, than any of the REGPA alternatives. For example, according to Bill Powers, (<http://www.gridsolar.com/uploads/AdvisoryBoardBios/WilliamPowers.pdf>) existing California rooftops and parking lots have the potential to generate over 100,000 MW of solar power and less than 5% of this potential had been developed as of December 2014. This un-developed potential exceeds by two orders of magnitude the generating capacity of the PEIR preferred alternative.

Inyo County leaders and Planning Department staff asserted repeatedly in REGPA-related meetings in spring 2014 that industrial-scale solar generation was both inevitable and required by state policy. No county leader or Planning Department staff member ever publically disclosed the existence of the CEESP, much less the fact that CEESP seeks to render un-necessary the development of the environmentally destructive, inefficient, non-point-of-use energy generation that county leaders have so vigorously promoted and claimed to be inevitable.

Not only are remote, non-point-of-use generation facilities not inevitable, -- there is mounting evidence they are no longer even economically viable. Case in point: in March 2014, Barclay’s Bank downgraded its rating of the entire electric sector of the U.S. high-grade corporate bond market to “underweight”. It did so because it sees “long-term challenges to electric utilities from solar energy.” According to Barclay’s analysis, “the cost of solar + storage for residential consumers of electricity is already competitive with the price of utility grid power in Hawaii. Of the other major markets, *California could follow in 2017* (italics added)... In the 100+ year history of the electric utility industry, there has never be-

fore been a truly cost-competitive substitute available for grid power. We believe that solar + storage could reconfigure the organization and regulation of the electric power business over the coming decade.” In short, Barclays argues that the traditional business model of electric utilities – based on long distance transmission – is failing due to the ever-lowering price of point-of-use solar and battery storage. It needn’t be stated that Barclay’s is hardly a fringe environmental group. (<http://blogs.barrons.com/incomeinvesting/2014/05/23/barclays-downgrades-electric-utility-bonds-sees-viable-solar-competition/>).

426-1
(cont'd)

The Planning Department, through the PEIR, is proposing to needlessly open large portions of the county to significant – by its own admission -- impacts of energy development because it is either unaware of, or rejects state energy generation priorities set forth in the CEESP. The Planning Department also displays no awareness of the economic reality that remote generation with long distance power transmission is a failing business model. The PEIR should be rewritten so it is untainted by the unjustified idea that Inyo County must accept significant environmental impacts to help meet California’s energy generation goals. The PEIR preferred alternative must be consistent with and promote implementation of the CEESP.

2) In rejecting the Distributed Generation Only Alternative, the PEIR asserts:

426-2

“...this alternative would be less supportive of the State’s goal of reduced reliance on petroleum-based energy sources in favor of renewable energy sources.”

This statement is incorrect because it assumes that construction of environmentally destructive, non-point-of-use generation facilities in Inyo County is essential for the state to meet its goals. This is not true. As noted in comment #1, energy efficiency resources, which have hardly begun to be exploited, far exceed the proposed generation capacity of the preferred alternative.

Not only is the assumption incorrect, it is inconsistent with state energy policy set forth in the CEESP (as noted above). The CEESP prioritizes using energy efficiency resources such as rooftop solar precisely so the environmentally destructive and inefficient plants that the PEIR treats as essential, may not be needed.

Unfortunately, the entire PEIR is premised upon this unwarranted assumption of the need for remote generation facilities in Inyo County. The PEIR should be withdrawn and re-written without this assumption. Its preferred alternative should advance the implementation of state energy policy stated in CEESP rather than undermining it, as the current preferred alternative does.

3) The PEIR fails to exclude certain lands set aside for mitigation and subject to management plans precluding industrial development. Specifically, the Laws SEDA includes DWP land already managed under plans developed as part of the 1997 MOU to the 1991 Inyo LA Long Term Water Agreement. The plans are intended to

426-3

“provide for the continuation of sustainable uses (including recreation, livestock grazing, agriculture, and other activities) will promote biodiversity and a healthy ecosystem, and will consider the enhancement of Threatened and Endangered Species habitats.”

There is no way using these lands for industrial-scale development could be consistent with their use as mitigation and their management according to these plans. Inyo County is a signatory to the 1997 MOU. Proposing to circumscribe a SEDA around land subject to these management goals is an act of bad faith by Inyo County.

This issue was raised repeatedly last spring when the initial REDAs were proposed. The Planning Department responded to the effect that some DWP lands subject to management plans under the MOU are already degraded and the public wants solar on degraded lands. This response didn't address the fundamental issue of bad faith.

426-3
(cont'd)

It should not be necessary to point out that the Planning Department cannot break commitments the county has already made. If the Planning Department wishes to place lands already managed under the terms of the 1997 MOU in a SEDA, it must first modify the 1997 MOU to find alternative mitigation, then change management goals of non-urban DWP land to allow industrial development. To simply ignore the constraints of the MOU, as this PEIR does, is an act of bad faith, and will invite legal challenge. The fact that the Planning Department continues to ignore the MOU land management plans, notwithstanding repeated objections reflects contempt for the public it is supposed to serve.

4) The Planning Department should not designate as "preferred" any alternative which will lead to significant, un-mitigatable impacts. This should be a given – what is the point of planning? The fact that it is not a given reflects the Planning Department's extreme bias in favor of industrial development due to its rejection of, or unfamiliarity with, energy generation priorities set forth in the CEESP (see comment #1).

426-4

5) If SEDAs are circumscribed at all, they should include no land on which industrial development would cause significant impacts. The entire point of the DRECP process which gave rise to REGPA is to identify lands *without* resource conflicts on which permitting may be streamlined. Instead of conducting the analyses needed to identify such lands, the Planning Department is proposing to open large parts of the county without regard to resource conflicts and accept significant impacts. As noted above, promoting environmentally destructive, non-point-of-use generation when there are enormous reserves of energy remaining to be tapped through efficiency measures is completely contrary to CEESP. The Planning Department should not undermine state energy policy (as well as the strongly expressed wishes of the Inyo County public) in the PEIR.

426-5

6) On pg ES-3 it is stated correctly,
"The analysis concluded that significant and unavoidable impacts could occur with respect aesthetics, biological resources, and cultural resources."

426-6

However, on pg ES-6 it is stated incorrectly,

"With the exception of air quality and noise, all significant impacts would be reduced to below a level of significance following implementation of the mitigation measures."

This sort of error in an executive summary calls into question the competence of the preparers of the EIR. Table ES-1 identifies no "air quality and noise" impacts as significant but, instead clearly identifies eight other impacts as "significant and unavoidable": one visual (AES-1); four biological (BIOL1, 3, 18 & 23); two cultural (CUL1a & 2); and one paleontological (PALEO1a)

7) The discussion of the No Build alternative in the Executive Summary is misleading and biased in favor of the project. In discussing the No Build Alternative, on pg ES-4 it is asserted,

426-7

"Significant portions of the County could be impacted by the development of solar and/or wind energy projects (all of which would be subject to CEQA review)."

It is critical that a brief explanation of Title 21 be added to this paragraph so people can better understand the consequences of the No Build alternative. Under the No Build alternative, any proposal would be subject to Title 21 which allows the Inyo County Board of Supervisors (BoS) to reject the project by not certifying the EIR or choosing the No Project alternative. Because decisions of future BoS regarding future projects are un-knowable, it is biased in favor of the project to assert that under the No-Build alternative “significant portions of the county could be impacted...” without also disclosing that it is equally true that the No Build alternative might lead to *fewer* projects and *fewer* impacts than the preferred alternative. It all depends upon decisions of future Boards of Supervisors and the PEIR fails to reveal this crucial fact. The wording cited above exemplifies the scare tactics the Inyo County Planning Department has used from the beginning of the development of the REGPA to confuse and frighten the public into accepting industrial-scale solar throughout the county. An unbiased way to reword the statement regarding the No Build alternative would be,

426-7
(cont'd)

“Significant portions of the County may or may not be impacted by the development of solar and/or wind energy projects at the discretion of Inyo County Supervisors under the provisions of Title 21 and CEQA”

8) On page E-4 it is stated:

“Additionally, the County would not set a cap on the amount of renewable energy development.”

426-8

The ability (or inability) of the county to enforce any caps should be clearly disclosed. As I understand it caps are a function of available transmission line capacity. How would caps be enforced if transmission line capacity were increased? How would caps be enforced if a cap was reached but a project subsequently went out of business and a new project was proposed? When I asked County Administrator Kevin Carunchio these questions last spring he was unable to answer them. It is extremely important to clearly state if and how any caps mentioned in the project could be enforced.

9) The Owens Valley Further Study Area should be re-drawn to exclude all lands already set aside for mitigation and subject land management plans under the 1997 MOU to the Inyo-LA Long Term Water Agreement. See comment #2. It is pointless and an act of bad faith with regard to the 1997 MOU to study lands for development where development is already prohibited. It is insulting to the public that this comment has to keep being made. Inyo County’s compliance with the 1997 MOU is not discretionary, no matter how much county leaders may wish it were.

426-9

10) The DRECP proposes certain lands in Inyo County be set aside for mitigation. The REGPA should make sure no land proposed for mitigation in the DRECP is included in any SEDA or further study area.

426-10

Thank you for considering these comments.

Sincerely,
Daniel Pritchett

Responses to Letter 426: Daniel Pritchett

Response 426-1: The comment notes that the CEESP is an important piece of policy for the State of California that was not incorporated into the REGPA. The following section has been added to the PEIR:

2.4.1.5 California Energy Efficiency Strategic Plan

In 2008, CPUC adopted the California Long-Term Energy Efficiency Strategic Plan (CEESP) in an effort to set forth a statewide roadmap to maximize achievement of cost-effective energy efficiency in California's electricity and natural gas sectors between 2009 and 2020, and beyond. For several decades, California has been laying the groundwork for large-scale efficiency efforts through short-term programs resulting in limited market impacts. The overarching objective of the CEESP is to motivate a market transformation that moves California towards long-term, high-impact energy efficiency programs. The CEESP articulates a long-term vision and goals for each economic sector and identifies specific near-term, mid-term, and long-term strategies to achieve its objective.

It is the intent of the REGPA to guide the type of renewable energy development within the County by further defining SEDAs that are appropriate for a variety of solar energy technologies including point-of-use and commercial scale (referred to as distributed generation in the Draft PEIR) facilities. Additionally, one of the primary objectives in determining the location of the SEDAs is their proximity to existing transmission facilities. Caps placed within each of the SEDAs regulate the potential for unlimited large-scale development throughout the region. Although utility scale renewable energy may occur under the proposed project, the REGPA is designed to facilitate smaller scale projects including point-of-use generation. Future renewable energy projects will be subject to project specific environmental analysis and will need to comply with federal, state, and local regulation including California's Public Utilities Code.

Response 426-2: A main objective of the REGPA is to direct and constrain the siting of future potential projects to areas that would have lesser environmental impacts, and to minimize potential adverse effects to the natural environment and sensitive resources in the County. The REGPA provides policy guidance to the County and potential project applicants and without that guidance the County has less influence about where projects may be developed.

This comment disagrees with the County's rejection of the Distributed Generation Alternative (referred to as the Commercial Scale Only Alternative in the Final PEIR), suggesting that the proposed project inherently promotes the construction of environmentally destructive, non-point-of-use generation facilities. The proposed project does not exclusively promote one type of technology over another; rather, it allows for a variety of technologies to potentially occur in designated areas. The County agrees with the assertion in the comment stating that, when appropriate and feasible, energy efficiency measures should be applied to advance the goals of the CEESP.

Response 426-3: The PEIR defines solar energy development areas throughout the County based on a number of criteria including current land uses, designations, and constraints. The SEDA boundaries depicted in the PEIR have been identified based on the Opportunities and Constraints Technical Study (Appendix D of the PEIR), and further refined based on feedback received through the agency scoping and public planning process (refer to Section 3.1.1 of the PEIR). As described in the PEIR, although the

SEDAs have been identified to direct and constrain utility scale and commercial scale solar development in the County, not all areas within the proposed SEDA boundaries may be suitable for development.

Future solar energy projects under the REGPA will undergo project specific analysis, which will include an evaluation of consistency with existing plans and regulatory framework such as the 1991 LADWP/ Inyo County Long Term Water Agreement (Agreement), the 1997 Memorandum of Understanding (MOU), and the Owens Valley Land Management Plan. The Agreement is discussed in Sections 2.4.3.3, 4.2.1.4 and 4.9.1.3 (under the description of the County's Groundwater Extraction Permit Ordinance [Ord. 394 § 1, 1980]). The Agreement was developed to manage ground and surface water resources while maintaining healthy groundwater dependent vegetation communities found in the Owens Valley and while providing a reliable supply of water for export to Los Angeles and for use in Inyo County. Individual projects would be subject to all applicable federal, state, and local regulations including the Agreement. The Agreement maps from the Inyo County Water Department would be used in the future during project-level analyses, which would ensure that proposed projects would not be located in an area that would conflict with the Agreement. Future solar projects on LADWP-owned lands or management areas in the OVSA would be subject to the terms and conditions of the Agreement and MOU.

Response 426-4: No alternative has been identified as “preferred” in the PEIR. The PEIR concludes that significant and unavoidable impacts would potentially occur in the areas of aesthetics, biology, and cultural resources. This is a conservative conclusion based on the uncertainty, at a Program EIR level, of a subsequent project's actual impacts. The SEDA boundaries depicted in the PEIR have been identified based on information described in the Opportunities and Constraints Technical Study (Appendix D of the PEIR). The SEDAs are intended to direct and constrain future solar developments to areas in the County identified as possibly supporting a lower level of resource sensitivity, and that are located near existing transmission facilities. Potentially significant impacts that could occur as a result of renewable energy projects being developed in the identified SEDAs were identified at a programmatic level and all feasible mitigation is prescribed in the PEIR; however, without project-specific information coupled with a project-level analysis under CEQA, it can't be stated with certainty that these potential impacts would be reduced to below a level of less than significant at a programmatic level. That is why the PEIR reaches the conservative conclusion that impacts remain potentially significant and unavoidable. The County will prepare a Statement of Overriding Considerations per Section 15093 of the State CEQA Guidelines that identifies the economic, legal, social, and/or technological benefits of implementing the proposed project in light of the unavoidable impacts identified in the PEIR. This document will be considered along with the Draft PEIR by the County Board of Supervisors in late March 2015. The County recognizes that without the REGPA, greater significant and unavoidable impacts may occur as described in the No Project Alternative in Section 6.3.1 in the PEIR.

Response 426-5: This comment suggests that the SEDA designations should include no land on which industrial development would cause significant impacts. The SEDAs have been identified to direct and constrain utility scale and commercial scale solar development in the County; however, not all areas within the proposed SEDA boundaries may be suitable for development. Subsequent project-level analyses would occur as individual projects are proposed, and project-specific impacts will be assessed. At this time, more specific mitigation would also be proposed to reduce potential impacts to the extent practicable. Additionally, the proposed project does not specifically promote non-point-of-use generation as discussed in the comment; rather, it allows for a variety of technologies to potentially be developed in designated areas. The REGPA and associated PEIR do not undermine state energy policy, as asserted in the comment; rather, the objectives of the REGPA are to help constrain future proposed

solar development within the County to areas that would have lesser impacts. Implementation of the REGPA would not disallow conformance with the CEESP.

Response 426-6: The commenter identified an editorial error in the Executive Summary. The following text in Section ES.6 has been updated for accuracy:

With the exception of ~~air quality and noise~~aesthetics, biological resources, and cultural resources, all significant impacts would be reduced to below a level of significance following implementation of the mitigation measures.

The list of environmental issue areas where significant impact could remain significant and unavoidable (aesthetics, biological resources, and cultural resources) was correctly identified on Page ES-3, Table ES-1, and the individual resource sections of the PEIR (Sections 4.1, 4.4, and 4.5, respectively).

Response 426-7: The comment request clarification about the No Build Project Alternative and how Title 21 of the Inyo County Code affects future renewable energy development throughout the County. As described in Section 6.3.1 of the PEIR, the No Project Alternative could impact significant portions of the county because the County would not have the regulatory guidance and authority to direct location, siting, and size of renewable energy projects. Furthermore, a MW cap would not be set which could result in potentially larger-scale projects that are more environmentally damaging. The County agrees with the comment that under the No Project Alternative, future project approvals will be at the discretion of the County Board of Supervisors and could result in fewer or more projects being developed; however, as stated above, there would not be a regulatory framework to guide renewable energy development in a responsible manner. The County fails to see how the statement that future projects, without the REGPA in place, would be subject to CEQA review is the equivalent of a “scare tactic.” Regardless, the following statement has been updated in Sections ES.4 and 6.3.1 of the PEIR:

Significant portions of the County ~~could~~may or may not be impacted by the development of solar and/or wind energy projects at the discretion of Inyo County Supervisors under the provisions of Title 21 and CEQA ~~(all of which would be subject to CEQA review)~~. The proposed REGPA provides policy guidance to the County and potential project applicants and without that guidance the County has less influence about where projects may be developed.

Response 426-8: Allowable energy generation capacity and its associated developable acreages for each SEDA are based on the analysis of capacity of existing transmission facilities in the County, and the location of the SEDAs relative to the transmission facility. This allows the County to inventory energy transmission capacity for future projects. By eliminating development areas, the County has limited control with where future projects can be located and the scale at which they can operate; therefore, projects would only be limited by the capacity of transmission facilities. The REGPA has designated MW and acreage caps for each individual SEDA which cannot be exceeded even in the event that transmission capacity is increased. Any effort to increase the cap would require a General Plan Amendment.

Response 426-9: Due to the unique and sensitive resources present, multiple jurisdictions and planning and land management policies dictating land uses in the Owens Valley, the OVSA will be analyzed through independent planning processes that use a separate set of criteria for development siting (refer to the discussion of the OVSA in Section 3.3.2 of the PEIR). Future solar energy projects proposed within the OVSA will undergo project specific analysis, which will include an evaluation of consistency with

existing plans and regulatory framework such as the 1991 Agreement and the 1997 MOU. Solar projects on LADWP-owned lands or management areas in the OVSA would be subject to the terms and conditions of the Agreement and MOU.

Response 426-10: The County recognizes that the DRECP proposes certain lands within the County that may be set aside for mitigation. Because the DRECP was in draft form during the preparation of the PEIR, the SEDAs were not further constrained based on information contained in the DRECP. However, if the DRECP and the REGPA are adopted, the County would coordinate with the DRECP agencies to avoid priority conservation areas and future projects in the County would be developed consistent with the requirements of the DRECP. Under REGPA Policy MER-2.6, the County would coordinate with renewable energy solar developers and other agencies to avoid, minimize, or mitigate impacts. If the County becomes a signatory of the DRECP, future development under the REGPA within the DRECP area could be expedited by the “take” coverage under Section 10 of the Endangered Species Act of 1973 and state take coverage under Section 2835 of the California Fish and Game Code for species listed under the California Endangered Species Act as threatened, endangered, or candidates.

From: Catherine Kravitz <ckravitz.2002@gmail.com>
Sent: Wednesday, January 14, 2015 12:30 PM
To: Cathreen Richards
Subject: solar plan

Dear Ms. Richards,

As a resident of Lone Pine, I have watched lands from Palm Springs to Mojave become littered with different forms of technology for the purposes of obtaining energy for those that are hundreds of miles away. Vistas have been destroyed and ;and use encumbered. Unless the solar project is checked our beautiful valley will be destroyed. We will not have the vistas, open spaces of natural beauty which does not even address any effect on wildlife roaming free or what will be inadvertently dug up as solar farms start to spread across our valley. It is like an itch. It starts out small and just gets bigger and bigger, which is what I feel will happen here. A tiny area will be used and once established it will grow out of control killing any peace or areas for people to come and enjoy our beautiful valley and going home with renewed peace both physically and in their sole. Please stop this maddness.

Catherine Kravitz,
P O Box 881
Lone Pine, CA 92545

427-1

Response to Letter 427: Catherine Kravitz

Response 427-1: The commenter expresses concern related to the potential for unchecked development throughout the region leading to a degraded landscape. However, under the No Project Alternative, there could be greater impacts to County resources when compared to the proposed project; this is due to a current lack of regulations controlling renewable energy development, such as regulations dictating the maximum utility scale renewable energy developments in the County and restrictions related to the locations of future proposed renewable projects. Without implementation of the REGPA, the County would be much more limited in its ability to discourage project applicants from location, siting and size of such projects. It is the intent of the REGPA to lead to the appropriate siting of future development projects in areas that would have less of an environmental impact than if the REGPA was not approved.



COMMENTS FROM UTILITIES/OTHER
Series 500 Responses to Comments





Deborah Hess, Region Manager
 Local Public Affairs
 PO Box 7329
 Mammoth Lakes, CA 93546

January 14, 2015

Cathreen Richards, Senior Planner
 Inyo County Planning Department
 Post Office Drawer L
 Independence, CA 93526
crichards@inyocounty.us

RE: Draft EIR for Inyo County Renewable Energy General Plan Amendment (REGPA)

Dear Ms. Richards:

Southern California Edison (SCE) appreciates the opportunity to review and comment on the Draft Environmental Impact Report (EIR) for Inyo County’s Renewable Energy General Plan Amendment (REGPA). The proposed REGPA involves identifying new and modified General Plan goals, policies, and implementation measures, including provisions for actual sites identified in the County that may be appropriate for renewable energy development [i.e., Solar Energy Development Areas (SEDAs)]. We understand that the overall purpose of the proposed project is to regulate and direct the type, siting, and size of potential future renewable energy development within the County through adoption of land use policies that are consistent with and meet the broader goals and visions for the County as expressed in the Inyo County General Plan. The REGPA would encourage solar energy developments with a total allowable capacity of 900 megawatts (MW) of electricity under peak solar conditions:

501-1

- 250 MW in the Western Solar Energy Group (consisting of the Laws, Owens Lake, Rose Valley, and Pearsonville SEDAs)
- 100 MW in the Southern Solar Energy Group (consisting of the Trona SEDA)
- 550 MW in the Eastern Solar Energy Group (consisting of Chicago Valley, Charleston View, and Sandy Valley SEDAs)

SCE appreciates Inyo County’s efforts to integrate environmental factors into its REGPA with an awareness of potential renewable generation and transmission development in the County. SCE is requesting the following corrections and clarifications to the REGPA Draft EIR:

• **Mitigation Measures for Transmission Lines**

Pages ES-12 and 4.1-29, SCE is concerned that MM AES-10 regarding treatment of transmission towers and structures with color and surfaces may result in long-term adverse environmental impacts. Lattice steel tower (LST) structures require a continuous electrical path through each steel element to the ground. Painting or powder coating of LST elements prior to assembly impedes the continuous electric path because it creates an insulator between the elements. Therefore, paint applications for LSTs are applied on the field (in an open air environment) after assembly of the individual tower pieces. The paint life cycle is much shorter than the structure and would require multiple repainting efforts. Reapplication of paint would result in additional long-term adverse environmental impacts associated with mobilizing the equipment required to each of the tower sites and scraping off loose paint before a new paint coat can be applied. SCE recommends the mitigation measure be revised to replace the treatment of transmission towers and structures with paint or powder coating with galvanizing or similar factory-applied conductive non-paint treatments.

501-2

• **Figures with SCE Transmission Lines**

The Draft EIR contained figures with depictions of SCE transmission facilities. Some of those figures were in error. Attached to this letter are revised figures that show corrections to accurately describe SCE’s transmission lines, including references to SCE’s substations.

- In Figure 2-4c SEDA Location: Rose Valley, the Draft EIR figure should be revised to illustrate that the 220 kV transmission line shown is owned by a third party generation company; not SCE.
- In Figure 2-4d Pearsonville SEDA, north of SCE’s Inyokern Substation, the Figure should be revised to show that the 220 kV transmission line is owned by a third party generation company, which is the same 220 kV line mentioned above. SCE owns the 220 kV

501-3

transmission line that is below SCE's Inyokern Substation located in Ridgecrest. The figure is modified to also show that SCE has an existing 115 kV subtransmission line within the same utility corridor. South of the Inyokern Substation, the utility corridor contains 220 kV and 115 transmission lines owned by SCE.

501-3
(cont'd)

- **Interconnection to SCE's Facilities**

The third paragraph of Section 2.2.3.5 Electric Distribution System of the Draft EIR (page 2-6) contains a brief discussion of generation interconnection into SCE's distribution system, as well as mentioning that a substation near Bishop has an estimated 19 MW of available capacity. The paragraph should clarify that although some of SCE's substations may have available capacity, generation developers interested in interconnecting to SCE's power system may be required to fund power system upgrades to interconnect their new generation project due to electrical constraints downstream from the substation.

501-4

Section 3.3.5 Transmission Planning, Subsection Southern Solar Energy Group of the Draft EIR (page 3-19), discusses the Trona SEDA and interconnection to SCE's existing 115 kV subtransmission line along the US 395 in Kern County, which is approximately 28 miles from the Trona SEDA. SCE understands that the purpose of the REGPA is to minimize impacts to environmental resources and utilization of existing transmission lines. However, SCE's McGen Substation and Searles Substation are approximately 3.5 miles and 8.5 miles from the Trona SEDA (see SCE's edits to Figure 2-4f Trona SEDA). With upgrades, these facilities and connecting subtransmission lines may be able to accommodate the Trona SEDA and may result in less environmental impacts than construction of a new 115 kV line that was mentioned by the REGPA.

Section 3.3.6.3 Transmission Infrastructure (pages 3-23 to 3-24) discuss tie-ins to the existing LADWP transmission lines. SCE has existing transmission and distribution lines throughout the project area and should also be considered in the discussions. This section also includes a discussion regarding new transmission line construction right-of-way (ROW) width and construction footprint for a 500 kV transmission line. This section of the Draft EIR should expand the discussion regarding ROW widths and construction footprints to include lower voltage transmission lines. For your reference, the DRECP's Transmission Technical Group Report Table 3-7 contains typical ROW widths and per mile impacts of bulk transmission, which is available at the following link http://www.drecp.org/draftdrecp/files/Appendix_K_TTG_Report.pdf. Paragraph 3 of Section 3.3.6.3 of Draft EIR should also be revised to include that the construction of tie-in alignments and new transmission lines supporting solar development may also require the construction of new switching stations.

- **Bird Collisions**

Section 4.4.90 of the Draft EIR states "Birds are at high risk for collision with power lines and guy wires that are difficult to see." This general statement is not always true. Collision risk is dependent upon the bird species, line location, and size of the power line conductors. SCE requests revision of the sentence to "Some bird species are at risk for collision with power lines and guy wires that are difficult to see."

501-5

- **Limitation of Transmission Line Development**

SCE is concerned that the REGPA may unintentionally limit or create concerns regarding SCE's ability to develop future transmission infrastructure within Inyo County, because the REGPA only considers renewable energy development within Inyo County and does not consider future renewable energy development in neighboring counties in California and Nevada, and electrical transmission needs associated with any such development. SCE understands and acknowledges that Inyo County has jurisdiction over renewable energy facilities¹ and tie-lines within Inyo County. In contrast, SCE's interconnected transmission system (both existing and future upgrades) is under the jurisdiction of the Federal Energy Regulatory Commission, the California

501-6

¹ Counties have jurisdiction over all wind facilities, solar photovoltaic, and solar thermal less than 50 MW.

January 14, 2014
Inyo County REGPA
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Public Utilities Commission, and the California Independent System Operator. These agencies have rules that relate to the interconnection of third party generators with the SCE transmission system and how SCE constructs and operates its transmission system. Thus, SCE suggests that the County's REGPA consider designating utility line corridors within one quarter mile on either side of SCE's existing transmission infrastructure in Inyo County. Such a designation may help SCE plan any necessary future transmission infrastructure or transmission system upgrades and minimize social, economic, and environmental impacts.

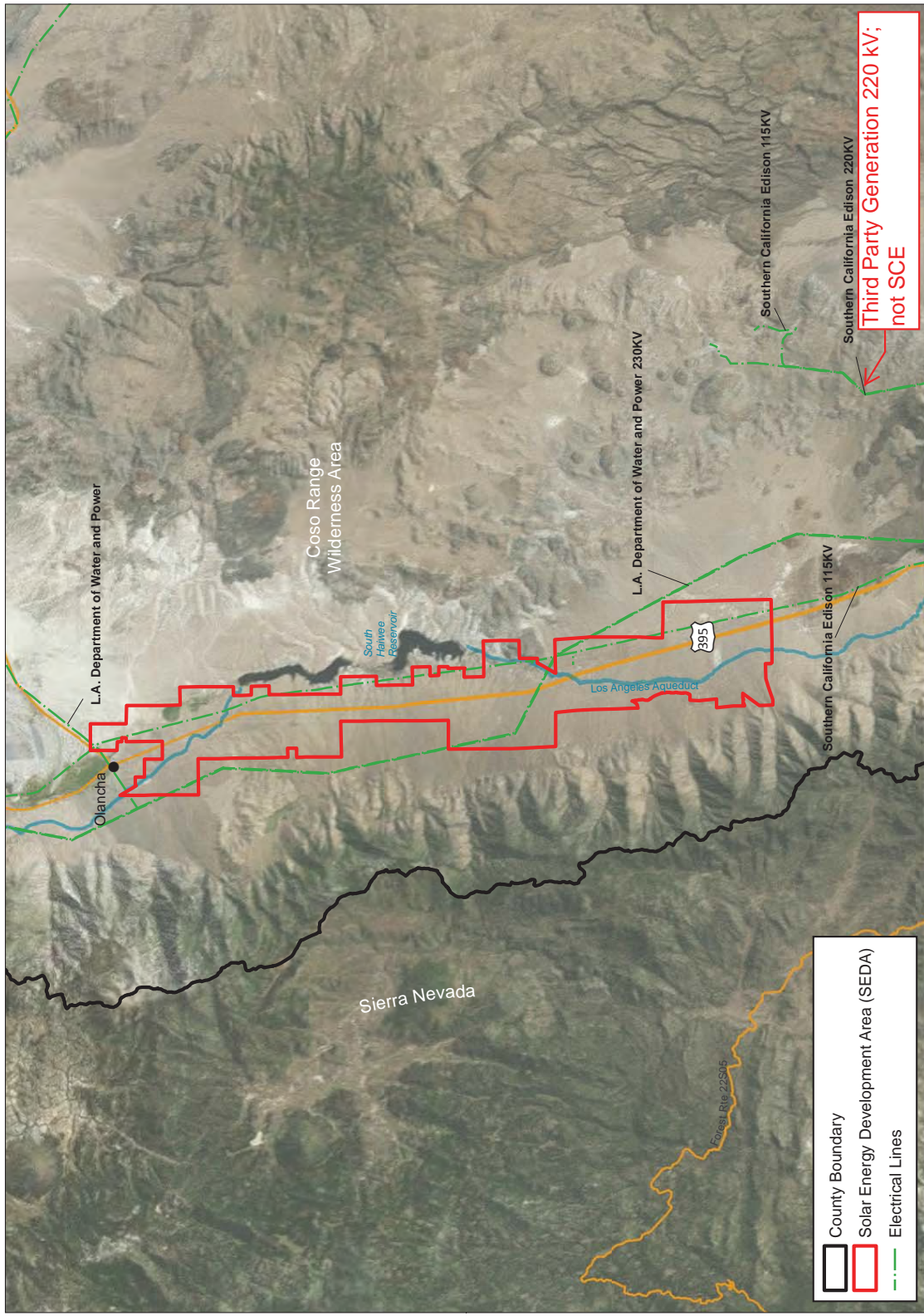
501-6
(cont'd)

If you have any questions regarding this letter, please do not hesitate to contact me at Deborah.Hess@sce.com or (760) 924-4811.

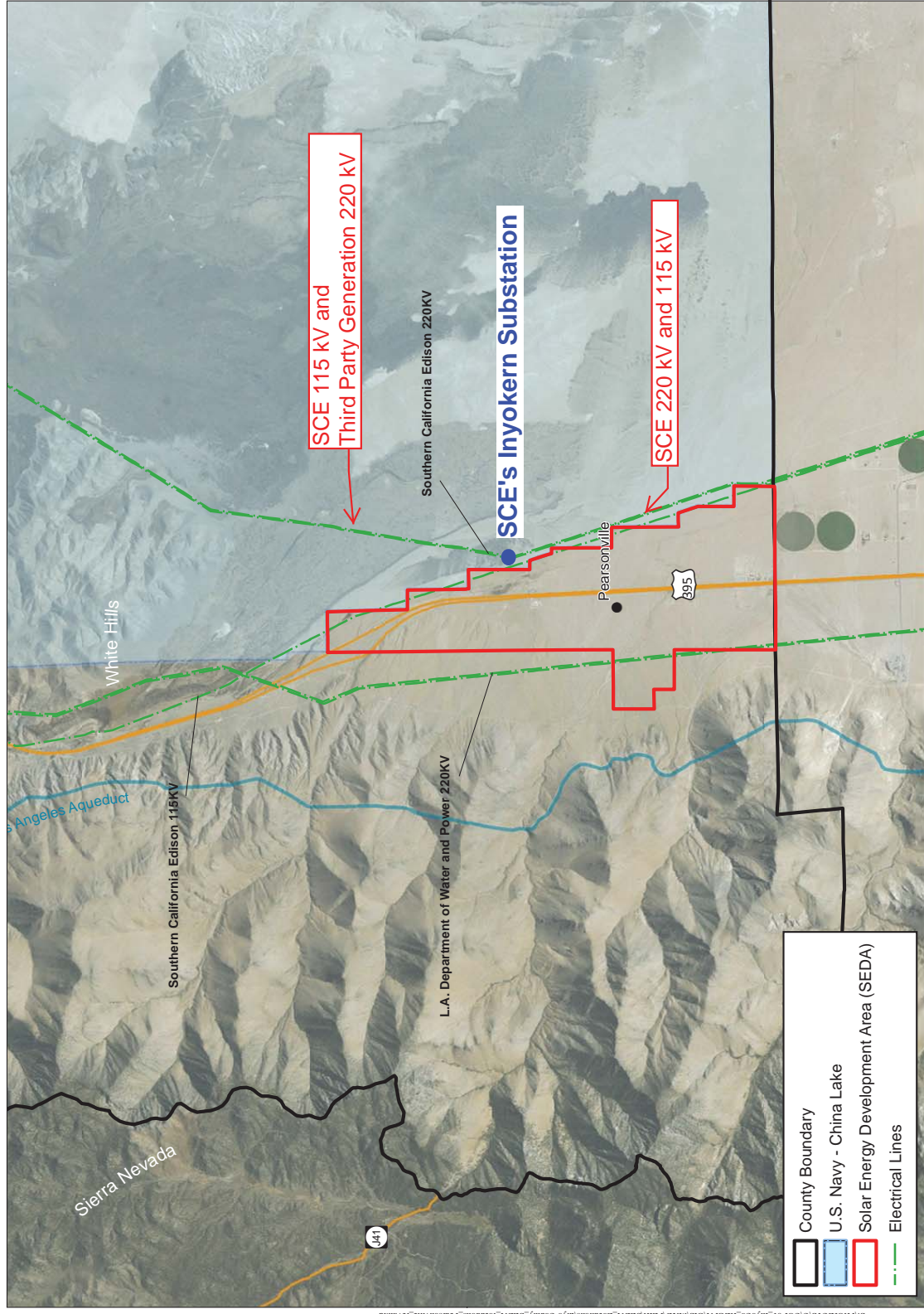
Regards,

Deborah Hess
Local Public Affairs Region Manager
Southern California Edison Company

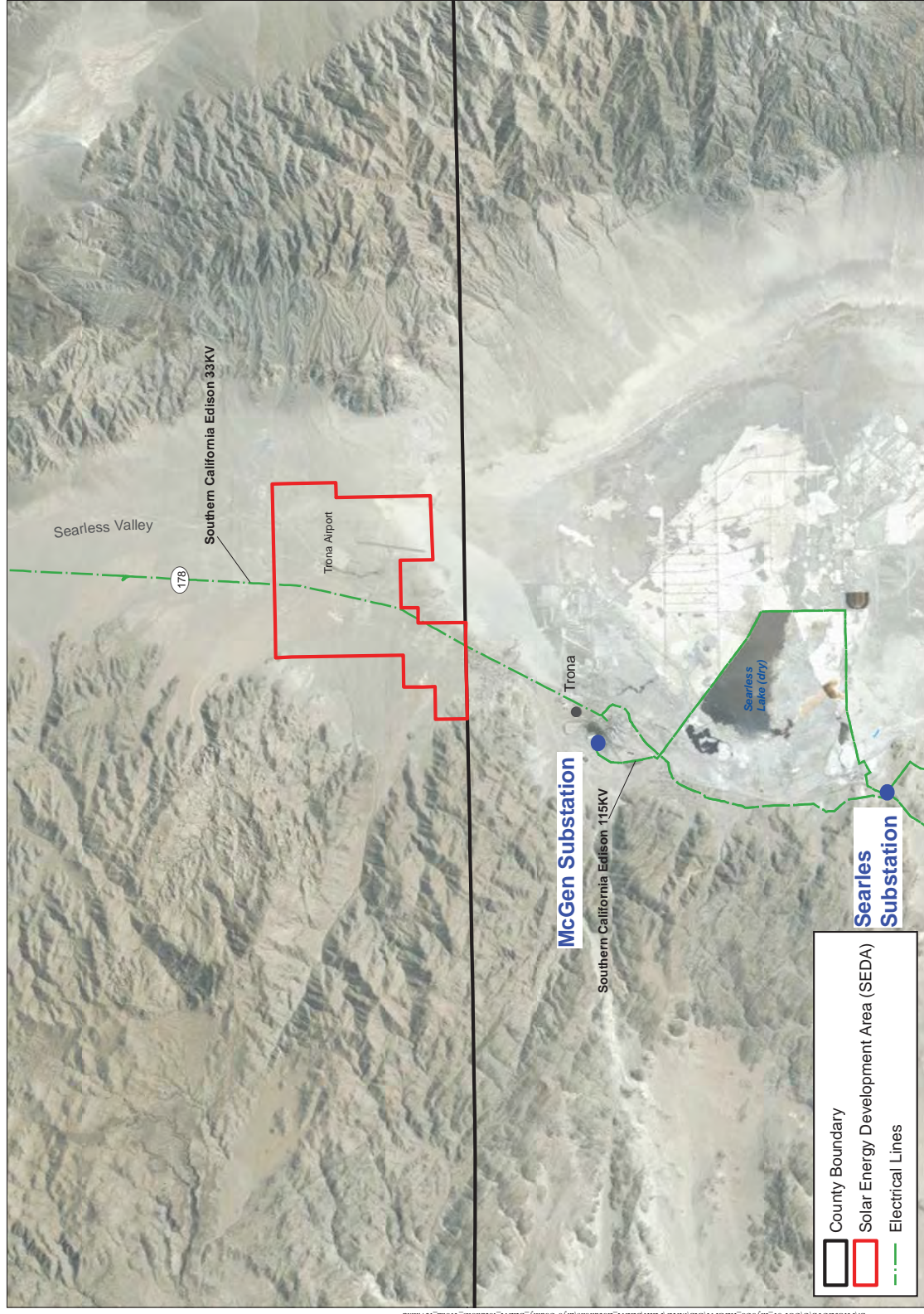
Attachment: Figures 2-4c, 2-4d, and 2-4f



SEDA Location: Rose Valley
 INYO COUNTY
 RENEWABLE ENERGY GENERAL PLAN AMENDMENT - PEIR
 Figure 2-4c



Pearsonville SEDA
 INYO COUNTY
 RENEWABLE ENERGY GENERAL PLAN AMENDMENT - PEIR
 Figure 2-4d



Trona SEDA
 INYO COUNTY
 RENEWABLE ENERGY GENERAL PLAN AMENDMENT - PEIR
 Figure 2-4f

Responses to Letter 501 – Southern California Edison

Response 501-1: The comment is introductory in nature and summarizes the intent of the REGPA. The purpose of the REGPA is not to encourage solar energy development, but to amend the County's General Plan to direct and constrain potential future solar energy projects to suitable areas in the County. No additional response is required.

Response 501-2: This comment is concerned with the treatment of transmission towers and structures with colors and surfaces that may result in long-term environmental adverse impacts *because* of the continual maintenance and reapplication of paint. The comment points out that the lattice steel tower structures require a continuous electrical path through each steel element, where painting or powder coating would impede connectivity. The comment proposes to modify the mitigation for transmission lines to allow galvanizing or factory-applied conductive non-paint treatments to be used. The County acknowledges the issue and has updated the specified portion of Mitigation Measure AES-10 as follows:

- To the extent practicable, treat transmission towers and structures with color and surfaces to reduce visual contrast with the surrounding visual landscape. Alternative methods to reduce visual impacts may be considered for structures that cannot use conventional methods of painting without impeding electrical conveyance or without causing long-term environmental impacts through the constant reapplication of paint. These methods may include, but shall not be limited to, galvanizing or similar factory-applied conductive non-paint treatments.

Response 501-3: The following figures have been modified to accurately show Southern California Edison transmission facilities:

- Figure 2-4c Rose Valley SEDA: Edits made to a transmission line show that is owned by a third party generation company, not Southern California Edison.
- Figure 2-4d Pearsonville SEDA: Southern California Edison Inyokern Substation added. The figure now shows that the 220 kV transmission line is owned by a third party generation company and that the 115 kV subtransmission line in the same corridor is owned by Southern California Edison. The 115 kV and 220 kV transmission lines below the substation have been identified as Southern California Edison.
- Figure 2-4f Trona SEDA: This figure has been updated to include the McGen and Searles Substation south of Trona.

Response 501-4: This comment proposes several revisions to the following sections of the PEIR. Section 2.2.3.5 has been updated to reflect that generation developers interested in interconnecting with existing and available substations may be required to fund power system upgrades to interconnect their new generation project due to electrical constraints downstream from the substation.

Section 3.3.5 has been updated to include two additional substations within 8.5 miles of the Trona SEDA that may be utilized if upgrades are made to them. The Southern Solar Energy Group is comprised of the Trona SEDA and has a 100-MW energy generation cap. There are no existing transmission lines in this area of the County; only lines providing distribution to local residences currently exist. However, SCE owns the McGen Substation and Searles Substation located approximately 3.5 and 8.5 miles away from the Trona SEDA. With upgrades, these facilities connecting subtransmission lines may be able to

accommodate the Trona SEDA, potentially reducing the need for new transmission lines. If new transmission lines are required, they could parallel the existing 33-kV SCE distribution line and would most likely be built at 115 kV to interconnect with the existing SCE 115-kV line that runs along US 395 in Kern County.

Section 3.3.6.3 has been updated to acknowledge that SCE lines exist throughout this region; however, costly upgrades to the system may be required. Substations owned by SCE exist near the Southern Solar Energy Group and may potentially be utilized; however new transmission lines may still be necessary to support solar development in the Southern Solar Energy Group. Tie-ins to a conceptual transmission line in western Nevada would be necessary to support solar development in the Eastern Solar Energy Group. The County notes that a lower voltage transmission line of 230 kV would require a right-of-way width of 100 feet and correspond to a disturbed area of approximately 15 acres per mile of transmission line constructed. Finally, the construction of tie-in alignments for the Western and Eastern Solar Energy Groups and new transmission lines supporting solar development in the Southern Solar Energy Group would require new transmission poles and conductors to be installed as well as the construction of new switching stations.

Response 501-5: Section 4.4.3.1 has been updated to reflect that some bird species are at high risk for collision with power lines and guy wires that are difficult to see.

Response 501-6: Section 5.0 of the PEIR contains an analysis of the cumulative impact resulting from the construction and operation of multiple past, present, and reasonably foreseeable future projects, including those related to renewable energy (solar, wind, and geothermal). This analysis employed a combination of two approaches for considering cumulative effects: a list of past, present, and probable future project producing related impacts to the proposed project, and a summary of projections contained in adopted General Plans or related planning documents which describe region-wide conditions contributing to the cumulative impact. Past projects were considered as part of the baseline condition for project analysis conducted in Section 4.0 of the PEIR, while on-going (i.e., Owens Lake Dust Mitigation program) and probable future project were included and analyzed in Section 5.0. The analysis of cumulative effects considered proposed projects major utility and transportation infrastructure improvements as well as proposed projects on land governed by the National Park Service, US Forest Service, Bureau of Land Management, and the following Counties: Inyo, Kern, Los Angeles, San Bernardino, Mono, Riverside, Clark (Nevada), and Nye (Nevada). Specific transmission planning efforts considered in the cumulative analysis included: West-wide Energy Corridor; Statewide Transmission Plan; RETI Transmission Plans Phase 2B; Eldorado-Ivanpah Transmission upgrade; SCE Coolwater-Lugo 500/220 kV Transmission Line; Hidden Hills Transmission Project; Nevada 300 Solar Project; and K-Road Moapa Solar Project. Designating utility-line corridors is beyond the scope of the REGPA planning effort.

Los Angeles  Department of Water & Power

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General Manager

January 13, 2015

Mr. Josh Hart
Inyo County Planning Department
P.O. Drawer L
Independence, CA 93526



Dear Mr. Hart:

Subject: Comments on Draft Program Environmental Impact Report
Inyo County Renewable Energy General Plan Amendment (REGPA)

Thank you for the opportunity to comment on the *Draft Program Environmental Impact Report, Inyo County Renewable Energy General Plan Amendment (DPEIR)*. The comments below pertain to the Western Solar Energy Development Area (SEDA), including Laws, Owens Lake, and Rose Valley as well as the Owens Valley Study Area (OVSA) defined in the DPEIR. 502-1

The City of Los Angeles (City) has landholdings in these areas and proposed projects in these areas could affect the Los Angeles Department of Water and Power's (LADWP) land management and water operations. Proposed renewable energy projects on City lands covered under the umbrella of this DPEIR are therefore subject to City approval, and if proposed, should be developed in consultation with LADWP. Further, many of the City's landholdings in these areas are managed for legally mandated environmental mitigation projects and these uses cannot be changed without modifying the current legal framework. Additionally, proposed projects that could modify City lands that are leased for agricultural use are also subject to City approval and potential impacts to these lands and lessee operations should be addressed in this DPEIR. Additionally, all environmental, geotechnical, hydrological, and other studies related to proposed projects on City property must be approved by LADWP prior to commencing.

The following comments are offered with regard to specific sections of the DPEIR.

4.4 Biological Resources:

4.4.1.2 Cropland, Page 4.4-4: First paragraph states the commercial crop production in the County of Inyo includes alfalfa and dates which are annuals. Alfalfa and dates are not annuals. 502-2

4.4.1.6 Habitat Connectivity and Wildlife Corridors, Page 4.4-11: Second paragraph referred to Lone Pine tule elk (*Cervus elaphus nannodes*). The local elk herds in the Owens Valley are just tule elk. 502-3

Los Angeles Aqueduct Centennial Celebrating 100 Years of Water 1913-2013

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<p><u>4.4.1.6 Important Bird Areas, Page 4.4-13:</u> According to the Audubon's GIS layer for Important Bird Areas, the Los Angeles Aqueduct (LAA) and North Haiwee Reservoir are not designated as Important Bird Areas.</p>	502-4
<p><u>Table 4.4-1 Sensitive Wildlife Species Known to Occur or Potentially Occurring in the SEDAS or Owens Valley Study Area, Page 4.4-17:</u> The Mojave fringe-toed lizard's (<i>Uma acoparia</i>) home range is not within or adjacent to the OVSA or other SEDAs and should be removed from this list.</p>	502-5
<p><u>Table 4.4-1 Sensitive Wildlife Species Known to Occur or Potentially Occurring in the SEDAS or Owens Valley Study Area, Page 4.4-18:</u> The Le Conte's thrasher population (<i>Toxostoma lecontei</i>) found in the Owens Valley is not a California Department of Fish and Wildlife (CDFW) Species of Special Concern (SSC) and should be removed from Table 4.4-1. The San Joaquin Valley's population of Le Conte's thrashers (<i>Toxostoma lecontei macmillianorum</i>) is the CDFW SSC.</p>	502-6
<p><u>Table 4.4-1 Sensitive Wildlife Species Known to Occur or Potentially Occurring in the SEDAS or Owens Valley Study Area, Page 4.4-18:</u> The Yellow warbler (<i>Dendroica petechial</i>) and the Yellow-headed blackbird (<i>Xanthocephalus xanthocephalus</i>) should be added to Table 4.4-1 as CDFW SSC. These two species are known to occur in the SEDAs and OVSA. The American peregrine falcon (<i>Falco peregrinus</i>) can also be found in all SEDAs and the OVSA and should be added to Table 4.4-1 as a CDFW Fully Protected (FP) species.</p>	502-7
<p><u>Table 4.4-1 Sensitive Wildlife Species Known to Occur or Potentially Occurring in the SEDAS or Owens Valley Study Area, Page 4.4-19:</u> There are several species of bats that should be added to Table 4.4-1 as they could be migrants that move through the SEDAs and the OVSA. These species include the western red bat (<i>Lasiurus blossevillii</i>) which is a CDFW SSC, and western small-footed myotis (<i>Myotis ciliolabrum</i>), long-eared myotis (<i>Myotis evotis</i>), Yuma myotis (<i>Myotis yumanensis</i>), and fringed myotis (<i>Myotis thysanodes</i>), all of which are Bureau of Land Management sensitive species.</p>	502-8
<p><u>Table 4.4-3 Sensitive Wildlife Species Known to Occur or Potentially Occurring in the Laws SEDA, Page 4.4-25:</u> Two of the fish species found in this table no longer exist in the Laws SEDA. The Owens pupfish (<i>Cyprinodon radiosus</i>) once inhabited the Owens River and other waterways, but have since been extirpated by the introduction of game fish to the Owens Valley. The nearest population of Owens pupfish is found in Fish Slough. The Owens tui chub (<i>Siphateles bicolor snyderi</i>) also no longer exist in the Laws SEDA due to hybridization with the Lahontan tui chub (<i>Siphateles bicolor obesa</i>). The nearest population of pure Owens tui chub can be found in an ornamental pond at the White Mountain Research Center just south of the Laws SEDA. These two species cannot expand their range due to competition and hybridization and should be removed from Table 4.4-3.</p>	502-9
<p><u>Table 4.4-3 Sensitive Wildlife Species Known to Occur or Potentially Occurring in the Laws SEDA, Page 4.4-26:</u> The Northern leopard frog (<i>Lithobates pipiens</i>) has only been observed two times, once in 1953 and again in 1960 near the Laws SEDA (CNDDDB). The CDFW more recently surveyed specifically for the Northern leopard frog and was unable to locate them. Given the changes to the area in the last fifty plus years, it is unlikely that the Northern leopard frog still inhabits the area.</p>	502-10
<p><u>Table 4.4-3 Sensitive Wildlife Species Known to Occur or Potentially Occurring in the Laws SEDA, Page 4.4-26:</u> Desert tortoise (<i>Gopherus agassizii</i>) have never been observed north of Olancha,</p>	502-11

California in the Owens Valley which is approximately 80 miles south of the Laws SEDA. Habitat for desert tortoise in the Laws SEDA is minimal at best and the Owens River could be considered a natural barrier to keep desert tortoise from populating the Laws SEDA. Desert tortoise should be removed from Table 4.4.3. 502-11 (cont'd)

Table 4.4-3 Sensitive Wildlife Species Known to Occur or Potentially Occurring in the Laws SEDA, Page 4.4-25-27: There are several wildlife species that are known to use or migrate through the Laws SEDA that should be added to the list. They include: 502-12

Common Name	Scientific Name	Status
Reptile		
Northern sagebrush lizard	<i>Sceloporus graciosus graciosus</i>	BLM sensitive
Birds		
Cooper's hawk	<i>Accipiter cooperii</i>	CDFW WL
Golden eagle	<i>Aquila chrysaetos</i>	CDFW FP, BLM sensitive, DRECP
Bald eagle	<i>Haliaeetus leucocephalus</i>	CDFW FP, BLM sensitive, DRECP
Northern harrier	<i>Circus cyaneus</i>	CDFW SSC
White-tailed kite	<i>Elanus leucurus</i>	BLM sensitive, CDFW FP, DRECP
Yellow-breasted chat	<i>Icteria virens</i>	CDFW SSC
Loggerhead shrike	<i>Lanius ludovicianus</i>	CDFW SSC
Bank swallow	<i>Riparia riparia</i>	BLM sensitive, DRECP
Osprey	<i>Pandion haliaetus</i>	CDFW WL
American peregrine falcon	<i>Falco peregrinus</i>	CDFW FP
Mammals		
American badger	<i>Taxidea taxus</i>	CDFW SSC, CA fur-bearing mammal
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	BLM sensitive, CDFW SSC, DRECP
Hoary bat	<i>Lasiurus cinereus</i>	DRECP

CDFW = California Department of Fish and Wildlife
FP = listed as Fully Protected under Fish and Game Code
SSC = listed as Species of Concern under Fish and Game Code
WL = listed as Watch List by CDFW
DRECP = Desert Renewable Energy Conservation Plan

4.4.1.11 Vegetation Communities and Habitats, 4.4-32: First sentence on the page says that the Los Angeles Aqueduct flows "through the northern half of the SEDA, and reenters the SEDA south of the North Haiwee Reservoir where it is directed underground." The LAA reenters the SEDA south of South Haiwee Reservoir not North Haiwee Reservoir. 502-13

4.4.1.11 Habitat Connectivity and Wildlife Corridors, Page 4.4-32: This paragraph states that the Los Angeles Aqueduct and the North Haiwee Reservoir are designated Important Bird Areas. What is your source for this information? According to the Audubon's GIS layer for Important Bird Areas, the LAA and North Haiwee Reservoir and not included in the Important Bird Areas. 502-14

<p><u>Table 4.4-4 Sensitive Wildlife Species Known to Occur or Potentially Occurring in the Owens Lake SEDA, Page 4.4-34-35:</u> The Mojave fringe-toed lizard home range is not within or adjacent to the Owens Lake SEDAs and should be removed from this list. The Owens pupfish and Owens tiu-chub are not found within or adjacent to the Owens Lake SEDA and should be removed from the table. The Yellow-headed blackbird should be added to Table 4.4-4 as the Yellow-headed blackbird occurs in the Owens Lake SEDA. The Le Conte's thrasher population found on Owens Lake is not the CDFW SSC (as discussed above) and should be removed from Table 4.4-4. The American peregrine falcon is found in the Owens Lake SEDA and should be added to Table 4.4-4. All bats listed in Table 4.4-1 plus the Western red bat, Western small-footed myotis, Long-eared myotis, Yuma myotis, and Fringed myotis needs to be added to Table 4.4-4 as they occur or migrate through the Owens Lake SEDA.</p>	502-15
<p><u>Table 4.4-5 Sensitive Wildlife Species Known to Occur or Potentially Occurring in the Rose Valley SEDA, Page 4.4-38-40:</u> The Yellow-headed blackbird, Bald eagle, and Osprey should be added to Table 4.4-5 as they occur or migrate through the Rose Valley SEDA. All bats listed in Table 4.4-1 plus the Western red bat, Western small-footed myotis, Long-eared myotis, Yuma myotis, and the Fringed myotis should be added to Table 4.4-5 as they occur or migrate through the Rose Valley SEDA.</p>	502-16
<p><u>4.4.1.11 Sensitive Habitats and Protected Natural Areas, Page 4.4-44:</u> The sentence "The more arid ranges to the west generally do not contain the hydrology to support wetlands" is misleading. In the Owens Valley the more arid ranges are to the east in the White and Inyo Mountains. Also the last sentence in the same paragraph should be Los Angeles Aqueduct and not Los Angeles Aquifer.</p>	502-17
<p><u>4.4.3. Impacts to Special Status Fish, Page 4.4.81:</u> The second paragraph states that all four special status fish species are endemic to the Owens Valley and occur in the Owens River and its tributaries. While all four are endemic to the Owens Valley, only the Owens sucker and the Owens speckled dace occur in the Owens River and/or its tributaries. The Owens pupfish and the Owens tui chub have been extirpated from the Owens River and its tributaries and only occur in isolated water bodies free from predation.</p>	502-18
<p><u>4.4.3. Impacts to Special Status Amphibians including Sierra Nevada Yellow-Legged Frog, Inyo Mountains Slender Salamander, Owens Valley Web-Toed Salamander, and Northern Leopard Frog, Page 4.4.82:</u> It is unlikely that Northern leopard frog still inhabits the Laws SEDA.</p>	502-19
<p><u>4.4.3.1 Impacts to Southwestern Willow Flycatcher, Page 4.4-86:</u> There is a minimal amount of nesting habitat in the Laws SEDA. The nesting habitat only occurs where the Laws SEDA approaches the Owens River.</p>	502-20
<p><u>4.4.3.1 Impacts to Bald Eagle and Golden Eagle, Page 4.4-86:</u> This paragraph states that both Golden and Bald eagles typically nest in tall trees away from human disturbances. Bald eagles typically nest in trees but Golden eagles typically nest in cliffs.</p>	502-21
<p><u>4.4.3.2 Western Solar Energy Group, Laws Solar Energy Development Area, Page 4.4-96:</u> The third paragraph discusses potential impacts to aquatic habitats and subsequently, special status fish species. Again, the Owens pupfish and the Owens tui chub have already been extirpated from the Laws SEDA.</p>	502-22

<p><u>4.4.3.2 Western Solar Energy Group, Owens Lake Solar Energy Development Area, Page 4.4-97:</u> The third paragraph, first sentence references the Owens Valley SEDA; this should be Owens Lake SEDA. The same paragraph discusses impacts to aquatic habitats and subsequently, special status fish species. Again, the Owens pupfish and the Owens tui chub have been extirpated from the Owens Lake SEDA.</p>	502-23
<p><u>4.4.3.2 Western Solar Energy Group, Rose Valley Solar Energy Development Area, Page 4.4-97:</u> The Los Angeles Aqueduct and North Haiwee Reservoir in the Rose Valley SEDA are not Important Bird Areas according to Audubon's GIS layer.</p>	502-24
<p><u>4.4.5 Mitigation Measures, Page 4.4-103:</u> Biological resources mitigation measures for projects greater than 20 megawatts should also be evaluated under California Environmental Quality Act (CEQA) and should not rely solely on the REGPA PEIR's mitigation measures. On projects less than 20 megawatts occurring on City land, LADWP shall also review the project to determine if there are going to be any potential impacts on biological resources.</p>	502-25
<p><u>4.4.5 MM BIO-2: Minimize impacts to special status plants, Page 4.4-107:</u> Second bullet- Modify verbiage to read: "For projects that are determined to have the potential to result in "take" of state or federally-listed plant species, consultation shall be conducted with CDFW or U.S. Fish and Wildlife Services (USFWS) respectively prior to project commencement <u>and appropriate mitigation measures will be developed if necessary.</u>"</p>	502-26
<p><u>4.4.5 MM BIO-2: Minimize impacts to special status plants, Page 4.4-107:</u> Remove the bullet regarding environmentally sensitive area fencing, as this may not be practical means for avoiding all sensitive plant species. The language added above should cover fencing if necessary.</p>	502-27
<p><u>4.4.5 MM BIO-2: Minimize impacts to special status plants, Page 4.4-107:</u> LADWP questions the applicability of the fourth bullet to private landowners regarding transplantation of sensitive plants. The California Endangered Species Act (CESA) contains unclear language with regard to native plant protection and the Native Plant Protection Act (NPPA) allows for some exceptions in the removal of native plants. <i>Transplantation of sensitive plants should be left to CDFW rather than the private landowner per CDFG Code 1913.(c) and 1906.</i> Section 1913 states that a landowner shall contact CDFW at least 10 days prior to changing the land use of an area where a rare or endangered plant is known to occur in order to provide CDFW the opportunity to salvage it. Section 1906 gives CDFW the jurisdiction to propagate and transplant native species.</p>	502-28
<p><u>4.4.5 MM BIO-2: Minimize impacts to special status plants, Page 4.4-107:</u> Fifth bullet- this information will be spelled out in the mitigation measures developed during the consultation with CDFW and USFWS. This bullet should be deleted.</p>	502-29
<p><u>4.4.5 MM BIO-3: Minimize impacts to special status wildlife, Page 4.4-109:</u> Third bullet- modify to read: "For projects that are determined to have the potential to result in "take" of state or federally-listed animal species, consultation shall be conducted with CDFW or USFWS respectively <u>and appropriate mitigation measures developed as necessary</u> and take authorization shall be obtained prior to project commencement <u>if relevant.</u>"</p>	502-30
<p><u>4.4.5 MM BIO-3: Minimize impacts to special status wildlife, Page 4.4-109:</u> Fourth bullet is too specific, as environmentally sensitive area fencing may not be practical in all circumstances. The</p>	502-31

relevant regulatory agencies will determine appropriate mitigation measures after initial consultation on the project. This paragraph should be deleted.	502-31 (cont'd)
<u>4.4.5 MM BIO-3: Minimize impacts to special status wildlife, Page 4.4-109:</u> Sixth bullet- modify to read: "In areas that could support desert tortoise or any other sensitive wildlife species, a County-approved <u>qualified</u> biologist with the appropriate CDFW and/or USFWS approvals for the species being salvaged and relocated and <u>shall be onsite and will respond accordingly should an animal need to be relocated</u> walk immediately ahead of equipment during the clearing and grading activities to salvage and relocate the wildlife in the path of the operations. The species shall be salvaged and relocated to off-site habitat when conditions will not jeopardize the health and safety of the biologist." The language contained in the DPEIR is too specific and may not be practical for all projects; appropriate protocols will be determined during consultation with the appropriate regulatory agencies on a project specific basis. Similarly, the qualified biologist should be approved by the appropriate regulatory agencies, not Inyo County.	502-32
<u>4.4.5 MM BIO-3: Minimize impacts to special status wildlife, Page 4.4-110:</u> Second bullet is too specific for a broad mitigation measure. CDFW and USFWS will lay out what mitigation measures must be taken in their Incidental Take Permit and/or Biological Opinion for each solar project. Also moving a tortoise from under a vehicle is considered "take."	502-33
<u>4.4.5 MM BIO-3: Minimize impacts to special status wildlife, Page 4.4-112:</u> Third bullet- Pipes as small as 1-inch in diameter have trapped and killed animals. To be safe all vertical pipes should be capped or filled.	502-34
<u>4.4.5 MM BIO-6: Minimize impacts to desert tortoise, Page 4.4-118:</u> Third bullet- modify to read: "The Desert Tortoise Relocation/Translocation Plan must be approved by the County , CDFW and USFWS prior to any project-related ground disturbing activity." Management of special status species is under the purview of the appropriate regulatory agencies; Inyo County does not need to approve these plans.	502-35
<u>4.4.5 MM BIO-6: Minimize impacts to desert tortoise, Page 4.4-118-119:</u> Sixth bullet- modify to read: "The project proponent shall design and implement a Raven Monitoring, Management, and Control Plan that is consistent with the most current USFWS raven management guidelines. The goal of the plan shall be to minimize predation on desert tortoises by minimizing project-related increases in raven abundance. The plan shall be approved by the County , CDFW and USFWS prior to the start of any project-related ground disturbing activities." Management of special status species is under the purview of the appropriate regulatory agencies; Inyo County does not need to approve these plans.	502-36
<u>4.4.5 MM BIO-9: Minimize impacts to burrowing owl, Page 4.4-120:</u> According to the Staff Report on Burrowing Owls (CDFG 2012): four burrowing owl surveys are required in both breeding and non-breeding seasons. The Staff Report on Burrowing Owl also recommends different setback distances based on levels of disturbance then the one recommended in this DPEIR.	502-37
<u>4.4.5 MM BIO-10: Minimize impacts to Western snowy plover, Western yellow-billed cuckoo, Inyo California towhee, and bank swallow, Page 4.4-120:</u> There is a standard Western Yellow-billed Cuckoo survey protocol developed by Halterman et al. (2011).	502-38

4.4.5 MM BIO-10: Minimize impacts to southwestern willow flycatcher, Page 4.4-121: The survey protocol for the Southwestern willow flycatcher was revised in 2010. 502-39

4.4.5 MM BIO-16: Minimize impacts to Mohave ground Squirrel, Page 4.4-123: According to the Mohave Ground Squirrel (MGS) Technical Advisory Group, translocation and artificial burrow construction is not recommended for Mohave ground squirrel. The bullet under this mitigation measure requiring preconstruction surveys is confusing as it does not follow CDFW protocol. If the project is in MGS habitat, a presence/absence survey must be conducted and if after the three trapping periods no MGS were observed or trapped, the CDFW will stipulate that the project harbors no MGS. The stipulation will last for one year from the ending date of the last trapping period. If construction is to begin within a year of the presence/absence survey, the preconstruction survey is unnecessary. If construction does not begin within a year of the presence/absence survey, another presence/absence survey must be conducted. 502-40

4.4.5 MM BIO-17: Minimize impacts to American badger and kit fox, Page 4.4-125: The bullet describing passive relocation strategies states that private land is to be avoided to the maximum extent practicable. Private land is not an option without written permission from the land owner. 502-41

4.4.5 MM BIO-18: Minimize impacts to other special status birds, raptors, migratory birds, nesting birds and bats, Pre-Construction Bird Surveys and Avoidance Measures Page 4.4-125: Modify to read: "If project construction occurs between roughly February 1 and August 31, a County-approved qualified biologist(s) shall conduct preconstruction surveys for nesting birds. The biologist(s) conducting the surveys shall be experienced bird surveyors and familiar with standard nest-locating techniques." Management of special status species is under the purview of the appropriate regulatory agencies; Inyo County does not need to approve the biologist. 502-42

4.4.5 MM BIO-18: Minimize impacts to other special status birds, raptors, migratory birds, nesting birds and bats, Bat and Avian Protection Plan, Page 4.4-125: Modify to read: "A bat and avian protection plan shall be developed to protect bats, migratory birds, and golden eagles while improving conservation, safety, and reliability for utility customers. The plan shall include measures to monitor the death and injury of birds from solar flux, radiance, PV panels and collisions with facility features such as reflective mirror-like surfaces..." 502-43

4.4.5 MM BIO-19: Minimize impacts to special status natural communities and protected natural areas, Page 4.4-128: Bullet two- modify to read: "Riparian communities adjacent to the project site shall be protected by installing environmentally sensitive area fencing if necessary at least 20 feet from the edge of the riparian vegetation in. Depending on site-specific conditions, this buffer may be narrower or wider than 20 feet in coordination with the project biologist. The location of the fencing shall be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications shall contain clear language that prohibits construction related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area." Environmentally sensitive fencing may not be relevant in every situation; this should be left up to the qualified biologist to determine. 502-44

4.4.5 MM BIO-20: Minimize impacts to waters of the US/State, including wetlands, Page 4.4-130: Modify to read: "Wetland habitats that occur near the project site shall be protected by installing environmentally sensitive area fencing if necessary at least 20 feet from the edge of the wetland. Depending on site-specific conditions and permit requirements, this buffer may be wider than 20 feet in coordination with the project biologist. The location of the fencing shall be marked in the 502-44

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~~field with stakes and flagging and shown on the construction drawings. The construction specifications shall contain clear language that prohibits construction related activities, vehicle operation, material and equipment storage, and other surface disturbing activities within the fenced environmentally sensitive area.~~ Environmentally sensitive fencing may not be relevant in every situation; this should be left up to the qualified biologist to determine.

502-44
(cont'd)

4.4.5 MM BIO-20: Minimize impacts to waters of the US/State, including wetlands, Page 4.4-131:
Ninth bullet- modify to read: "If wetlands are filled or disturbed as part of the highway solar project, compensation will be implemented for the loss of wetland habitat to ensure no net loss of habitat functions and values..."

502-45

4.4.5 MM BIO-24: Minimize impacts to groundwater dependent vegetation: Modify to read: "Any solar development projects or related infrastructure implemented under the REGPA shall comply with the terms of the Inyo County/ Los Angeles Long Term Water Agreement. A qualified biologist/botanist shall evaluate the potential for any project implemented under the REGPA to impact groundwater dependent vegetation. If the qualified biologist/botanist determines that the project has the potential to impact groundwater dependent vegetation, a groundwater dependent vegetation management plan will be prepared. The plan will include an evaluation of the potential impacts to groundwater dependent vegetation and appropriate measures to avoid or reduce the impacts to the extent feasible. The plan shall be prepared in coordination with the County and LADWP and should describe any appropriate monitoring, such as vegetation and/or water table monitoring, and prescribe mitigation to offset the impacts of the project on groundwater dependent vegetation as deemed appropriate by the qualified biologist in coordination with the County and LADWP. The project and vegetation management plan shall be approved by both Inyo County and LADWP prior to implementation."

502-46

If you have any further questions, please feel free to contact Ms. Lori Dermody, Watershed Resources Supervisor, at (760) 873-0408.

Sincerely,



James G. Yannotta
Manager of Aqueduct

JM:bs

c: Mr. Kevin Carunchio
Mr. Jeff Griffiths
Mr. Dan Totheroh
Mr. Rick Pucci
Mr. Matt Kingsley
Mr. Mark Tillemans
Ms. Lori Dermody

Responses to Letter 502 – Los Angeles Department of Water and Power

Response 502-1: The County acknowledges that the City of Los Angeles owns property in Inyo County and would assert the legal rights of any property owner over any proposed activity on its property. The County further acknowledges that the City of Los Angeles is constrained in the management of some of its property in Inyo County by legal mandates and existing agricultural leases. No specific solar energy development projects are proposed at this time. Should a solar energy proposal be submitted to the County that includes coverage and/or potential impacts to City-owned property, the County would coordinate with the City, as applicable.

Response 502-2: Section 4.4.1.2 of the PEIR has been updated to reflect that alfalfa and dates are not annual crops.

Response 502-3: Section 4.4.1.6 of the PEIR has been updated to correctly identify the elk species in question as tule elk.

Response 502-4: Section 4.4.1.6 of the PEIR has been updated to remove identification of Los Angeles Aqueduct and North Haiwee Reservoir as designated Important Bird Areas.

Response 502-5: Section 4.4.1.10 and Table 4.4.1 of the PEIR have been amended to clarify that the range of Mojave fringe-toed lizard extends into Inyo County only slightly, along the Amargosa River near the extreme southern end of Death Valley, and is not near any SEDA or the OVSA.

Response 502-6: Table 4.4-1 of the PEIR has been amended to remove LeConte's thrasher, as only the San Joaquin Valley population is considered sensitive.

Response 502-7: Table 4.4-1 of the PEIR has been amended to include American peregrine falcon.

Response 502-8: Table 4.4-1 of the PEIR has been amended to include western red bat, western small-footed myotis, long-eared myotis, fringed myotis, and Yuma myotis as migratory species.

Response 502-9: Table 4.4-3 of the PEIR has been amended to remove Owens pupfish and Owens tui chub. Section 4.4.1.11 of the PEIR has been updated to reflect the status of two fish species as they relate to the Laws SEDA.

Response 502-10: The County notes LADWP's comment regarding likelihood of northern leopard frog occurrence in the Laws SEDA; however, CNDDDB records are listed as "presumed extant", and data regarding negative results of recent CDFW surveys can and should be considered in project-level biological resources studies. No changes have been made to the PEIR regarding this comment.

Response 502-11: The County notes LADWP's comment regarding the likelihood of desert tortoise occurrence in the Laws SEDA and agrees that the potential for desert tortoise in the Laws SEDA is extremely low. However, the species is included on the USFWS list of species occurring in and affected by projects in Inyo County, and location data, habitat suitability, and dispersal barriers can be considered in project-level biological resources studies. No changes have been made to the PEIR regarding this comment.

Response 502-12: Table 4.4-3 of the PEIR has been amended to add the species listed in the comment letter.

Response 502-13: Section 4.4.1.11 of the PEIR has been amended to correctly reflect the name of the reservoir.

Response 502-14: Section 4.4.1.11 of the PEIR has been amended to remove mention of Los Angeles Aqueduct and North Haiwee Reservoir as designated Important Bird Areas.

Response 502-15: Table 4.4-4 of the PEIR has been amended as follows: (1) remove Mojave fringe-toed lizard; (2) remove Owens pupfish and Owens tui chub; (3) add Yellow-headed blackbird; (4) remove LeConte's thrasher; (5) add American peregrine falcon; and, (6) add Townsend's big-eared bat, western mastiff bat, western red bat, hoary bat, western small-footed myotis, long-eared myotis, fringed myotis, and Yuma myotis.

Response 502-16: Table 4.4-5 of the PEIR has been amended to include bald eagle, osprey, yellow-headed blackbird, and all 10 bat species listed in Table 4.4-1 (as amended in response to previous comments).

Response 502-17: Section 4.4.1.11 of the PEIR has been amended to correct the reference to "more arid ranges to the west" of the OVSA, and correct the reference "Los Angeles Aquifer."

Response 502-18: Section 4.4.3.1 of the PEIR has been amended to reflect the historic ranges and current status of the fish species mentioned.

Response 502-19: The County notes LADWP's comment regarding likelihood of northern leopard frog occurrence in the Laws SEDA; however, CNDDDB records are listed as "presumed extant", and data regarding negative results of recent CDFW surveys can and should be considered in project-level biological resources studies. No changes have been made to the PEIR regarding this comment.

Response 502-20: The County notes LADWP's comment regarding the extent of habitat for southwestern willow flycatcher in the Laws SEDA. Habitat suitability and the need for surveys shall be assessed in project-level biological resources studies as outlined in the PEIR. No changes have been made to the PEIR regarding this comment.

Response 502-21: Section 4.4.3.1 of the PEIR has been amended to correct the description of nesting habits for the two species mentioned.

Response 502-22: Reference to potential impacts to Owens pupfish and Owens tui chub have been removed from Section 4.4.3.2 of the PEIR.

Response 502-23: Reference to potential impacts to Owens pupfish, Owens tui chub, LeConte's thrasher, and Mojave fringe-toed lizard have been removed from Section 4.4.3.2 of the PEIR. Also, the reference to "Owens Valley SEDA" has been corrected.

Response 502-24: Reference to Los Angeles Aqueduct and North Haiwee Reservoir as designated Important Bird Areas has been deleted from Section 4.4.3.2 of the PEIR.

Response 502-25: As outlined in Section 1.2 of the PEIR, subsequently proposed individual solar energy projects 20 MW and greater will undergo project specific analysis and will be examined in light of the PEIR as defined in Section 15168 of the State CEQA Guidelines to determine whether any additional environmental documentation must be prepared. Moreover, the process outlined in the Draft PEIR

does not preclude CEQA review of a small scale solar energy project if a qualified County planner finds that it may result in significant impacts, but it does allow for discretionary judgment on the part of the qualified County planner in the assessment of the likelihood of such impacts. It should be noted that under Title 21 of the Inyo County Code concerning renewable energy development, any person who proposes to construct an electric transmission line, solar thermal renewable energy facility or a photovoltaic renewable energy facility in the County must first obtain a Renewable Energy Permit, a Renewable Energy Development Agreement or a Renewable Energy Impact Determination. A Renewable Energy Impact Determination applies to projects over which the County has limited authority because the project is located on federal or state land or is subject to the permitting jurisdiction of the California Energy Commission.

Under Title 21, the issuance of a Renewable Energy Permit is subject to CEQA, and the County Planning Commission must conduct a noticed public hearing before considering approval of such a permit. The Planning Commission must find that there has been compliance with CEQA before a permit can be issued. In addition, "as a condition to the issuance of such a permit, the Planning Commission may impose such reasonable and feasible mitigation measures as it finds to be necessary to protect the health, safety, and welfare of the county's citizens, the county's environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project." Finally, the Planning Commission is required to impose as a condition of approval, a plan for the reclamation/revegetation of the project site at the time of decommissioning of the project and the Planning Commission shall require financial assurances from the applicant to ensure that the reclamation plan will be fully implemented.

Concerning Renewable Energy Development Agreements, Title 21 provides that such agreements may be entered into by the County and a project applicant in lieu of obtaining a Renewable Energy Development Permit. Renewable Energy Development Agreements are subject to CEQA and must be approved by an ordinance adopted by the Board of Supervisors following a noticed public hearing. Prior to approving such an agreement, the Board must find that there has been compliance with CEQA. Renewable Energy Development Agreements must include a reclamation plan, acceptable financial assurances to ensure full implementation of the reclamation plan, be consistent with the county general plan and be enforceable by injunctive relief or other enforcement mechanisms under law. In the Renewable Energy Development Agreement, the Board of Supervisors may require such mitigation measures or modifications of the project as it finds necessary to protect the health, safety, and welfare of the county's citizens, the county's environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.

If the REGPA is adopted, any future commercial or utility scale solar energy development that is proposed to be sited outside of the SEDAs would require a General Plan Amendment, and would require separate environmental review under CEQA.

The County acknowledges that proposed actions on property owned by the City of Los Angeles will be subject to City approval.

Response 502-26: Mitigation Measure BIO-2 has been amended as requested.

Response 502-27: Mitigation Measure BIO-2 has been amended to remove the bullet related to environmentally sensitive area fencing.

Response 502-28: The County notes LADWP's concerns regarding the legality of transplanting sensitive plants by private entities; however, it believes that Sections 1913 and 1906 of the California Fish and Game Code do not specify that the legal authority they grant to CDFW is inalienable. The County believes that CDFW can exercise its authority by delegating it to a private entity.

Mitigation Measure BIO-2 has been amended to clarify the role of agency consultation in formulating mitigation for unavoidable impacts to sensitive plants that may include transplantation.

Response 502-29: See Response to Comment 502-28.

Response 502-30: Mitigation Measure BIO-3 has been amended per the comment.

Response 502-31: Mitigation Measure BIO-3 has been amended to remove the bullet specifying environmentally sensitive area fencing as a universally-required mitigation measure.

Response 502-32: Mitigation Measure BIO-3 has been amended per the comment.

Response 502-33: Mitigation Measure BIO-3 has been amended to remove the bullet regarding desert tortoise.

Response 502-34: Mitigation Measure BIO-3 has been amended per the comment.

Response 502-35: Mitigation Measure BIO-6 has been amended to read as follows:

- The Desert Tortoise Relocation/Translocation Plan must be approved by the ~~County~~, CDFW and USFWS prior to any project-related ground disturbing activity. Plans may also be subject to approval by the County as part of the conditions of approval for future projects.

Response 502-36: Mitigation Measure BIO-6 has been amended to read as follows:

- The project proponent shall design and implement a Raven Monitoring, Management, and Control Plan that is consistent with the most current USFWS raven management guidelines. The goal of the plan shall be to minimize predation on desert tortoises by minimizing project-related increases in raven abundance. The plan shall be approved by ~~the County~~, CDFW and USFWS prior to the start of any project-related ground disturbing activities. Plans may also be subject to approval by the County as part of the conditions of approval for future projects.

Response 502-37: Mitigation Measure BIO-9 has been amended to clarify the nature of required surveys, and to replace mention of the 75-meter buffer with reference to distances recommended in the 2012 Staff Report.

Response 502-38: Mitigation Measure BIO-10 has been amended to include reference to standard protocols for yellow-billed cuckoos.

Response 502-39: Mitigation Measure BIO-11 has been amended to reference the 2010 revised survey protocol for southwestern willow flycatcher at the following URL:

<http://www.fws.gov/mountain-prairie/endspp/protocols/SWWFReport.pdf>

Response 502-40: Mitigation Measure BIO-16 has been amended to read as follows:

Protocol Mohave ground squirrel surveys shall be required for projects that propose impacts to habitat with potential to support Mohave ground squirrel or are within or adjacent to the species' known range. Mohave ground squirrel surveys consist of a visual survey followed by 3 trapping sessions of 5 nights each (CDFW 2003). Each trapping session must be conducted during a specific time frame. The first session must be conducted between March 15 and April 30; the second between May 1 and May 31; and the third between June 15 and July 15. Trapping can be discontinued if a Mohave ground squirrel is trapped or observed, in which case the survey area is deemed to be occupied. If survey results are negative, the survey area will be deemed to be unoccupied for one year during which pre-construction surveys are not required. If survey results are positive, the project shall obtain an incidental take permit from CDFW under CESA Section 2081.

Response 502-41: Mitigation Measure BIO-17 has been amended to state that, even with permission from the landowner, private land is to be avoided to the maximum extent practicable.

Response 502-42: Mitigation Measure BIO-18 has been amended to change "...County-approved qualified biologist(s)..." to read "...CDFW-approved biologist..."

Response 502-43: See Response to Comment 106-4. Mitigation Measure BIO-18 has been rewritten and no longer includes the text to which the comment refers.

Response 502-44: Mitigation Measure BIO-19 has been amended to state that riparian communities adjacent to the project site shall be protected by installing environmentally sensitive area fencing, if necessary, in coordination with the project biologist. Mitigation Measure BIO-20 has been amended to state that wetland habitats that occur near the project site shall be protected by installing environmentally sensitive area fencing, if necessary, in coordination with the project biologist.

Response 502-45: Mitigation Measure BIO-20 has been amended to replace the word "highway" with "solar" as referenced in the comment.

Response 502-46: Mitigation Measure BIO-24 has been amended to include approval by the LADWP and the County prior to the implementation of a vegetation management plan or project that is located on or could affect lands owned by the City of Los Angeles.

**CPG INDEPENDENCE, LLC**

January 14, 2014

Inyo County Planning Department
Attention: Ms. Cathreen Richards, Senior Planner
P.O. Drawer L
Independence, CA 93526

Re: Inyo County Renewable Energy General Plan Amendment (REGPA) DRAFT Programmatic EIR

503-1

Dear Cathreen:

Since 2012, CPG Independence, LLC has been developing a 138MW (AC) solar photovoltaic project on a certain 1,280 acre parcel of private land ("Site") just east of the Owens River and just South of Mazourka Canyon Road approximately 5 miles southeast of the town of Independence, also known as the Independence Solar Project. A permit application for that project has been filed with Inyo County and the EIR/CEAQ document preparation commenced.

We are writing to comment on the DRAFT Programmatic EIR for the Inyo County Renewable Energy General Plan Amendment (REGPA).

An element of the REGPA DRAFT Programmatic EIR (Section 3.3.5 page 3-18) suggests that a limit of 250MW be placed on renewable energy development in the Owens Valley Study Area (and Western Area Energy Group) due to that capacity being the limitation on the existing LADWP electrical Barren Ridge to Owens Gorge transmission lines that run through the valley. This figure is stated to have been provided by LADWP as the available capacity on these lines. Due to the confidentiality of the grid interconnection process required by the LADWP Transmission Tariff, details of the interconnection process are confidential. However, as a general statement, without being able to provide any details due to the aforementioned confidentiality clause, the existing unused capacity on the Barren Ridge to Owens Gorge transmission line that is available for new renewable (solar) generation is substantially more than 250MW, and we understand that it may be in the 350MW to 400MW range. Thus it is incorrect to state that 250MW is the unutilized capacity of those existing lines as reported by LADWP, and the limit for renewable energy development in the Owens Valley Study Area (and Western Area Energy Group) should be increased to reflect at least the actual unused capacity on the Barren Ridge to Owens Gorge transmission line. There is no justification for a limit to the renewable energy development in the Owens Valley Study area and Western Area Energy Group, which is below the actual unused capacity on such transmission lines.

The statement in the DRAFT Programmatic EIR that the capacity of the LADWP Inyo-Rinaldi transmission line (also referred to as the Inyo-Owens Gorge line, the Barren Ridge-Owens Gorge line and the Rinaldi-Owens Gorge line, depending on line section referred to) has an existing capacity of (approximately) 450MW is not questioned (Section 2.2.3.2).

6032 Shelter Bay Ave Mill Valley, CA 94941



CPG INDEPENDENCE, LLC

However, the statement that 240MW (Section 2.2.3.2) or 250MW (Section 3.3.5) is the existing available unused capacity (which implies 210MW to 210MW of current generation is being input into the existing transmission line) is simply not correct.

503-1
(cont'd)

The transmission interconnection process managed by LADWP will ultimately determine the actual limit on the capacity of renewable generation that can be exported on the existing transmission lines and will act as an ultimate control of the renewable generation that could be built in the OVSA and that can be exported over the existing LADWP transmission lines– likely to be capped in the range of 350MW to 400MW.

The DRAFT REGPA sets the limit for renewable energy development in accordance with the export capacity of existing transmission lines, which, based on incorrect information has thus been set an artificially low renewable energy generation limit. Considering LADWP’s development of a 200MW solar project in the Owens Valley Study Area that could be seen to be in competition with the privately developed proposed Independence Solar Project, setting such an artificially low limit on development based on LADWP’s incorrect information would be discriminatory to and place an undue burden on the Independence Solar Project and on this previously disturbed private property, which is exactly the type of site that is encouraged for solar energy generation by this same DRAFT Programmatic EIR and the renewable energy generation goals of Inyo County and the State of California.

Additionally, the solar project area per MW (AC) is understated in the DRAFT Programmatic EIR. Most projects, to allow for site access and natural site feature conditions, work out to be in the 6 to 7 acres per DC MW range. With an approximate conversion rate from DC to AC of 80%, this corresponds to 7.5 to 8.75 acres per AC MW.

Based on the foregoing, we urge the modification of the DRAFT Programmatic EIR Renewable Energy proposed cap in the Owens Valley Study Area and the total for the Western Area Energy Group (Table 3-1) to be 400MW not the artificially understated 250MW as the DRAFT Programmatic EIR currently states. Further, since the project area per MW (AC) is understated, the corresponding acreage for 400MW of projects in the Owens Valley Study Area and the total for the Western Area Energy Group should be changed from 1,500 acres to a minimum of 3,200 acres (a minimum ratio of 8 acres per AC MW, 6.4 acres per DC MW).

Respectfully Submitted,

Charlie Kuffner

Charlie Kuffner
CPG Independence, LLC

6032 Shelter Bay Ave Mill Valley, CA 94941

Response to Letter 503 – CPG Independence, LLC

Response 503-1: This comment raises questions about the available capacity of the LAWDP Inyo-Rinaldi transmission line as identified in the OVSA and Western Area Energy Group. The commenter suggests that the capacity of this line is 350MW- 400MW. However, the PEIR states that the Inyo-Rinaldi System is a 230-kV line with a rated capacity of about 450 MW and that the LADWP holds entitlement to the entire 450 MW capacity of the existing line; this existing line has approximately 240 MW of excess carrying capacity. The information used in the Draft EIR is based on the Opportunities and Constraints Technical Study (OCTS) prepared for the County of Inyo by Aspen Environmental Group in February of 2014. Furthermore, this information is consistent with the Southern Owens Valley Solar Ranch: Area Narrowing Study (2013) prepared for the LADWP by Power Engineers, Inc. in support of the Southern Owens Valley Solar Ranch DEIR. If additional capacity is realized by other technical studies or supporting information, a General Plan Amendment would still be required for a project to be approved that would exceed the 250 MW cap. The County acknowledges the information presented by CPG Independence, LLC about additional capacity available within the LADWP Inyo-Rinaldi transmission line and will consider this letter as part of Final PEIR and as information available to the public; however, the County will assume the more conservative estimate of available capacity as presented in the OCTS and REGPA PEIR.

January 12, 2015

We, the undersigned, are full-time and part-time residents of Tecopa. We do not believe that industrial-scale solar energy production is right for Eastern Inyo County. Tourism forms the basis of our economy, and many tourists come here seeking the remote, undeveloped landscapes that the Death Valley Region has to offer. Charleston View and the Chicago Valley are important parts of our region, and if they were to be converted into utility-scale solar energy production areas, it could potentially have a negative impact on tourism, and thereby a negative impact on our local economy.

504-1

Please withdraw Charleston View and Chicago Valley from consideration as Solar Energy Development Areas.

Signed,

Kate Knight P.O. Box 113, Shoshone, CA 92384

James Robert Janti P.O. Box 144, Tecopa CA 92384

Business - Paul Barnes, Tecopa Hot Springs Conservancy, P.O. Box 103, Tecopa, CA 92389

Business - Nancy Good, New Light Foto Design, P.O. Box 105, Tecopa, CA 92389

Emma K Clark P.O. Box 214 Tecopa CA 92389

Bridget Johnson P.O. Box 214 Tecopa Ca 92389

with with ^{lined here over 10 yrs.} po. Box 334, Tecopa, Ca.

Response to Letter 504 – Tecopa Residents Petition

Response 504-1: This comment has been provided by the residents of Tecopa voicing their opposition to industrial-scale solar energy production in Eastern Inyo County. The letter is primarily concerned about impacts to tourism and how that could negatively affect the local economy. Section 4.16 of the PEIR analyzes impacts to socioeconomics and concluded that, with the implementation of proposed REGPA policies, ICC Title 21, and management measures outlined in Section 4.16.7, the County would be able to maintain its current economic condition and not realize an adverse fiscal impact related to the construction and operation of solar energy facilities.

Name	City	State	Zip Code	Country
Patrick Donnelly	Shoshone	California		United States
Julie Vargo	Bishop	California	93514	United States
Kevin Emmerich	Beatty	Nevada	89003	United States
Jim Mattern	Joshua Tree	California	92252	United States
John Smolinski	Yucca Valley	California	92284	United States
connie j cunningham	Boise	Idaho	83709	United States
Lorraine Vineyard	Lake Havasu City	Arizona	86404	United States
Rob Ortegon	Rio Rancho	New Mexico	87124	United States
Jack Cook	Lacka	New York	14218	United States
Per Roam	Phoenix	Arizona	85032	United States
Lynne DeSpain	Bisbee	Arizona	85603	United States
shaunt kouyoumdjian	Glendale	California	91202	United States
Ann Harrell	Shoshone	California	92384	United States
Patrick Overlie	San Bernardino	California	92404	United States
Daniel price	Adelanto	California	92301	United States
jeff mcauliff	castro valley	California	94546	United States
christopher snyder	Marina	California	93933	United States
chiara graziosi			53035	Italy
Kim wright	Tehachapi	California	93561	United States
guido voltolini			53035	Italy
Freddie Miller	Fresno	California	93727	United States
Renee Sweezey	Santa Rosa	California	95404	United States
Joseph Linert	North Las Vegas	Nevada	89081	United States
Pat martin	Quail Valley	California	92587	United States
faye helms	daleville	Alabama	36322	United States
chris evans	Lake Havasu City	Arizona	86403	United States
Yesenia Smith	victorville	California	92392	United States
monica martini			53035	Italy
Seth Cline	Bishop	California	93514	United States
Erika Diamond	Tustin	California	92770	United States
Jared Fuller	Plesant Grove	Utah	84062	United States
Earline Ahonima	San Francisco	California	94114-2434	United States
Jeff Cooper	Apple Valley	California	92307	United States
Carol Corbett	Las Vegas	Nevada	89149	United States
eric h	Santee	California	92071	United States
Scott Fajack	Los Angeles	California	90026	United States
Erin McGuire	Palmdale	California	93591	United States
Keith Suleski	Santa Ana	California	92706	United States
Ann Bucharelli	Inyokern	California	93527	United States
Jamie Weleber	Columbia	New Jersey	7832	United States
Catherine Ruane	Buckeye	Arizona	85309	United States
Reid Campbell	Darwin	California	93522	United States
Dulce Stein	Hawthorne	California	90250	United States
Patricia Davis	California City	California	93505	United States
Sharon Garabedian	Canoga Park	California	91304	United States
Kathryn Holmes	Hains	Alaska	99827	United States

Kyri Freeman	Barstow	California	92311 United States
Karin Pine	Tecopa	California	92389 United States
claudia millerbragg	Campo	California	91906 United States
Craig Dicht	Joshua Tree	California	92252 United States
Roger Shervington	Claremont	California	91711 United States
Pete zwanenburg	rotterdam		Netherlands
fred rinne	San Francisco	California	94112 United States
James Ledwidge	Mojave	California	93501 United States
Elizabeth Perluss	Auburn	California	95602 United States
Reece Parker	Albuquerque	New Mexico	87123 United States
sue sch.	Florida	Florida	89077 United States
Constance Parker	Albuquerque	New Mexico	87123 United States
Elizabeth Morgan	San Diego	California	92126 United States
Alan Brechlin	Victorville	California	92395 United States
Robert Hansen	Hayward	California	94545-2935 United States
Mary Roper	Independence	California	93526 United States
Chris Clarke	Joshua Tree	California	92252 United States
Jeff Dyer	Pinon Hills	California	92372 United States
Pierre Plas			66470 France
Edwin Palacios	Sylmar	California	91342 United States
Carma roper	Independence	California	93526 United States
Ryan Drnek	Culver City	California	90230 United States
Clayton Ellis	Tunnel Hill	Georgia	30755 United States
Rob Spangler	Syracuse	Utah	84075 United States
Rana Schindler	Lone Pine	California	93545 United States
Kenneth Sitz	Los Angeles	California	90026 United States
Sonie Sampson	San Francisco	California	94121 United States
Jacklyn Velasquez	Big Pine	California	93513 United States
Robert Davis jr	Bethesda	Maryland	20817 United States
John Feeney	Boulder	Colorado	80304 United States
shani kleinahus	Palo Alto	California	94303 United States
Jill Bays	Pinon Hills	California	92372 United States
Tamie Warren	Ridgecrest	California	93555 United States
Erin Barca	Walnut Creek	California	94596 United States
Laraine Turk	Joshua Tree	California	92252 United States
Dennis Kaplan	Mayfield Heights	Ohio	44124 United States
William Fortney	Camarillo	California	93010 United States
Bill Helmer	Independence	California	93526 United States
Yaney Maclver	Corvallis	Oregon	97330-3179 United States
randy ness	Rosamond	California	93560 United States
Sonya Shiffer	Pismo Beach	California	93449 United States
Paul Fretheim	Independence	California	93526 United States
Mary Williams	Burbank	California	91504 United States
david Martinez	San Dimas	California	91773-2032 United States
Duncan Bell	Claremont	California	91711 United States
William Heller	Union Beach	New Jersey	7735 United States
Linda Webb	Albuquerque	New Mexico	87111 United States

Ty dennison	Inyokern	California	93527 United States
Elizabeth Nannini	Castro Valley	California	94546 United States
Mike Hudak	Binghamton	New York	13904 United States
b Coons	San Diego	California	92110 United States
Spencer Coffin	Twentynine Palms	California	92277 United States
Neil Toll	Gallatin	Tennessee	37066 United States
Tresa Gallegos	Leesville	Louisiana	71446 United States
Patty smith	Savannah	Georgia	31404 United States
Alison Erickson	Des Plaines	Illinois	60018 United States
Trevolyn Haines	Chino Hills	California	91709 United States
Carol Underhill	Victorville	California	92392 United States
Robert Morgan	Bishop	California	93514 United States
Karyn Newbill	Simi Valley	California	93063 United States
G. Donald Bain	El Cerrito	California	94530-6503 United States
Nicholas Lessig	San Diego	California	92117 United States
Jane Mcdonald	Independence	California	93526 United States
edie trimmer	big pine	Utah	93513 United States
Christian Hogan	Marysville	California	95901 United States
Penelope Melko	Tehachapi	California	93561-8154 United States
Dylan NEUBAUER	Santa Cruz	California	95060 United States
Rose Masters	Independence	California	93526 United States
Aaron Hampton	Independence	California	93526 United States
Robert Temple	Ridgecrest	California	93555 United States
Kathy Tieu	Santa Ana	California	92705 United States
Randy Stevenson	Atascadero	California	93422 United States
Michael Rotolo	El Segundo	California	90245 United States
Gann Matsuda	Culver City	California	90230 United States
John Moore	Sacramento	California	95820 United States
Linda Emerson	Bishop	California	93514 United States
Ilene Mandelbaum	Lee Vining	California	93541 United States
Stan Russell	Santa Cruz	California	95060 United States
Joel Masser	San Jose	California	95124 United States
Bruce E	Los Angeles	California	90026 United States
Frank Bluntew	Los Angeles	California	90024 United States
Annie Bergman	Portland	Oregon	97206 United States
Jennifer Jennings	Long Beach	California	90806 United States
Daniel Pritchett	Bishop	California	93514 United States
Lynn Johnson	Independence	California	93526 United States
Kirsten Liske	Santa Cruz	California	95062 United States
sarah rose	YOSEMITE NATIONAL PARK	California	95389 United States
Jen Michelsen	Santa Cruz	California	95062 United States
Kevin McDavid	Costa Mesa	California	92626 United States
Beth Jackson	Fishers	Indiana	46037 United States
Steven McLaughlin	Big Pine	California	93513 United States
Donna Archer	Independence	California	93526 United States
Michael Prather	Lone Pine	California	93545 United States
Christopher Capp	Venice	California	90291 United States

John Corathers	Reno	Nevada	89523 United States
BryAnna Vaughan	Big Pine	California	93513 United States
Karen Brorson	Bishop	California	93514 United States
Steve Campini	Temecula	California	92591 United States
Jesse Roper	Portland	Oregon	97213 United States
Clare Marter Kenyon	Los Angeles	California	90065 United States
Sydney Quinn	Big Pine	California	93513 United States
Nancy Masters	Independence	California	93526 United States
Patricia Tapanes	Los Angeles	California	90045 United States
Richard kelty	Bishop	California	93514 United States
Mark Campbell	Rosamond	California	93560 United States
Joel Ferree	Pasadena	California	91106 United States
brian cashore	Bishop	California	93514 United States
Christian Corathers	Long Beach	California	90814 United States
Ellen Donnelly	Southbury	Connecticut	6488 United States
janis lloyd	North Bend	Oregon	97459 United States
Richard DiPrima	Bishop	California	93514 United States
julia still	wells		5363 United Kingdom
john walton	Carmel Valley	California	93924 United States
Michael Brorson	Bishop	California	93514 United States
Edwin Thomas	Catonsville	Maryland	21228 United States
Amy Noel	Tecopa	California	92389 United States
Howard Steidtmann	Stateline	Nevada	89449 United States
Nancy Good	Las Vegas	Nevada	89110 United States
Jora Fogg	June Lake	California	93529 United States
Sam Roberts	Millbrae	California	94030 United States
Carol Conner-Turner	Bishop	California	93514 United States
Elaine Bowers	Big Pine	California	93513 United States
cassie baez	Mountain View	California	94043 United States
Bryce Winter	Santa Cruz	California	95060 United States
Monica Wilson	Coarsegold	California	93614 United States
Matthew Page	Simi Valley	California	93065 United States
Candas Klosowski -jones	Valencia	California	Valencia United States
Deborah Cruze	New Washoe City	Nevada	89704 United States
Austin Womack	Ontario	California	91764 United States
Andrea Mann	Concord	California	94521 United States
Guy hatzvi	Los Angeles	California	90042 United States
Karin Kersteter	Ventura	California	93001 United States
Larry Thompson	Huntington Beach	California	92647 United States
Jeff Mitchell	Lancaster	California	93536 United States
Dave Wagner	Independence	California	93526 United States
Elisabeth Chaplin	Santa Barbara	California	93101 United States
Chastity Richkarday	Van Nuys	California	91405 United States
Lauralea Thompson	Laguna Niguel	California	92677 United States
Leslie Sobel	Milan	Michigan	48160 United States
Olivia Grah	Bishop	California	93514 United States
James Morehouse	Las Vegas	Nevada	89135 United States

Lori Simpson	Bishop	California	93514 United States
Sherrie Good	Harrisonburg	Virginia	22801 United States
charlene roueche	Torrance	California	90503 United States
William Turner	Oakland	California	94618-1029 United States
Brian McColgan	Ojai	California	93023 United States
francesca militeau	boulder	Colorado	80302 United States
Terry Frewin	Santa Barbara	California	93130 United States
sam foster	San Francisco	California	94112 United States
Joyce Hana	Brea	California	92821 United States
Amanda Wendt	Independence	Iowa	50644 United States
Roland Peachie	Ridgecrest	California	93555-4137 United States
karen orso	Wilseyville	California	95257 United States
Steve Haga	Auburn	California	95602 United States
Julie Rolfe	Mammoth Lakes	California	93546 United States
Lance Rava	Reno	Nevada	89521 United States
Jose Witt	Las Vegas	Nevada	89143 United States
Susan Kollins	Long Beach	California	90808 United States
David Herbst	Bishop	California	93514 United States
Kerry Farris	Klamath Falls	Oregon	97603 United States
Laura Furuyama	Livermore	California	94551 United States
Keith Thompson	Beaumont	California	922238603 United States
Edward Logue	Palmdale	California	93552 United States
david iverson	Cottonwood	Arizona	86326 United States
Bob Meacham	San Antonio	Texas	78218 United States
Steven Smith	Barstow	California	92311 United States
Molly Hansen	Arroyo Seco	New Mexico	87514 United States
Sarah Lewis	Long Beach	California	90803 United States
lara hartley	Barstow	California	92311 United States
James Wilson	Big Pine	California	93513 United States
Graham Cooper	Big Pine	California	93513 United States
Tom Budlong	Los Angeles	California	90049 United States
Janet Westbrook	Ridgecrest	California	93556 United States
Valerie Hart	Big Pine	California	93513 United States
Mary Jane McEwan	Ridgecrest	California	93555 United States
Jack Freer	Gardnerville	Nevada	89410 United States
Susan Odell	Silver Spring	Maryland	20910 United States
Devona Snook	San Francisco	California	94131 United States
Kathryn LaShure	Inyokern	California	93527 United States
SHAWN RUMMEL	Buena Park	California	90621 United States
Gordon Matassa	San Francisco	California	94112 United States
Jonathan Pusey	Long Beach	California	90803 United States
Ariana Wylie	Byron	California	94514 United States
Eric Bero	Gardnerville	Nevada	89460 United States
dale aastrom	Montclair	California	91763 United States
Anca Logan	Mammoth Lakes	California	93546 United States
Ross Heckmann	Arcadia	California	91006-2406 United States
Deny Dudzik	Yorkville	California	95494 United States

D. Wall	San Pedro	California	90732 United States
nancy gooch	Ridgecrest	California	93555 United States
Bob Kent	Chatsworth	California	91311 United States
David Rose	Conroe	Texas	77303 United States
Norma Ryan	Simi Valley	California	93065 United States
Thomas Perkins	Ridgecrest	California	93555 United States
robert gaude	Verdi	Nevada	89439 United States
Whitney Peterson	Minneapolis	Minnesota	55438 United States
Dean Godinez	Costa Mesa	California	92626 United States
Katheryn Uccello	Monterey	California	93940 United States
Linda Bozack	Brookings	Oregon	97415 United States
Marcos Trinidad	Los Angeles	California	90041 United States
Michelle Stahnke	Atascadero	California	93422 United States
Teresa Mokma	San Jose	California	95128 United States
Andrew Yocum	Simi Valley	California	93063 United States
Janet Kruse	Portland	Oregon	97293 United States
Yolanda Demotto	Chula Vista	California	91911 United States
Lynne Almeida	Bishop	California	93514 United States
Colby Brokvist	Oakhurst	California	93644 United States
Steve Byrne	Pacifica	California	94044 United States
Sara Manning	Bishop	California	93514 United States
Mervin Hess	Bishop	California	93514 United States
Will Scott	Lagunitas	California	94938 United States
Jessica Dixon	Mammoth Lakes	California	93546 United States
Shirley Mills	Alturas	California	96101 United States
Priyantha Wijesooriya	Colombo5		Sri Lanka
Eric O'Rafferty	Altadena	California	91001 United States
Leslie Gunning	Studio City	California	91604 United States
Mitzi patterson	Las Vegas	Nevada	89129 United States
Aleah Sato	Phoenix	Arizona	85012 United States
Sharon Stein	Hawthorne	California	90250 United States
Darlene McGriff	Sacramento	California	95826 United States
Julio Soria	Montebello	California	90640 United States
David Ross	Paulsboro	New Jersey	8066 United States
Stacy Fitzgerald	Reno	Nevada	89521 United States
Tracie Denton	Aliso Viejo	California	92656 United States
sedda wuller	Los Angeles	California	90026 United States
Adina Ross	Murrieta	California	92564 United States
Cheryl Hobson	Morongo Valley	California	92256 United States
Diane Mahle	Newhall	California	91321 United States
Jennifer Riley	Antelope	California	95843 United States
Judith Millward	W Richland	Washington	WA 99353 United States
Justin Blake	Tecopa	California	92389 United States
Andres Burrola	Lomita	California	90717 United States
Ariella Daly	Nevada City	California	95959 United States
Sherry Cosgrove	Keeler	California	93530 United States
Paula Hugill	San Diego	California	92154 United States

Jacqueline Halpin	Altadena	California	91001 United States
Steve Parmenter	Bishop	California	93514 United States
julie haber	Ridgecrest	California	93555 United States
Diana Williams-Horning	Sparks	Nevada	89431 United States
David Kurdeka	Ridgecrest	California	93555 United States
Sandra Schwarzbach	Ridgecrest	California	93555 United States
Louise Mathias	Joshua Tree	California	92252 United States
Jo barlow	Bishop	California	93514 United States
Mary Jean Sitter	Pleasant Hill	Missouri	64080 United States
Chris Kalashian	Clovis	California	93619 United States
Ellen Kalashian	Clovis	California	93619 United States
Keith Ross	Battle Ground	Washington	98604 United States
Susan Maylone	Dallas	Texas	75240 United States
jane nye	Chicago	Illinois	60640 United States
Theresa Hoff	Mooresville	North Carolina	28117 United States
Rosemary Jarrett	Bishop	California	93514 United States
George Mitchell	San JOse	California	95155-655 United States
Michelle Westrum	Nevada City	California	95959 United States
Andrew Morin	Lone Pine	California	93545 United States
Jael Hoffmann	Olancha	California	93549 United States
Jamey Wilcher	Davis	California	95616 United States
Ethel Messer	Shoshone	California	92384 United States
Samantha Dixon	Las Vegas	Nevada	89120 United States
Li Newton	Asheville	North Carolina	28803 United States
John G Curry	Durham City	England	DH1 4HP United Kingdom
Scott Parker	Antioch	California	94509 United States
Linda Anderson	Ridgecrest	California	93555 United States
Shawn Delehanty	Bishop	California	93515 United States
Hilary Parish	Bishop	California	93515 United States
Lucy Alexander	Toronto		M4M2Y8 Canada
Lisa Ronning	Chula Vista	California	91911 United States
Michel Collins	Cayce	South Carolina	29033 United States
Sheila Steeples Anders	Flagstaff	Arizona	86001 United States
Laura Beardsley	Mammoth Lakes	California	93546 United States
Cathy Huff	Ridgecrest	California	93555 United States
Virginia Davis	Camano Island	Washington	98282 United States
Jackie Brown	Ridgecrest	California	93555 United States
Teresa Skye	Pahrump	Nevada	89048 United States
Patricia Brannon	Glendora	California	91740 United States
Mike Hay	Bishop	California	93514 United States
tina breedlove	inyokern	California	93527 United States
Barbara Durham	DEATH VALLEY	California	92328 United States
Jesse Noh	Brea	California	92823 United States
Brian Settle	Worthington	Ohio	43085 United States
Cynthia Koff	Long Beach	California	90808 United States
kate kingston	fairfax	California	94930 United States
Tracey Bowers-Stidham	Ramona	California	92065 United States

joseph cappiello	Pomona	California	91768 United States
Toreia Miller	Mentone	California	92359 United States
Mike Bond	Sparks	Nevada	89431 United States
Barbara Carter	Vallejo	California	94591 United States
Joseph Leomo	Los Angeles	California	91324 United States
nancy higbee	Perris	California	92570-7873 United States
Barry Lehrman	Claremont	California	91711 United States
Joey Davidson	Bishop	California	93514 United States
Mike Kelly	Hesperia	California	92345 United States
Ryan Navales	Los Angeles	California	90014 United States
Robert oinas	San Bernardino	California	92407 United States
Andy Williams	Cortlandt	New York	10567 United States
David Rosenthal	Westlake Village	California	91361 United States
K. Belt	Silver City	New Mexico	88061 United States
annie belt	San Jose	California	95126 United States
Ann Michelle DeSelms	Colstrip	Montana	59323 United States
john whitworth	Acworth	Georgia	30102 United States
Barbara Burns	ARCATA	California	95521 United States
alfredo figueroa	Blythe	California	92225 United States
Greg Belt	Lompoc	California	93436 United States
Michael Hale	Oklahoma City	Oklahoma	73162 United States
frances Trotta	Silver City	New Mexico	88061 United States
Alex Fuhrer	Carpinteria	California	93013 United States
Jef Chadwick	Mammoth Lakes	California	93546 United States
Randy Kennedy	Montrose	Colorado	81401 United States
Raven Gray	Inverness	California	94937 United States
Jesse Deyden	Huntington Beach	California	92647 United States
William Hein	Los Angeles	California	91405 United States
Cathy Billings	Los Angeles	California	90042 United States
Robert Sr	Mina	Nevada	89422 United States
Barbara Hausteen	Riverside	California	92504 United States
Zachary Michelson	Orinda	California	94563 United States
Kiriaki Keramitsoglou	Didimoticho		Greece
Matilde Reyes	South Pasadena	California	91030 United States
enrika lazdauskaite	Los Angeles	California	90038 United States
Carie Ledbetter	Riverside	California	92504 United States
Chris Christensen	Olancho	California	93549 United States
Dominique Tardif	Boise	Idaho	83703 United States
Chantal Buslot	Hasselt	Texas	78753 United States
michelle strong	los angeles	California	90042 United States
Shannon Mallory	San Diego	California	92111 United States
Mark Reback	Los Angeles	California	90042-1107 United States
Erik Polczwartek	Joshua Tree	California	92252 United States
Melissa Crusinberry	Blythe	California	92225 United States
Gerry Mulryan	Castaic	California	91384 United States
Kendall Mallory	San Diego	California	92111 United States
Maryanne Murray	Little Rock	California	93543 United States

Louise Grabowski

Quincy

Massachusetts

Letter 505
2171 United State

Comments

Name	Location	Date	Comment
Julie Vargo	Bishop, United States	2015-01-05	Industrial scale solar is not the future. We need energy solutions that do not destroy the few remaining pristine areas of our country.
Lorraine Vineyard	Lake Havasu City, AZ	2015-01-05	We as a nation have spoiled enough land. We need to repurpose what we have now and leave the rest for our ancestors.
Jack Cook	Lacka, United States	2015-01-05	Large-scale solar has proven to be devastating to ecosystems, wildlife, and to cause pollution with the coolant, erosion from runoff, and yet big-energy still tries and destroy our desert with these solar plants. Put solar panels on rooftops!
Daniel price	Adelanto, CA	2015-01-05	we don't need solar stuff making the beautiful desert ugly. They have put some solar stuff around my area and it's ugly. I travel a lot up and down 393 and 58 and I see that ugly solar stuff. Now don't get me wrong I don't mind saving the earth by going solar but I also would like to save our beautiful Death Valley. Put that solar stuff somewhere that it don't destroy our wild life and desert. Put it in the city on top of buildings were no one sees it our cares. Thank you for your time. Daniel Price
christopher snyder	sedona, United States	2015-01-05	Solar panels belong where the power is used
chiara graziosi	Italy	2015-01-05	To preserve the natural beauty of this wild landscape. Let the wild be wild!!
guido voltolini	Italy	2015-01-05	I love these places
Pat Martin	Canyon Lake, CA	2015-01-05	this is a stupid proposal.
monica martini	Italy	2015-01-05	I love the loneliness of the Inyo county
Seth Cline	Bishop, CA	2015-01-05	I'm signing this because there's simply no need to ruin a amazing area like this. We don't need any more damage. L.A department of water and power already did enough!!
Jamie Weleber	Columbia, NJ	2015-01-05	The Mojave is a fully functional, vibrant ecosystem. Large scale solar, so far removed from the demand for the power, degrades the landscape. Easier, more efficient options, such as DG, currently exist and should be pursued over large scale solar.
Patricia Davis	California City, United States	2015-01-05	I am against the Western USA Deserts looking like a wasteland.. What will we look like when these companies change to another source for electricity and these are no longer needed, who will clean up all the scrap? We will be the "dumping" ground in the USA
Kyri Freeman	Barstow, United States	2015-01-05	Solar belongs on rooftops, not in wilderness
Craig Dicht	Joshua Tree, United States	2015-01-05	Until Inyo County adequately explores distributed generation, it should not look to pristine desert for energy needs. Energy, government fee, and tax generation will all prove less than expected on these projects.
Rev. Roger Shervington	Claremont, CA	2015-01-05	We don't need this eyesore in this land of incredible beauty!
fred rinne	san francisco, CA	2015-01-05	huge solar farms are a scam. rooftop solar is the best option for us all
James Ledwidge	Mojave, CA	2015-01-05	There is plenty of land right next to all the wind turbines. They could share the transmission lines. Why waist more of our beautiful Desert?
Constance Parker	Big Pine, CA	2015-01-05	I am outraged that Inyo County is considering the destruction of a very fragile environment with this development. I support solar utility but think there are many more suitable places to consider within the county borders where a wilderness area will not be so negatively impacted.
Pierre Plas	France	2015-01-05	J'aime et je respecte la nature. Ne touchez pas à la Death Valley!

Name	Location	Date	Comment
Rob Spangler	Syracuse, UT	2015-01-05	This is the wrong location for a solar project. The local ecology in the proposed project location should be protected, not subject to intensive development.
Ken Sitz	Los Angeles, CA	2015-01-05	I have visited the Death Valley region many times and it is a irreplaceable national treasure that deserves protection from these ill-conceived industrial solar schemes. We need tp preserve these fragile ecosystems and the magnificent viewscape. Real alternative energy means solar on rooftops - industrial solar is NOT a solution.
Sonie Sampson	Pioneertown, CA	2015-01-05	We DONT need solar in wilderness areas!! Put it on rooftops and on degraded lands only.
Jacklyn Velasquez	Big Pine, CA	2015-01-05	Renewable energy should be placed at the source of consumption not hundreds of miles away.
John Feeney	Boulder, CO	2015-01-06	We need to protect fragile desert ecosystems.
William Fortney	Camarillo, United States	2015-01-06	Keep it wild.
Bill Helmer	Independence, CA	2015-01-06	I oppose industrial scale solar developments in Inyo County. Distributed generation solar projects should be encouraged.
Yaney MacIver	Corvallis, United States	2015-01-06	I'm an expat Owens Valley person hoping to return this summer. Don't make this mistake!
randy ness	Rosamond, CA	2015-01-06	I have this locally and we hate the view, dust, and the lack of wild life.
Mary Williams	Burbank, CA	2015-01-06	It's wrong to destroy this environment.
Ty dennison	Inyokern, CA	2015-01-06	im signing this petition because i dont want to see the god damn solar panels out in the beautiful owens valley LA is already raping us from our water an now their trying to take our land Whats next? Time to take our valley back
Elizabeth Nannini	Castro valley, CA	2015-01-06	I'm signing out of respect for the landscape. There are more rooftops in the US than open spaces. Put the panels on the roofs, give people free power as rent for the space and power your factory or town or whatever.
Spencer Coffin	San Diego, CA	2015-01-06	Natural land should be kept natural. There are millions of rooftops to put solar panels on.
Neil Toll	Gallatin, TN	2015-01-06	For decades, the government has been stealing land from the public. We were told that even a footprint damages the delicate desert environment. I know several desert land owners that cannot access their land because of the laws passed to "protect" the environment. Projects such as this will completely destroy the area in and around it, more than billions of footprints could possibly do.
Patricia Smith	Littlerock, CA	2015-01-06	this is a beautiful area and a solar array would ruin it
Karyn Newbill	Simi Valley, CA	2015-01-06	Death Valley area needs to stay wild.
G. Donald Bain	El Cerrito, CA	2015-01-06	I love wild and open country.
Penelope Melko	Tehachapi, CA	2015-01-07	Get out and stay the hell out of Death Valley and protected area you greedy bastards. One Hundred Third Congress of the United States of America AT THE SECOND SESSION. Begun and held at the City of Washington on Tuesday, the twenty-fifth day of January, one thousand nine hundred and ninety-four An Act. To designate certain lands in the California Desert as wilderness, to establish the Death Valley and Joshua Tree National Parks, to establish the Mojave National Preserve, and for other purposes. Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled.

Name	Location	Date	Comment
Randy Stevenson	Atascadero, CA	2015-01-07	I don't think locating solar in the desert, even if it has been previously disturbed is a wise use of land, especially when there are so many rooftops, parking lots, canals, etc where panels can be located.
kirsten liske	santa cruz, CA	2015-01-07	These landscapes are special habitats and places that offer humans a unique experience. The power lines and roads infrastructure required for solar plants should not impact the experience of these wild and rural working landscapes of the eastern sierra
Jen Michelsen	Santa Cruz, CA	2015-01-07	I'm signing because that area of the Eastern Sierra is one of my favorite recreation areas and an industrial solar energy installation would destroy the fragile ecosystem.
Kevin McDavid	Costa Mesa, CA	2015-01-07	Picture Kramer Junction or Ivanpah solar facilities in Olancho or on Owens Lake. This would be a huge mistake.
Steven McLaughlin	Big Pine, CA	2015-01-07	Distributed solar is the superior option.
Donna Archer	Independence, CA	2015-01-07	I don't want beauty and biodiversity ruined!!!!!!!
Michael Prather	Lone Pine, CA	2015-01-07	My wife and I lived and worked in Death Valley from 1972-1980. We taught school there and met people in Chicago Valley (the Messer family, who oppose solar development there), Shoshone (Susan Sorrells, another opponent of this industrialization) and the Charleston View Area (Resting Springs & China Ranch Brian Brown who also opposes this proposal). Precious groundwater and world class landscapes are at risk. Please reject zoning that will threaten these lands. Since 1980 my family has lived in Lone Pine where we have raised our two daughters. We love the lands of our county and support the sustainable tourism-based economy that exists here. We oppose threats to that economy and the natural beauty that attracts millions of visitors from around the US and the world.
Christopher Capp	Venice, CA	2015-01-07	To change the Landscape and Local Ecology of the Eastern Sierra and Death Valley Regions would not only be detrimental to the delicate balance of the areas ecosystem but it will also be devastating to the natural balance of its Beauty. Please find somewhere else to build your Industrialized Energy production zone and not destroy our sacred land and playground.
John Corathers	Reno, United States	2015-01-07	We also have a house in the eastern Sierra. Pleas, no big solar installations!!!
BryAnna Vaughan	Big Pine, CA	2015-01-07	I love Eastern Sierra just the way it is! I am 7th generation resident of this valley and I hope that 7 generations from now people will enjoy the Eastern Sierra the same way that I have. Alternative energy can be a good thing, but only if it is done in a way that is well thought out. The best place to have solar in the Eastern Sierra is on top of existing roof tops or parking structures. If the policies for tax credits and similar incentives do not currently exist, then let's wait!
Clare Marter Kenyon	Los Angeles, United States	2015-01-07	These areas of our State are precious, exceptional and wild. I have traveled and hiked in these remote and beautiful landscapes for decades - in fact, I was married at a lake high in the Sierra Nevada 31 years ago. Losing these unique areas and wildlife to solar farms must be prevented and the lands protected for the generations to come.
Sydney Quinn	Big Pine, CA	2015-01-07	The Eastern Sierra has been my home since 1970. While I can support small scale solar development on already disturbed land, industrial scale solar is not appropriate for our fragile environment. Our house is fully solar and that's where panels belong, on rooftops and over parking lots.
Mark Campbell	Rosamond, CA	2015-01-07	I am concerned about the destruction this will cause to the beauty, biology, and cultural resources of the area.

Name	Location	Date	Comment
Edwin Thomas	Catoonsville, MD	2015-01-07	I'm moving to the county in the next year and would hate to see the area ruined.
Amy Noël	Tecopa, CA	2015-01-07	Energy can and needs to be produced where it is used. Let's preserve open space and beauty for our souls and future generations!
Nancy G	Las Vegas, NV	2015-01-07	It makes no sense to place utility-scale solar operations in remote and pristine lands with no existing infrastructure in place to support them. When we think of "green" energy, we must also consider the green philosophy of recycling abandoned warehouses, military bases, airports, and other similarly-disturbed lands in areas already set up to handle these types of utilities.
Jora Fogg	June Lake, CA	2015-01-07	I want the Eastern Sierra to remain the same with opportunities for recreation and developing ecotourism to strengthen our economy. I support the development of small scale PV solar, particularly on roof tops and parking lots.
Sam Roberts	Millbrae, CA	2015-01-07	I care about the Eastern Sierra and Death Valley.
Carol Conner-Turner	Bishop, United States	2015-01-07	I lived in Inyo & Mono counties for 32 years & loved it for it's remoteness, it's beauty & diversity. Please don't destroy it for money! Please don't destroy it ever- for any reason!!! IT'S NOT YOURS TO CHANGE OR DESTROY!!!! Please, please don't do this to 'my forever home'.
Elaine Bowers	Big Pine, United States	2015-01-07	I don't want our beauty ruined. Why do u guys want to mess up a good thing. There aren't that many places of natural beauty. Leave a good thing alone
Bryce Winter	Santa Cruz, United States	2015-01-07	We need to save wild places and not create more impact in areas that are not already impacted severely.
guy hatzvi	Los angeles, CA	2015-01-07	I am opposed to polluting the beauty of the views of the Owens Valley with the power needs of a city that has already taken so much from this valley. No No NO. LADWP can find alternatives.
Karin Kersteter	Ventura, CA	2015-01-07	Please do not destroy this pristine area! The destruction of habitat cannot be allowed to continue.
Lauralea Thompson	Laguna Niguel, CA	2015-01-07	I visit and spend time in these areas and have for many years. There us no reason to spoil these lands. Bad enough LA took the water years ago.
James Morehouse	Las Vegas, NV	2015-01-07	Solar belongs on roof tops, not spread out over the Owens Valley.
William C Turner	Oakland, CA	2015-01-07	it is not spelled out what the environmental impact of the solar development in the Death Valley Region would be.
Joyce Hana	Brea, CA	2015-01-08	The Eastern Sierra is an essential, irreplaceable part of wild California. It needs preservation, not destruction.
karen orso	wilseyville, CA	2015-01-08	solar panels belong on the rooftops of buildings and parking lots in urban areas right next to where the power is needed. It makes no sense to despol undeveloped lands where their is little or no need for power. We need to protect and restore our undeveloped wild lands.
Steve Haga	Auburn, CA	2015-01-08	There are places for solar farms for sure. This is not one of them.
Susan Collins	Long Beach, CA	2015-01-08	I think solar energy is a good source for our needs, but why would the panels be put where no one lives or does business . . . they need to be put on top of buildings at the point of use. Leave our beautiful areas alone.

Name	Location	Date	Comment
Kerry Farris	Klamath Falls, OR	2015-01-08	Seems to me that large-scale solar projects should be constructed in areas where a certain amount of infrastructure already exists (e.g., urban areas), not in the few expanses of true wilderness that remain. Constructing solar-panel roofs over parking lots, or using existing large buildings would create the energy much closer to where it is consumed and likely reduce costs. Or, what about covering the entire length of the Imperial Valley Water Project with solar panels to both produce energy and reduce the evaporation of water? It's currently being done in India http://motherboard.vice.com/read/indias-ingenious-plan-to-cover-1000-miles-of-canals-with-solar-power-plants
Keith Thompson	Beaumont, CA	2015-01-08	I have been visiting the Owens Valley for over 60 years. I am incredulous that you would even consider desecrating this area with large-scale solar projects. Please do not even begin to consider this a feasible use of this precious area.
Robert Meacham	San Antonio, TX	2015-01-08	Because I saw my sister-in-law share about it on Facebook it's important to her
Molly Hansen	Arroyo Seco, United States	2015-01-08	I'm signing because I believe that industrial-scale solar belongs on already disturbed lands and has absolutely no place on our pristine lands.
Iara Hartley	barstow, CA	2015-01-08	it would be an obscenity to destroy the pristine landscape of the proposed solar plants. the destroy and burn the land cannot ever be repaired. long after the solar plants are built - and die - the land will be scorched. we can't come back from these misguided solar projects.
James Wilson	Pahrump, NV	2015-01-08	This is my home!
Tom Budlong	Los Angeles, CA	2015-01-08	It is myopic to ignore the vast rooftop resource in CA cities while proposing serious damage to unspoiled desert.
Valerie Hart	Big Pine, United States	2015-01-08	I love this area and please don't ruin it.
Mary Jane McEwan	Ridgecrest, CA	2015-01-08	Owens Valley and the areas around Death Valley should be preserved for their scenic value and wildlife habitat. Los Angeles has already benefited from taking water from the region. Thousands of Angelinos drive north through Owens Valley - the open vistas and gorgeous scenery are a respite from the crowded scene they come from. This last areas of open space in California should be free of industrial solar developments. Solar power can be placed on rooftops closer to the place of use.
Susan Odell	Silver Spring, United States	2015-01-08	Regardless of the value of large-scale solar energy development, some places are more important than increasing input to the electricity grid. Although I haven't been to the Eastern Sierra or Death Valley for a few years, they are important to me as a citizen of the US and the world; they deserve to be left in a natural state to support and enhance the ecosystems in that region and inspire local residents as well as visitors from around the globe. Until we have used every rooftop and every industrial site to install solar equipment, we should stay away from the unique and important ecological expanses of this region.
SHAWN RUMMEL	Buena Park, CA	2015-01-08	STAY AWAY FROM OUR ONLY VIEW OF MOUNTAINS AND NATURE. GO TO THE CITY AND INSTALL YOUR SOLAR,....
Ariana Wylie	Bishop, CA	2015-01-08	i love this place, and solar can be put in any numerous open lands. Not here in inyo county
D. Wall	San Pedro, CA	2015-01-08	Why destroy more landscape when distributed solar can do the job in cities and towns that already exist?
nancy gooch	Ridgecrest, CA	2015-01-08	Big solar means big drains of potable water.

Name	Location	Date	Comment
Bob Kent	Chatsworth, United States	2015-01-08	This unique place is the wrong place because of its unique ecosystem and the light pollution it would cause in a truly natural area!
David Rose	Conroe, TX	2015-01-08	I love the valley the way it is.
Norma Ryan	Simi Valley, CA	2015-01-08	Leave the beautiful open space free of solar plants.
Linda Bozack	Brookings, OR	2015-01-08	The desert is an important ecosystem that we must preserve!
Teresa Mokma	San Jose, CA	2015-01-08	I don't want solar panels or any other industrialized energy production source to destroy the natural habitat & beauty of this area!! Why are you destroying this natural place of beauty?
Janet Kruse	Portland, United States	2015-01-08	It is immoral to defile these sacred places.
Yolanda Demotto	Chula Vista, CA	2015-01-08	This beautiful land is one of the last wild, natural bastions in California. I've never seen beauty like the Sierra Nevada anywhere else. I can only hope we can preserve the beauty for the next generations, who will have to travel far and wide to find undisturbed nature.
Lynne Almeida	Bishop, CA	2015-01-08	There are so many better options and choices than this ill-considered plan ... Please don't be a part of the ruination of the Owens Valley.
Steve Byrne	San Francisco, China	2015-01-08	I love the wild Eastern Sierra and deserts and want them to remain unblighted for my children.
Mervin Hess	Bishop, CA	2015-01-08	I enjoy the scenic beauty of my homelands!
Will Scott	Lagunitas, CA	2015-01-08	I work and live in the eastern sierra part time and this would be a disaster for the fragile desert out here. Solar should be scaled to individual homes and buildings, not mass-marketed as the next energy "fix". It isn't a fix if it's destroying the places we live (especially the places where countless sensitive species live).
Will Scott	Lagunitas, CA	2015-01-08	I work and live in the eastern sierra part time and this would be a disaster for the fragile desert out here. Solar should be scaled to individual homes and buildings, not mass-marketed as the next energy "fix". It isn't a fix if it's destroying the places we live (especially the places where countless sensitive species live).
Mitzi patterson	Las Vegas, NV	2015-01-08	Because I care!
Stacy Fitzgerald	Reno, United States	2015-01-08	We need to keep these areas wild for future generations!
Tracie Denton	Aliso Viejo, CA	2015-01-08	I Don't Wish To See These Precious Places Defaced By Anything!!! I Enjoy The Beauty Of The Amargosa, The WildEmess And All Its Natural Inhabitants. We Dont Need A Solar Farm There, Put It On Every Rooftop In LA.
Adina Ross	Murrieta, CA	2015-01-08	I don't want to detract from the beauty of our sierras, plus I don't think this help with the energy crisis. Most governmental agencies lie to you for their own interests.
Cheryl Hobson	Morongo Valley, CA	2015-01-08	I'm signing this petition, because it would damage the beauty of our country, which is being destroyed else where in the US.
Diane Mahle	Newhall, CA	2015-01-08	I don't want Chinese doing any part of my country and state. They wouldn't let us come to their land to set up things. So, why would we let them come here? Also, I want the wild places to stay wild.
Jennifer Riley	Antelope, CA	2015-01-08	I don't agree. Let's keep and honor this wild gem.
Judith Millward	W Richland, WA	2015-01-08	I believe that we don't have enough natural space and beauty left undeveloped, and that there are areas still available for industrial development.
Justin Blake	Tecopa, CA	2015-01-08	I live on the edge of Death Valley because it is rare and unspoiled. The land must be preserved.

Name	Location	Date	Comment
Sherry Cosgrove	Keeler, United States	2015-01-08	This is a terrible idea for us people, the wildlife and the land. They should be shade structures for urban environments.
julie haber	ridgecrest, CA	2015-01-08	i live in the area, and believe they can find a more suitable region, then something so rare and breathtaking
Diana Williams-Horning	Sparks, NV	2015-01-08	I grew up in this area, and death valley and surrounding lands are one of a kind, and should not be exploited for any reason
Sandra Schwarzbach	Ridgecrest, CA	2015-01-08	I don't want any more of the unique desert land destroyed. And it will be, these people care for nothing but maximizing their profits, no matter the irreversible destruction.
Chris Kalashian	Clovis, United States	2015-01-09	This is just wrong. Solar panels have already ruined the beautiful landscapes near Carrizo Plain and South of the Tehachapi Mountains. No, no, no!
Ellen Kalashian	Clovis, CA	2015-01-09	I'm signing because I love this area and do not want to see it ruined by this project!
Susan Maylone	Dallas, United States	2015-01-09	Hands off both of these natural treasures, we must protect them from commercial usage at all cost.
Theresa Hoff	Mooreville, United States	2015-01-09	Its beauty should remain, don't taint the landscape!
G Dan Mitchell	San Jose, CA	2015-01-09	I know this beautiful landscape and it is no place for an industrial installation — and solar is better installed closer to the users, as on the roofs of urban structures.
Andrew Morin	Bishop, CA	2015-01-09	Because industrial solar makes no sense at this point (with point of use solar becoming the norm) and is destructive to the environment and economy of Inyo.
Ethel Messer	Shoshone, CA	2015-01-09	I don't want to see any solar in my area.
Scott Parker	Antioch, CA	2015-01-09	There are far more suitable places elsewhere. Lets save one of the most beautiful parts on the state!
LINDA ANDERSON	Ridgecrest, CA	2015-01-09	Hey, I like solar. But please do not destroy our landscape. This area is too valuable in its natural state.
Lisa Ronning	Chula Vista, CA	2015-01-09	The area needs protection from industrialization
Sheila Steeples Anders	Flagstaff, United States	2015-01-09	this is a unique and iconic American landscape, destroying it would be uniquely and iconically short sighted and stupid.
Cathy Huff	Ridgecrest, CA	2015-01-09	This is one of a few areas in this country that should remain pristine. There are plenty of other areas to place the solar farm. Leave the Eastern Sierra and Death Valley alone!
Teresa Skye	Pahrump, NV	2015-01-09	I love the desert and all the beauty it gives. Nothing should inhibit that.
Patricia Brannon	Glendora, United States	2015-01-09	Industrial scale solar is the most ridiculous thing ever dreamt up! It has absolutely nothing to do with green energy or saving the planet & everything to do with money, period.
Mike Hay	Bishop, CA	2015-01-09	Solar panels should go on rooftops, not on undeveloped land.
Barbara Durham	Death Valley, CA	2015-01-09	I live here in Death Valley, our Timbisha native aboriginal lands are threatened.
Brian Settle	Delaware, United States	2015-01-09	I am an avid offroader and love the outdoors. I would have to see our area spoiled by the installation of a giant solar farm.
kate kingston	fairfax, United States	2015-01-09	Solar farms are the most preposterously stupid, shortsighted, all-for-profit and control idea in the industry! Hands off our wildernesses!

Name	Location	Date	Comment
Joseph cappiello	Pomona, CA	2015-01-09	I do not want the desert that I grew up exploring to be ruined by more hideous, underperforming, wastes of tax dollars. I want my son to have the opportunity to see the land the way I have.
Mike Bond	Sparks, NV	2015-01-09	Keep ugly solar power units out of the area
nancy higbee	Perris, CA	2015-01-09	We are frequent visitors to this area and value it's uniqueness. Furthermore, roof top solar that doesn't involve long routes for power delivery should be accomplished before large scale projects can even be evaluated for need.
Joey Davidson	asheville, NC	2015-01-09	I'm signing this cause I want the eastern sierra to remain open and beautiful. I honestly don't think it'll make a difference though. Money rules our world, not pretty landscapes. So I'm sure I'll be using some of that solar energy soon enough.
Robert oinas	San Bernardino, CA	2015-01-09	This is not the place for a solar farm losing recreational land is wrong.
David Rosenthal	Westlake Village, CA	2015-01-09	I'm a frequent visitor to the area. I love Death Valley and the surrounding area and I believe it should be protected.
annie belt	San Jose, CA	2015-01-09	We need to put solar on rooftops, over parking lots, and over only the most denuded, lifeless soils.
Ann Michelle DeSelms	Colstrip, MT	2015-01-09	I grew up in/Tecopa Hot Springs/Shoshone area. I'm concerned about water resources that this project will consume. I'm also concerned about bird populations, which will be severely impacted by the solar panels. It has been documented that solar farms negatively impact birds, both migrating and local populations. Additionally, I'm concerned about the impact on insect life in the desert, as well as migrating butterflies.
Alfredo Figueroa	Blythe, CA	2015-01-10	to much has been destroyed
Michael Hale	Oklahoma City, OK	2015-01-10	I grew up in Trona, and spent all of my formative years in the desert. I hope to return there someday. I know, firsthand, the beauty of the Amargosa, of Death Valley, of the Owens Valley. It seems only right that energy for large metro areas like Los Angeles should come from areas where we have already left our mark. I vote NO to utility-scale solar in the Eastern Sierra and Death Valley regions.
Jef Chadwick	Clovis, CA	2015-01-10	While I support solar energy, the Eastern Sierra and Death Valley regions are not appropriate for this type of development.
Randy Kennedy	Montrose, CO	2015-01-11	I grew up in beautiful Inyo county. To put up this eye soar would be the most hearty braking news I have ever encountered in my life. This is just pure sight pollution and would bring negative energy to Inyo county.
Catherine Billings	Los Angeles, United States	2015-01-11	Because the promise of solar is in small scale residential and commercial buildings, not in giant corporate money making schemes that are detrimental to the environment!
Robert Sr	Mina, NV	2015-01-11	I have been to Amargosa Valley and have seen what the desert looks like in Tonopah, Nev with that solar crap.
Barbara Hausteen	Riverside, United States	2015-01-11	Because my husband and I love the Eastern Sierras and surrounding valley!
matilde reyes	los aneles, CA	2015-01-11	Large utility scale projects in our local mountains @ deserts is not "green". The destruction of our environment is not "green".
Dominique Tardif	Boise, ID	2015-01-13	I am signing this petition because I treasure the wild and rural nature of the East side of the Sierra and of Death Valley. I reject the idea that the deserts of California should sacrificed to feed the power needs of urban Southern California or any urban center. SoCal stole Owens Valley's water and now they want this? Just say no to utility-scale solar projects. Instead put solar panels on every roof and over every parking lot, golf course and amusement park in SoCal.

Letter 505

Name	Location	Date	Comment
Shannon Malloy	San Diego, CA	2015-01-14	I love the Owens Valley. I was raised there and don't want to see its pristine beauty ruined. PUT THIS PROJECT SONEWHERE ELSE!
Melissa Crusinberry	Blythe, CA	2015-01-14	I see the destruction being done in Eastern Riverside County and can attest to the horrendous damage that big scale wind and solar do to the deserts. Please, don't do the same in Inyo County.

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Petitioning Inyo County Planning Department
 This petition will be delivered to:
 Inyo County Planning Department

Say no to utility-scale solar in the iconic Eastern Sierra and Death Valley Regions



[Amargosa Conservancy](#)

376

Supporters

The Eastern Sierra. Death Valley. Two of the most iconic American landscapes. Irreplaceable beauty and unparalleled biodiversity- where the mountains meet the desert. This is one of the most unique places in the world.

And Inyo County wants to put solar here.

Inyo County is proposing to designate eight Solar Energy Development Areas (SEDAs) in the Owens Valley/Eastern Sierra and Death Valley Regions! These SEDAs would be site of intensive utility-scale solar development, irreversibly changing the local ecology and the landscape. The SEDAs are nestled between numerous federally designated Wilderness Areas, Areas of Critical Environmental Concern, and Death Valley, Kings Canyon, and Sequoia National Parks. This is not an appropriate place for industrialized energy production!

[This is a map](#) of the proposed Solar Energy Development Areas in the Death Valley Region.

[This is a map](#) of the county-wide SEDA proposals.

This petition is meant for people who have visited the Eastern Sierra and Death Valley Regions, and appreciate their remote and undeveloped character. Inyo County should know that the experience of tourists and adventurers who visit the area will change dramatically if part of the area is converted to an industrialized energy production zone.

By signing this petition you are telling Inyo County that you'd prefer the Eastern Sierra and Death Valley Regions the way they are- remote, undeveloped, and wild.

This comment letter on the PEIR is brought to you by the Amargosa Conservancy and the Owens Valley Committee. For more information on our work, visit us at <http://www.amargosaconservancy.org>, and <http://www.ovcweb.org/>.

For more information on Hidden Hills, the project that was already proposed and failed to go through in the Charleston View area, check out [Basin and Range Watch's page](#).

Industrial-scale solar in the iconic Eastern Sierra and Death Valley Regions? Tell Inyo County "NO!"

Petition Closed

Thanks for signing. Now help this campaign succeed by getting your friends to sign! with 376 supporters
624 needed

We were unable to post to Facebook. If you still want to share this petition, please try again.

Industrial-scale solar in the iconic Eastern Sierra and Death Valley...

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To review the actual Programmatic Environmental Impact Statement, through which Inyo County is proposing these designations, check out the [Inyo County Planning Department website](#).

For more information on some of the environmental impacts associated with utility-scale solar in the desert, check out these links:

<http://berc.berkeley.edu/big-solar-and-avian-mortality/>

<http://berc.berkeley.edu/utilityscale-renewables-projects-face-permitting-challenges-on-native-american-lands/>

<http://blogs.berkeley.edu/2014/03/07/interior-moving-forward-with-contentious-desert-solar-projects/>

<http://www.hcn.org/blogs/goat/are-big-desert-solar-farms-killing-birds>

-

Letter to

Inyo County Planning Department

I have enjoyed my visits to the stunning Eastern Sierra and Death Valley Regions of Inyo County. These areas are iconic American landscapes, and I hope to continue visiting in the future. I am attracted to the area because of its remote and undeveloped character, and eye-popping unspoiled beauty.

The Eastern Sierra and Death Valley Regions, and my experience of them as a visitor, would be permanently altered by the presence of industrial-scale solar energy production. No longer remote and undeveloped, the areas would feel like an industrial landscape- the very sort of place I visit Inyo County to escape. If these developments went forward, it might influence where I chose to take future trips or vacations.

Please eliminate the Charleston View, Chicago Valley, Pearsonville, and Rose Valley SEDAs, and please limit solar development in the county to small-scale facilities which will directly generate renewable energy for in-county use.

Please do not spoil the irreplaceable landscapes of the Eastern Sierra and the Death Valley Region with utility-scale solar development.
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Petition started on Jan 5, 2015

Reasons for signing

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- [Michael Prather](#) LONE PINE, CA
 - 12 days ago
 - Liked 1

My wife and I lived and worked in Death Valley from 1972-1980. We taught school there and met people in Chicago Valley (the Messer family, who oppose solar development there), Shoshone (Susan Sorrells, another opponent of this industrialization) and the Charleston View Area (Resting Springs & China Ranch Brian Brown who also opposes this proposal). Precious groundwater and world class landscapes are at risk. Please reject zoning that will threaten these lands. Since 1980 my family has lived in Lone Pine where we have raised our two daughters. We love the lands of our county and support the sustainable tourism-based economy that exists here. We oppose threats to that economy and the natural beauty that attracts millions of visitors from around the US and the world.

REPORT THIS COMMENT:

This comment is inappropriate

- [Patricia Davis](#) CALIFORNIA CITY, UNITED STATES
 - 14 days ago
 - Liked 1

I am against the Western USA Deserts looking like a wasteland.. What will we look like when these companies change to another source for electricity and these are no longer needed, who will clean up all the scrap? We will be the "dumping" ground in the USA

REPORT THIS COMMENT:

This comment is inappropriate

- [Jack Cook](#) LACKA, UNITED STATES
 - 15 days ago
 - Liked 1

Large-scale solar has proven to be devastating to ecosystems, wildlife, and to cause pollution with the coolant, erosion from runoff, and yet big-energy still tries and destroy our desert with these solar plants. Put solar panels on rooftops!

REPORT THIS COMMENT:

This comment is inappropriate

- [Lorraine Vinevard](#) LAKE HAVASU CITY, UNITED STATES
 - 15 days ago
 - Liked 1

We as a nation have spoiled enough land. We need to repurpose what we have now and leave the rest for our ancestors.

REPORT THIS COMMENT:

Report abuse

Please report any offensive or inappropriate content.

Thank you. This abuse has been reported.

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English (United States) ▾

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Response to Letter 505 – Amargosa Conservancy Petition

Response 505-1: Letter 505 is a petition by the Amargosa Conservancy that was signed by 367 visitors and residents opposing utility scale solar development in the Eastern Sierra. The County acknowledges the petitioners opposition to utility scale development in Inyo County and have addressed specific concerns presented by the Amargosa Conservancy regarding environmental impacts and the REGPA PEIR in Comment Nos. 202-1 through 202-38.



COMMENTS FROM PEIR REVIEW MEETINGS
Series 600 Responses to Comments



TABLE I: PEIR REVIEW MEETING COMMENTS BY ENVIRONMENTAL TOPIC AREA

Meeting	Comments Summary	Environmental Topic	Comment Index Number	Comment Narratives	
601	1. Bishop Public Workshop: December 2, 2014; 5:30 p.m. 2 comments appreciative of the EIR process 1 comment appreciative of MW caps 1 comment requesting clarification of EIR alternatives 1 comment regarding hydrology/water quality impacts	CEQA Process	1.1	Thank you for extending the deadline for public review.	601-1
		General	1.2	I want to emphasize that I appreciate the MW caps, I want to keep in mind the 250 MW cap for the Western Group.	601-2
		CEQA Process	1.3	Thank you for doing the PEIR.	601-3
		CEQA Alternatives	1.4	For alternative regarding previously disturbed lands, please provide analysis of what constitutes disturbed land.	601-4
		Hydrology/Water Quality	1.5	With regard to the proposed SEDAS in the Eastern Group, I know of a recent hydrology study by Andy Edon regarding connectivity to groundwater. Even with pumping, there would be an impact. Are you aware of that and has it been factored in?	601-5
602	2. Planning Commission Meeting: December 3, 2014, 10:00 a.m. 2 comments supporting integrating DRECP process with REGPA process 2 comments expressing concern about impacts on particular special-status species and habitat connections 1 comment expressing concern about visual impacts to tribal viewsheds	CEQA Process	2.1	Thank you to staff for extending the comment period. DRECP objectives should be integrated into the REGPA process. Concerned about LADWP's role; how are they a part of this process? Briggs Mine trucks diesel fuel on-site. It would be better to have solar on-site in lieu of diesel. Which category of energy would that be?	602-1
		Biological Resources	2.2	Support the County's efforts for comprehensive planning; thankful for comment period extension. Pearsonville and Rose Valley SEDAs include public lands providing designated habitat for Mohave ground squirrel. Solar projects in this area could affect connectivity for the species. Consider lake effect/reflective surfaces and potential impacts to avian resources. Consider direct impact and stranding on the panels themselves, and the need to minimize mortality. Would like to see monitoring for solar projects. Need to maintain connectivity between Inyo/White Mountains. Integrate the DRECP into the REGPA process as much as possible. Eastern Group concerns/hydrological evidence suggests that groundwater is linked to the Amargosa River (and impacting water/springs/seeps) related to groundwater overdraft. US Fish and Wildlife Service (USFWS) in Nevada	602-2

Meeting	Comments Summary	Environmental Topic	Comment Index Number	Comment Narratives	
				is proposing release of desert tortoise immediately east of the county line; concerned about additional translocation efforts. Concern regarding Trona SEDA transmission upgrades.	
		Aesthetics, Cultural Resources	2.3	Will submit formal written comments. Tribe concerned about significant and unavoidable impacts. Section 4.1.6 (visual impacts) – tribal viewsheds will be affected. Section 4.4.7 (biological resources) and Section 4.5.6 (cultural resources) – both include significant and unavoidable impacts. Tribe has previously requested that additional investigation be undertaken for biological and cultural resources. Suggest reducing or eliminating SEDAs so that cultural resources would not be impacted. Private landowners will be compelled to develop their lands for solar purposes or seek compensation from the County not to develop said lands. SEDAs should avoid critical habitats, Areas of Critical Environmental Concern (ACECs), cultural resource areas, and military areas. Proposed project does not accomplish the goal of avoiding these areas.	602-3
603	3. Lone Pine Public Workshop: December 3, 2014; 5:00 p.m. 6 comments requesting that developers be required to obtain extensive local input and conduct community-driven processes—perhaps organized into formal committees similar to Mono County’s Regional Planning Advisory Committees (RPACs)—for proposed projects in SEDAs	General	3.1	Concern about the Owens Valley Study Area. I thought there was a clear Board of Supervisors directive about criteria; does the proposed criteria comply? Were project objectives developed based on input from the Board of Supervisors?	603-1
General		3.2	Getting input from diverse smaller communities could be easier using community plans. An example of this can be found in Mono County’s RPACs [Mono RPAC Statement was read aloud and is provided in Appendix B].	603-2	
Aesthetics		3.3	In Olancha, aesthetics of proposed projects matter. Getting businesses instead of solar development is preferred. The Planning Department did not visit Olancha, so the community could not provide input. Need more community input in Olancha.	603-3	
General		3.4	The Board of Supervisors gave a clear directive about considering and favoring distributed distribution.	603-4	

Meeting	Comments Summary	Environmental Topic	Comment Index Number	Comment Narratives	
	5 comments on aesthetic impacts of siting large solar facilities close to existing communities 3 comments regarding Board of Supervisors direction on distributed solar 1 comment addressing biological and cultural resources documentation 1 comment addressing the approval process for projects outside of SEDAs 3 comments regarding CEQA alternatives	Biological Resources, Cultural Resources	3.5	Biological and cultural resources in the county aren't comprehensively documented. Will projects be required to document individual sites?	603-5
		General	3.6	Developers should have early, grassroots, and proactive involvement in the community as part of future proposals pursuant to the REGPA.	603-6
		CEQA Process	3.7	Can public notice requirements be extended to 2 miles? 350 feet is too small for the unincorporated county.	603-7
		General	3.8	We want proactive involvement from developers.	603-8
		CEQA Process	3.9	LADWP and others hire biologists and other technical specialists without local experience or knowledge. The REGPA should require more local input. Development agreements should be made public to eliminate the appearance of giving up something to get something.	603-9
		Aesthetics	3.10	Community isolation is part of the community experience in rural areas. This was not addressed in the PEIR.	603-10
		Aesthetics	3.11	Can a project application include requirements for specific, as-built site visuals so the public can physically see what the project will look like? This should be part of the application process.	603-11
		Aesthetics	3.12	Would it be possible to put a requirement in place before the REGPA is adopted that would require additional community involvement?	603-12
		Aesthetics	3.13	Large-scale solar should be built farther away from communities like Charleston View.	603-13
		General	3.14	Emphasize community input in decision-making before General Plan and zoning amendments are considered by the Board of Supervisors. Community plans could prevent avoidable hardships to individual communities by addressing specific needs.	603-14

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Meeting	Comments Summary	Environmental Topic	Comment Index Number	Comment Narratives	
		General	3.15	The Monroe project is located outside the Rose Valley SEDA. It is inconsistent for the County's plan to say SEDAs are the most appropriate places to promote solar energy, while simultaneously approving a project located outside of SEDAs.	603-15
		General	3.16	Inyo County should facilitate a community-driven process for the REGPA (and other elements of the General Plan), similar to the Mono County RPACs. This would avoid top-down decision-making that conflicts with community values, as is occurring in Olancha. The long timeline for additional analysis of the Owens Valley Study Area leaves the door open for development of industrial-scale solar, which is clearly contrary to community will for the Owens Valley. We have said many times now that we wish the Owens Valley to be removed completely.	603-16
		CEQA Alternatives	3.17	Is the environmentally superior alternative based on analysis? What about the surrounding communities and cities? Why isn't the no project alternative superior?	603-17
		CEQA Alternatives	3.18	The solar PV only alternative would allow other agencies to do solar thermal or wind. This just clarifies County policy. Could this be removed?	603-18
		CEQA Alternatives	3.19	Some alternatives have only slightly less impact. What does this mean?	603-19
4. Tecopa Public Workshop: December 4, 2014; 5:00 p.m.	4 comments addressing aesthetic impacts 2 comments addressing biological impacts 1 comment addressing cultural resource	General	4.1	Do not site large-scale solar near existing communities.	604-1
		Cultural Resources	4.2	There is an archeological/cultural study being completed in Chicago Valley by BLM. Please review that information.	604-2
		Biological Resources	4.4	Please include "no unmitigated net loss" concept in biological resources mitigation language.	604-3
		Aesthetics	4.5	Bring on the solar development; put it right next to the County offices too! With all respect, please protect our small special areas.	604-4

Meeting	Comments Summary	Environmental Topic	Comment Index Number	Comment Narratives	
	impacts 3 comments addressing hydrology/water quality impacts 1 comment addressing cumulative impacts 2 comments addressing economic impacts 1 comment addressing CEQA alternatives 1 comment addressing land use conflicts and resulting environmental impacts	Aesthetics	4.6	As a homeowner in Tecopa with a new home and corresponding tax liability, I would prefer not to have any solar or wind plants in our pristine deserts. Our remote and unmolested natural beauty draws people here from all over the world. There are few places on earth like this (at least that you can drive to). Our valued wilderness areas should remain just that. Make it feasible for low-income residents to install solar on their rooftops with help from County, state, and federal government. Low-income homeowners were offered grants here for water wells to make them more independent; why not solar and/or wind energy generation too? It would benefit all concerned except perhaps corporate energy companies. We built out here to escape ugly, industrial traffic, noise, odors, and so on. Help us keep this area as rare, beautiful, and wonderful as it is. Defend the deserts! This is a special place! No "significant and unavoidable" damage to our desert!	604-5
		Hydrology/Water Quality	4.7	The PEIR claims there are no impacts to hydrology/water quality, but it would depend on technology.	604-6
		Hydrology/Water Quality	4.8	Water quality impacts exist in Charleston View from pumping to Amargosa River. How will this project address the water quality?	604-7
		Cumulative Impacts	4.9	There ought to be a complete list of solar plants. Las Vegas is doing a plant and these projects should be included. The deadline should be extended further to allow consideration of combined effects.	604-8
		Economic Impacts	4.10	Consider economic impacts to property values. Industrial/residential development would impact Old Spanish Trail unit (National Park Service).	604-9
		Biological Resources	4.11	More biological resources analysis is needed and additional species need to be identified.	604-10

Meeting	Comments Summary	Environmental Topic	Comment Index Number	Comment Narratives	
		CEQA Alternatives	4.12	Regarding the previously disturbed lands alternative, the northern portion of Sandy Valley is not disturbed, and several species are identified there. If only PV on previously disturbed sites would be better, need to redraw this area to focus on only disturbed lands.	604-11
		Economic Impacts	4.13	I would like to see something in the report about supporting jobs in the area.	604-12
		Aesthetic Impacts	4.14	Views from the Sierra should be protected.	604-13
		Land Use Conflict and Resulting Impacts	4.15	Does Charleston View include multiple 2.5-acre parcels? How will land be assembled? Need to understand how current land use patterns and considerations affect the SEDAs.	604-14
		Hydrology/Water Quality	4.16	Andy Zahn has been doing well testing in these areas. Consult the "State of the Basin" report.	604-15

Responses to Public Meeting Comments 601 – Bishop Public Workshop: December 2, 2014

Response 601-1: The comment expresses appreciation to the County for extending the public review period. No additional response is necessary.

Response 601-2: The comment expresses appreciation of the MW caps; no additional response is necessary. The 250 MW cap in the Western Solar Energy Group will apply to current and future solar transmission limits for projects occurring in the group.

Response 601-3: The comment expresses gratitude to the County for preparing the PEIR. No additional response is necessary.

Response 601-4: As described in Section 6.3.5, *Solar Energy Development on Previously Disturbed Lands Only Alternative*, disturbed lands include degraded lands, abandoned mine lands, former landfill sites, superfund sites, brownfields, abandoned grazing/agricultural lands, and Owens Lake. These land uses are identified as priority redevelopment areas for the proposed project, and are described in detail in Section 3.3.3, *Priority Redevelopment Areas*.

Response 601-5: The County shares your concerns regarding the protection and preservation of local groundwater resources, including those within the Amargosa Watershed. It is acknowledged that the hydrologic and hydraulic characteristics of groundwater basins, including their connectivity with other basins and relationships to surface waters, are complex. Accordingly, based on a program-level assessment of local groundwater resources, the PEIR identifies potentially significant impacts to groundwater supplies for the OVSA and all eight SEDAs (including Charleston View). While detailed groundwater studies within these areas were not conducted as part of the PEIR analysis and are not considered appropriate under CEQA at the Program level (i.e., due to the fact that no specific development projects or associated groundwater withdrawals have been proposed at this time), such investigations will be required prior to approval of all applicable solar development projects under the REGPA as outlined in Section 4.9.5 of the PEIR. Specifically, this would involve detailed evaluation of factors such as a proposed project's likely demand, local aquifer volumes and hydrogeologic characteristics, current/proposed withdrawals, inflow/recharge capacity, and potential effects to local groundwater basins and related surface water features (with the referenced mitigation on Section 4.9.5 modified to clarify the required analysis of potential effects to groundwater-dependent features such as springs from proposed groundwater use). The detailed groundwater investigations conducted for proposed solar development under the REGPA would also utilize the most current available technical data, including applicable information from the 2014 "State of the Basin Report" identified in this comment (Zdon and Associates, 2014, unpublished). From these and other pertinent analyses, site-specific impact assessments and, as necessary, measures would be developed to address potential concerns and ensure that groundwater and related groundwater-dependent surface water features would be appropriately.

Responses to Public Meeting Comments 602 – Planning Commission Meeting: December 3, 2014

Response 602-1: The comment expresses appreciation to the County for extending the public review period.

As stated under the discussion of the DRECP in Section 2.4.3.1, the DRECP is currently under review, and although the County is under no obligation to implement the DRECP objectives, principles, and policies, the County has considered the DRECP in development of the REGPA. If the REGPA and DRECP are adopted, the County would coordinate with the DRECP agencies and future REGPA projects would be developed consistent with the requirements of the DRECP. Under REGPA Policy MER-2.6, the County would coordinate with renewable energy solar developers and other agencies to avoid, minimize, or mitigate impacts. If the County becomes a signatory of the DRECP, future development under the REGPA within the DRECP area could be expedited by the federal take coverage provided by the DRECP under Section 10 of the federal Endangered Species Act of 1973 and state take coverage under Section 2835 of the California Fish and Game Code for species listed under the California Endangered Species Act as threatened, endangered, or candidates.

LADWP has been presented the opportunity to review and comment on the REGPA and its PEIR through the agency scoping and public planning process. The County has limited jurisdiction over the review and approval of projects located on LADWP lands; however, LADWP is required to consider consistency with the County's General Plan as a part of their CEQA environmental review process.

The commenter expressed an interest in the concept of the Briggs Mine using on-site solar facilities to power the mine, rather than diesel-powered generators. Operation of the Briggs Mine is outside of the scope of the REGPA, and is not addressed in the Final PEIR.

Response 602-2: The comment expresses appreciation to the County for the public planning process and for extending the public review period.

Refer to the discussions of sensitive habitats and protected natural areas for the Rose Valley and Pearsonville SEDAs in Section 4.4.1.11 of the PEIR for a discussion of the Mohave ground squirrel Conservation Area within and/or directly abutting the SEDAs. Refer to the discussion of impacts, broken down by SEDA, in Section 4.4.3.2 for the discussion of potential impacts to the Mohave ground squirrel as a result of the proposed project. The PEIR identifies the potential for impacts to the Mohave ground squirrel from implementation of the REGPA, and proposes Mitigation Measure BIO-16 (see Table 4.4-13 of the PEIR). Alternatives have been developed for Mojave Ground Squirrel connectivity issues that will be considered during the adoption process.

Potential impacts related to the lake effect/reflective surfaces are discussed in detail in the PEIR. Refer to the discussion of collision with reflective surfaces, luminosity, and solar flux under *Impacts to Other Special Status Birds, Raptors, and Migratory Birds and Bats* in Section 4.4.3.1. Mitigation Measure BIO-18 includes measures to avoid and/or minimize those effects on birds.

For projects with the potential to impact on- or off-site special status species or their habitats, biological resources monitoring would be implemented during all phases of a solar development project under the REGPA. Refer to Mitigation Measure BIO-01 regarding the requirements of the plan. Additional resource-specific monitoring is described in the following biological Mitigation Measures: BIO-02: Minimize impacts to special status plants; BIO-03, Minimize impacts to special status wildlife; BIO-04: Minimize impacts to special status fish; BIO-06: Minimize impacts to desert tortoise; BIO-12: Minimize

impacts to bald and golden eagle; BIO-18: Minimize impacts to other special status birds, raptors, migratory birds, nesting birds and bats; Bio-19: Minimize impacts to special status natural communities and protected natural areas; BIO-20: Minimize impacts to waters of the US/State, including wetlands; BIO-24: Minimize impacts to groundwater dependent vegetation and ecosystems; and BIO-25: Minimize potential indirect impacts due to groundwater pumping.

Wildlife connectivity is an issue addressed in the PEIR, and would be studied during CEQA review at a project specific level for subsequent projects. Refer to the discussion of potential impacts to wildlife connectivity under *Impacts to Movement or Migratory Corridors or Native Wildlife Nursery Sites* in Section 4.4.3.1. Mitigation Measure BIO-21 includes measures to avoid and/or minimize impacts to movement or migratory corridors or native wildlife nursery sites.

Refer to comment response 606 (above) regarding consideration of the DRECP in the REGPA process.

Discussion of the Amargosa River in Section 4.9, *Hydrology and Water Quality*, identifies the hydrologic connection between the river and groundwater resources. Mitigation Measure HYD-01 requires that future projects proposed under the REGPA conduct during CEQA review site-specific groundwater investigations that would evaluate aquifer/well drawdown and groundwater recharge capacity, and would restrict project-related groundwater withdrawals to avoid significant effects to aquifers/wells, and other groundwater-dependent uses (e.g., vegetation, springs, and other related surface water features). Mitigation Measure BIO-24 requires a project-specific evaluation of potential impacts to groundwater dependent vegetation and ecosystems, and requires measures to avoid and/or reduce the impacts to the extent feasible. Mitigation Measure BIO-25 requires project-specific evaluation of potential indirect impacts due to groundwater pumping.

Regarding the release of desert tortoise in Nevada near the Inyo County boundary, future proposals under the REGPA would be required to conduct site-specific biological evaluations to determine potential impacts for biological resources, which would include on-ground site surveys and the special status species status data available at the time. For sites containing desert tortoise and/or their habitat, CDFW and USFWS would be consulted with to determine the most appropriate avoidance and/or minimization measures, and the appropriate permits would need to be obtained prior to construction activities (refer to Mitigation Measure BIO-6). As described in Mitigation Measure BIO-6, if desert tortoise would need to be relocated, a Desert Tortoise Relocation/Translocation Plan would be developed in consultation with the USFWS, and would need to be approved by the County, CDFW, and USFWS prior to any project-related ground disturbing activity.

The comment states a general concern regarding the Trona SEDA transmission upgrades; however, no specific issues were identified. Please refer to the discussion of potential impacts to biological resources in the Trona SEDA in Section 4.4.3.2 of the PEIR, and the measures to avoid, minimize and/or mitigate for those impacts in Section 4.4.5. Because no specific issues were identified; no additional response is necessary.

Response 602-3: The Tribe is concerned about significant and unavoidable impacts. Potentially significant impacts that could occur as a result of renewable energy projects being developed in the identified SEDAs were identified at a programmatic level and all feasible mitigation is prescribed in the PEIR; however, without project-specific information coupled with a project-level analysis under CEQA, it can't be stated with certainty that these potential impacts would be reduced to below a level of less

than significant at a programmatic level. That is why the PEIR reaches the conservative conclusion that impacts remain potentially significant and unavoidable.

As described in Section 2.4, the Renewable Portfolio Standards (RPS) is the primary driver for new utility scale renewable energy development in California, where implementation of the REGPA would effectively help California achieve its renewable energy targets set forth by the California Public Utilities Commission. The County will prepare a Statement of Overriding Considerations per Section 15093 of the State CEQA Guidelines that identifies the significance and influence of the RPS on the REGPA as well as the economic, legal, social, and/or technological benefits of implementing the proposed project in light of the unavoidable impacts identified in the PEIR. This Statement will be considered along with the PEIR by the County Board of Supervisors in late March 2015.

Please refer to response to comment 303-1 regarding consultation with the Big Pine Paiute Tribe regarding the tribe's concerns to date.

The SEDA boundaries depicted in the PEIR have been identified based on the Opportunities and Constraints Technical Study (Appendix D of the PEIR), and further refined based on feedback received through the agency scoping and public planning process (Section 3.1.1 of the PEIR). As described in the PEIR, although the SEDAs have been identified to direct and constrain utility-scale and commercial scale solar energy facility development in the County, not all areas within the proposed SEDA boundaries may be suitable for development. Constraints within the SEDAs will be identified during subsequent, project-specific environmental review under CEQA, as outlined in the PEIR. These constraints include critical habitat, ACECs, military readiness conflict areas, and cultural resource areas, among others. Section 4.1 of the PEIR prescribes nine mitigation measures relevant to aesthetics and visual resources, including Mitigation Measure AES-1: preparation of visual studies and an evaluation of potential impacts to existing visual resources. Section 4.4 of the PEIR prescribes 25 mitigation measures relevant to direct and indirect impacts on biological resources, mitigation measure Mitigation Measure BIO-01: prepare project level biological resources evaluation and mitigation and monitoring plan, in which potential impacts to critical habitat would be identified. Section 4.5 of the PEIR prescribes Mitigation Measure CUL-1a that requires a cultural resources inventory, evaluation of cultural resources, preparation of a Cultural Resources Management and Treatment Plan, and implementation of any required plans and project-specific mitigation in advance of adoption of any potential, individual solar energy development project.

Responses to Public Meeting Comments 603 – Lone Pine Public Workshop: December 3, 2014

Response 603-1: Please refer to the response provided in the Inyo County REGPA EIR Comments Meeting Minutes for Lone Pine on December 3, 2014. The County Board of Supervisors has reviewed and provided input on the criteria developed for the OVSA, including a desired prohibition of wind and geothermal projects.

Response 603-2: The County has executed an extensive public involvement campaign throughout development of the REGPA and its PEIR. If approved, subsequent developments under the REGPA would be subject to public review pursuant to CEQA and/or NEPA, during which time the public and affected communities would be afforded the opportunity to provide feedback regarding the specific development.

Response 603-3: As stated in Response 610, subsequent developments under the REGPA would be subject to public review pursuant to CEQA and/or NEPA. If any solar projects are proposed in the Owens Lake or Rose Valley SEDAs in the vicinity of Olancha, the Olancha residents would have the opportunity to review and comment on the proposed projects. Staff will consider additional public input at the onset of renewable energy solar facility projects and provide for it as much as practicable.

Response 603-4: The comment points out that the Board of Supervisors gave a clear directive about considering and favoring distributed generation. As noted in the Introduction to Volume I of the Final PEIR, the County has removed the title “distributed generation” from the PEIR, and has titled any solar energy facility that produces 20 MW or less of electricity for off-site use, consumption, and/or sale as “commercial scale renewable energy solar facility (20 MW or less).” The definition of the facility has not changed, and the County still encourages development of renewable energy solar facilities 20 MW or less in size. No comment regarding the adequacy of the PEIR was made; therefore, no additional response is required.

Response 603-5: Potential impacts to biological and cultural resources will be analyzed through subsequent, project-specific environmental analyses under CEQA. The PEIR addresses the types of impacts and mitigation measures that will be implemented as part of an update to the County’s General Plan and the SEDAs as defined in the EIR. All future projects under the REGPA would be subject to project-specific environmental review. This process will use the types of impacts and mitigation measures outlined in the Program EIR as guidelines. Depending on the size and location of the development and the technology used, a full EIR may be required. However, the REGPA also encourages small scale, PV technologies to be constructed which may not require a full EIR. As stated in Section 1.2 of the PEIR:

Subsequent, proposed solar energy projects over 20 megawatts (MW) would be examined in the light of this PEIR to determine whether any additional environmental document must be prepared. (State CEQA Guidelines Section 15168(c)). Solar energy projects 20 MW or less may be exempt from further CEQA analysis, unless an event specified in PRC Section 21166 occurs as determined by a qualified County planner, in which case a Supplemental EIR or other CEQA document may be required. These determinations will be made for potential projects pursuant to Inyo County Code (ICC) Title 21 and the State CEQA Guidelines.

It should be noted that under Title 21 of the ICC concerning renewable energy development, any person who proposes to construct an electric transmission line, solar thermal renewable energy facility or a PV

renewable energy facility in the County must first obtain a Renewable Energy Permit, a Renewable Energy Development Agreement or a Renewable Energy Impact Determination. A Renewable Energy Impact Determination applies to projects over which the County has limited authority because the project is located on federal or state land or is subject to the permitting jurisdiction of the California Energy Commission.

Under Title 21, the issuance of a Renewable Energy Permit is subject to CEQA, and the County Planning Commission must conduct a noticed public hearing before considering approval of such a permit. The Planning Commission must find that there has been compliance with CEQA before a permit can be issued. In addition, “as a condition to the issuance of such a permit, the Planning Commission may impose such reasonable and feasible mitigation measures as it finds to be necessary to protect the health, safety, and welfare of the county’s citizens, the county’s environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.” Finally, the Planning Commission is required to impose as a condition of approval, a plan for the reclamation/revegetation of the project site at the time of decommissioning of the project and the Planning Commission shall require financial assurances from the applicant to ensure that the reclamation plan will be fully implemented.

Concerning Renewable Energy Development Agreements, Title 21 provides that such agreements may be entered into by the County and a project applicant in lieu of obtaining a Renewable Energy Development Permit. Renewable Energy Development Agreements are subject to CEQA and must be approved by an ordinance adopted by the Board of Supervisors following a noticed public hearing. Prior to approving such an agreement, the Board must find that there has been compliance with CEQA. Renewable Energy Development Agreements must include a reclamation plan, acceptable financial assurances to ensure full implementation of the reclamation plan, be consistent with the county general plan and be enforceable by injunctive relief or other enforcement mechanisms under law. In the Renewable Energy Development Agreement, the Board of Supervisors may require such mitigation measures or modifications of the project as it finds necessary to protect the health, safety, and welfare of the county’s citizens, the county’s environment, including its public trust resources, and to ensure that the county and its citizens do not bear an undue financial burden from the project.

Response 603-6: The County has conducted a thorough public outreach campaign intended to inform agencies and members of the public during development of the REGPA and to solicit public feedback throughout the development process. As part of this process, interested parties, including developers as members of the public, have been provided the opportunity to be involved in the development of the REGPA and to review and comment on the PEIR. The comment does not relate to the adequacy of the PEIR, so no additional response is necessary.

Response 603-7: For individual projects proposed under the REGPA, the County may elect to expand the public notice requirement radius depending on the location of the project and the surrounding communities. This would be considered at the time the proposal is received, and on a project-by-project basis.

Staff will consider additional public input at the onset of renewable energy solar facility projects and provide for it as much as practicable.

Response 603-8: Please refer to Response 614.

Response 603-9: Biological resources Mitigation Measure BIO-01 has been revised to clarify that the qualified biologist used for project level biological resources evaluations must have documented experience or training related to the subject species, and must submit their qualifications to CDFW prior to conducting fieldwork.

Under Section 21.08.100 of the ICC, renewable energy development agreements are subject to a public notice hearing before the Inyo County Board of Supervisors which can consider an ordinance approving such agreement (since the agreement must be approved by ordinance, the ordinance is subject to referendum) and such agreements must comply with CEQA. In addition, Section 20.08.010 requires an applicant for a renewable energy development permit to file an application with the County. The application is a public record.

Response 603-10: Potential impacts to the existing visual character or quality of the site and its surroundings are discussed in Section 4.1.3, and at a programmatic level the proposed REGPA could result in potentially significant visual impacts to existing visual character and/or quality of a site and its surroundings. Subsequent project applications would undergo project specific evaluation to determine the potential for impacts to the existing visual character or quality of the site and its surroundings (refer to Mitigation Measure AES-1), and applicable recommendations from the project-specific analysis would be incorporated into the associated individual project design to avoid and/or minimize those impacts.

Response 603-11: Refer to Mitigation Measure AES-1: Prepare visual studies that include existing views, scenic vistas, and visual resources and evaluate the potential impacts to existing visual resources. This mitigation measure includes the preparation of visual simulations to conceptually depict post-development views from key observation points.

Response 603-12: The County has executed an extensive public involvement campaign throughout development of the REGPA and this PEIR. If approved, subsequent developments under the REGPA will be subject to public review pursuant to CEQA and/or NEPA, during which time the public and affected communities would be afforded the opportunity to provide feedback regarding the specific development.

Response 603-13: The County would consider the potential impact of siting utility scale renewable energy solar facilities in close proximity to established communities at the time that a specific project proposal is brought to the County. Such a project would be subject to further CEQA analysis and a public comment period.

Response 603-14: The County has executed an extensive public involvement campaign throughout development of the REGPA and its PEIR. If approved, subsequent developments under the REGPA would be subject to public review pursuant to CEQA and/or NEPA, during which time the public and affected communities would be afforded the opportunity to provide feedback regarding the specific development.

Response 603-15: Although the Munro Valley Solar Project was proposed prior to development of the REGPA; still, the County has included this proposed 4 MW project in the megawatt and acreage cap for the Rose Valley SEDA.

Response 603-16: The County has executed an extensive public involvement campaign throughout development of the REGPA and this PEIR. If approved, subsequent developments under the REGPA will be subject to public review pursuant to CEQA and/or NEPA, during which time the public and affected

communities would be afforded the opportunity to provide feedback regarding a specific development proposal. As stated in Section 3.3.2 of the PEIR, the OVSA is not an identified SEDA, but rather a separate and distinct study area. A separate set of potential criteria for development siting in the OVSA has been formulated, and have been updated as follows:

(1) only utilize existing transmission facilities and corridors; (2) guide the development to disturbed lands, including over and along the Los Angeles Aqueduct; (3) consider encouraging development at solid waste and wastewater treatment facilities, on private lands, in small scale (e.g., roof tops) and ~~distributed generation~~ commercial scale (20 MW or less) arrays, and around communities in smaller arrays (~~10-6~~ MW or less); (4) mitigate potential impacts to the environment, society, culture, and economy of the County; (5) work to avoid significant alterations to visual resources; and (6) minimize intertie facilities.

Any solar development proposed in the OVSA would require a General Plan Amendment and would be subject to additional CEQA analysis and public comment.

Response 603-17: Refer to Section 6 of the PEIR for an analysis of REGPA alternatives. The No Project Alternative would not be environmentally superior to the proposed project because the County would process proposed renewable energy project applications countywide without the framework and guidance provided by the REGPA, and wind development would not be excluded from the County. This alternative would likely result in an exacerbation of the potential impacts countywide. The Solar PV Only Alternative, Commercial Scale Only Alternative (previously the Distributed Generation Only Alternative), Reduced SEDA Alternative, and Solar Energy Development on Previously Disturbed Lands Alternative are environmentally superior to the proposed project based on the analysis provided in Section 6 of the PEIR, although they would still result in significant and unavoidable impacts to aesthetics, biology, and cultural resources.

Response 603-18: The County has limited influence over federal, state, and LADWP-managed lands in the County. Therefore, other agencies may propose solar thermal or wind projects on their own lands even with implementation of the REGPA, and under any of the alternative scenarios identified in the PEIR. However, the County coordinates with the LADWP, BLM, and SLC to guide development in the County, and advocates for its General Plan policies when projects on these lands are proposed. The REGPA would provide a policy framework for the County's coordination with agencies regarding proposals on their lands.

The following statement has been added to Section 1.2 of the PEIR for clarity:

The County is solely responsible for the lands under its own jurisdiction. Any future development in the SEDAs or OVSA involving federal, state, and LADWP-owned lands would require coordination with the appropriate land managing agency and would be subject to environmental review and land use constraints consistent with the regulations applicable to that jurisdiction.

Response 603-19: A slightly less impact is identified where the alternative would result in the same type of impact as compared with the proposed REGPA (e.g., less than significant, potentially significant, significant and unavoidable), but due to the nature of the alternative the impact could likely be reduced from those identified for the proposed project. For example, both the proposed REGPA and the Solar PV Only Alternative have the potential to result in significant and unavoidable impacts to birds. However,

because the Solar PV Only Alternative would not include solar thermal projects which have certain unavoidable impacts to birds due to the technology, the alternative would likely result in a lesser degree of impact when compared with the proposed project.

Responses to Public Meeting Comments 604 – Tecopa Public Workshop: December 4, 2014

Response 604-1: The County would consider the potential impact of siting utility scale renewable energy solar facilities in close proximity to established communities at the time that a specific project proposal is brought to the County. Such a project would be subject to further CEQA analysis and a public comment period.

Response 604-2: If a development proposal is received for BLM-managed lands within the Chicago Valley SEDA, the County would coordinate with the BLM regarding sensitive resources identified on their lands, including those known as a result of studies conducted by the BLM.

Response 604-3: The biological resources mitigation measures are intended to minimize impacts to the extent feasible through complete avoidance, or where avoidance is not feasible, through measures to minimize the impact to mitigate for the loss. Please refer to Mitigation Measures BIO-01 through BIO-25. Mitigation Measures BIO-19 and BIO-20 specifically state that mitigation shall be provided for impacts to riparian vegetation and wetlands to ensure no net loss of habitat functions and values. As described in the individual measures, depending on the resource being affected, any compensation for impacts to other resources (if required) would be developed through coordination with the appropriate agency and would be based on project-specific conditions and impacts.

Response 604-4: The intent of the REGPA is to direct and constrain the locations where renewable energy development could be implemented within the County so that the area's resources are managed and conserved appropriately. The SEDAs are considered to be general planning areas where not all areas within the proposed SEDA boundaries may be suitable for development, and constraints within the SEDAs will be identified through subsequent, project-specific environmental review under CEQA to avoid and/or minimize impacts to the County's resources.

Response 604-5: Potentially significant impacts that could occur as a result of renewable energy projects being developed in the identified SEDAs were identified at a programmatic level and all feasible mitigation is prescribed in the PEIR; however, without project-specific information coupled with a project-level analysis under CEQA, it can't be stated with certainty that these potential impacts would be reduced to below a level of less than significant at a programmatic level. That is why the PEIR reaches the conservative conclusion that impacts from future projects remain potentially significant and unavoidable.

As described in Section 2.4, the RPS is the primary driver for new utility scale renewable energy development in California, where implementation of the REGPA would effectively help California achieve its renewable energy targets set forth by the California Public Utilities Commission. The County will prepare a Statement of Overriding Considerations per Section 15093 of the State CEQA Guidelines that identifies the significance and influence of the RPS on the REGPA as well as the economic, legal, social, and/or technological benefits of implementing the proposed project in light of the unavoidable impacts identified in the PEIR. This Statement will be considered along with the Draft PEIR by the County Board of Supervisors in late March 2015.

Response 604-6: Refer to Section 4.9, *Hydrology and Water Quality* of the PEIR for the potential impacts to hydrology and water quality as a result of the proposed project. The PEIR concludes that construction and operation of future utility scale, commercial scale, and community scale solar energy facilities under the REGPA could result in potentially significant impacts related to: (1) drainage alteration; (2) flood hazards; (3) groundwater resources; and (4) long-term water quality. Section 4.9.3

is an analysis of the potential impacts, and Section 4.9.5 contains proposed measures to avoid, and/or minimize the potential impacts to the extent feasible.

Response 604-7: Addressing existing water quality issues from past and current pumping to the Amargosa River are outside of the scope of the REGPA. The PEIR analyzes potential impacts to water quality as a result of implementing the REGPA (refer to Section 4.9, Hydrology and Water Quality), and contains proposed measures to avoid and/or minimize the potential impacts to the extent feasible (refer to Section 4.9.5).

Response 604-8: Refer to Table 5-1 for the list of cumulative projects evaluated. The list includes renewable energy projects in the Las Vegas area (refer to Renewable Energy Projects in Clark County, Nevada, ID No. 96 – 110). Figure 5-1 depicts the locations of the projects, including those in the Las Vegas area.

Response 604-9: Please refer to Response 202-24 regarding potential economic impacts related to property values. It is acknowledged that cultural and historic sites within the County are valued and such features appeal to, and attract, visitors. As described in Section 4.5 of the PEIR, the Old Spanish Trail that traverses the County was an early, important trade route linking New Mexico with California. Mitigation is identified in Section 4.5.5 of the PEIR to protect cultural resources that could potentially be impacted by future solar energy development.

Response 604-10: Section 4.5 of the PEIR has been updated to include additional species based on agency and public feedback, and to incorporate additional analysis of specific biological issues, including impacts to special status insects, potential indirect impacts due to groundwater pumping, and potential impacts to the biological resources of the Amargosa watershed. The comment does not identify specific species or other biological issues that need to be evaluated in the PEIR; therefore, no additional response is necessary.

Response 604-11: The SEDA boundaries depicted in the Draft PEIR have been identified based on the Opportunities and Constraints Technical Study (Appendix D of the Draft PEIR), and further refined based on feedback received through the agency scoping and public planning process (Section 3.1.1 of the PEIR). As described in the PEIR, although the SEDAs have been identified to direct and constrain utility-scale and commercial scale solar development in the County, not all areas within the proposed SEDA boundaries may be suitable for development. Therefore, the SEDA boundaries as presented in the Draft PEIR are not modified for the Final PEIR – rather, constraints within the SEDAs will be identified through subsequent, project-specific environmental review and planning processes, as outlined in the PEIR. If a solar development is proposed for the Sandy Valley SEDA, the location of the development within the SEDA could be constrained by the biological resources identified during CEQA review, including the special status species and their habitat that are present within the SEDA.

Response 604-12: The County agrees with the importance of supporting local jobs. The REGPA contains Policy ED-4.5: Employ and Train Local Labor, which states that the County shall encourage developers to employ the local labor force during renewable energy facility development, for long-term facility maintenance, and suggests that project developers provide educational and training opportunities, as practicable.

Response 604-13: As described in Section 4.1.1.4, the USFS has regulations monitoring visual and scenic resources on National Forest Service lands, including Inyo National Forest in the Sierra Nevada in Inyo County. The USFS Scenery Management System defines the minimum level of visual quality to which

any National Forest landscape should be subjected. In accordance with Mitigation Measure AES-1, site-specific visual studies shall be prepared for all utility scale projects, and for proposed commercial scale or community scale projects determined by a County planner to have the potential to impact individual visual resources. The evaluation would include an assessment of public views from key observation points, such as views from National Forest lands that are monitored by the USFS Scenery Management System.

Response 604-14: As described in Section 4.10.1.2, Project Area Land Use Setting, the approximate size of the Charleston View SEDA is 39,697 acres. About 41 percent of the land is privately owned, and the remaining 59 percent is managed by the BLM. If the County receives a proposal to develop in the Charleston View SEDA, the composition of land ownership and parcels for the specific development would be determined at the time of the proposal. For additional information regarding land uses and potential impacts to those land uses, please refer to Section 4.10 of the PEIR.

Response 604-15: The County shares your concerns regarding the protection and preservation of local groundwater resources, including those within the Amargosa Watershed. It is acknowledged that the hydrologic and hydraulic characteristics of groundwater basins, including their connectivity with other basins and relationships to surface waters, are complex. Accordingly, based on a program-level assessment of local groundwater resources, the PEIR identifies potentially significant impacts to groundwater supplies for the OVSA and all eight SEDAs (including Charleston View). While detailed groundwater studies within these areas were not conducted as part of the PEIR analysis and are not considered appropriate under CEQA at the Program level (i.e., due to the fact that no specific development projects or associated groundwater withdrawals have been proposed at this time), such investigations will be required prior to the approval of all applicable solar development under the REGPA as outlined in Section 4.9.5 of the PEIR. Specifically, this would involve detailed evaluation of factors such as a project's potential water demand, local aquifer volumes and hydrogeologic characteristics, current/proposed withdrawals, inflow/recharge capacity, and potential effects to local groundwater basins and related surface water features (with the referenced mitigation on Section 4.9.5 modified to clarify the required analysis of potential effects to groundwater-dependent features such as springs from proposed groundwater use). The detailed groundwater investigations conducted for proposed solar development under the REGPA would also utilize the most current available technical data, including applicable information from the 2014 "State of the Basin Report" identified in this comment. From these and other pertinent analyses, site-specific impact assessments and related measures would be developed to address potential concerns and ensure that groundwater and related groundwater-dependent surface water features would be appropriately protected and/or subject to applicable mitigation.

COUNTY OF INYO PLANNING COMMISSION

MINUTES OF DECEMBER 3, 2014 MEETING

COMMISSIONERS:

WILLIAM STOLL
CYNTHIA WAHRENBROCK
ANNETTE SWITZER
ROSS CORNER
JOHN "JIM" GENTRY

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PLANNING DIRECTOR
PUBLIC WORKS DIRECTOR
COUNTY ADMINISTRATOR
SENIOR PLANNER
ASSOCIATE PLANNER
ASSOCIATE PLANNER
COUNTY COUNSEL
PROJECT COORDINATOR

The Inyo County Planning Commission met in regular session on Wednesday, December 3, 2014, in the Administration Building, in Independence, California. Chair Corner opened the meeting at 10:00 a.m. These minutes are to be considered for approval by the Planning Commission at their next scheduled meeting.

ITEM 1: PLEDGE OF ALLEGIANCE – The Pledge of Allegiance was led by Commissioner Wahrenbrock.

ITEM 2: ROLL CALL - Commissioners: Cynthia Wahrenbrock, Ross Corner and Annette Switzer were present.

Commissioners Absent: John "Jim" Gentry, William Stoll

Staff present: Josh Hart, Planning Director; David Nam, County Counsel; Cathreen Richards, Senior Planner; Diane Fortney, Project Coordinator.

Staff absent: Clint Quilter, Public Works Director; Kevin Carunchio, County Administrator; Adena Fansler, Associate Planner; Elaine Kabala, Associate Planner.

ITEM 3: PUBLIC COMMENT PERIOD – This item provides the opportunity for the public to address the Planning Commission on any planning subject that was not scheduled on the Agenda.

There was no one from the public that wished to comment on any planning subject that was not scheduled on the Agenda.

ITEM 4: APPROVAL OF MINUTES – Approval of Minutes from the November 5, 2014 Planning Commission Meeting.

MOTION: Commissioner Wahrenbrock made a motion to approve the minutes; Commissioner Switzer made a second.

Motion passed 3-0 Commissioners Stoll & Gentry absent

ITEM 5: PARKING – A member of the public raised concerns regarding on-street parking recently. Staff will provide information regarding the County’s parking regulations.

Mr. Josh Hart, Planning Director presented the workshop providing the Inyo County Codes covering both on-street/off-street parking and the departments responsible for enforcement.

Mr. Jim Pursell and Mr. Turner, residents of Wildrose Lane expressed concerns over the large number of vehicles, boats and trailers being stored for long periods of time on public roads. Requesting clarification and enforcement of the code for vehicles or trailers parked over 240 hours.

The Commissioner expressed sympathy regarding the parking concerns.

Planning Commission Corner requested to azenize authorization of the Planning Commission Chair to correspond with the Inyo County Sheriff’s Department to recommend Code Amendment and Enforcement.

ITEM 6: DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT FOR THE RENEWABLE ENERGY GENERAL PLAN AMENDMENT (GENERAL PLAN AMENDMENT #2013-02/INYO COUNTY) This is an opportunity for the public to make comments concerning the Draft Program Environmental Impact Report (PEIR) for the County’s General Plan Amendment 2013-02/Inyo County [the Renewable Energy General Plan Amendment (REGPA)] per County Code Section 15.36.090. The County is proposing to amend its General Plan to include policies for solar energy development within the County.

Ms. Cathreen Richards, Senior Planner presented the project. Mr. Robert Edgerton from Helix Environmental Planning presented the PEIR, Review and Public Comment Process. Public comments to be submitted in writing for the record.

Comment included:

- Sally Miller, The Wilderness Society, expressed appreciation for the extended time for review and comment. Requests the DRECP be integrated into the plan for South County. Comment will be submitted in writing. 605-1
- Ileene Andersen, Center for Bio Diversity, concerns for the Mohave Ground Squirrel, Water fowl and the lake effect, Wildlife movement between the Sierra’s and the Inyo’s, ground water pumping in South County Area and Desert Tortoises. 605-2
- Alan Bacoach, Big Pine Paiute Tribe, Concerns for View Shed, Cultural/Tribal & Biological impacts 605-3
- Earl Wilson, Lone Pine Question: What are the elements of the study area and what is being studied? Mr. Hart, Planning Director recommend the question be written down and that as the Commissioners’ were the decision makers, referred Mr. Wilson to meet with Planning Staff. 605-4

The public hearing was opened at 10:45 p.m. The public hearing was closed at 11:02 p.m.

ITEM 7: CODE ENFORCEMENT (ZONE RECLASSIFICATION NO., 2014-04/INYO COUNTY) Through work being undertaken for the Zoning Code update, it has become apparent that code enforcement issues relate more broadly than the Zoning Ordinance, including environmental health, building and safety, fire, and other County Codes. Staff proposes to add a new Chapter 2.99 to the County Code to address code enforcement issues throughout the Code. Minor text amendments to the Zoning Ordinance are required to refer to the proposed Code Enforcement Chapter and address specific issues related to enforcement of the Zoning Ordinance. The proposal is exempt for the California Environmental Quality Act.

Mr. Josh Hart, Planning Director presented the item.

Commission Wahrenbrock questioned if the ordinance would restrict the type of vegetation that could be planted in a front yard. Mr. Hart, Planning Director explained that generally speaking the Planning Department does not regulate the type of plants.

The public hearing was opened at 11:09 a.m. No one from the public wished to comment. The public hearing was closed at 11:10 a.m.

MOTION: Commissioner Wahrenbrock made a motion to recommend; Commissioner Switzer made a second.

The Motion passed 3-0. Commissioners Stoll & Gentry absent

ITEM 8: WATER – Workshop

Dr. Robert Harrington, Water Department Director present workshop. Topics included Drought conditions, LADWP operations plan and State ground water legislation.

COMMISSIONERS' REPORT/COMMENTS –

Commissioner Corner acknowledges that this was the last meeting for Commissioner Stoll to attend. Commissioner Wahrenbrock wished all a Merry Christmas.

DIRECTOR'S REPORT- No report given

ADJOURNMENT - With no further business, Chair Corner adjourned the meeting at 11:45 a.m., to reconvene, January 28, 2015 at 10:00 a.m.

Prepared by:
Diane Fortney
Inyo County Planning Department

Responses to Public Meeting Comments 605 – Planning Commission Meeting: December 3, 2014

Response 605-1: Please refer to Response 603-1.

Response 605-2: Please refer to Response 603-2.

Response 605-3: Please refer to Response 603-3.

Response 605-4: The Owens Valley is not a SEDA but instead was identified as a study area (OVSA) demarcated by a geographic boundary of the general valley area and does not correlate with a proposed development area. Any potential future solar energy project proposed for this area would be subject to a General Plan Amendment and further CEQA analysis and public comment as outlined in the PEIR. The reason for evaluation of the area is because the Owens Valley is where the majority of the County's citizens live, and therefore, where the majority of the communities are – but the area is also under multiple jurisdictions and is highly managed. Since it is known the LADWP has interest in solar energy development on some of its lands in the Owens Valley, it would benefit the County to have policy in place with regard to that potential development. As described in Section 1.1 of PEIR, potential solar projects in the OVSA would be considered in a subsequent planning process, separate from the REGPA, which will identify a set of criteria for identifying and mapping areas appropriate within the OVSA for solar energy development. Still, limitations on the size of projects and transmission policies pertaining to the OVSA are established in the REGPA.

COUNTY OF INYO
NATURAL RESOURCE ADVISORY COMMITTEE

DRAFT MINUTES OF DECEMBER 18, 2014 MEETING

MEMBERS:

DAVID GERMAN (VICE-CHAIR)
DOUG THOMPSON
TOM NOLAND
DANA JEFFRIES
WALTER SHARER (CHAIR)

Inyo County Planning Department
Post Office Drawer L
Independence, CA 93526
(760) 878-0263
(760) 872-0382 FAX
inyoplanning@inyocounty.us

ALTERNATES:

JAEI HOFFMAN
VACANT

STAFF:

JOSHUA HART, AICP
DIANE FORTNEY

PLANNING DIRECTOR
PROJECT COORDINATOR

The Inyo County Natural Resource Advisory Committee (NRAC) met on Thursday December 18, 2014, at the Inyo County Board of Supervisors Room in the County Administrative Center in Independence, CA.

David German, Vice-Chair opened the meeting at 5:05 p.m.

ITEM 1: ROLL CALL – Members in attendance: David German, Doug Thompson, Tom Noland and Alternate Jael Hoffman. Ms. Hoffman participated on the Committee as there were absences.

Also present was Joshua Hart, Planning Director, Cathreen Richards, Senior Planner, and Diane Fortney, Project Coordinator.

ITEM 2: PLEDGE OF ALLEGIANCE

ITEM 3: PUBLIC COMMENT – This was the opportunity for anyone in the audience to address the Committee on any related subject that was not scheduled on the Agenda.

There was no one from the public wishing to address the Committee.

ITEM 4: APPROVAL OF MINUTES – Approval of Minutes from August 21, 2014.

Committee members indicated that the draft minutes incorrectly omitted Doug Thompson as Members in attendance.

MOTION: Moved by Committee-member Thompson to approve the minutes with correction. The motion was seconded by Alternate Committee-member Hoffman.

The Motion passed 3-0-1, with Committee-member Walter Sharer and Dana Jeffries Absent, Committee-member Tom Nolan abstained.

ITEM 5: RENEWABLE ENERGY GENERAL PLAN AMMENDMENT (REGPA) –
The committee received a presentation regarding the Draft Program Environmental Impact Report (PEIR) for the REGPA.

Ms. Cathreen Richards, Senior Planner presented the PEIR, Review and Public Comment Process. Committee members asked multiple clarification questions. Committee Chair, Walter Sharer joined the discussion at 5:20 pm. Committee members discussed transmission line capacities; Community/Utility based project; Community projects ability to provide local needs effect on transmission; Current projects are permitting under existing County rules until plan is approved and adopted.

Comments by the committee include:

- There is confusion within the public in understanding the Cap and limits within the individual SEDA'S. Provide individual maps of the SEDA's and show the effect if maximum development allowed. 606-1
- No new transmission lines with the Owens Valley 606-2
- Prefer solar projects that do not require clearing of the natural brush and plants 606-3
- Included additional community input early in zoning amendment request process. 606-4

ITEM 6: DESERT RENEWABLE ENERGY CONSERVATION PLAN (DRECP) –
The committee received a presentation regarding the Draft Environmental Impact Report/Statement and Draft Desert Renewable Energy Conservation Plan to provide input to the Board and Planning Commission.

Mr. Joshua Hart, Planning Director presented an overview of the Draft Environmental Impact Report/Statement and Draft Desert Renewable Energy Conservation Plan and public comment process. Committee members asked multiple clarification questions. The committee discussed with Ms. Richards, Senior Planner & Mr. Hart, Planning Director the concerns of the plan identifying Olancha & Pearsonville as a priority area for acquiring private lands for conservation; the small amount of private land, less than 2%, available in the County; Area surrounding Lone Pine identified by plan for renewable energy projects; lack of clear mapping. Committee member Doug Thompson left the meeting at 6:00 pm.

Comments by the committee include:

- The need for reconciliation and coordination between DRECP and REGPA to align project objectives.
- Improved mapping to match existing development.

ITEM 7: PLANNING DIRECTORS REPORT

Mr. Hart discussed his investigation that found no wind projects are currently proposed in Olancha. A letter of interest has been received from Mr. Earl Wilson for the vacant committee position. The possibility of meeting "satellite" vs in-person was discussed.

ITEM 8: COMMITTEE MEMBER'S REPORT/COMMENTS

Request by Committee Vice-Chair, David German, for an update of the ATV Adventure Trails of the Eastern Sierra Project.

ITEM 9: SCHEDULE NEXT MEETING

The committee discussed meeting in March, will poll for meeting date.

The meeting adjourned at 7:04 p.m.

Prepared by:
Diane Fortney
Staff to Natural Resource Advisory Committee

**Responses to Public Meeting Comments 606 – Natural Resource Advisory Committee Meeting:
December 18, 2014**

Response 606-1: Please refer to Figures 2-4a through 2-4i of the PEIR for general maps of each SEDA.

Response 606-2: As stated in Section 3.3.2 of the PEIR, a separate set of potential criteria for development siting in the OVSA has been formulated, which include only utilizing existing transmission facilities and corridors. The total allowable megawatt cap for the Western Solar Energy Group (which includes the Owens Valley) is based on the capacity of the existing transmission facilities through the valley; therefore, with implementation of the REGPA, new transmission lines could not be constructed through the Owens Valley without an amendment to the General Plan.

Response 606-3: Vegetation removal would be minimized to the extent practicable. Mitigation Measure BIO-22 requires that the area of vegetation and/or ground disturbance shall be limited to the absolute minimum. Mitigation Measure BIO-23 requires that projects be designed and sites to avoid or minimize impacts to sensitive and unique habitats and wildlife species. Mitigation Measures BIO-19 and BIO-24 are in regards to minimizing direct and indirect impacts on sensitive vegetation and ecosystems.

Response 606-4: The County has made note of this comment and will consider providing more public input opportunity at the onset of each specific solar energy project processed under the REGPA.



SECTION E

MITIGATION MONITORING AND
REPORTING PROGRAM (MMRP)



**INYO COUNTY RENEWABLE ENERGY GENERAL PLAN AMENDMENT
PROGRAM ENVIRONMENTAL IMPACT REPORT**

Mitigation Monitoring and Reporting Program

Prepared for:

County of Inyo
168 N. Edwards Street
Independence, CA 93526

Prepared by:

HELIX Environmental Planning, Inc.
11 Natoma Street, Suite 155
Folsom, CA 95630

March 2015

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The California Environmental Quality Act (CEQA), Public Resources Code Section 21081.6, requires that a Mitigation Monitoring and Reporting Program (MMRP) be established upon completing findings. CEQA stipulates that “the public agency shall adopt a reporting or monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation.”

This MMRP has been developed in compliance with Section 21081.6 of CEQA. The County of Inyo (County) is the lead agency for the project under CEQA and will administer and implement the MMRP. The County is responsible for review of all monitoring reports, enforcement actions, and document disposition. The County will rely on information provided by the project site observers/monitors (e.g., construction manager, project manager, biologist, archaeologist, etc.) as accurate and up-to-date and will provide personnel to field check mitigation measure status, as required.

The mitigation measures in this MMRP are derived from the Program Environmental Impact Report (PEIR) for the proposed Renewable Energy General Plan Amendment (REGPA) project (proposed project) dated November 2014. To sufficiently track and document the status of mitigation measures for the proposed project, a mitigation matrix (Table 1) has been prepared and includes the following items:

- Mitigation Measure Number
- Mitigation Measure (text)
- Phase of Implementation / Mitigation Timing
- Frequency and/or Duration of Required Monitoring
- Enforcement or Reporting Agency / Action Notes
- Record Document Location

Mitigation measure timing has been noted in several specific timing increments, the most common being:

- During the design phase
- Prior to permit issuance
- During construction
- At completion of construction

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**Table 1
 INYO COUNTY RENEWABLE ENERGY GENERAL PLAN AMENDMENT PEIR
 MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Phase of Implementation / Mitigation Timing	Frequency and/or Duration of Required Monitoring	Enforcement or Reporting Agency / Action Notes	Record Document Location
AESTHETICS				
<p>AES-1: Prepare visual studies that include existing views, scenic vistas, and visual resources and evaluate the potential impacts to existing visual resources.</p> <p>Site-specific visual studies shall be prepared to assess potential visual impacts for all proposed solar energy projects greater than 20 MW (utility scale) and for proposed solar energy projects that are commercial scale or community scale that have been determined by a qualified County planner to have the potential to impact visual resources within the individual SEDAs and the OVSA. The visual study shall include assessment of the existing visual environment, including existing views, scenic vistas, and visual resources, and evaluate the potential of the proposed solar energy project to adversely impact resources and degrade the visual character or quality of the site and its surroundings. The study shall include assessment of public views from key observation points, the locations of which shall be determined in consultation with County staff and, if applicable, other public agencies with jurisdiction over the project site (e.g., BLM). Visual simulations shall be prepared to conceptually depict post-development views from the identified key observation points.</p> <p>The analysis and results of the study shall be documented in a memorandum that will include: (1) an assessment of the existing visual environment, including existing views, scenic vistas, and visual resources and (2) an evaluation of the potential of the proposed solar energy project to adversely impact resources and degrade the visual character or quality of the site and its surroundings. Applicable recommendations from the project-specific visual analysis shall be incorporated into the associated individual project design to address identified potential visual impacts.</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Inyo County Planning Department, and/or other applicable agencies.</p>	

Table 1
INYO COUNTY RENEWABLE ENERGY GENERAL PLAN AMENDMENT PEIR
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Phase of Implementation / Mitigation Timing	Frequency and/or Duration of Required Monitoring	Enforcement or Reporting Agency / Action Notes	Record Document Location
AESTHETICS (cont.)				
<p>AES-2: Reduce potential effects of glare by preparing site-specific glare studies that inform project design.</p> <p>Site-specific glare studies shall be prepared for all proposed solar energy projects greater than 20 MW (utility scale) and for proposed solar energy projects that are commercial scale or community scale that have been determined by a qualified County planner to have the potential to impact visual resources within the individual SEDAs and the OVSA to assess potential glare impacts. Applicable results and recommendations from the project specific glare study shall be incorporated into the associated individual project designs to address identified potential visual impacts.</p>	Prior to approval and/or issuance of Major Use Permits	Prior to approval and/or issuance of Major Use Permits	Inyo County Planning Department	
<p>AES-3: Minimize visual contrast using colors that blend with surrounding landscape and do not create excessive glare.</p> <p>For proposed solar energy projects that are greater than 20 MW (utility scale) and for proposed solar energy projects that are commercial scale or community scale that have been determined by a qualified County planner to have the potential to impact visual resources, the surfaces of structures and buildings that are visible from public viewpoints shall be treated so that (1) their colors minimize visual contrast by blending with the surrounding landscape and (2) their colors and finishes do not create excessive glare. Surface color treatments shall include painting or tinting in earth tone colors to blend in with the surroundings desert and mountains. Materials, coatings, or paints having little or no reflectivity shall be used.</p>	Prior to / during construction	Prior to construction	Inyo County Planning Department and/or other applicable agencies.	
<p>AES-4: Install natural screens to protect ground-level views into the project.</p> <p>For all proposed solar energy projects greater than 20 MW (utility scale) and for proposed solar energy projects that are commercial scale or community scale that have been determined by a qualified County planner to have the potential to impact visual resources within the individual SEDAs and the OVSA, and where existing screening topography and vegetation are absent or minimal, natural-looking earthwork landforms (such as berms or contour slopes), vegetative, or architectural screening shall be installed to screen ground-level views into the project site. The</p>	Prior to / during construction	Prior to construction	Inyo County Planning Department	

**Table 1
 INYO COUNTY RENEWABLE ENERGY GENERAL PLAN AMENDMENT PEIR
 MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Phase of Implementation / Mitigation Timing	Frequency and/or Duration of Required Monitoring	Enforcement or Reporting Agency / Action Notes	Record Document Location
<p>shape and height of the earthwork landforms shall be context sensitive and consider distance and viewing angle from nearby public viewpoints.</p>				
<p>AES-5: Prepare lighting plan using BMPs consistent with the Renewable Energy Action Team’s (REAT’s) Best Management Practices and Guidance Manual (REAT 2010) to reduce night lighting during construction and operation.</p> <p>The project applicant shall prepare a lighting plan for all proposed solar energy projects greater than 20 MW (utility scale) and for proposed solar energy projects that are commercial scale or community scale that have been determined by a qualified County planner to have the potential to impact visual resources within the individual SEDAs and the OVSA that documents how project lighting would be designed and installed to minimize night sky impacts during construction and operation. The lighting plan shall include, at minimum, the following lighting design parameters:</p> <ul style="list-style-type: none"> • Lighting shall be of the minimum necessary brightness consistent with operational safety and security requirements. • Lighting shall incorporate fixture hoods/shielding with light directed downward and toward the area to be illuminated. • Light fixtures that are visible from beyond the project boundary shall have cutoff angles that are sufficient to prevent lamps and reflectors from being visible beyond the project boundary, except where necessary for security. • Project lighting shall be kept off when not in use whenever feasible and consistent with safety and security requirements. 	Prior to construction	Prior to construction	Inyo County Planning Department	
<p>AES-6: Treat PV solar panel glass with anti-reflective coating.</p> <p>For proposed PV facilities greater than 20 MW (utility scale) and for proposed solar energy projects that are commercial scale or community scale that have been determined by a qualified County planner to have the potential to impact visual resources within the individual SEDAs and the OVSA, glass used to cover solar panels shall be treated with an anti-reflective coating to further decrease reflection and increase the transmission of light through the glass to the cells.</p>	Prior to / during construction	Prior to construction	Inyo County Planning Department	

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Mitigation Measure	Phase of Implementation / Mitigation Timing	Frequency and/or Duration of Required Monitoring	Enforcement or Reporting Agency / Action Notes	Record Document Location
<p>AES-7: Coordinate with the Federal Aviation Administration when considering the use of audio visual warning systems.</p> <p>For projects requiring aircraft warning lights, the project applicant shall coordinate with the Federal Aviation Administration (FAA) to consider the use and installation of audio visual warning systems technology on tower structures. If the FAA denies a permit for the use of audio visual warning systems, the project applicant shall limit lighting to the minimum required to meet FAA safety requirements.</p>	Prior to / during construction	Prior to construction	Inyo County Planning Department and/or other applicable agencies.	
<p>AES-8: Projects on federal land will comply with the respective federal agency's visual guidelines and policies.</p> <p>Solar energy projects proposed on federal land within individual SEDAs and the OVSA shall be coordinated with the federal agency that is responsible for the management of the land and shall comply with the respective federal agency's visual guidelines and policies.</p>	Prior to approval and/or issuance of Major Use Permits	Prior to approval and/or issuance of Major Use Permits	Inyo County Planning Department and/or other applicable agencies.	
<p>AES-9: The project will implement BMPs and measures during construction to reduce the visual and aesthetic effects of the construction site.</p> <p>The following measures shall be implemented for all proposed solar energy projects greater than 20 MW (utility scale) and for proposed solar energy projects that are commercial scale or community scale that have been determined by a qualified County planner to have the potential to impact visual resources within the individual SEDAs and the OVSA during construction:</p> <ul style="list-style-type: none"> • Construction boundaries and staging areas shall be clearly delineated and where appropriate fenced to prevent encroachment onto adjacent natural areas. • Construction staging and laydown areas visible from nearby roads, residences, and recreational areas shall be visually screened using temporary fencing. Fencing shall be of an appropriate design and color to visually blend with the site's surroundings. • Existing native vegetation shall be preserved to the greatest extent possible. • Project grading shall utilize undulating surface edges and contours 	During construction	During construction	Inyo County Planning Department Inyo County Department of Public Works	

Table 1
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Mitigation Measure	Phase of Implementation / Mitigation Timing	Frequency and/or Duration of Required Monitoring	Enforcement or Reporting Agency / Action Notes	Record Document Location
<p>that repeat the natural shapes, forms, textures, and lines of the surrounding landscape.</p> <ul style="list-style-type: none"> • Exposed soils shall be restored to their original contour and vegetation. • Stockpiled topsoils shall be reapplied to disturbed surfaces. 				
<p>AES-10: Projects requiring overhead electrical transmission connections will consider design and installation techniques that reduce visual impacts.</p> <p>For projects that require overhead electrical transmission connections to existing transmission lines and for the potential off-site transmission corridor to serve the Trona, Chicago Valley, and Charleston View SEDAs, the following shall be considered in the design and alignment of the transmission line connections:</p> <ul style="list-style-type: none"> • Avoid placing transmission towers and structures along ridgelines, peaks, or other locations where skylining effects would occur such that they would silhouette against the sky. • Place transmission corridor connection alignments along edges of clearings or at transition areas (i.e., natural breaks in vegetation or topography). • To the extent practicable, treat transmission towers and structures with color and surfaces to reduce visual contrast with the surrounding visual landscape. Alternative methods to reduce visual impacts may be considered for structures that cannot use conventional methods of painting without impeding electrical conveyance or without causing long-term environmental impacts through the constant reapplication of paint. These methods may include, but shall not be limited to, galvanizing or similar factory-applied conductive non-paint treatments. • Use of appropriate and context-sensitive transmission tower types (i.e., lattice structures compared to monopoles) to reduce visual contrast with the surrounding visual landscape. 	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

Table 1
INYO COUNTY RENEWABLE ENERGY GENERAL PLAN AMENDMENT PEIR
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Phase of Implementation / Mitigation Timing	Frequency and/or Duration of Required Monitoring	Enforcement or Reporting Agency / Action Notes	Record Document Location
AGRICULTURE AND FORESTRY RESOURCES				
<p>AG-1: Review development proposals for potential impacts to agricultural operations.</p> <p>The County Agricultural Commissioner shall be responsible for reviewing new development proposals adjacent to agricultural operations to ensure they do not significantly impact agricultural operations.</p>	Prior to approval and/or issuance of Major Use Permits	Prior to approval and/or issuance of Major Use Permits	Inyo County Agriculture Commissioner/ Planning Department/	
<p>AG-2: Conduct site-specific investigations for agricultural lands.</p> <p>Site-specific agricultural resource investigations shall be completed for proposed solar development projects within the individual SEDAs and the OVSA that are located on lands utilized for agricultural operations prior to final project design approval. If agricultural operations are identified within the project area, alternative designs should be implemented to avoid and/or minimize impacts to those resources. This may include mitigating conversion of agricultural lands based on the mitigation ratios identified in consultation with affected agencies at the cost of the project applicant to the satisfaction of the County. Mitigation ratios and impact fees assessed, if any, shall be outlined in the Renewable Energy Development Agreement, Renewable Energy Permit, or Renewable Energy Impact Determination.</p>	Prior to approval and/or issuance of Major Use Permits	Prior to approval and/or issuance of Major Use Permits	Inyo County Planning Department Inyo County Agriculture Commissioner	
<p>AG-3: Invasive plant species or noxious weeds.</p> <p>To prevent the introduction and spread of noxious weeds, a project-specific integrated weed management plan shall be developed for approval by the permitting agencies, which would be carried out during all phases of the project. The plan shall include the following measures, at a minimum, to prevent the establishment, spread, and propagation of noxious weeds:</p> <ul style="list-style-type: none"> • The area of vegetation and/or ground disturbance shall be limited to the absolute minimum and motorized ingress and egress shall be limited to defined routes. • Project vehicles shall be stored onsite in designated areas to minimize the need for multiple washings of vehicles that re-enter the project site. • Vehicle wash and inspection stations shall be maintained onsite and the types of materials brought onto the site shall be closely monitored. 	Prior to approval and/or issuance of Major Use Permits / prior to construction / during operation	Prior to approval and/or issuance of Major Use Permits / prior to construction / during operation	Inyo County Planning Department and/or other applicable agencies.	

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<ul style="list-style-type: none"> • The tires and undercarriage of vehicles entering or re-entering the project site shall be thoroughly cleaned. • Native vegetation shall be re-established as quickly as practicable on disturbed sites. • Weed Monitor and quickly implement control measures to ensure early detection and eradication of weed invasions. • Use certified weed-free straw, hay bales, or equivalent for sediment barrier installations. 				
AIR QUALITY				
<p>AQ-1: Prepare site-specific air quality technical report.</p> <p>Prior to issuance of Major Use Permits for solar energy projects, a site-specific air quality technical report shall be prepared and approved by the County, which will verify compliance with County and Great Basin Unified Air Pollution Control District standards during construction and operation of the solar project.</p> <p>Mitigation Measures AQ-2 and AQ-3, as defined below, will be incorporated into the site-specific technical report, and will be implemented during construction and operation of future projects. These measures require implementation of dust control practices during construction activities and solar project operations.</p>	Prior to approval and/or issuance of Major Use Permits	Prior to approval and/or issuance of Major Use Permits	Inyo County Planning Department and/or other applicable agencies.	
<p>AQ-2: Reduce fugitive dust and particulate matter emissions during construction.</p> <p>To control emissions of particulate matter, and to ensure compliance with Great Basin Unified Air Pollution Control District Rules 401 and 402 as well as applicable best management practices (BMP)s from the Renewable Energy Action Team’s (REAT’s) Best Management Practices and Guidance Manual (REAT 2010), solar projects shall implement fugitive dust and particulate matter emissions control measures including, but not limited to the following:</p> <ul style="list-style-type: none"> • Water and/or coarse rock all active construction areas as necessary and indicated by soil and air conditions; • Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard; 	During construction	During construction	Inyo County Planning Department and/or other applicable agencies.	

**Table 1
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Mitigation Measure	Phase of Implementation / Mitigation Timing	Frequency and/or Duration of Required Monitoring	Enforcement or Reporting Agency / Action Notes	Record Document Location
<ul style="list-style-type: none"> • Pave or apply (non-toxic) soil stabilizers on all unpaved access roads; • Sweep daily (with water sweepers) all paved access roads; Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets; • Suspend excavation and grading activity when sustained winds make reasonable dust control difficult to implement, e.g., for winds over 25 miles per hour (mph). • Limit the speed of on-site vehicles to 15 mph. 				
<p>AQ-3: Implement dust control measures during operation.</p> <p>To control emissions of particulate matter, and to ensure compliance with Great Basin Unified Air Pollution Control District Rule 401 and 402 as well as applicable BMPs from REAT’s Best Management Practices and Guidance Manual (REAT 2010), solar projects shall incorporate feasible dust control measures into the site design including, but not limited to, the following:</p> <ul style="list-style-type: none"> • Incorporate perimeter sand fencing into the overall design to prevent migration of exposed soils into the surrounding areas. The perimeter fence is intended to provide long-term protection around vulnerable portions of the site boundary; it is also intended to prevent off-road site access and sand migration across site boundaries and the associated impacts. • Incorporate wind deflectors intermittently across solar project sites. The solar panels themselves, especially where installed to transverse primary wind direction, will provide some measure of protection of the ground surface. Wind deflectors enhance this effect by lifting winds that may otherwise jet beneath panels, thereby disrupting long wind fetches, and reducing surface wind velocities and sand migration. • Orient infrastructure/solar panels perpendicular to primary wind directions. • Adjust panel operating angles to reduce wind speeds under panels. • Perform revegetation in areas temporarily denuded during construction. These areas would be replanted with native plant species that exist on the site presently. Irrigation would be applied temporarily during the plant establishment period (typically multiple 	During operation	During operation	Inyo County Planning Department and/or other applicable agencies.	

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<p>years), but after establishment it is expected that these areas would require little or no maintenance. Vegetation provides dust control by protecting and preventing threshold wind velocities at the soil surface. Studies have shown that an 11 to 54 percent vegetation cover on a site can provide up to 99 percent PM10 control efficiency (GBUAPCD 2008).</p> <ul style="list-style-type: none"> As the installation of solar panels and associated equipment progresses, each area that is completed (i.e. where no further soil disturbance is anticipated) will be treated with a dust palliative to prevent wind erosion. CARB certifications indicate that the application of dust suppressants can reduce PM10 emissions by 84 percent or more (CARB 2011). 				
BIOLOGICAL RESOURCES				
<p>BIO-1: Prepare project level biological resources evaluation and mitigation and monitoring plan.</p> <p>Prior to the approval of any solar development projects or related infrastructure under the REGPA with the potential to impact biological resources as determined by a qualified biologist (defined as a biologist with documented experience or training related to the subject species), a project level biological resource evaluation shall be prepared by a qualified biologist for the project. The biological resource evaluation shall include field reconnaissance and focused surveys as determined necessary by a qualified biologist to identify special status species and natural communities present or having the potential to occur on the site, an evaluation of the extent of those habitats, an evaluation of the potential for impacts to each special status species and/or habitat, and shall prescribe specific mitigation measures to avoid impacts to biological resources to the maximum extent practicable. The qualifications of any biologists conducting special status species surveys or focused habitat assessments will be submitted to CDFW prior to conducting fieldwork. The level of biological resource analysis will be based on factors such as the size of the proposed project, the extent of impacts to biological resources, and the sufficiency of existing data to determine impacts.</p> <p>An evaluation of the potential for off-site impacts to special status species and sensitive habitats will be included in the biological resources</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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<p>evaluation, especially for projects involving groundwater pumping. Chapter 2 of the Basin Plan protects beneficial uses for groundwater with respect to groundwater recharge and freshwater replenishment and beneficial uses for wildlife habitats and flora and fauna including cold freshwater habitat, warm freshwater habitat, wildlife habitat, rare, threatened, or endangered species, spawning, reproduction, and development, preservation of biological habitats of special significance, and migration of aquatic organisms (RWQCB 1995). A project-specific evaluation of potential impacts to beneficial uses for groundwater as specified in the Basin Plan will be included in the biological resources evaluation.</p> <p>For projects in the Chicago Valley or Charleston View SEDAs, potential impacts to special status species and/or riparian and other groundwater dependent habitat in the Amargosa Watershed will be evaluated. If any solar development projects are proposed in the Laws SEDA that would require groundwater pumping, a hydrologic study shall be conducted to determine the potential for impacts to the hydrology of Fish Slough and/or populations of Fish Slough milk-vetch. USFWS and CDFW shall be contacted during preparation of the biological resources evaluation to obtain the best available scientific data on such potential impacts including existing hydrologic studies (e.g., the unpublished State of the Basin Report-2014 prepared by Zdon and Associates, Inc.).</p> <p>For projects with the potential to impact on- or off-site special status species or habitats as determined in the biological resources evaluation, a project-specific biological resources mitigation and monitoring plan shall be prepared that meets the approval of permitting agencies. The plan shall be implemented during all phases of the project and shall identify appropriate mitigation levels to compensate for significant direct, indirect, and cumulative impacts, including habitat, special status plant, and wildlife species losses as well as impacts to groundwater dependent vegetation or off-site impacts to special status species or sensitive habitats due to groundwater pumping. The plan shall address at a minimum:</p> <ul style="list-style-type: none"> • Biological resource avoidance and minimization measures and mitigation, monitoring and compliance measures required by federal, state, and local applicable permitting agencies. 				

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<ul style="list-style-type: none"> • Documentation (based on surveys) of sensitive plant and wildlife expected to be affected by all phases of the project (project construction, operation, abandonment, and decommissioning). Agencies may request additional surveying, based on the documentation or past experience working with the resources. Include measures to avoid or minimize impacts to species and habitat. • A detailed description of measures to minimize or mitigate permanent and temporary disturbances from construction activities. • All locations on a map, at an approved scale, of sensitive plant and wildlife areas subject to disturbance and areas requiring temporary protection and avoidance during construction. • Aerial photographs or images, at an approved scale, of areas to be disturbed during project construction activities. • Duration for each type of monitoring and a description of monitoring methodologies and frequency. • Performance standards and criteria to be used to determine if/when proposed mitigation is or is not successful. • All standards and remedial measures to be implemented if performance standards and criteria are not met. • A closure/decommissioning or abandonment plan, including a description of funding mechanism(s). • A process for proposing plan modifications to the County project manager. • All locations on a map, at an approved scale, of sensitive plant and wildlife areas subject to disturbance and areas requiring temporary protection and avoidance during construction. • Aerial photographs or images, at an approved scale, of areas to be disturbed during project construction activities. • Duration for each type of monitoring and a description of monitoring methodologies and frequency. • Performance standards and criteria to be used to determine if/when proposed mitigation is or is not successful. • All standards and remedial measures to be implemented if performance standards and criteria are not met. • A closure/decommissioning or abandonment plan, including a 				

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description of funding mechanism(s). <ul style="list-style-type: none"> A process for proposing plan modifications to the County project manager. 				
<p>BIO-2: Minimize impacts to special status plants.</p> <ul style="list-style-type: none"> Prior to the approval of any solar development projects or related infrastructure under the REGPA, a CDFW-approved botanist shall evaluate the potential for special status plant species to occur on the site and conduct surveys, if necessary, to determine presence or infer absence of special status plants on the site following the November 24, 2009 <i>Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities</i> or the most current guidelines. When special status plants are found on a site, the project shall be redesigned or modified to avoid direct and indirect impacts on special status plants, to the maximum extent feasible, as determined by the County. In order to avoid direct and indirect impacts to special status plants, the projects should be re-sited or re-configured to provide an avoidance buffer of at least 0.25 mile from special status plant populations to account for the physical and biological processes that provide these species with their habitat and pollinator needs. <p>If special status plants are identified in the project area and complete avoidance of direct and indirect impacts is not feasible as determined by the County, the following measures shall be implemented to avoid and minimize impacts on special status plants:</p> <ul style="list-style-type: none"> If feasible, when special status plants are found on a site, the project shall be redesigned or modified to avoid direct and indirect impacts on special status plants, as determined by the County. In order to avoid direct and indirect impacts to special status plants, the projects should be re-sited or re-configured to provide an avoidance buffer of at least 0.25 mile from special status plant populations to account for the physical and biological processes that provide these species with their habitat and pollinator needs. For projects that are determined to have the potential to result in "take" of state or federally-listed plant species, consultation shall be conducted with CDFW or USFWS 	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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<p>respectively prior to project commencement, and appropriate mitigation measures developed if necessary.</p> <ul style="list-style-type: none"> When individuals of a special status species occur within an area proposed for construction and take cannot be avoided, mitigation shall be developed in coordination with USFWS and/or CDFW to reduce impacts on the local population of the special status species. Mitigation measures approved by USFWS and/or CDFW may include transplantation under the direction of a CDFW-approved botanist if transplantation of such species is deemed likely to succeed, or seed shall be collected prior to destruction of the plants and dispersed in suitable habitats not impacted by construction, if such habitats exist and seed collection is deemed likely to be successful by a CDFW-approved botanist with experience propagating the species in question. In all cases, CDFW will be notified at least 10 days prior to removal of any special status plant to allow transplantation or collection of seed at their discretion. If transplanting is proposed, the botanist shall coordinate with the appropriate resource agencies and local experts to determine whether transplantation is feasible. If the agencies concur that transplantation is a feasible mitigation measure, the botanist shall develop and implement a transplantation plan through coordination with the appropriate agencies. The special status plant transplantation plan shall involve identifying a suitable transplant site; moving some or all of the plant material and seed bank to the transplant site; collecting seed material and propagating it in a nursery (in some cases it is appropriate to keep plants onsite as nursery plants and sources for seed material); and monitoring the transplant sites to document recruitment and survival rates. Monitoring shall be conducted for a period of five years and transplantation shall be considered successful if an 80 percent survival rate has been achieved by the end of the five-year monitoring period. A mitigation and monitoring plan shall be developed by a qualified botanist/ restoration ecologist and submitted to CDFW for approval prior to approval of the proposed project. The mitigation and monitoring plan will dictate appropriate avoidance and minimization measures, compensatory mitigation, and monitoring requirements as 				

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<p>pertinent to the specific species and level of impact(s). Mitigation shall include, but is not limited to 1) protection of special status plant populations not directly impacted by construction or implementation of the project as stated above; 2) transplantation and/or collection of seed from impacted plants if feasible, as stated above; and 3) the preservation in perpetuity of an equivalent or larger off-site population for every individual or population of special status plant impacted including sufficient land surrounding the preserved population to ensure its survival in perpetuity as determined by a qualified botanist/ restoration ecologist. The qualified botanist/ restoration ecologist shall include plans to restore and enhance the preserved populations to the extent feasible.</p> <ul style="list-style-type: none"> • If any solar development projects are proposed in the Laws SEDA that would require groundwater pumping, a hydrologic study shall be conducted to determine the potential for impacts to the hydrology of Fish Slough and/or populations of Fish Slough milk-vetch, pursuant to Mitigation Measure HYD-2 in Section 4.9, Hydrology and Water Quality. If any solar development projects are proposed in the Chicago Valley or Charleston View SEDAs that would require groundwater pumping, a hydrologic study shall be conducted to determine the potential for down-watershed impacts to the habitats for special status plants in the Amargosa Watershed including the portion of the Amargosa River that has been designated by Congress as "Wild and Scenic." If such studies conclude that any project has the potential to result in indirect impacts to the hydrology of off-site habitat for special status plant species (e.g., Fish Slough, marshes, riparian areas, alkaline flats in the Amargosa Watershed and the portion of the Amargosa River that has been designated by Congress as "Wild and Scenic"), a management plan will be prepared in coordination with the County and submitted to the appropriate resource agency with oversight for the species or habitat in question. The plan shall describe any appropriate monitoring, such as vegetation and/or water table monitoring, and prescribe mitigation to offset the impacts of the project on off-site habitat for special status plants such as preservation of suitable habitat or funding of activities to restore, enhance or conserve habitat within the County. 				

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<p>BIO-3: Minimize impacts to special status wildlife.</p> <p>Prior to the approval of any solar development projects or related infrastructure under the REGPA with the potential to impact special status wildlife as determined by a qualified biologist, a CDFW-approved wildlife biologist shall conduct a survey to document the presence or absence of suitable habitat for special status wildlife in the project site. The following steps shall be implemented to document special status wildlife and their habitats for each project, as determined by the CDFW-approved wildlife biologist:</p> <ul style="list-style-type: none"> • Review Existing Information. The wildlife biologist shall review existing information to develop a list of special status wildlife species that could occur in the project area or be impacted by the proposed project, either directly or indirectly (e.g., groundwater pumping could result in indirect impacts to off-site habitats for special status wildlife). The following information shall be reviewed as part of this process: the USFWS special status species list for the project region, CDFW's CNDDDB, previously prepared environmental documents, and USFWS issued biological opinions for previous projects. If the project is taking place on BLM or state administered lands (e.g., BLM, State Trust Lands), the list of special status wildlife from that land managing agency shall be obtained and reviewed in addition to the lists previously mentioned. • Coordinate with State and Federal Agencies. The wildlife biologist shall coordinate with the appropriate agencies (CDFW, USFWS, BLM) to discuss wildlife resource issues in the project region and determine the appropriate level of surveys necessary to document special status wildlife and their habitats. • Conduct Field Studies. The wildlife biologist shall evaluate existing habitat conditions and determine what level of biological surveys may be required. The type of survey required shall depend on species richness, habitat type and quality, and the probability of special status species occurring in a particular habitat type. Depending on the existing conditions in the project area and the proposed construction activity, one or a combination of the following 	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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<p>levels of survey may be required:</p> <ul style="list-style-type: none"> • Habitat Assessment. A habitat assessment determines whether suitable habitat is present. The wildlife biologist shall conduct project-specific habitat assessments consistent with protocols and guidelines issued by responsible agencies for certain special status species (e.g., USFWS' 2004 Protocol for Evaluating Bald Eagle Habitat and Populations in California). Habitat assessments are used to assess and characterize habitat conditions and to determine whether return surveys are necessary. If no suitable habitat is present for a given special status species, no additional species-focused or protocol surveys shall be required. • Species-Focused Surveys. Project-specific species-focused surveys (or target species surveys) shall be conducted if suitable habitat is present for special status wildlife and if it is necessary to determine the presence or absence of the species in the project area. The wildlife biologist shall conduct project-specific surveys focusing on special status wildlife species that have the potential to occur in the region. The surveys shall be conducted during a period when the target species are present and/or active. • Protocol-Level Wildlife Surveys. The wildlife biologist shall conduct project specific protocol level surveys for special status species with the potential to be impacted by the proposed project. The surveys shall comply with the appropriate protocols and guidelines issued by responsible agencies for the special status species. USFWS and CDFW have issued survey protocols and guidelines for several special- status wildlife species that could occur in the project region, including (but not limited to): bald eagle, burrowing owl, golden eagle, Swainson's hawk, least Bell's vireo, willow flycatcher, desert tortoise, and desert kit fox. The protocols and guidelines may require that surveys be conducted during a particular time of year and/or time of day when the species is present and active. Many survey protocols require that only a USFWS- or CDFW-approved biologist perform the surveys. The project proponent shall coordinate with the appropriate state or federal agency biologist before the initiation of protocol-level surveys to 				

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<p>ensure that the survey results would be valid. Because some species can be difficult to detect or observe, multiple field techniques may be used during a survey period and additional surveys may be required in subsequent seasons or years as outlined in the protocol or guidelines for each species.</p> <ul style="list-style-type: none"> • Habitat Mapping. The wildlife biologist shall map special status wildlife or suitable habitat identified during the project-specific field surveys. • A Scientific Collecting Permit is required to take, collect, capture, mark, or salvage, for scientific, educational, and non-commercial propagation purposes, mammals, birds and their nests and eggs, reptiles, amphibians, fishes and invertebrates (Fish and Game Code Section 1002 and Title 14 Sections 650 and 670.7). All biologists will be required to obtain a Scientific Collecting Permit that may be required to handle any live or dead animals during construction or operation of a project. <p>In addition, the following measures should be implemented to avoid and minimize impacts on special status species and their habitats if they occur within a site:</p> <ul style="list-style-type: none"> • For projects that are determined to have the potential to result in "take" of state or federally-listed animal species, consultation shall be conducted with CDFW or USFWS respectively and appropriate mitigation measures developed as necessary, and take authorization shall be obtained prior to project commencement, if relevant. • If ground disturbing activities are required prior to site mobilization, such as for geotechnical borings or hazardous waste evaluations, a CDFW-approved biologist shall be present to monitor any actions that could disturb soil, vegetation, or wildlife. • In areas that could support desert tortoise or any other sensitive wildlife species, a qualified biologist with the appropriate CDFW and/or USFWS approvals for the species being relocated shall be onsite and respond accordingly should an animal need to be relocated... 				

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<ul style="list-style-type: none"> • Vehicular traffic during project construction and operation shall be confined to existing routes of travel to and from the project site, and cross country vehicle and equipment use outside designated work areas shall be prohibited. Vehicles shall not exceed 25 mph on the project site. Vehicles shall abide by posted speed limits on paved roads. • A CDFW-approved biologist shall be designated to oversee compliance with biological resources avoidance and minimization measures during mobilization, ground disturbance, grading, construction, operation, and closure/decommissioning, or project abandonment, particularly in areas containing or known to have contained sensitive biological resources, such as special status species and unique plant assemblages. The CDFW-approved biologist shall perform biological monitoring during all grading, clearing, grubbing, trenching, and construction activities. The boundaries of all areas to be disturbed (including staging areas, access roads, and sites for temporary placement of spoils) shall be delineated with stakes and flagging prior to construction activities in consultation with the biological monitor. Spoils shall be stockpiled in disturbed areas lacking native vegetation and which do not provide habitat for special status species. Parking areas, staging and disposal site locations shall also be located in areas without native vegetation or special status species habitat. All disturbances, vehicles, and equipment shall be confined to the flagged areas. The CDFW-approved biologist shall be responsible for actions including, but not limited to, the following: <ul style="list-style-type: none"> ○ Clearly marking sensitive biological resource areas and inspecting the areas at appropriate intervals for meeting regulatory terms and conditions. ○ Inspecting, daily, active construction areas where wildlife may have become trapped (for example, trenches, bores, and other excavation sites that constitute wildlife pitfalls outside the permanently fenced area) before beginning construction. At the end of the day, conducting wildlife inspections of installed structures that would entrap or not allow escape during periods of construction inactivity. Periodically inspecting areas with 				

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<p>high vehicle activity (such as parking lots) for wildlife in harm's way.</p> <ul style="list-style-type: none"> ○ Periodically inspect stockpiled material and other construction material and equipment (including within the fenced areas) throughout the day as some species such as desert kit fox may enter the project site at any time. ○ Overseeing special status plant salvage operations. ○ Immediately recording and reporting hazardous spills immediately as directed in the project hazardous materials management plan. ○ Coordinating directly and regularly with permitting agency representatives regarding biological resources issues, and implementation of the biological resource avoidance and minimization measures. ○ Maintaining written records regarding implementation of the biological resource avoidance and minimization measures, and providing a summary of these records periodically in a report to the appropriate agencies. ○ Notifying the project owner and appropriate agencies of non-compliance with biological resource avoidance and minimization measures. ○ At the end of each work day, the biological monitor shall ensure that all potential wildlife pitfalls (trenches, bores, and other excavations) have been backfilled or if backfilling is not feasible, the biological monitor shall ensure that all trenches, bores, and other excavations are sloped at a 3:1 ratio at the ends to provide wildlife escape ramps, or covered completely to prevent wildlife access, or fully enclosed with desert tortoise-exclusion fencing. All trenches, bores, and other excavations outside the areas permanently fenced with desert tortoise exclusion fencing shall be inspected periodically, but no less than three times, throughout the day and at the end of each workday by the CDFW-approved biologist. Should a tortoise or other wildlife become trapped, the CDFW and USFWS-approved desert tortoise biologist shall remove and relocate the individual as described in the project's Desert Tortoise Relocation/Translocation Plan. Any wildlife encountered during 				

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<p>the course of construction shall be allowed to leave the construction area unharmed.</p> <ul style="list-style-type: none"> ○ Any construction pipe, culvert, or similar structure with a diameter greater than 1 inch, stored less than 8 inches aboveground, and within desert tortoise habitat (i.e., outside the permanently fenced area) for one or more nights, shall be inspected by the biological monitor for desert tortoises or other special status species such as fringe-toed lizard, before the material is moved, buried, or capped. As an alternative, all such structures may be capped before being stored outside the fenced area, or placed on pipe racks. These materials would not need to be inspected or capped if they are stored within the permanently fenced area after the clearance surveys have been completed. ● Access roads, pulling sites, storage and parking areas outside of the fenced solar facility area shall be designed, installed, and maintained with the goal of minimizing impacts to native plant communities and sensitive biological resources. Transmission lines and all electrical components shall be designed, installed, and maintained in accordance with the APLIC Suggested Practices for Avian Protection on Power Lines (APLIC 2006) and Mitigating Bird Collisions with Power Lines (APLIC 2004) to reduce the likelihood of bird electrocutions and collisions. ● Facility lighting shall be designed, installed, and maintained to direct light downwards towards the project site and avoid light spillover to wildlife habitat. ● Construction and operation related noise levels shall be minimized to minimize impacts to wildlife. ● All vertical pipes shall be capped to prevent the entrapment of birds and other wildlife. ● All vehicles and equipment shall be maintained in proper working condition to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. The biological monitor shall be informed of any hazardous spills immediately. Hazardous spills shall be immediately cleaned up and 				

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<p>the contaminated soil properly disposed of at a licensed facility. Servicing of construction equipment shall take place only at a designated area. Service/maintenance vehicles shall carry a bucket and pads to absorb leaks or spills.</p> <ul style="list-style-type: none"> • Road surfacing and sealants as well as soil bonding and weighting agents used on unpaved surfaces shall be non-toxic to wildlife and plants. Anticoagulants shall not be used for rodent control. Pre-emergents and other herbicides with documented residual toxicity shall not be used. Herbicides shall be applied in conformance with federal, state, and local laws and according to the guidelines for wildlife- safe use of herbicides in BIO 24 (Weed Management Plan). • The following measures shall be implemented to minimize attractants to wildlife: <ul style="list-style-type: none"> ○ If the application of water is needed to abate dust in construction areas and on dirt roads, use the least amount needed to meet safety and air quality standards and prevent the formation of puddles, which could attract wildlife to construction sites. The biological monitor shall patrol these areas to ensure water does not puddle and attract desert tortoise, common ravens, and other wildlife to the site and shall take appropriate action to reduce water application where necessary. ○ Water shall be prohibited from collecting or pooling for more than 24 hours after a storm event within the project retention basin. Standing water within the retention basin shall be removed, pumped, raked, or covered. Alternative methods or the timeframe for allowing the water to pool may be modified with the approval of the biological monitor. ○ Dispose trash and food-related items in self-closing, sealable containers with lids that latch to prevent wind and wildlife from opening containers. Empty trash containers daily and remove from the project site those associated with construction when construction is complete. ○ To avoid attracting insectivorous birds and bats, prepare a facility vector (such as mosquitoes or rodents) control plan, as appropriate, that meets the permitting agency approval and 				

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<p>would be implemented during all phases of the project.</p> <ul style="list-style-type: none"> • Workers or visitors, while on project property, shall be prohibited from feeding wildlife, bringing domestic pets to the project site, collecting native plants, or harassing wildlife. • To reduce the potential for the transmission of fugitive dust the project proponent shall implement dust control measures. These shall include: <ul style="list-style-type: none"> ○ The project proponent shall apply non-toxic soil binders, equivalent or better in efficiencies than the CARB- approved soil binders, to active unpaved roadways, unpaved staging areas, and unpaved parking area(s) throughout construction to reduce fugitive dust emissions. ○ Water the disturbed areas of the active construction sites at least three times per day and more often if uncontrolled fugitive dust is noted. Enclose, cover, water twice daily, and/or apply non-toxic soil binders according to manufacturer's specifications to exposed piles with a 5 percent or greater silt content. Agents with known toxicity to wildlife shall not be used. ○ Establish a vegetative ground cover (in compliance with biological resources impact mitigation measures above) or otherwise create stabilized surfaces on all unpaved areas at each of the construction sites within 21 days after active construction operations have ceased. ○ Increase the frequency of watering, if water is used as a soil binder for disturbed surfaces, or implement other additional fugitive dust mitigation measures, to all active disturbed fugitive dust emission sources when wind speeds (as instantaneous wind gusts) exceed 25 mph. • A project-specific worker environmental awareness program (WEAP) shall be developed and carried out during all phases of the project (site mobilization, ground disturbance, grading, construction, operation, closure/decommissioning, or project abandonment, and restoration/reclamation activities). The WEAP shall include the biological resources present and the measures for minimizing impacts 				

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<p>to those resources. Interpretation for non-English speaking workers shall be provided, and all new workers shall be instructed in the WEAP. The project field construction office files will contain the names of onsite personnel (for example, surveyors, construction engineers, employees, contractors, contractor's employees/ subcontractors) who have participated in the education program. All employees and contractors shall be trained to carry out the WEAP and on their role in ensuring the effectiveness of implementing the Plan. At a minimum, the WEAP shall including the following:</p> <ul style="list-style-type: none"> ○ Photos and habitat descriptions for special status species that may occur on the project site and information on their distribution, general behavior, and ecology. ○ Species sensitivity to human activities. ○ Legal protections afforded the species. ○ Project measures for protecting species. ○ State and federal law violation penalties. ○ Worker responsibilities for trash disposal and safe/ humane treatment of special status species found on the project site, associated reporting requirements, and specific required measures to prevent taking of threatened or endangered species. ○ Handout materials summarizing the contractual obligations and protective requirements specified in project permits and approvals. ○ Project site speed limit requirements and penalties. <ul style="list-style-type: none"> ● A project specific restoration, re-vegetation, and reclamation plan that meets the approval of permitting agencies shall be prepared and carried out for all projects. The plan shall address at a minimum: <ul style="list-style-type: none"> ○ Minimizing natural vegetation removal and the consideration of cutting or mowing vegetation rather than total removal, whenever possible. ○ Salvage and relocation of cactus and yucca from the site before beginning construction. ○ Identification of protocols to be used for vegetation salvage. ○ Reclaiming areas of temporarily disturbed soil using certified weed free native vegetation and topsoil salvaged from 				

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<p>excavations and construction activities.</p> <ul style="list-style-type: none"> ○ Restoration and reclamation of temporarily disturbed areas, including pipelines, transmission lines, staging areas, and temporary construction-related roads as soon as possible after completion of construction activities. The actions are recommended to reduce the amount of habitat converted at any one time and promote recovery to natural habitats. ○ Specifying proper seasons and timing of restoration and reclamation activities to ensure success. <ul style="list-style-type: none"> ● If any solar development projects are proposed that would require groundwater pumping, a hydrologic study shall be conducted to determine the potential for indirect off-site impacts to special status wildlife species and/or their habitats. If such studies conclude that any project has the potential to result in indirect impacts to the hydrology of off-site habitat for special status wildlife species (e.g., Amargosa vole, Ash Meadows naucorid), a management plan will be prepared in coordination with the County and submitted for approval to the appropriate resource agency with regulatory oversight for the species or habitat in question. The plan shall describe any appropriate monitoring, such as vegetation and/or water table monitoring, and prescribe mitigation to offset the impacts of the project on off-site habitat for special status wildlife such as preservation of suitable habitat or funding of activities to restore, enhance or conserve habitat within the County. 				
<p>BIO-4: Minimize impacts to special status fish.</p> <p>Prior to the approval of any solar development projects or related infrastructure under the REGPA that is determined during the project level biological resource evaluation (Mitigation Measure BIO-1) to have the potential to affect special status fish, a project-specific groundwater impact analysis will be conducted to address potential impacts to habitat for special status fish. In addition, consultation with USFWS shall be conducted for projects with the potential to impact federally listed species including Owens pupfish or Owens tui chub and coordination with CDFW will be conducted for projects with the potential to impact state listed species or CDFW species of special concern including Owens sucker and Owens</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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<p>speckled dace. For projects that are determined to have the potential to result in “take” of state or federally listed fish species, consultation shall be conducted with CDFW or USFWS respectively and take authorization obtained prior to project commencement.</p> <p>For all projects proposed in the Charleston View and Chicago Valley SEDAs, an analysis of potential down-watershed impacts to special-status fish species in the Amargosa Watershed will be conducted prior to project approval, if the project involves impacts to groundwater and/or requires pumping of groundwater (e.g. solar thermal projects). If the project is determined to have the potential to result in down-watershed impacts that could alter the hydrology of habitats for special-status fish species, a mitigation and monitoring plan will be prepared by the applicant to address potential impacts to groundwater and down-watershed biological resources and submitted to USFWS and CDFW for approval prior to project implementation. Mitigation measures will be developed in coordination with USFWS and CDFW to offset these impacts. Mitigation measures should include but are not limited to 1) a requirement for the project applicant to purchase and retire currently exercised water rights along the same flowpath as the water being used by the facility at a minimum 1:1 ratio; 2) hydrological and biological monitoring of the impacts of groundwater pumping on the groundwater system and the sensitive habitats down-watershed; and 3) adaptive management to increase the ratio of water rights purchased and retired and restore habitats down-watershed if hydrological and biological monitoring indicates that the projects groundwater pumping is having detrimental effects to sensitive biological resources (e.g., special status species or sensitive natural communities as designated by USFWS, CDFW, or CNPS) within the watershed as determined by a qualified hydrologist/hydrogeologist or biologist in coordination with USFWS and/or CDFW.</p>				
<p>BIO-5: Minimize impacts to amphibians.</p> <p>The following measures shall be implemented for any solar development project(s) or related infrastructure under the REGPA that is determined during the project level biological resource evaluation (Mitigation Measure BIO-1) to have the potential to affect special status amphibians.</p>	<p>Prior to approval and/or issuance of Major Use Permits / during construction</p>	<p>Prior to approval and/or issuance of Major Use Permits / during construction</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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<ul style="list-style-type: none"> • Surveys for special status amphibians including but not limited to northern leopard frog, Owens Valley web-toed salamander, and Inyo Mountains slender salamander shall be conducted by a CDFW-approved biologist with experience surveying for and/or handling these species. If construction is scheduled to commence during the optimal period of identification for these species, then surveys shall be conducted within two weeks prior to the commencement of construction. If construction is not scheduled to commence during the optimal period of identification for these species, then surveys shall be conducted during the optimal period of identification for these species (in the calendar year prior to construction) and again within two weeks prior to the commencement of construction. • If any of these species are found on a project site during the surveys, CDFW shall be contacted and avoidance and mitigation measures appropriate to the species will be developed. Avoidance measures could include actions such as waiting to begin construction until the animal passively disperses from the project site, active relocation of the animal, or allowing construction to begin with the institution of an appropriate no disturbance buffer until the animal has passively dispersed. Mitigation measures could include restoration of temporarily disturbed habitats. • If federal or state-listed amphibians not discussed above are determined to have the potential to occur on a project site or otherwise be impacted by the project, consultation shall be conducted with USFWS and CDFW respectively to determine the survey protocol and mitigation measures appropriate to the species. For projects that are determined to have the potential to result in "take" of state or federally-listed amphibian species, consultation shall be conducted with CDFW or USFWS respectively and take authorization shall be obtained prior to project commencement. 				
<p>BIO-6: Minimize impacts to desert tortoise.</p> <p>The following measures shall be implemented for any solar development project(s) or related infrastructure under the REGPA that is determined during the project level biological resource evaluation (Mitigation Measure</p>	<p>Prior to approval and/or issuance of Major Use Permits / during construction</p>	<p>Prior to approval and/or issuance of Major Use Permits / during construction</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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<p>BIO-1) to have the potential to affect desert tortoise in order to avoid, minimize, and mitigate for impacts:</p> <ul style="list-style-type: none"> • Consultation shall be conducted with CDFW and USFWS for any projects where desert tortoise or signs of their presence is found on the site and/or the project is determined by a CDFW-approved biologist to have the potential to impact desert tortoise. In such cases, permits under Section 2080 of the Fish and Game Code and Section 7/10 of FESA authorizing incidental take of desert tortoise will be obtained from CDFW and USFWS respectively prior to implementation of the project, including any project-related ground disturbing activities. All requirements of the 2081/2080.1 permit and the Biological Opinion shall be implemented. • The project proponent shall fully mitigate for habitat loss and potential take of desert tortoise. The project specific mitigation shall be developed in coordination with CDFW and USFWS, and would be reflective of the mitigation measures described in the Biological Opinion prepared by the USFWS for the project. • The project developer shall provide funds for regional management of common ravens through the payment of a per-acre fee as determined in consultation with the USFWS. The fee shall be commensurate with current per-acre fees (at the time of project approval) required by the BLM and the CEC for development projects in the desert with the potential to provide subsidies to common ravens such as shelter, perching sites, and food. The fee shall be used by the Desert Managers Group to manage common ravens in the California desert with the goal of reducing their predation on desert tortoises. • Projects shall not be sited within areas identified for desert tortoise recovery or conservation according to the Revised Recovery Plan for the Mojave Population of the Desert Tortoise (<i>Gopherus agassizii</i>) (USFWS 2011) (such as designated critical habitat, Areas of Critical Environmental Concern, Desert Wildlife Management Areas, Priority Connectivity Areas, and other areas or easements managed for desert tortoises). 				

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<ul style="list-style-type: none"> On project sites containing desert tortoise, consultation shall be conducted with USFWS and CDFW to determine the need for and/or feasibility of conducting desert tortoise translocation (changing location or position) to minimize the taking of the tortoises, if they are observed within the proposed project area. See http://www.fws.gov/ventura/speciesinfo/protocols_guidelines/ for federal translocation plan guidance. Translocation plan development and implementation may require, but not be limited to: additional surveys of potential recipient sites; translocated and resident tortoise disease testing and health assessments; monitoring protocols; and consideration of climatic conditions at the time of translocation. Due to the potential magnitude of proposed renewable energy project impacts on desert tortoises, USFWS and CDFW must evaluate translocation efforts on a project by project basis in the context of cumulative effects. A desert tortoise authorized biologist approved by CDFW and USFWS shall be contracted to oversee and be responsible for ensuring compliance with desert tortoise avoidance and minimization measures before initiation of and during ground-disturbing activities. The desert tortoise biologist shall conduct clearance surveys, tortoise handling, artificial burrow construction, egg handling, and other procedures in accordance with the Guidelines for Handling Desert Tortoise During Construction Projects (Desert Tortoise Council 1999) or the most current USFWS guidance. The desert tortoise biologist shall be present on site from March 15 through October 31 (active season) during ground-disturbing activities in areas outside the tortoise exclusion fencing. It is recommended that the biologist be on call from November 1 to March 14 (inactive season) and checks such construction areas immediately before construction activities begin. Refer to the Ventura Fish and Wildlife Office website <http://www.fws.gov/ventura/endangered/species/surveys-protocol.html> for desert tortoise authorized biologist and monitor responsibilities and qualifications, and survey and translocation guidance, and refer to the Nevada Fish and Wildlife Office (desert 				

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<p>tortoise recovery office) website <http://www.fws.gov/nevada/desert_tortoise/dtro/.html> for desert tortoise federal recovery plan documents. Methods for clearance surveys, fence specification and installation, tortoise handling, artificial burrow construction, egg handling and other procedures shall be consistent with those described in the 2013 USFWS Desert Tortoise Field Manual available at the Ventura Fish and Wildlife Office website listed above, or more current guidance provided by CDFW and USFWS. All terms and conditions described in the Biological Opinion for the project prepared by the USFWS shall be implemented.</p> <ul style="list-style-type: none"> • The project owner shall undertake appropriate measures to manage the construction site and related facilities in a manner to avoid or minimize impacts to desert tortoise. These measures include, but are not limited to, the following: <ul style="list-style-type: none"> ○ The project applicant shall notify the USFWS and CDFW prior to project commencement and prior to the commencement of any ground disturbing activities. ○ Before starting project ground disturbing activities, the project proponent shall avoid potential desert tortoise harm by incorporating desert tortoise exclusion fencing into permanent fencing surrounding the proposed facility, and installing desert tortoise exclusion fencing around temporary project construction areas such as staging area, storage yards, excavations, and linear facilities. The tortoise exclusion fencing shall be constructed consistent with the USFWS 2010 Desert Tortoise Exclusion Fence Specifications or the most current guidance provided by USFWS and CDFW, and should be constructed in late winter or early spring to minimize impacts to desert tortoise and accommodate subsequent tortoise surveys. ○ Within 24 hours before starting tortoise exclusion fence construction, the desert tortoise biologist shall survey the fence alignment and utility right-of-way alignments and clear desert tortoises from the area. The surveys and relocation methods shall be conducted using techniques approved by the CDFW and USFWS. Following construction of the tortoise exclusion fence, 				

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<p>the desert tortoise biologist shall conduct clearance surveys within the fenced area to ensure as many desert tortoises as possible have been removed from the site. Burrows and tortoises identified within the project area shall be handled according to the 2013 USFWS Desert Tortoise Field Manual, and tortoises requiring relocation shall be handled in accordance with the project Desert Tortoise Relocation/Translocation Plan.</p> <ul style="list-style-type: none"> ○ Heavy equipment may enter the project site following the completion of project area desert tortoise clearance surveys by the desert tortoise biologist. Monitoring initial clearing and grading activities by the biologist will help ensure that tortoises missed during the initial clearance survey are moved from harm's way. ○ The desert tortoise biologist shall be responsible for appropriate documentation and reporting to the permitting agencies for desert tortoises handled, in accordance with the project Desert Tortoise Relocation/Translocation Plan. ○ Security gates shall be designed with minimal ground clearance to deter ingress by tortoises. The gates shall be kept closed, except for the immediate passage of vehicles, to prevent desert tortoise passage into the project area. ○ Following installation of the desert tortoise exclusion fencing – both the permanent site fencing and temporary fencing in the utility corridors – the fencing shall be regularly inspected by the biological monitor. The biological monitor shall ensure that damage to the permanent or temporary fencing is immediately blocked to prevent tortoise access and permanently repaired within 72 hours between March 15 and October 31, and within 7 days between November 1 and March 14. The biological monitor shall inspect permanent fencing quarterly and after major rains to ensure fences are intact and there is no ground clearance under the fence that would allow tortoises to pass. The biologist shall inspect construction pipes, culverts, or similar structures: (a) with a diameter greater than 3 inches, (b) stored for one or more nights, (c) less than 8 inches aboveground, and (d) within desert tortoise habitat (outside the permanently fenced area), before the materials are moved, buried, or capped. As an 				

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<p>alternative, the materials may be capped before storing outside the fenced area or placing on pipe racks. Inspection or capping is not necessary if the materials are stored within the permanently fenced area after completing desert tortoise clearance surveys.</p> <ul style="list-style-type: none"> ○ The project proponent shall ensure vehicular traffic does not exceed 25 miles per hour within the delineated project areas or on access roads in desert tortoise habitat. On unpaved roads suppress dust and protect air quality by observing a 10-mile per hour speed limit. ○ To avoid vehicle impacts to desert tortoise, workers shall be responsible for inspecting the ground under the vehicle for the presence of desert tortoise any time a vehicle or construction equipment is parked in desert tortoise habitat outside the permanently fenced area. If a desert tortoise is seen, it may move on its own. If it does not move within 15 minutes, the desert tortoise biologist may remove and relocate the animal to a safe location. ● The project proponent shall develop and implement a Desert Tortoise Relocation/Translocation Plan that is consistent with current USFWS approved guidelines. The goal of the plan will be to safely exclude desert tortoises from within the fenced project area and relocate/translocate them to suitable habitat capable of supporting them, while minimizing stress and potential for disease transmission. The plan shall be developed in consultation with the USFWS to ensure the document does not conflict with conditions issued under an Incidental Take Statement. The plan will utilize the most recent USFWS guidance on translocation that includes siting criteria for the translocation site and control site, methods for translocation/relocation including the holding pen, and post translocation/relocation monitoring. Development and implementation of a translocation plan may require, but may not be limited to, additional surveys of potential recipient sites; disease testing and health assessments of translocated and resident tortoises; and consideration of climatic conditions at the time of translocation. The plan shall designate a relocation site as close as possible to the disturbance site that provides suitable conditions for long term 				

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<p>survival of the relocated desert tortoise and outline a method for monitoring the relocated tortoise.</p> <ul style="list-style-type: none"> • The Desert Tortoise Relocation/Translocation Plan must be approved by the County, CDFW and USFWS prior to any project-related ground disturbing activity. • Within 30 days after initiation of relocation and/or translocation activities, the Designated Biologist shall provide to the Project Manager for review and approval, a written report identifying which items of the plan have been completed, and a summary of all modifications to measures made during implementation of the plan. Written monthly progress reports shall be provided to the Project Manager for the duration of the plan implementation. • The project proponent shall design and implement a Raven Monitoring, Management, and Control Plan that is consistent with the most current USFWS raven management guidelines. The goal of the plan shall be to minimize predation on desert tortoises by minimizing project-related increases in raven abundance. The plan shall be approved by the County, CDFW and USFWS prior to the start of any project-related ground disturbing activities. 				
<p>BIO-7: Minimize impacts to special status reptiles (except desert tortoise).</p> <p>The following measures shall be implemented for any solar development project(s) or related infrastructure under the REGPA that is determined during the project level biological resource evaluation (Mitigation Measure BIO-1) to have the potential to affect special status reptiles (with the exception of desert tortoise which has separate mitigation measures):</p> <ul style="list-style-type: none"> • Surveys for special status reptiles including but not limited to northern sagebrush lizard, Panamint alligator lizard, and Mojave fringe-toed lizard shall be conducted by a CDFW-approved biologist with experience surveying for and/or handling these species. If construction is scheduled to commence during the optimal period of identification for these species, then surveys shall be conducted within two weeks prior to the commencement of construction. If 	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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<p>construction is not scheduled to commence during the optimal period of identification for these species, then surveys shall be conducted during the optimal period of identification for these species (in the calendar year prior to construction) and again within two weeks prior to the commencement of construction.</p> <ul style="list-style-type: none"> • If any of these species are found on a project site during the surveys, CDFW will be contacted and avoidance and mitigation measures appropriate to the species will be developed. Avoidance measures could include actions such as waiting to begin construction until the animal passively disperses from the project site, active relocation of the animal, or allowing construction to begin with the institution of an appropriate no disturbance buffer until the animal has passively dispersed. Mitigation measures could include restoration of temporarily disturbed habitats. • If federal or state-listed reptiles not discussed above are determined to have the potential to occur on a project site or otherwise be impacted by the project, consultation shall be conducted with USFWS and CDFW respectively to determine the survey protocol and mitigation measures appropriate to the species. 				
<p>BIO-8: Minimize impacts to Swainson’s hawk.</p> <p>The following measures shall be implemented for any solar development project(s) or related infrastructure under the REGPA that is determined during the project level biological resource evaluation (mitigation measure BIO-1) to have the potential to affect Swainson’s hawk:</p> <ul style="list-style-type: none"> • Surveys shall be conducted for Swainson’s hawk by a CDFW-approved biologist according to the 2010 Swainson’s Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California (California Department of Fish and Game [CDFG] 2010) or more recent guidance, unless otherwise directed by CDFW. This guidance dictates survey methods for detecting Swainson’s hawk nesting in or in the vicinity of a project site and measure to avoid and/or reduce impacts to nesting Swainson’s hawk if they are found. The project applicant shall be 	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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responsible for coordinating with CDFW and ensuring that the CDFW guidance is implemented.				
<p>BIO-9: Minimize impacts to burrowing owl.</p> <p>The following measures shall be implemented for any solar development project(s) or related infrastructure under the REGPA that is determined during the project level biological resource evaluation (Mitigation Measure BIO-1) to have the potential to affect burrowing owl, unless otherwise directed by CDFW:</p> <ul style="list-style-type: none"> • In the calendar year that construction is scheduled to commence, surveys will be conducted by a CDFW-approved biologist to determine presence/absence of burrowing owls and/or occupied burrows in the project site and accessible areas within 500 feet according to the <i>CDFW's Staff Report on Burrowing Owls</i> (CDFG 2012). A non-breeding season survey will be conducted between December 1 and January 31 and a breeding season survey will be conducted between April 15 and July 15 according to established protocols (CDFG 2012). Pre-construction surveys will also be conducted within 30 days prior to construction to ensure that no additional burrowing owls have established territories since the initial surveys. If no burrowing owls are found during any of the surveys, no further mitigation will be necessary. If burrowing owls are found, then the following measures shall be implemented prior to the commencement of construction: <ul style="list-style-type: none"> ○ During the non-breeding season (September 1 through January 31) burrowing owls should be evicted by passive relocation as described in the Staff Report on Burrowing Owls (CDFG 2012). ○ Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) occupied burrows shall not be disturbed and shall be provided with a 75-meter protective buffer unless a qualified biologist approved by CDFW verifies through non-invasive means that either: (1) the birds have not begun egg laying or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. 	Prior to approval and/or issuance of Major Use Permits / prior to construction	Prior to approval and/or issuance of Major Use Permits / prior to construction	Inyo County Planning Department and/or other applicable agencies.	

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<ul style="list-style-type: none"> ○ If on-site avoidance is required, the location of the buffer zone will be determined by a qualified biologist. The developer shall mark the limit of the 75-meter buffer zone with yellow caution tape, stakes, or temporary fencing. The buffer will be maintained throughout the construction period. ○ Where on-site avoidance is not possible, CDFW should be consulted regarding the appropriate avoidance and minimization measures to avoid impacts to this species. 				
<p>BIO-10: Minimize impacts to western snowy plover, western yellow-billed cuckoo, Inyo California towhee, and bank swallow.</p> <p>Prior to the approval of any solar development projects or related infrastructure under the REGPA that is determined during the project level biological resource evaluation (Mitigation Measure BIO-1) to have the potential to affect federally-listed bird species for which survey protocols have not been published, including the western snowy plover, Inyo California towhee, and bank swallow, the USFWS shall be contacted to develop project specific measures to determine the potential for presence/absence of the species in the project area and appropriate avoidance and mitigation measures. For projects in the desert portions of the County, contact the Palm Springs Fish and Wildlife Office. For projects in the forested portions of the County or the Owens Valley, contact the Nevada Fish and Wildlife Office. Mitigation measures shall include, but are not limited to, species specific habitat assessments and/or focused surveys to determine whether federally-listed bird species or their habitat are present in or adjacent to the project site, measures to avoid or minimize impacts to these species during construction and operation of the solar development, and compensatory mitigation for loss of habitat. For projects that are determined to have the potential to result in “take” of federally-listed bird species, consultation will be conducted with USFWS under either Section 7 or Section 10 of FESA and an Incidental Take Statement will be obtained prior to project commencement. Western yellow-billed cuckoo, Inyo California towhee, and bank swallow are also state-listed species. An Incidental Take Permit from CDFW will also be required if a project or any project-related activity during the life of the project is determined to have the potential to result in “take” of these species (as</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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defined by the Fish and Game Code).				
<p>BIO-11: Minimize impacts to southwestern willow flycatcher.</p> <p>Prior to the approval of any solar development projects or related infrastructure under the REGPA that is determined during the project level biological resource evaluation (Mitigation Measure BIO-1) to have the potential to affect southwestern willow flycatcher, surveys shall be conducted according to Southwestern Willow Flycatcher Protocol Revision 2010 (http://www.fws.gov/mountain-prairie/endspp/protocols/SWWFReport.pdf) following the guidelines for the revised protocol for project-related surveys or the most recent guidance as determined in coordination with the USFWS Pacific Southwest Region Nevada Fish and Wildlife Office. For projects that are determined to have the potential to result in “take” of southwestern willow flycatcher, consultation will be conducted with USFWS under either Section 7 or Section 10 of FESA and an Incidental Take Statement will be obtained prior to project commencement. Southwestern willow flycatcher is also a state-listed species. An Incidental Take Permit from CDFW will also be required if a project or any project-related activity during the life of the project is determined to have the potential to result in “take” of this species (as defined by the Fish and Game Code). Mitigation measures shall be implemented and shall include, but are not limited to, species specific habitat assessments and/or focused surveys to determine whether federally-listed bird species or their habitat are present in or adjacent to the project site, measures to avoid or minimize impacts to these species during construction and operation of the solar development, and compensatory mitigation for loss of habitat.</p>	Prior to approval and/or issuance of Major Use Permits	Prior to approval and/or issuance of Major Use Permits	Inyo County Planning Department and/or other applicable agencies.	
<p>BIO-12: Minimize impacts to bald and golden eagle.</p> <p>Prior to the approval of any solar development projects or related infrastructure under the REGPA that is determined during the project level biological resource evaluation (mitigation measure BIO-1) to have the potential to affect bald and golden eagles, the project proponent shall implement the following measures to avoid and offset impacts:</p> <ul style="list-style-type: none"> • Site specific surveys and monitoring of known or suspected eagle nesting and foraging habitat in areas where eagles occur (i.e., all of California) shall be conducted to provide background information 	Prior to approval and/or issuance of Major Use Permits	Prior to approval and/or issuance of Major Use Permits	Inyo County Planning Department and/or other applicable agencies.	

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<p>related to bald eagle take permits (golden eagle is fully protected pursuant to Fish and Game Code and no permits may be issued for their take). Surveys shall be conducted using (at least) methods and qualified personnel as recommended by CDFW and USFWS. Surveys shall be conducted according to the USFWS 2010 Interim Golden Eagle Inventory and Monitoring Protocols; and Other Recommendations (available online at http://www.fws.gov/southwest/es/oklahoma/documents/te_species/wind%20power/usfws_interim_goea_monitoring_protocol_10march2010.pdf), the USFWS's 2004 Protocol for Evaluating Bald Eagle Habitat and Populations in California and CDFW's 2010 Bald Eagle Breeding Survey Instructions (both documents are available online at http://www.dfg.ca.gov/wildlife/nongame/survey_monitor.html) or the most recent guidance regarding non-breeding season surveys for winter, migratory, and floating populations of eagles determined in coordination with CDFW and USFWS.</p> <ul style="list-style-type: none"> • Where proposed projects may result in take of bald eagles, the USFWS shall be consulted to determine the standards and requirements for the permit titled "Eagle Take - Necessary to Protect Interests in a Particular Locality." Bald eagle take permits are performance based and will hinge on the merits of the application. The permit application form and related information are on the USFWS website: http://www.fws.gov/migratorybirds/baldeagle.htm. The final rule (Federal Register / Vol. 74, No. 175, September 11, 2009), Environmental Assessment (http://www.fws.gov/migratorybirds/CurrentBirdIssues/BaldEagle/EA_EagleTakePermit_Final.pdf), implementation and protocol documents, and consultations with USFWS will provide additional guidance. • Projects shall avoid, to the extent needed to comply with state and federal requirements, siting project facilities and infrastructure in a location or manner that would cause bald and golden eagle mortality, injury, and/or disturbance; i.e., locate facilities outside of eagle breeding home ranges as well as important breeding, wintering, and dispersal foraging areas, migration stopovers and corridors, and areas 				

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<p>used by eagles for thermal or orographic lift.</p> <ul style="list-style-type: none"> Projects shall avoid, to the extent needed to comply with state and federal requirements, siting project facilities and infrastructure in a location or manner that would cause bald and golden eagle mortality, injury, and/or disturbance; i.e., locate facilities outside of eagle breeding home ranges as well as important breeding, wintering, and dispersal foraging areas, migration stopovers and corridors, and areas used by eagles for thermal or orographic lift. Projects shall incorporate actions to avoid eagle disturbance (refer to the USFWS National Bald Eagle Management Guidelines, May 2007 and Interim Golden Eagle Technical Guidance: Inventory and Monitoring Protocols; and Other Recommendations in Support of Golden Eagle Management and Permit Issuance, Attachment II) in consultation with the USFWS to obtain the most current guidance and measures. 				
<p>BIO-13: Minimize impacts to least Bell’s vireo.</p> <p>Prior to the approval of any solar development projects or related infrastructure under the REGPA that is determined during the project level biological resource evaluation (Mitigation Measure BIO-1) to contain habitat for least Bell’s vireo on or adjacent to the site, surveys shall be conducted according to the USFWS’s Least Bell’s Vireo Survey Guidelines (http://www.fws.gov/pacific/ecoservices/conservation/recovery/documents/LBVireo.2001.protocol.pdf) or the most recent guidance as determined in coordination with the USFWS Pacific Southwest Region Nevada Fish and Wildlife Office.</p> <p>For projects that are determined to have the potential to result in “take” of least Bell’s vireo, either on or off-site due to direct or indirect impacts, consultation will be conducted with USFWS under either Section 7 or Section 10 of FESA and an Incidental Take Statement will be obtained prior to project commencement. Least Bell’s vireo is also a state-listed species. An Incidental Take Permit from CDFW will also be required if a project or any project-related activity during the life of the project is determined to have the potential to result in “take” of this species (as</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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<p>defined by the Fish and Game Code).</p> <p>For projects with the potential to result in direct or indirect impacts to least Bell’s vireo or its habitat, mitigation measures shall be developed in consultation with USFWS and CDFW and shall be implemented prior to project implementation. Such measures shall include, but are not limited to, species specific habitat assessments and/or focused surveys to determine whether federally-listed bird species or their habitat are present in or adjacent to the project site, measures to avoid or minimize impacts to these species during construction and operation of the solar development, habitat restoration, and compensatory mitigation for loss of habitat that may include implementation of captive breeding programs</p>				
<p>BIO-14: Minimize impacts to bighorn sheep.</p> <p>Prior to the approval of any solar development projects or related infrastructure under the REGPA that is determined during the project level biological resource evaluation (Mitigation Measure BIO-1) to have the potential to affect bighorn sheep, the project applicant shall retain a qualified biologist, approved by the USFWS and CDFW, to conduct preconstruction surveys for Sierra Nevada bighorn sheep and/or Peninsular and Mojave bighorn sheep depending on the location of the project. Due to low detection probabilities, the following data shall be used when evaluating potential projects impacts to the species: data relative to historic ranges of bighorn sheep; known and potential wildlife corridors (such as, those identified in the BLM Mojave and Colorado deserts land use plans); point location data; and existing literature. If bighorn sheep or their migration routes exist, are known or likely to occur on or in the vicinity of the project site, and may be affected by project-related activities, consultation shall be conducted with USFWS, CDFW, and other stakeholders, as appropriate, regarding avoidance, minimization, compensatory mitigation, or site abandonment.</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	
<p>BIO-15: Minimize impacts to Sierra Nevada red fox.</p> <p>Prior to the approval of any solar development projects or related infrastructure under the REGPA that is determined during the project level biological resource evaluation (mitigation measure BIO-1) to have the potential to affect Sierra Nevada red fox, CDFW shall be contacted to</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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<p>develop project specific measures to determine the potential for presence/absence of this species in the project area and appropriate avoidance and mitigation measures. Mitigation measures shall include, but are not limited to, a species specific habitat assessment and/or focused surveys to determine whether Sierra Nevada red fox or its habitat is present in or adjacent to the project site, measures to avoid or minimize impacts to this species during construction and operation of the solar development, and compensatory mitigation for loss of habitat. For projects that are determined to have the potential to result in “take,” consultation will be conducted with CDFW under the California Endangered Species Act and incidental take authorization will be obtained prior to project commencement.</p>				
<p>BIO-16: Minimize impacts to Mohave ground squirrel.</p> <p>Protocol Mohave ground squirrel surveys shall be required for projects that propose impacts to habitat with potential to support Mohave ground squirrel or are within or adjacent to the species’ known range. Mohave ground squirrel surveys consist of a visual survey followed by 3 trapping sessions of 5 nights each (CDFW 2003). Each trapping session must be conducted during a specific time frame. The first session must be conducted between March 15 and April 30; the second between May 1 and May 31; and the third between June 15 and July 15. Trapping can be discontinued if a Mohave ground squirrel is trapped or observed, in which case the survey area is deemed to be occupied. If survey results are negative, the survey area will be deemed to be unoccupied for one year during which pre-construction surveys are not required. If survey results are positive, the project shall obtain an incidental take permit from CDFW under CESA Section 2081.</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	
<p>BIO-17: Minimize impacts to American badger and kit fox.</p> <p>Prior to the approval of any solar development projects or related infrastructure under the REGPA that is determined during the project level biological resource evaluation (mitigation measure BIO-1) to have the potential to affect American badger and/or kit fox, the following measures shall be implemented to avoid, minimize, and mitigate for impacts to these species:</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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<ul style="list-style-type: none"> • The project proponent shall prepare and implement an American badger and/or kit fox management plan. The plan shall be prepared in accordance with the most current CDFW guidelines for these species. The plan shall be approved by CDFW prior to implementation. The plan shall include the following components: <ul style="list-style-type: none"> ○ Preconstruction surveys and mapping efforts: biological monitors shall perform pre- construction surveys for badger and kit fox dens in the project area, including areas within 250 feet of all project facilities, utility corridors, and access roads. If dens are detected, each den shall be classified as inactive, potentially active, or definitely active, including characterization of den type for kit fox (natal, pupping, likely satellite, atypical) per CDFW guidance, and mapped along with major project design elements. ○ Inactive dens that would be directly impacted by construction activities shall be excavated by hand and backfilled to prevent reuse by badgers or kit fox. Excavation and filling activities shall be performed by a CDFW-approved biologist. Potentially and confirmed active dens shall not be disturbed during the whelping/pupping season (February 1 to September 30). ○ Monitoring requirements. Potentially and definitely active dens that would be directly impacted by construction activities shall be monitored by the CDFW-approved biologist for three consecutive nights (during weather conditions favorable for detection) using a tracking medium (such as diatomaceous earth or fire clay) and/or infrared camera stations at the entrance. If no tracks are observed in the tracking medium or no photos of the target species are captured after three nights, the den shall be excavated and backfilled by hand. If tracks are observed, the den shall be progressively blocked with natural materials (rocks, dirt, sticks, and vegetation piled in front of the entrance) for the next three to five nights to discourage the badger or kit fox from continued use. After verification that the den is unoccupied it shall then be excavated and backfilled by hand to ensure that no badgers or kit fox are trapped in the den. ○ Passive relocation strategies. The management plan shall contain, at a minimum, several strategies to passively relocate 				

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<p>animals from the site. These methods may entail strategic mowing, fencing, or other feasible construction methods to assist in moving animals offsite toward desirable land. The plan shall address location of preferred offsite movement of animals, based on CDFW data and land ownership. Even with permission from the landowner, private land is to be avoided to the maximum extent practicable.</p> <ul style="list-style-type: none"> ○ Escape dens shall be installed along the perimeter fencing to reduce predation risk. ○ Kit fox disease prevention measures. The CDFW-approved biologist shall notify the County project manager and CDFW within 24 hours if a dead kit fox is found or appears sick. The plan must also detail a response to a kit fox injury, including a necropsy plan, reporting methods, and scope of adaptive methods in the event of a known or suspected outbreak. The project owner will pay for any necropsy work. 				
<p>BIO-18: Minimize impacts to other special status birds, raptors, migratory birds, nesting birds and bats.</p> <p>The following measures apply to all projects developed under the REGPA that are determined during the project level biological resource evaluation to have the potential to impact nesting birds and/or bats and shall be implemented to avoid, minimize, and mitigate for impacts to birds and bats. These measures are for bird species without established protocols and non-listed bird species that lack species-specific mitigation measures (not applicable to the common raven). For future development proposed to be located on or near land with old mines, specific survey protocols and mine closure considerations shall be developed.</p> <p>Pre-Construction Bird Surveys and Avoidance Measures If project construction occurs between roughly February 1 and August 31, a CDFW-approved biologist shall conduct preconstruction surveys for nesting birds. The biologist(s) conducting the surveys shall be experienced bird surveyors and familiar with standard nest-locating techniques. Surveys shall be conducted in accordance with the following guidelines:</p> <ul style="list-style-type: none"> • CDFW and/or USFWS (depending on the avian species in question) 	<p>Prior to approval and/or issuance of Major Use Permits / prior to / during construction / during operation</p>	<p>Prior to approval and/or issuance of Major Use Permits / prior to / during construction / during operation</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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<p>shall be contacted to obtain approval of pre-construction survey methodology prior to commencement of the surveys.</p> <ul style="list-style-type: none"> • Surveys shall cover all potential nesting habitat in the project site and within 500 feet of the project site and linear facilities boundaries - inaccessible areas outside of the project boundary may be surveyed from within the project site or publicly accessible land with the aid of binoculars. • Vegetation removal or other ground disturbing activities should be avoided between February 1 and August 31; however if it cannot be avoided, the CDFW-approved biologist shall survey breeding/nesting habitat within the survey radius described within one week prior to the start of project activities. • CDFW and/or USFWS must provide concurrence with the survey findings prior to the start of construction. Site preparation and construction activities may begin after receiving the concurrence and if no breeding/nesting birds are observed. Additional follow up surveys shall be conducted if periods of construction inactivity exceed one week in any given area, an interval during which birds may establish a nesting territory and initiate egg laying and incubation. <p>If active nests are detected during the survey, a no-disturbance buffer zone (protected area surrounding the nest, the size of which is to be determined by the project biologist in consultation with CDFW and/or USFWS) and a monitoring plan shall be developed. The nesting bird plan shall identify the types of birds that may nest in the project area, the proposed buffers, monitoring requirements, and reporting standards that will be implemented to ensure compliance with the MBTA and Fish and Game Codes 3505 and 3505.3. The CDFW-approved biologist shall monitor the nest until he or she determines that nestlings have fledged and dispersed.</p> <p>Pre-Construction Bat Surveys and Avoidance Measures Preconstruction bat surveys shall be conducted by a CDFW-approved biologist(s) familiar with standard bat survey techniques. If night or day roosting bats are identified in project structures they shall not be disturbed and a 100 foot non-disturbance buffer shall be placed between the roost and</p>				

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<p>the construction activities until a determination is made whether the roost is a maternity roost or a non-breeding roost. Maternity colonies shall not be disturbed until coordination with CDFW is conducted to determine appropriate measures including an appropriate no-disturbance buffer. If the CDFW-approved bat biologist determines roosting bats consist of a non-breeding roost, the individuals shall be safely evicted under the direction of a CDFW-approved bat biologist. CDFW shall be notified of any bat evictions within 48 hours.</p> <p>Bat and Avian Protection Plan A bird and bat conservation strategy (BBCS) shall be prepared to reduce potential project impacts on migratory birds. The BBCS shall describe proposed actions to avoid, minimize, and mitigate adverse effects to migratory birds protected under the MBTA during construction and operations of the proposed project. The BBCS shall be submitted to USFWS and CDFW for approval prior to the start of ground disturbing activities. The BBCS shall address buffer distances for specific bird species and include a robust, systematic monitoring protocol to document mortality and habitat effects to birds. The monitoring protocol should incorporate the following objectives at a minimum: (1) a minimum of weekly monitoring for mortality and immediate necropsy to determine cause of death, both during construction and throughout the life of the project; (2) systematic data collection and reporting of bird mortality including data on the following: species, date, time, how the animal died (e.g., exhaustion, trauma), as well as any information on what might be attracting animals to the photovoltaic cells (light, insects, etc.); (3) a method to estimate the overall annual avian mortality rate associated with the facility, including mortality associated with all the features of the project that are likely to result in injury and mortality (e.g., fences, ponds, solar panels); and (4) methods to determine whether there is spatial differentiation within the solar field in the rates of mortality (i.e., panels on the edge of the field versus interior of the field). Biologists performing this work would be required to have a Scientific Collecting Permit from CDFW. Standardized and systematic data on bird and bat mortalities will be collected to contribute to the improvement of the scientific communities' understanding of both baseline and photovoltaic related mortality that occurs in solar projects in the desert and is needed in order to identify improved methods</p>				

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<p>to minimize adverse effects on migrating birds and bats.</p> <p>In the absence of a permit from the USFWS, the temporary or permanent possession of protected migratory birds and their carcasses is a violation of the MBTA. Because of the need for carcass collection to adequately monitor avian impacts during BBCS implementation and to reduce the food subsidy that carcasses may provide to common ravens (<i>Corvus corax</i>) and other predators, developers shall be required to obtain a special purpose utility permit from the USFWS allowing the collection of migratory birds and/or their carcasses prior to implementation of the monitoring protocol.</p> <p>General Bird Mortality Avoidance Measures The following measures shall be implemented to minimize bird mortality from birds attracted to solar facilities:</p> <ul style="list-style-type: none"> • All potential nesting vegetation (e.g., trees, shrubs) shall be removed within the fenced area of the facility to decrease attractive habitat. • The most current science regarding visual cues to birds that the solar panel is a solid structure shall be implemented. This may include but is not limited to UV-reflective or solid, contrasting bands spaced no further than 28 centimeters from each other. An adaptive management approach for reducing bird collisions with solar panels shall be implemented in coordination with the USFWS so that measures used are systematically tested and modified as appropriate. • Projects with documented avian mortality shall work with the USFWS to conduct additional research to test measures for reducing avian mortality. Such measures could include, but are not limited to, experimental lighting within the solar field and use of detection and deterrent technologies. • Developers of power tower operations shall implement adaptive management in consultation with the USFWS should mortality monitoring indicate that suspension of power tower operations during certain periods is necessary to reduce impacts on local or regional bird populations. Such measures may include, but are not limited to, suspending or reducing project operations during peak migration 				

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<p>seasons.</p> <ul style="list-style-type: none"> Vertical orientation of mirrors shall be avoided whenever possible (for example, mirrors shall be tilted during washing). Perch deterrent devices shall be placed on tower railings. Exclusionary measures shall be employed to prevent bats from roosting in and around the facility. <p>Minimize Impacts from Solar Flux The following mitigation measures shall be implemented in order to minimize avian impacts from solar flux:</p> <ul style="list-style-type: none"> Solar thermal developments utilizing solar power tower technologies shall be sited a minimum of 1,000 feet from Important Bird Areas, the OVSA, or riparian or other aquatic habitats including lakes, ponds, rivers, streams, and perennial wetland habitats unless potentially significant impacts are avoided, although the appropriate buffer distance shall be determined on a project-by-project basis as determined by the County in consultation with responsible and trustee agencies. This requirement generally does not apply to seasonal or ephemeral wetland habitats unless deemed necessary by a qualified biologist in light of the wetland’s specific habitat value for bird species. The County shall require developers proposing solar power tower technology to coordinate with the USFWS during project planning. As part of that coordination process, and in conjunction with the project’s next tier of CEQA review, the USFWS will advise the County whether a Bird and Bat Conservation Strategy would be necessary for the project, and if required, would adequately reduce the effects of the project on migratory birds and bats. <p>Minimize Impacts from Open Evaporation Ponds The following mitigation measures shall be implemented for projects that require the use of open evaporation ponds:</p> <ul style="list-style-type: none"> An evaporation pond management plan shall be prepared and submitted to CDFW for approval prior to project approval. 				

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<ul style="list-style-type: none"> • If the use of open evaporation ponds is permitted for the project and especially if the water would be considered toxic to wildlife, ponds shall be designed to discourage bird and other wildlife use by properly netting or otherwise covering the pond. <p>Avoid Impacts from Electric Lines and Lights The following design measures shall be implemented for applicable projects to minimize impacts to bats and birds:</p> <ul style="list-style-type: none"> • Transmission lines and electrical components shall be installed and maintained in accordance with the Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (APLIC 2006) or the most recent guidance to reduce the likelihood of electrocutions of raptors and other large birds, . • Transmission lines and electrical components shall be installed and maintained in accordance with the APLIC's <i>Reducing Avian Collisions with Power Lines: The State of the Art in 2012</i> (Edison Electric Institute 2012) or the most recent guidance to reduce the likelihood of bird collisions. • Low and medium voltage connecting power lines shall be placed underground, if feasible. If burial of the lines is not feasible due to cost or other logistical reasons (for example in shallow bedrock areas) or may cause unacceptable impacts to biological habitats and their dependent species, overhead lines may be installed in compliance with the following requirements: <ul style="list-style-type: none"> ○ low and medium voltage overhead lines shall be sited away from high bird crossing locations, such as between roosting and feeding areas or between lakes, rivers, and nesting areas; and/or ○ low and medium voltage overhead lines shall be installed parallel to tree lines or be otherwise screened so that collision risk is reduced. • Permanent communication towers and permanent meteorological towers shall not be constructed with guy wires, if feasible. If guy wires are necessary for permanent or temporary towers, bird flight diverters or high visibility marking devices shall be used. In such 				

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<p>cases a monitoring plan shall be developed and carried out to determine the diverters'/devices' effectiveness in reducing bird and bat mortality.</p> <ul style="list-style-type: none"> • Facility lighting shall be installed and maintained to prevent upward and side casting of light towards wildlife habitat and motion sensors shall be used. If the FAA requires turbine or tower lighting to alert aircraft, red or white strobe lights shall be used on the structures to minimize avian collision risks. The strobes shall be on for as brief of a period as possible and the time between strobe or flashes shall be the longest allowable. Strobes shall be synchronized so that a strobe effect is achieved and towers are not constantly illuminated. • Lights with sensors and switches shall be used to keep lights off when not required. • The use of high-intensity lighting, steady-burning, or bright lights such as sodium vapor or spotlights shall be minimized. <p>Compensatory Mitigation for the Cumulative Loss of Migratory Bird Habitat along the Pacific Flyway The County shall require solar development projects implemented under the REGPA to mitigate for the loss of habitat by funding activities to restore, enhance, or conserve important habitat for migratory birds or to remove other mortality sources from the Pacific Flyway. Such funding may be directed to the Sonoran Joint Venture (http://sonoranjv.org), Central Valley Joint Venture (http://www.centralvalleyjointventure.org), or Intermountain West Joint Venture (http://iwjv.org), or other groups able to implement conservation of migratory birds within the Pacific Flyway. The amount of funding will be determined by the County in coordination with USFWS and shall be commensurate with the level of impact.</p>				
<p>BIO-19: Minimize impacts to special status natural communities and protected natural areas.</p> <p>Solar development authorized under the REGPA will not be sited within any special status natural communities or protected natural areas. If solar development is sited adjacent to any special status natural communities or protected natural areas or is determined to have the potential to impact any</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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<p>off-site special status natural communities or protected natural areas during the project level biological resources evaluation (e.g., projects in the Laws SEDA could impact the hydrology of critical habitat for Fish Slough milk-vetch; projects in the Chicago Valley SEDA could negatively impact off-site mesquite bosque by altering drainage patterns or altering groundwater levels; projects in the Charleston View and Chicago Valley SEDAs could impact down-watershed habitats in the Amargosa Watershed (including habitats within the portion of the Amargosa River that has been designated by Congress as “Wild and Scenic.”), a management plan will be developed in consultation with CDFW and/or USFWS. The management plan will address the potential offsite effects of the construction and on-going operations of the facility on special status species including but not limited to the effects of human disturbance, noise, nighttime maintenance activities, increased lighting, increased traffic on desert roads, and barriers to movement for special status species. The management plan will also address potential mechanisms of offsite habitat degradation such as introduction of invasive weeds, introduction or attraction of feral animals or other species attracted to areas with anthropogenic disturbance, hydrologic disruption due to groundwater impacts or alteration of surface drainage patterns, and increased risk of wildfires. The management plan will also outline the specific measures to be undertaken to avoid and/or minimize indirect effects of the solar development on the adjacent sensitive habitat and special status species and include a plan for long term monitoring of the adjacent habitat as well as an adaptive management plan.</p> <p>If riparian communities (other than water birch riparian scrub – a special status natural community that must be avoided) are present in a project area, impacts to riparian communities shall be avoided or minimized by implementing the following measures:</p> <ul style="list-style-type: none"> • The project shall be redesigned or modified to avoid direct and indirect impacts on riparian communities, if feasible. • Riparian communities adjacent to the project site shall be protected by installing environmentally sensitive area fencing, if necessary, in coordination with the project biologist. • The potential for long term loss of riparian vegetation shall be 				

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<p>minimized by trimming vegetation rather than removing the entire shrub. Shrub vegetation shall be cut at least 1 foot above ground level to leave the root systems intact and allow for more rapid regeneration of the species. Cutting shall be limited to a minimum area necessary within the construction zone. This type of removal shall be allowed only for shrub species (all trees shall be avoided) in areas that do not provide habitat for sensitive species (e.g., willow flycatcher).</p> <ul style="list-style-type: none"> If riparian vegetation is removed as part of a project, the loss of riparian vegetation shall be mitigated to ensure no net loss of habitat functions and values. Compensation ratios shall be based on site-specific information and determined through coordination with state and federal agencies (including CDFW and USFWS). Compensation shall be provided at a minimum 1:1 ratio (1 acre restored or created for every 1 acre removed) and may be a combination of on-site restoration/creation, off-site restoration, or mitigation credits. A restoration and monitoring plan shall be developed and implemented that describes how riparian habitat shall be enhanced or recreated and monitored over a minimum period of time, as determined by the appropriate state and federal agencies. 				
<p>BIO-20: Minimize impacts to waters of the US/State, including wetlands.</p> <p>The following measures apply to all projects developed under the REGPA that are determined during the project level biological resource evaluation to have the potential to impact waters of the US or waters of the State, including wetlands, and shall be implemented to avoid, minimize, and mitigate for such impacts. These measures shall be incorporated into contract specifications and implemented by the construction contractor. In addition, the project proponent shall ensure that the contractor incorporates all state and federal permit conditions into construction specifications.</p> <ul style="list-style-type: none"> Wetlands and other waters of the US/state shall be delineated on the project site using both USACE and CDFW definitions of wetlands. USACE jurisdictional wetlands shall be delineated using the methods outlined in the USACE 1987 Wetlands Delineation Manual and the 	<p>Prior to approval and/or issuance of Major Use Permits / prior to / during construction</p>	<p>Prior to approval and/or issuance of Major Use Permits / prior to / during construction</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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<p>Arid West Manual, or the most recent guidance. This information shall be mapped and documented as part of the CEQA documentation, as applicable, and in wetland delineation reports. All applicable permits shall be obtained prior to impacting waters of the US/State including CWA Section 404 and 401 permits from the USACE and the RWQCB respectively and a Streambed Alteration Agreement from CDFW.</p> <ul style="list-style-type: none"> • The project shall be redesigned or modified to avoid direct and indirect impacts on waters of the U.S./State, if feasible. • Standard erosion control measures shall be implemented for all phases of construction and operation where sediment runoff from exposed slopes threatens to enter waters of the State and/or waters of the US. Sediment and other flow-restricting materials shall be moved to a location where they shall not be washed back into the stream. All disturbed soils and roads within the project site shall be stabilized to reduce erosion potential, both during and following construction. Areas of disturbed soils (access and staging areas) with slopes trending towards a drainage shall be stabilized to reduce erosion potential. • Wetland habitats that occur near the project site shall be protected by installing environmentally sensitive area fencing, if necessary, in coordination with the project biologist. • All construction vehicles and equipment shall use existing roadways to the extent feasible to avoid or reduce impacts to waters of the U.S./State. • Installation activities shall be avoided in saturated or ponded wetlands during the wet season (spring and winter) to the maximum extent possible. Where such activities are unavoidable, protective practices, such as use of padding or vehicles with balloon tires, shall be used. • Wetland habitats that occur near the project site shall be protected by installing environmentally sensitive area fencing at least 20 feet from the edge of the wetland. Depending on site-specific conditions and 				

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<p>permit requirements, this buffer may be wider than 20 feet in coordination with the project biologist. The location of the fencing shall be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications shall contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area.</p> <ul style="list-style-type: none"> • Installation activities shall be avoided in saturated or ponded wetlands during the wet season (spring and winter) to the maximum extent possible. Where such activities are unavoidable, protective practices, such as use of padding or vehicles with balloon tires, shall be used. • Where determined necessary by resource specialists, geotextile cushions and other materials (e.g., timber pads, prefabricated equipment pads, or geotextile fabric) shall be used in saturated conditions to minimize damage to the substrate and vegetation. • Exposed slopes and stream banks shall be stabilized immediately on completion of installation activities. Other waters of the US shall be restored in a manner that encourages vegetation to reestablish to its pre-project condition and reduces the effects of erosion on the drainage system. • In highly erodible stream systems, banks shall be stabilized using a non-vegetative material that will bind the soil initially and break down within a few years. If the project engineers determine that more aggressive erosion control treatments are needed, geotextile mats, excelsior blankets, or other soil stabilization products shall be used. • During construction, trees, shrubs, debris, or soils that are inadvertently deposited below the ordinary high-water mark of drainages shall be removed in a manner that minimizes disturbance of the drainage bed and bank. • If wetlands are filled or disturbed as part of the solar project, compensation will be implemented for the loss of wetland habitat to 				

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<p>ensure no net loss of habitat functions and values. Compensation ratios shall be based on site-specific information and determined through coordination with state and federal agencies (including CDFW, USFWS, and USACE). The compensation shall be at a minimum 1:1 ratio (1 acre restored or created for every 1 acre filled) and may be a combination of on site restoration/creation, off-site restoration, or mitigation credits. A restoration and monitoring plan shall be developed and implemented if onsite or offsite restoration or creation is chosen. The plan shall describe how wetlands shall be created and monitored for the duration established by the regulatory agency.</p> <ul style="list-style-type: none"> For solar projects proposing groundwater pumping, hydrological studies shall be performed to assess the potential for off-site impacts to jurisdictional waters that depend on groundwater. Projects shall be designed to avoid and/or minimize impacts to groundwater-dependent jurisdictional resources off-site, and all proposed impacts to such resources shall be reviewed by the agencies with jurisdiction over the affected resources, and mitigated according to those agencies' requirements. 				
<p>BIO-21: Minimize impacts to movement or migratory corridors or native wildlife nursery sites.</p> <p>The following mitigation measures will be implemented to minimize impacts to movement or migratory corridors or native wildlife nursery sites:</p> <ul style="list-style-type: none"> Solar development authorized under the REGPA shall not be sited in or within 1,000 feet of any areas determined by the County in consultation with responsible and trustee agencies to be Important Bird Areas, essential connectivity areas or linkages identified in the 2001 Missing Links in California's Landscape Project (Penrod et al. 2001), or tule elk and mule deer movement corridors unless potentially significant impacts are avoided. The appropriate buffer distance shall be determined on a project-by-project basis as determined by the County in consultation with responsible and trustee agencies. Any proposed solar development projects in the OVSA shall be 	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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<p>required to study the potential impact of the project on tule elk and mule deer movement corridors prior to project approval. If a proposed project is determined to be located within an important tule elk and mule deer movement corridor, the applicant shall be responsible for the preparation of a plan to avoid and/or minimize impacts to such corridors in coordination with CDFW.</p> <ul style="list-style-type: none"> As stated in Mitigation Measure BIO-6, projects shall not be sited within areas identified for desert tortoise recovery or conservation according to the Draft Revised Recovery Plan for the Mojave Population of the Desert Tortoise (<i>Gopherus agassizii</i>) (USFWS 2011) (such as designated critical habitat, ACECs, DWMAs, priority connectivity areas, and other areas or easements managed for desert tortoises) 				
<p>BIO-22: Minimize impacts to invasive plant species or noxious weeds.</p> <p>For projects implemented under the REGPA that are determined during the project level biological resource evaluation to have the potential to result in the spread of invasive plant species or noxious weeds, the following mitigation measures shall be implemented.</p> <p>To prevent the introduction and spread of noxious weeds, a project-specific integrated weed management plan shall be developed for approval by the permitting agencies, which would be carried out during all phases of the project. The plan shall include the following measures, at a minimum, to prevent the establishment, spread, and propagation of noxious weeds:</p> <ul style="list-style-type: none"> The area of vegetation and/or ground disturbance shall be limited to the absolute minimum and motorized ingress and egress shall be limited to defined routes. Project vehicles shall be stored onsite in designated areas to minimize the need for multiple washings of vehicles that re-enter the project site. Vehicle wash and inspection stations shall be maintained onsite and the types of materials brought onto the site shall be closely monitored. 	<p>Prior to approval and/or issuance of Major Use Permits / prior to construction / during operation</p>	<p>Prior to approval and/or issuance of Major Use Permits / prior to construction / during operation</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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<ul style="list-style-type: none"> • The tires and undercarriage of vehicles entering or re-entering the project site shall be thoroughly cleaned. • Native vegetation shall be re-established quickly on disturbed sites. • Weed Monitor and quickly implement control measures to ensure early detection and eradication of weed invasions. • Use certified weed-free straw, hay bales, or equivalent for sediment barrier installations. 				
<p>BIO-23: Implement general design guidelines to minimize impacts to biological resources.</p> <p>All projects authorized under the REGPA will incorporate the following design guidelines as applicable in coordination with the County:</p> <ul style="list-style-type: none"> • Design and site the project, in consultation with the permitting agencies, to avoid or minimize impacts to sensitive and unique habitats and wildlife species. Locate energy generation facilities, roads, transmission lines, and ancillary facilities in the least environmentally sensitive areas (such as away from riparian habitats, streams, wetlands, vernal pools, drainages, sand dunes, critical wildlife habitats, wildlife conservation, management, other protected areas, or unique plant assemblages). <ul style="list-style-type: none"> ○ Design facilities to use existing roads and utility corridors as much as possible to minimize the number and length/size of new roads, laydown, and borrow areas. ○ Design transmission line poles, access roads, pulling sites, storage, and parking areas to avoid special status species or unique plant assemblages adjacent to linear facilities. ○ Locate and/or design facilities to minimize or mitigate wildlife movement disruptions. ○ Locate and/or design facilities to minimize or mitigate wildlife movement disruptions. ○ Design facilities to discourage their use as bird perching, drinking, or nesting sites. ○ Design facility lighting to prevent side casting of light toward wildlife habitat and skyward protection of light that may 	<p>Prior to approval and/or issuance of Major Use Permits / prior to construction</p>	<p>Prior to approval and/or issuance of Major Use Permits / prior to construction</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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<p>disorient night-migrating birds.</p> <ul style="list-style-type: none"> ○ Avoid using or degrading high value or large intact habitat areas, such as areas identified as sensitive natural habitat, Wilderness Areas, Areas of Critical Environmental Concern, critical habitat; riparian, sand dunes. ○ Avoid severing movement and connectivity corridors. Consider existing conservation investments such as protected areas and lands held in trust for conservation purposes. ○ Locate facilities so they do not disrupt sand transport processes nor remove some or all of a sand source that contributes to sand dune systems harboring listed or otherwise sensitive species. Avoid armoring nearby dune system. 				
<p>BIO-24: Minimize impacts to groundwater dependent vegetation.</p> <p>Any solar development projects or related infrastructure implemented under the REGPA which are located on City of Los Angeles-owned land or which could affect City of Los Angeles-owned land shall comply with the terms of the Agreement. A qualified biologist/botanist with experience in Inyo County shall evaluate the potential for any project implemented under the REGPA to impact groundwater dependent vegetation or ecosystems located on City of Los Angeles-owned land. If the qualified biologist/botanist determines that the project has the potential to impact groundwater dependent vegetation or ecosystems, a groundwater dependent vegetation management plan will be prepared. The plan will include an evaluation of the potential impacts to groundwater dependent vegetation or ecosystems and appropriate measures to avoid or reduce the impacts to the extent feasible. The plan shall be prepared in coordination with the County and LADWP and should describe any appropriate monitoring, such as vegetation and/or water table monitoring, and prescribe mitigation to offset the impacts of the project on groundwater dependent vegetation or ecosystems as deemed appropriate by the qualified biologist in coordination with the County and LADWP. Projects that are likely to affect groundwater resources in a manner that would result in a substantial loss of riparian or wetland natural communities and/or habitat for sensitive flora and fauna associated with such habitats shall be avoided to the extent feasible and impacts shall be mitigated to a level determined to be acceptable by the County. The project and vegetation management plan</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Inyo County Planning Department Inyo County Water Department and/or other applicable agencies.</p>	

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shall be approved by both the County and LADWP prior to implementation.				
<p>MM BIO-25: Minimize potential indirect impacts due to groundwater pumping.</p> <p>Mitigation measures for potential indirect impacts due to groundwater pumping are included in Mitigation Measure BIO-1, Mitigation Measure BIO-2, Mitigation Measure BIO-3, and Mitigation Measure BIO-4. Prior to approval of any project under the REGPA requiring groundwater pumping, the potential effects of the groundwater pumping on biological resources will be evaluated during preparation of the project-specific biological resources evaluation and will be based on the results of the hydrologic study conducted as a requirement of Mitigation Measure HYD-2 in Section 4.9, Hydrology and Water Quality. If groundwater pumping is determined to have the potential to result in off-site impacts to biological resources, measures will be included in the project-specific biological resources mitigation and monitoring plan to avoid, minimize, and mitigate for any such impacts. The measures will be commensurate with the resource and level of impact and may include but are not limited to vegetation and/or water table monitoring, preservation of suitable habitat or funding of activities to restore, enhance or conserve habitat within the County, and a requirement for the project applicant to purchase and retire currently exercised water rights along the same flowpath as the water being used by the facility at a minimum 1:1 ratio.</p>	Prior to approval and/or issuance of Major Use Permits	Prior to approval and/or issuance of Major Use Permits	Inyo County Planning Department Inyo County Water Department and/or other applicable agencies.	
CULTURAL RESOURCES				
<p>CUL-1: Minimize impacts to cultural resources.</p> <p>Adverse effects to historical resources (CRHP-eligible cultural resources) would be resolved on a project-specific level. As part of this process, resource identification efforts including pedestrian surveys, formal government-to-government tribal consultation with state lead agencies, and engagement with Native American communities would be necessary. Examples of ways to resolve adverse effects include:</p> <ul style="list-style-type: none"> • Plan ground disturbance to avoid cultural resources. • Deed cultural resources into permanent conservation easements. • Cap or cover archaeological resources with a layer of soil before building on the location. 	Prior to approval and/or issuance of Major Use Permits	Prior to approval and/or issuance of Major Use Permits	Inyo County Planning Department and/or other applicable agencies.	

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<ul style="list-style-type: none"> • Plan parks, greenspace, or other open space to incorporate cultural resources. • Write synthetic documents summarizing the current understanding of the history and prehistory of the project area and vicinity. • Recover data for archaeological resources. • Develop interpretive material to correspond with recreational uses to educate the public about protecting cultural resources and avoiding disturbance of sensitive resources. • Develop partnerships to assist in the training of groups and individuals to participate in site stewardship programs. • Coordinate with visual resources staff to ensure visual management standards consider cultural resources and tribal consultation to include landmarks of cultural significance to Native Americans (e.g., TCPs, trails). • Measures to address visual impacts to the setting of built-environment resources include: <ul style="list-style-type: none"> ○ Existing mature plant specimens shall be used for screening during construction, operation, and decommissioning phases. The identification of plant specimens that are determined to be mature and retained shall occur as part of the design phase and mapped/identified by a qualified plant ecologist or biologist and integrated into the final design and project implementation. ○ Revegetation of disturbed areas within the project area shall occur as various activities are completed. Plans and specifications for revegetation shall be developed by a qualified plant ecologist or biologist before any extant vegetation is disturbed. The revegetation plan shall include specification of maintenance and monitoring requirements, which shall be implemented for a period of 5 years after project construction or after the vegetation has successfully established, as determined by a qualified plant ecologist or biologist. Plant material shall be consistent with surrounding native vegetation. ○ The color of the wells, pipelines, storage tanks, control structures, and utilities shall consist of muted, earth-tone colors that are consistent with the surrounding natural color palette. Matte finishes shall be used to prevent reflectivity. For example, 				

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<p>integral color concrete should be used in place of standard gray concrete.</p> <ul style="list-style-type: none"> ○ The final revegetation and painting plans and specifications shall be reviewed and approved by an architect, landscape architect, or allied design professional licensed in the State of California to ensure that the design objectives and criteria are being met. ○ Specific impact identification and adjustments to finish specifications shall occur during project design. Implementation of the revegetation and coloration plans shall occur during oilfield development. Maintenance and monitoring requirements shall be implemented after initial project construction for a period of 5 years, or after the vegetation has successfully established, as determined by a qualified plant ecologist or biologist. <ul style="list-style-type: none"> ● Protective measures and monitoring protocols can be implemented for built environment resources located in close proximity to a project but that are not anticipated to be directly impacted by demolition or development but which may be subject to other direct impacts such as change in historic setting, vibration, noise, or inadvertent damage include: <ul style="list-style-type: none"> ○ Historic Structures Reports (HSR) shall be prepared for buildings and structures adjacent to the project area for which detailed information is required to develop protection measures. Reports shall be completed for buildings and structures that appear to be in poor condition and, therefore, potentially sensitive to development-related activities such as vibration. These reports shall determine if predevelopment stabilization through temporary shoring and bracing of these buildings is warranted. ○ Predevelopment condition assessments shall be prepared for buildings and structures that qualify as historical resources that are adjacent to the project area and are structurally stable, but could be unintentionally damaged during development. Should there be any question as to whether the project caused damage, these condition assessments will provide confirmation of the predevelopment condition. 				

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<ul style="list-style-type: none"> ○ Precautions to protect built environment historical resources from construction vehicles, debris, and dust may include fencing or debris meshing. Temporary mothballing, and fire and intrusion protection may be needed if the buildings are unoccupied during oil and gas field development. ○ Protective measures shall be field checked as needed during development by a qualified architectural historian with demonstrated experience conducting monitoring of this nature. Vibration monitoring may be required for buildings determined susceptible to vibration damage located in close proximity to development activities or machinery that cause vibration. ○ These measures are designed to avoid direct impacts such as vibration that may result in structural damage or inadvertent direct impacts. Structural damage or demolition would otherwise potentially result in a significant impact because character-defining features and aspects of historic integrity that convey the resource’s significance could be materially impaired. ○ Redesign of relevant facilities shall be used to avoid destruction or damage where feasible. ● For built resources that will be directly and significantly impacted, mitigation typically includes: <ul style="list-style-type: none"> ○ Historic American Building Survey (HABS), Historic American Engineering Record (HAER), and Historic American Landscape Survey (HALS) records will be prepared for historical resources that will be demolished. The HABS/HAER/HALS documentation will be prepared as appropriate for the impacted historical resource with HABS normally completed at Level II. These reports will include written and photographic documentation of the significant and character-defining features of these properties. While this documentation will not reduce impacts to a less than a significant level, it is needed to capture and preserve a description of the significant information and characteristics associated with the resource. ○ All HABS/HAER/HALS reports are subject to review and approval by the NPS. Following approval, the lead agencies will produce sufficient copies for distribution to identified 				

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<p>repositories, including the Library of Congress, the California State Library, the University of California Water Resources Center Archives, and any local repositories, as appropriate and agreed upon with the County Planning Department and interested parties. Distribution will ensure the formal documentation is retained and conveyed to a wide audience.</p> <ul style="list-style-type: none"> ○ Deconstruction and salvage of materials from demolished buildings will be performed to the extent feasible to enable the restoration of similar buildings and structures outside of the area of direct impact. Deconstruction and salvage will not reduce impacts to a less than significant level, but will help to ensure that similar resources are restored and maintained in manner that will ensure that examples of the resource type are preserved. ○ Relocate historically significant resources for which demolition cannot be feasibly avoided by development. In such circumstances, relocation must meet the requirements for the Special Criteria Consideration for Moved Buildings, Structures, and Objects to ensure the significance of the building is retained. ○ Require that the preservation or reuse of an eligible structure follow Department of the Interior (DOI) Standards and Guidelines for Archeology and Historic Preservation. If the building is considered a historic resource under CEQA, the local building inspector must grant code alternatives under the State Historic Building Code. ○ In a case where HABS/HAER documentation does not provide adequate mitigation to reduce impacts to a less than significant level, projects would normally be required to take additional steps to capture the history and memory of the resource and share this information with the public using various methods such as Web media, static displays, interpretive signs, use of on-site volunteer docents, or informational brochures. <ul style="list-style-type: none"> ● Avoidance and minimization are the preferred means by which the County would prevent potential impacts to cultural resources, including cultural landscapes. Preservation in place is the preferred manner to avoid and minimize impacts to historical and archaeological resources. All impacts to cultural resources that are 				

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<p>eligible or potentially eligible for listing on the CRHR shall be avoided, to the greatest extent possible. Preservation in place may be accomplished by, but is not limited to, the following: Avoidance of significant or potentially significant cultural resources through project redesign and the relocation of project element.</p> <ul style="list-style-type: none"> • Following avoidance and minimization, measures to address impacts to cultural resources at a landscape scale should follow the guidance in <i>A Strategy for Improving Mitigation Policies and Practices of the Department of the Interior</i> (DOI 2014) and the National Park Service Preservation Brief 36 - Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes, including but not limited to: <ul style="list-style-type: none"> ○ Document the individual landscape characteristics and features in the context of the landscape as a whole in a Cultural Landscape Report, including contributing and non-contributing features. ○ Develop compensatory mitigation. ○ Coordinate with other agencies. ○ Monitor and evaluate the progress of long-term mitigation. ○ Develop and maintain geospatial information systems for use in identifying existing and potential conservation strategies and development opportunities. 				
<p>CUL-1a: Designate project Cultural Resources Staff.</p> <p><u>Project Cultural Resources Specialist.</u> Prior to the approval of a Renewable Energy Permit, Renewable Energy Development Agreement, or Renewable Energy Impact Determination by the County Planning Department, a cultural resources specialist whose training and background conforms to the US Secretary of Interior’s Professional Qualifications Standards, as published in Code of Federal Regulations Title 36, part 61 shall be retained by the project owner to conduct a cultural resources inventory, evaluate any resources, produce a Cultural Resources Management and Treatment Plan and other related plans for the approved project and to implement any required plans and mitigation, as necessary as determined by the cultural resource specialist. Their qualifications shall be appropriate to the needs of</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Prior to approval and/or issuance of Major Use Permits</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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<p>the project, and shall include local knowledge. If the project primarily impacts resources archaeological in nature, the cultural resources specialist shall have a background in archaeology, anthropology or cultural resource management. If the project impacts primarily built environment resources, the cultural resources specialist shall have a background in architectural history. Resumes of the proposed cultural resources staff shall be submitted to the County Planning Department or other CEQA lead agency for review and approval. The Monitoring and Treatment Plan (mitigation measure CUL-1c) shall be prepared and implemented under the direction of the cultural resources specialist and shall address and incorporate CUL-1a through CUL 1g.</p> <p><u>Additional Cultural Resources Staff.</u> The project’s cultural resources specialist may obtain the services of specialists, cultural resources monitors and field crew if needed, to assist in identification, evaluation, mitigation, monitoring, and curation activities. Cultural Resources Staff shall have a Bachelor’s degree in anthropology, archaeology, history, architectural history or related field, and demonstrated field experience. These individuals must also meet local lead agency qualifications and their resumes must be reviewed and approved by local lead agency staff prior to beginning work.</p>				
<p>CUL-1b: Draft a Historical Resources Treatment Plan.</p> <p>To mitigate the potential impacts on historical resources identified during inventory of the project area, a treatment plan for historical resources shall be developed by, depending on the nature of the resources identified, an archaeologist and/or architectural historian who meets the Secretary of Interior’s Professional Qualifications Standards. This treatment plan would include data recovery plans that would address National Register of Historic Places/California Register for Historic Resources-eligible cultural resources that would be impacted by the project by requiring some level of extracting the scientific value and analysis of the resources prior to development.</p>	Prior to construction	Prior to construction / during inventory of the project area	Inyo County Planning Department and/or other applicable agencies.	

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<p>CUL-1c: Draft a Monitoring and Treatment Plan.</p> <p>To mitigate the potential impacts related to inadvertent discovery of archaeological resources during construction, the project proponents shall have a Secretary of the Interior-qualified archaeologist implement a monitoring program and an unanticipated archaeological resource treatment plan. The qualified archaeologist will evaluate any resources uncovered during ground disturbing activities implement appropriate treatment as specified in the archaeological resource treatment plan. During all phases of the project that include ground disturbance, these ground-disturbing activities will be observed by an archaeological monitor, as determined necessary by the archaeologist.</p> <ol style="list-style-type: none"> a. If, during the course of monitoring, a potentially significant resource is discovered, the qualified archaeologist will have the authority to stop or redirect ground disturbing activities away from the resource until it can be evaluated. b. If previously unknown cultural deposits are discovered during the course of construction, such as previously undiscovered stratified cultural deposits, a testing program will be implemented to evaluate the stratified cultural deposit. c. A separate Native American monitor shall be retained by the project proponent to monitor ground disturbing activities in and around archaeological resources. The Native American monitor shall be selected through consultation with Native American tribal groups. The Native American monitor shall work in conjunction with the qualified archaeologist. 	Prior to / during construction	Prior to / during construction	Inyo County Planning Department and/or other applicable agencies.	
<p>CUL-1d: Authority to halt project activities.</p> <p>Prior to the approval of a Renewable Energy Permit, Renewable Energy Development Agreement, or Renewable Energy Impact Determination by the County or the relevant CEQA lead agency, the project owner shall submit a written document granting authority to halt project related activities to the project's cultural resources specialist (as defined in mitigation measure CUL-1a) and cultural resources monitors in the event of a discovery or possible damage to a cultural resource. Redirection of project related activities shall be accomplished under the direction of the project supervisor in consultation with the cultural resources specialist. The details of this</p>	During construction	During construction	Inyo County Planning Department and/or other applicable agencies.	

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agreement shall be stipulated in the Cultural Resources Management and Treatment Plan as required in mitigation measure CUL-1b.				
<p>CUL-1e: Cultural Resources Worker Environmental Awareness Program.</p> <p>Prior to and for the duration of project activities, the project owner shall provide WEAP training to all new workers within their first week of employment at the project site. The training shall be prepared by the Project cultural resources specialist (as defined in CUL-1) in consultation with local Native Americans and shall incorporate the traditions and beliefs of local Native American groups into the presentation. The presentation may be conducted by any qualified cultural resources specialist and a Native American, if possible, and may be presented in the form of a video. A consulting fee or honorarium shall be negotiated with the local Native American consultants and presenter and paid to them for their participation. The training may be discontinued when project activities are completed or suspended, but must be resumed when project activities resume.</p> <p>The training shall include:</p> <ol style="list-style-type: none"> 1. A discussion of applicable laws and penalties under the law; 2. Samples or visuals of artifacts that might be found in the project vicinity; 3. A discussion of what such artifacts may look like when partially buried, or wholly buried and then freshly exposed; 4. A discussion of what prehistoric and historical archaeological deposits look like at the surface and when exposed during ground-disturbance, and the range of variation in the appearance of such deposits; 5. A discussion of what local Native American beliefs are, how those beliefs are related to cultural resources that may be found in the area, and the appropriate respectful behavior towards sacred places and objects; 6. Instruction that all cultural resources specialists have the authority to halt ground disturbance in the area of a discovery to an extent sufficient to ensure that the resource is protected from further impacts, as determined by the project cultural resources specialist (as defined in CUL-1); 	Prior to / during construction	Prior to / during construction / for the duration of project activities	Inyo County Planning Department and/or other applicable agencies.	

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7. Instruction that employees are to avoid areas flagged as sensitive for cultural resources; 8. Instruction that employees are to halt work on their own in the vicinity of a potential cultural resources discovery and shall contact their supervisor and the project cultural resources specialist (as defined in CUL-1), and that redirection of work would be determined by the project supervisor and the project cultural resources specialist; 9. An informational brochure that identifies reporting procedures in the event of a discovery; 10. An acknowledgement form signed by each worker indicating that they have received the training which shall be submitted to the County Planning Department and any other CEQA lead agency; and 11. A sticker that shall be placed on hard hats indicating that environmental training has been completed.				
<p>CUL-1f: Conduct cultural resources reporting.</p> <p>The project cultural resources specialist shall document results in interim and final reports as necessary. The contents and timing of these reports shall be stipulated in the Cultural Resources Management and Treatment Plan (CUL-1b).</p> <p>Final reports for archaeological resources, human remains, and some landscapes, shall be written by or under the direction of a Secretary of the Interior qualified archaeologist or architectural historian as appropriate for the project. Reports shall be provided in the California Office of Historic Preservation’s Archaeological Resource Management Reports: Recommended Contents and Format and local agency formats. Final documents shall report on all field activities including dates, times and locations, results, samplings, and analyses. All survey reports, Department of Parks and Recreation 523 series forms, data recovery reports, and any additional research reports not previously submitted to the California Historical Resource Information System and the State Historic Preservation Officer shall be included as appendices.</p>	During construction	During construction	Inyo County Planning Department and/or other applicable agencies.	

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<p>CUL-1g: Proper curation of cultural resources collections.</p> <p>All archaeological materials retained as a result of the cultural resources investigations (survey, testing, data recovery) shall be curated in accordance the California State Historical Resources Commission’s <i>Guidelines for the Curation of Archaeological Collections</i>, into a retrievable storage collection in a public repository or museum. Additionally, all collection and retention of archaeological materials as a result of cultural resources investigations must comply with the regulations and policies of the land managing agency or property owner.</p>	During construction	During construction	Inyo County Planning Department and/or other applicable agencies.	
<p>CUL-2: Implement proper actions in the event of the incidental discovery of human remains.</p> <p>In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie potential remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are or are believed to be Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours. In accordance with Section 5097.98 of the California Public Resources Code, the NAHC must immediately notify those persons it believes to be the most likely descendant of the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the County, the disposition of the human remains.</p> <p>Should human remains be discovered at any time during construction of the project, construction in the vicinity would halt and the County Coroner would be contacted immediately. If the Coroner determines that the remains do not require an assessment of cause of death and are probably Native American, then the NAHC would be contacted to identify the Most Likely Descendant.</p>	During construction	During construction	Inyo County Planning Department and/or other applicable agencies.	

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<p>PALEO-1a: Protect paleontological resources.</p> <p>Project developers shall document in a paleontological resources assessment report whether paleontological resources exist in a project area on the basis of the following: the geologic context of the region and site and its potential to contain paleontological resources (including the fossil yield potential), a records search of institutions holding paleontological collections from California desert regions, a review of published and unpublished literature for past paleontological finds in the area, and coordination with paleontological researchers working locally in potentially affected geographic areas (or studying similar geologic strata).</p> <p>If paleontological resources are present at the site or if the geologic units to be encountered by the project (at the surface or the subsurface) have a high/very high or moderate/unknown fossil yield, a Paleontological Resources Management Plan shall be developed.</p> <p>The plan shall include the following types of requirements:</p> <ol style="list-style-type: none"> 1. The qualifications of the principal investigator and monitoring personnel 2. Construction crew awareness training content, procedures, and requirements 3. Any measures to prevent potential looting, vandalism, or erosion impacts 4. The location, frequency, and schedule for on-site monitoring activities 5. Criteria for identifying and evaluating potential fossil specimens or localities 6. A plan for the use of protective barriers and signs, or implementation of other physical or administrative protection measures 7. Collection and salvage procedures 8. Identification of an institution or museum willing and able to accept any fossils discovered 9. Compliance monitoring and reporting procedures <p>If the geologic units that would be affected by the project have been determined to have low fossil yield potential, paleontological resources shall</p>	<p>Prior to / during construction</p>	<p>Prior to / during construction</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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<p>be included as an element in construction worker awareness training. The training shall include measures to be followed in the event of unanticipated discoveries, including suspension of construction activities in the vicinity.</p> <p>The Paleontological Resources Management Plan shall evaluate all of the construction methods proposed, including destructive excavation techniques. Where applicable, the principal investigator shall include in the plan an evaluation of the potential for such techniques to disturb or destroy paleontological resources, an evaluation of whether loss of such fossils would represent a significant impact, and discussion of mitigation or compensatory measures (such as recordation/recovery of similar resources elsewhere on the site) that are necessary to avoid or substantially reduce the impact.</p>				
GEOLOGY AND SOILS				
<p>GEO-1: Conduct site-specific geotechnical investigations.</p> <p>Site-specific geotechnical investigations will be completed for all applicable proposed development within the individual SEDAs and the OVSA, and the potential off-site transmission corridors associated with the Charleston View, Chicago Valley, and Trona SEDAs (if applicable), prior to final project design approval. These investigations will identify site-specific criteria related to considerations such as grading, excavation, fill, and structure/facility design. All applicable results and recommendations from the geotechnical investigations will be incorporated into the associated individual project design documents to address identified potential geologic and soil hazards, including but not necessarily limited to: ground rupture; ground acceleration (ground shaking); soil liquefaction (and related issues such as dynamic settlement and lateral spreading); landslides/slope instability; geologic and soil instability (including compressible/collapsible soils, subsidence, and corrosive soils); and expansive soils. The final project design documents will also encompass applicable standard design and construction practices from sources including the California Building Code (CBC), International Building Code (IBC), and County standards, as well as the results/recommendations of County plan review and on-the-ground geotechnical observations and testing to be conducted during project excavation, grading and construction activities (with all related requirements to be included in applicable engineering/design drawings and construction contract specifications). A summary of the types of remedial measures</p>	<p>Prior to final project design approval</p>	<p>Prior to final project design approval</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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<p>typically associated with identified potential geologic and soil hazards, pursuant to applicable regulatory and industry standards (as noted), is provided below. The remedial measures identified/recommended as part of the described site-specific geotechnical investigations will take priority over the more general types of standard regulatory/industry measures listed below.</p>				
<ul style="list-style-type: none"> • Ground Rupture: (1) locate (or relocate) applicable facilities away from known active (or potentially active) faults and outside of associated CGS Earthquake Fault Zones; and (2) require appropriate (typically 50-foot) building exclusion buffers on either side of applicable fault traces. • Ground Acceleration (Ground Shaking): (1) incorporate applicable seismic loading factors (e.g., IBC/CBC criteria) into the design of facilities such as structures, foundations/slabs, pavement, utilities, manufactured slopes, retaining walls and drainage facilities; (2) use remedial grading techniques where appropriate (e.g., removing/replacing and/or reconditioning unsuitable soils); and (3) use properly engineered fill per applicable industry/regulatory standards (e.g., IBC/CBC), including criteria such as appropriate fill composition, placement methodology, compaction levels, and moisture content. • Liquefaction and Related Effects: 1) remove unsuitable soils and replace with engineered fill (as previously described), per applicable regulatory/industry standards (e.g., IBC/CBC); (2) employ measures such as deep soil mixing (i.e., introducing cement to consolidate loose soils) or use of subsurface structures (e.g., stone columns or piles) to provide support (i.e., by extending structures into competent underlying units); (3) use subdrains in appropriate areas to avoid or reduce near-surface saturation; and (4) design for potential settlement of liquefiable materials through means such as use of post-tensioned foundations and/or flexible couplings for utility connections. • Landslides/Slope Instability: (1) construct properly drained shear keys and/or replace susceptible deposits with manufactured buttress fills where appropriate; (2) employ applicable slope laybacks (i.e., shallower slopes) and/or structural setbacks; (3) incorporate structures such as retaining walls and stability fills where appropriate 				

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<p>to provide support; and (4) implement proper slope drainage and landscaping where applicable per established regulatory/industry standards (e.g., IBC/CBC).</p> <ul style="list-style-type: none"> • Geologic and Soil Instability: (1) use standard efforts such as over-excavation and recompaction or replacement of unsuitable soils with engineered fill, and enhanced foundation design in applicable areas (e.g., post-tensioned or mat slab foundations); (2) use engineered fill, subdrains, surcharging (i.e., loading prior to construction to induce settlement) and/or settlement monitoring (e.g., through the use of settlement monuments) in appropriate areas; (3) implement groundwater withdrawal monitoring/restrictions per established legal/regulatory/industry standards (if applicable); and (4) remove unsuitable deposits and replace with non-corrosive fill, use corrosion-resistant construction materials (e.g., corrosion-resistant concrete and coated or non-metallic facilities), and install cathodic protection devices (e.g., use of a more easily corroded “sacrificial metal” to serve as an anode and draw current away from the structure to be protected) per established regulatory/industry standards (e.g., IBC/CBC). • Expansive Soils: (1) replace and/or mix expansive materials with non-expansive fill; and (2) cap expansive soils in place with an appropriate thickness of non-expansive fill per established regulatory/industry standards (e.g., IBC/CBC). 				
GREENHOUSE GAS EMISSIONS				
<p>GHG-1: Prepare site-specific Greenhouse Gas Report.</p> <p>Prior to approval of a Renewable Energy Permit, Renewable Energy Development Agreement, or Renewable Energy Impact Determination for a solar energy project, a site-specific greenhouse gas technical report will be prepared and approved by the County. The site-specific technical report will identify project-specific emissions to ensure compliance with the interim SCAQMD GHG thresholds, as well as measures to reduce operational greenhouse gas emissions. The technical report will be completed and approved by the County prior to the County’s action.</p>	<p>Prior to approval of a Renewable Energy Permit, Renewable Energy Development Agreement, or Renewable Energy Impact Determination</p>	<p>Prior to approval of a Renewable Energy Permit, Renewable Energy Development Agreement, or Renewable Energy Impact Determination</p>	<p>Inyo County Planning Department</p>	

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HAZARDS AND HAZARDOUS MATERIALS				
<p>HAZ-1: Conduct site-specific Phase I ESA.</p> <p>Site-specific Phase I Environmental Site Assessments (ESAs) shall be completed for all proposed development projects within the nine individual SEDAs and the OVSA, as well as the potential off-site transmission corridors associated with the Trona, Chicago Valley, and Charleston View SEDAs (if applicable), prior to final project design approval. Specifically, Phase I ESA investigations shall be conducted for the noted areas to identify the potential occurrence of hazardous materials and Recognized Environmental Conditions, (RECs, as defined in ASTM International E1527-05, Section 1.1.1), potentially involving the presence of contaminated soil or groundwater, and/or structures or facilities containing hazardous materials such as asbestos insulation, lead-based paint and polychlorinated biphenyls. Phase I investigations shall include: (1) appropriate regulatory database records review; (2) site reconnaissance; (3) review of appropriate maps, aerial photographs and other pertinent documents; (4) interviews with current/previous property owners, local government/industry officials, and other individuals with knowledge of the property and/or local environmental conditions; (5) documentation of known or potential RECs; and (6) identification of recommendations to address RECs or other concerns, if applicable (including Phase II ESA investigations, as outlined below).</p>	Prior to final project design approval	Prior to final project design approval	Inyo County Planning Department and/or other applicable agencies.	
<p>Depending on the results of the described Phase I ESAs, one or more Phase II ESA investigations shall be conducted if identified as part of the Phase I recommendations. Phase II ESAs consist of “intrusive” investigations, in which original samples of soil, groundwater and/or building materials are collected and submitted for laboratory analysis to identify applicable contaminants. Based on the results of this testing, the Phase II ESAs shall identify the type and extent of REC (or other) contamination, and provide appropriate remedial measures to address associated hazards. Typical remedial measures may include efforts such as removal and proper disposal of contaminated materials (or on-site treatment and reuse, if applicable), or in situ treatments such as oxidation (use of aerobic bacteria to accelerate natural attenuation of organic contaminants) or bioremediation (e.g., using bacteria to remove contaminants from groundwater).</p> <p>All ESAs conducted for the proposed project shall be prepared in</p>				

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<p>conformance with applicable regulatory and industry standards, including ASTM International E1527-05 Standard Practice for Environmental Site Assessments, and Code of Federal Regulations Part 312, Standards and Practices for All Appropriate Inquiries. Applicable results and recommendations from the described Phase I and Phase II investigations shall be incorporated into the associated individual final project design documents to address identified potential hazardous material concerns.</p>				
<p>HAZ-2: Conduct site-specific Airport Safety Investigations. Site-specific Airport Safety Investigations shall be completed for all proposed development projects in the Laws, Trona, Charleston View, and Sandy Valley SEDAs, the OVSA, and related potential off-site transmission line corridors associated with the Trona, Chicago Valley, and Charleston View SEDAs that are within two miles of a public or private airport prior to final project design approval. These investigations will assess the site-specific design and location of proposed facilities to determine if they are compatible with existing and planned future activities at nearby airports. The Airport Safety Investigations shall utilize applicable criteria from proposed project design information (e.g., facility locations and heights), airport comprehensive land use plans and/or management plans (if applicable), the Inyo County Airport Hazard Overlay Ordinance, and/or other pertinent information related to considerations such as airport hazard zones and traffic patterns, to identify potential safety conflicts. If such conflicts are identified, the Airport Safety Investigations shall provide remedial measures to address these concerns, potentially including efforts such as relocating and/or redesigning proposed facilities to avoid potential hazards. Applicable results and recommendations from the described Airport Safety Investigations shall be incorporated into the associated individual final project design documents to address identified potential airport-related concerns.</p>	<p>Prior to final project design approval</p>	<p>Prior to final project design approval</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	
<p>HAZ-3: Conduct site-specific School Safety Investigations. Site-specific School Safety Investigations shall be completed for all proposed development projects in the OVSA that are within one-quarter mile of an existing or proposed school, prior to final project design approval. These investigations will assess the site-specific design and location of proposed facilities to determine if they are compatible with</p>	<p>Prior to final project design approval</p>	<p>Prior to final project design approval</p>	<p>Inyo County Planning Department</p>	

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<p>existing and planned future activities at schools located within one-quarter mile. The School Safety Investigations shall utilize applicable criteria from proposed project design information, such as proposed hazardous material use/storage, associated facility locations, and required measures in Hazardous Materials Business Emergency/Contingency Plans and/or Risk Management Plans (e.g., proper inventory documentation, storage/containment, transport, employee training, and spill response/clean-up measures) to assess potential hazards to local schools from the use or emission of hazardous materials or wastes. If such hazards are identified, the School Safety Investigations shall provide remedial measures to address these concerns, potentially including efforts such as relocating (i.e., outside of the one quarter mile boundary) and/or redesigning proposed facilities (e.g., providing enclosures or secondary containment) to avoid potential hazards. Applicable results and recommendations from the described School Safety Investigations shall be incorporated into the associated individual final project design documents to address identified potential school-related concerns.</p>				
<p>HAZ-4: Conduct site-specific Wildfire Safety Investigations.</p> <p>Site-specific Wildfire Safety Investigations shall be completed for all proposed projects within the nine individual SEDAs and the OVSA, as well as the potential off-site transmission corridors associated with the Trona, Chicago Valley, and Charleston View SEDAs (if applicable), that are in areas rated as moderate or high for wildfire hazards by California Department of Forestry and Fire Protection prior to final project design approval. Specifically, the Wildfire Safety Investigations shall be conducted for the noted areas to identify site-specific fire hazard ratings and associated risks to people and structures at proposed development sites. The Wildfire Safety Investigations shall include assessment of the following criteria for the noted areas and surrounding environments: (1) fire history; (2) fuel (vegetation) types; (3) climatic conditions (including wind patterns); (4) projected fire behavior (including flame lengths) from computer modeling (e.g., BehavePlus Fire Modeling System 5.0.4); (5) documentation of known or potential wildfire hazards to on-site people and structures; and (6) identification of remedial measures, if applicable (per applicable regulatory standards such as the California Building, Fire, and Residential Codes), potentially including efforts such as the use of fuel</p>	<p>Prior to final project design approval</p>	<p>Prior to final project design approval</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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<p>modification, structural features (e.g., non-combustible materials and fire/ember/smoke barriers), alarm systems, and/or automatic sprinklers. Applicable results and recommendations from the described Wildfire Safety Investigations shall be incorporated into the associated individual final project design documents to address identified potential wildfire-related concerns.</p>				
HYDROLOGY AND WATER QUALITY				
<p>HYD-1: Conduct site-specific hydrologic investigations.</p> <p>Site-specific hydrologic investigations will be completed for proposed utility scale solar facility development projects within the individual SEDAs and the OVSA (i.e., those with grading, excavation or other activities potentially affecting hydrologic conditions, as determined by the County), as well as the potential off site transmission corridors associated with the Trona, Chicago Valley, and Charleston View SEDAs (if applicable), prior to final project design approval. All applicable results and recommendations from these investigations will be incorporated into the associated individual final project design documents to address identified potential hydrologic concerns, including but not necessarily limited to: drainage alteration, runoff rates and amounts, flood hazards, and existing/planned storm drain system capacity. The final project design documents will also encompass applicable standard design and construction practices from sources including NPDES, Basin Plan and County standards, as well as the results/recommendations of County plan review (with all related requirements to be included in applicable engineering/design drawings and construction contract specifications). A summary of the types of remedial measures typically associated with identified potential hydrologic concerns, pursuant to applicable regulatory and industry standards (as noted), is provided below. The remedial measures identified/recommended as part of the described site-specific hydrologic investigations will take priority over the more general types of standard regulatory/industry measures listed below.</p> <ul style="list-style-type: none"> • Drainage Alteration: (1) locate applicable facilities and activities (e.g., staging areas and soil/material stockpiles) outside of surface drainage courses and drainage channels; (2) re-route surface around applicable facilities, with such rerouting to be limited to the smallest 	<p>Prior to final project design approval</p>	<p>Prior to final project design approval</p>	<p>Inyo County Planning Department Inyo County Department of Public Works Inyo County Water Department Inyo County Department of Environmental Health and/or other applicable agencies.</p>	

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<p>area feasible and re-routed drainage to be directed back to the original drainage course at the closest feasible location (i.e., the closest location to the point of diversion); and (3) use drainage structures to convey flows within/through development areas and maintain existing drainage patterns.</p> <ul style="list-style-type: none"> • Runoff Rates and Amounts: (1) minimize the installation of new impervious surfaces (e.g., by surfacing with pervious pavement, gravel or decomposed granite); and (2) use flow regulation facilities (e.g., detention/retention basins) and velocity control structures (e.g., riprap dissipation aprons at drainage outlets), to maintain pre-development runoff rates and amounts. • Flood Hazards: (1) work to locate proposed facilities and activities outside of mapped 100 year floodplain boundaries; (2) based on technical analyses such as Hydrologic Engineering Center-River Analysis System (HEC-RAS) studies, restrict facility locations to avoid adverse impacts related to impeding or redirecting flood waters; and (3) based on HEC RAS studies, use measures such as raised fill pads to elevate proposed structures above calculated flood levels, and/or utilize protection/containment structures (e.g., berms, barriers or waterproof doors) to avoid flood damage. • Storm Drain System Capacity: (1) implement similar measures as noted above for runoff rates and amounts; and (2) utilize additional and/or enlarged facilities to ensure adequate on- and off-site storm drain system capacity. 				
<p>HYD-2: Conduct site-specific groundwater investigations.</p> <p>Site-specific groundwater investigations will be completed for all proposed solar facility development projects within the individual SEDAs and the OVSA proposing to utilize groundwater resources, prior to final project design approval. These investigations will identify site-specific criteria related to considerations such as local aquifer volumes and hydrogeologic characteristics, current/proposed withdrawals, inflow/recharge capacity, and potential effects to local aquifer and well levels from proposed project withdrawals. All applicable results and recommendations from these investigations will be incorporated into the associated individual project design documents to address identified potential impacts to groundwater</p>	Prior to final project design approval	Prior to final project design approval	<p>Inyo County Planning Department</p> <p>Inyo County Water Department and/or other applicable agencies.</p>	

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<p>resources (per applicable regulatory standards), with all related requirements to be included in associated engineering/design drawings and construction contract specifications. A summary of the types of remedial measures typically associated with identified potential effects to groundwater resources is provided below. The remedial measures identified/recommended as part of the described site-specific groundwater investigations will take priority over the more general types of standard measures listed below.</p> <ul style="list-style-type: none"> • Aquifer/Well drawdown: (1) monitor local aquifer and private/production well levels to verify the presence or absence of project-related effects during pre-construction, construction, and operation periods (based on a methodology and monitoring schedule approved by the RWQCB and County); (2) document background and pre-construction groundwater conditions and comparable project-related construction and operation trends, along with related factors such as precipitation levels and groundwater budgets; (3) prepare scaled maps depicting the associated site(s), existing and proposed monitoring well locations, relevant natural (e.g., springs and groundwater-dependent vegetation) and other features (e.g., reservoirs), and pre- post-project groundwater contours, along with a description of cumulative water level changes; (4) restrict project-related groundwater withdrawals to appropriate levels to avoid significant adverse effects to local aquifers/wells and/or other groundwater-dependent uses (e.g., vegetation, springs or other related surface water features), based on thresholds approved by the RWQCB and County; and (5) provide mitigation for affected wells or other uses where applicable, potentially including well modifications (e.g., deepening pumps or wells) and/or financial compensation. • Groundwater Recharge Capacity: (1) reduce the area of on-site impervious surface if appropriate, through increased use of surfacing materials such as gravel, decomposed granite, or pervious pavement; and (2) use facilities such as retention/percolation basins and unlined drainage facilities to increase local infiltration and groundwater recharge. The County may employ water injection as a method of groundwater recharge 				

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<p>as deemed appropriate on a case by case basis. This decision would be made during project specific CEQA analysis for a given solar energy development proposal.</p>				
<p>HYD-3: Conduct site-specific water quality investigations.</p> <p>Site-specific water quality investigations will be completed for long-term solar facility operations associated with applicable proposed development projects within the individual SEDAs and the OVSA (i.e., those with activities potentially affecting water quality conditions, as determined by the County), as well as the potential off site transmission corridors associated with the Trona, Chicago Valley, and Charleston View SEDAs (if applicable), prior to final project design approval. All applicable results and recommendations from these investigations will be incorporated into the associated individual final project design documents to address identified potential long-term water quality issues related to conditions such as: anticipated and potential pollutants to be used, stored or generated on-site; the location and nature (e.g., impaired status) of on-site and downstream receiving waters; and project design features to avoid/address potential pollutant discharges. The final project design documents will also encompass applicable standard design practices from sources including NPDES, Basin Plan and County standards, as well as the results/recommendations of project-related hazardous materials investigations and regulatory standards (with all related requirements to be included in applicable engineering/design drawings and construction contract specifications). A summary of the types of BMPs typically associated with identified potential water concerns, pursuant to applicable regulatory and industry standards (as noted), is provided below. The BMPs identified/recommended as part of the described site-specific water quality investigations will take priority over the more general types of standard regulatory/industry measures listed below.</p> <ul style="list-style-type: none"> • Low Impact Development (LID)/Site Design BMPs: LID/site design BMPs are intended to avoid, minimize and/or control post development runoff, erosion potential and pollutant generation to the maximum extent practicable by mimicking the natural hydrologic regime. The LID process employs design practices and techniques to effectively capture, filter, store, evaporate, detain and infiltrate runoff 	<p>Prior to final project design approval</p>	<p>Prior to final project design approval</p>	<p>Inyo County Planning Department</p> <p>Inyo County Water Department Inyo County Department of Environmental Health and/or other applicable agencies.</p>	

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<p>close to its source through efforts such as: (1) minimizing developed/disturbed areas to the maximum extent feasible; (2) utilizing natural and/or unlined drainage features in on-site storm water systems; (3) disconnecting impervious pervious to slow concentration times, and directing flows from impervious surfaces into landscaped or vegetated areas; and (4) using pervious surfaces in developed areas to the maximum extent feasible.</p> <ul style="list-style-type: none"> • Source Control BMPs: Source control BMPs are intended to avoid or minimize the introduction of pollutants into storm drains and natural drainages to the maximum extent practicable by reducing on-site pollutant generation and off-site pollutant transport through measures such as: (1) installing no dumping” stencils/tiles and/or signs with prohibitive language (per current County guidelines) at applicable locations such as drainages and storm drain inlets to discourage illegal dumping; (2) designing trash storage areas to reduce litter/pollutant discharge through methods such as paving with impervious surfaces, installing screens or walls to prevent trash dispersal, and providing attached lids and/or roofs for trash containers; (3) designing site landscaping (if applicable) to maximize the retention of native vegetation and use of appropriate native, pest-resistant and/or drought-tolerant varieties to reduce irrigation and pesticide application requirements; and (4) providing secondary containment (e.g., enclosed structures, walls or berms) for applicable areas such as trash or hazardous material use/storage. • Treatment Control/LID BMPs: Treatment control (or structural) BMPs are designed to remove pollutants from runoff to the maximum extent practicable through means such as filtering, treatment or infiltration. Treatment control and/or LID BMPs are required to address applicable pollutants, and must provide medium or high levels of removal efficiency for these pollutants (per applicable regulatory requirements). Based on the anticipated pollutants of concern, potential LID and treatment control BMPs may include (1) providing water quality treatment and related facilities such as sediment basins, vegetated swales, infiltration basins, filtration devices and velocity dissipators to treat appropriate runoff flows and reduce volumes prior to off-site discharge (per applicable regulatory requirements); and (2) conducting 				

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regular inspection, maintenance and as-needed repairs of pertinent facilities and structures.				
LAND USE AND PLANNING				
No mitigation measures are required.				
MINERAL RESOURCES				
<p>MIN-1: Conduct site-specific mineral resource investigations.</p> <p>Site-specific mineral resource investigations will be completed for proposed development projects within the individual SEDAs, the OVSA, and the potential off-site transmission corridors associated with the Trona, Chicago Valley, and Charleston View SEDAs (if applicable), prior to final project design approval. These investigations will include the following elements: (1) descriptions of regional and on-site geologic environments; (2) identification of site-specific potential for the occurrence of mineral resources; (3) assessment of estimated mineral resource quantities and extents (as applicable); (4) evaluation of associated potential for economic resource recovery, including considerations such as supply and demand, and production, processing and transportation costs; (5) determination of the presence of mineral entries such as mining claims and mineral leases, including descriptions of individual mineral entry types, issuing agencies and status; (6) assessment of potential impacts from project implementation to identified regionally- or locally-important mineral resources, associated exploration/recovery efforts, and valid mineral entries; and (7) development of remedial measures to address identified impacts to mineral resources, operations and entries, as feasible, potentially including efforts such as avoidance, use of proposed project development timing or phasing to accommodate mineral operations, or locating proposed project facilities to accommodate multiple use operations (e.g., through shared use of access or infrastructure). All applicable results and recommendations from the described investigations identifying identified potential mineral resource impacts and remedial measures will be incorporated into the associated individual project design documents.</p>	Prior to final project design approval	Prior to final project design approval	Inyo County Planning Department	
NOISE				
NOI-1: Prepare technical noise report for solar facilities proposed within 500 feet of noise sensitive land uses.	Prior to approval and/or issuance of	Prior to approval and/or issuance of	Inyo County Planning Department	

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<p>If a proposed utility scale solar energy project resulting from implementation of the REGPA is within 500 feet of a residence or other noise sensitive land use, prior to issuance of a Major Use Permit, a site-specific noise technical report will be prepared and approved by the County. The technical report will verify compliance with all applicable County laws, regulations, and policies during operation of the solar project, including that noise levels would not exceed the relevant thresholds described in the General Plan Noise Element (60 dBA LDN for noise sensitive land uses such as residences, schools, transient lodging and medical facilities). The site specific noise technical report will include project specifications, applicable noise calculations, project design features, applicable BMPs and related information from the REAT’s Best Management Practices and Guidance Manual (REAT 2010), and mitigation measures applicable to the project. The technical noise report will address operational related noise sources, as well as noise from the use of generators during an emergency. The technical report will calculate specific anticipated noise and vibration levels from operations in accordance with County standards and provide specific mitigation when noise levels are expected to exceed County standards.</p>	Major Use Permits	Major Use Permits	Building and Safety Department	
<p>NOI-2: Implement construction noise reduction measures.</p> <p>If utility scale solar development resulting from implementation of the REGPA is proposed within 500 feet of a residence or other noise sensitive receptor, the following measures, in addition to applicable BMPs and related information from REAT’s Best Management Practices and Guidance Manual (REAT 2010), shall be implemented to reduce construction noise to the extent feasible:</p> <ul style="list-style-type: none"> • Whenever feasible, electrical power will be used to run air compressors and similar power tools. • Equipment staging areas will be located as far as feasible from occupied residences or schools. • All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers. • Stationary equipment shall be placed such that emitted noise is directed away from sensitive noise receptors. • Stockpiling and vehicle staging areas shall be located as far as 	During construction	During construction	Inyo County Planning Department	

**Table 1
 INYO COUNTY RENEWABLE ENERGY GENERAL PLAN AMENDMENT PEIR
 MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Phase of Implementation / Mitigation Timing	Frequency and/or Duration of Required Monitoring	Enforcement or Reporting Agency / Action Notes	Record Document Location
practical from occupied dwellings.				
<p>NOI-3: Helicopter Noise Control Plan.</p> <p>In the event that a utility scale solar project site would have limited access and would require the use of helicopters during operation or maintenance of a facility, the County shall prepare a Helicopter Noise Control Plan that indicates where helicopters would be used and the frequency and duration for such use. The plan shall demonstrate compliance with the noise level limits within the County Noise Element for helicopter noise to properties within 1,600 feet of proposed helicopter use locations.</p>	During construction	During construction	Inyo County Planning Department	
POPULATION AND HOUSING				
No mitigation measures are required.				
PUBLIC SERVICES				
<p>PUB-1: Analyze public safety and protection response times and staff levels for each project.</p> <p>Site specific analysis of fire and police protection service response times and staffing levels shall be completed for proposed future solar development projects, as deemed appropriate by the County, at the cost of the project applicant, prior to final project design approval of each project. The analysis shall include a determination regarding a project's impact to fire and police protection services and outline feasible measures to maintain adequate response times for fire and police protection services.</p>	Prior to final project design approval	Prior to final project design approval	Inyo County Planning Department and/or other applicable agencies.	
<p>PUB-2: Provide onsite security during the construction and long-term operation of the project.</p> <p>For project sites associated with proposed future solar development projects that are determined through Mitigation Measure PUB-1 to have insufficient law enforcement protection services or significant impacts to law enforcement services, project proponents shall be required to provide adequate, onsite private security for the duration of construction activities and during the long-term operation of the project to the satisfaction of the County. The actual size and configuration of the security detail shall be determined by the County during preparation of the Development</p>	During construction and operations	During construction and operations	Inyo County Planning Department	

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 MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Phase of Implementation / Mitigation Timing	Frequency and/or Duration of Required Monitoring	Enforcement or Reporting Agency / Action Notes	Record Document Location
Agreement for the future solar energy project.				
PUB-3: Pay mitigation fees for public safety and protection services. The County shall require project proponents to pay established County development mitigation fees for fire and police protection services. Said fees shall be used to maintain proper staffing levels for fire, police protection, and emergency services and to sustain adequate response times as required by the County.	Prior to final project design approval	Prior to final project design approval	Inyo County Planning Department and/or other applicable agencies.	
RECREATION				
No mitigation measures are required.				
SOCIOECONOMICS				
SOC-1: Minimize Impacts on transient housing. To further offset potential negative effects and increased demand on transient housing, General Plan Policy ED-4.5, Employ and Train Local Labor, shall be supplemented with the following: <ul style="list-style-type: none"> • For renewable energy projects where the construction schedule exceeds one-year, community monitoring programs shall be developed that would identify and evaluate transient housing demand and other socioeconomic effects utilizing economic models such as JEDI. Measures developed for monitoring may include the collection of data reflecting the workforce demands and social effects (such as tracking any demonstrable drop in recreational usership) as a result of increased transient housing demand from construction workers at the local and County level. • Project developers shall work with the County, local chambers of commerce, and/or other applicable local groups to assist transient workers in finding temporary lodging. If temporary lodging is not available, developers of utility scale projects shall consider the feasibility of providing on-site temporary housing accommodations for all projects. 	During construction	During construction	Inyo County Planning Department	
SOC-2: Minimize Impacts on County Public Services. To further off-set potential negative effects on County public services, General Plan Policy ED 4.4, Offset the Cost to the County for Service	Prior to issuance of building permit	Prior to issuance of building permit	Inyo County Planning Department	

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<p>Provision, shall be supplemented with the following:</p> <ul style="list-style-type: none"> • Cooperative agreements between project applicants and the County shall be secured prior to issuance of a building permit or project-specific entitlement to ensure the following: • Unless property taxation of a renewable energy installation is deemed sufficient by the County, project applicants shall pay a fair-share public service impact fee. A potential method for estimating a fair-share contribution could be calculated by: • [annual service budget] X [estimated number of temporary workers temporarily in-migrating ÷ County population served]. • The public service fee (and formula used for calculating fair-share) shall be adjusted based on the duration of project construction (e.g., a project only lasting 9 months would utilize 75 percent of the annual budget, one lasting 1.5 years would utilize 150 percent of the annual budget, etc.); and • Project applicants shall maximize the County's receipt of sales and use taxes paid in connection with construction of the project by methods such as including language in construction contracts identifying jobsites to be located within the County and requiring construction contractors to attribute sales and use taxes to the County in their Board of Equalization filings and permits. 				
TRANSPORTATION AND CIRCULATION				
<p>TRA-1: Prepare site-specific traffic control plans for individual projects.</p> <p>Site-specific traffic control plans shall be prepared for all proposed solar energy projects within the individual SEDAs and the OVSA to ensure safe and efficient traffic flow in the area of the solar energy project and within the project site during construction activities. The traffic control plan shall, at minimum, contain project-specific measures to be implemented during construction including measures that address: (1) noticing; (2) signage; (3) temporary road or lane closures; (4) oversized deliveries; (5) construction times; and (6) emergency vehicle access.</p>	Prior to / during construction	Prior to / during construction	Inyo County Planning Department and/or other applicable agencies.	
<p>TRA-2: Implement recommendations from traffic impact analysis on surrounding roadways and intersections.</p>	During construction	During construction	Inyo County Planning Department	

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Mitigation Measure	Phase of Implementation / Mitigation Timing	Frequency and/or Duration of Required Monitoring	Enforcement or Reporting Agency / Action Notes	Record Document Location
<p>Site-specific construction traffic impact analyses shall be prepared for all proposed solar energy projects within the individual SEDAs and the OVSA to evaluate potential traffic impacts on surrounding roadways and intersections during the construction period. Applicable results and recommendations from the project-specific construction traffic impact analysis shall be implemented during the appropriate construction phase to address identified potential construction traffic impacts.</p>			<p>and/or other applicable agencies.</p>	
UTILITIES AND SERVICE SYSTEMS				
<p>UTIL-1: Projects within the western solar energy group will not exceed a combined maximum of 250 MW or 1,500 acres.</p> <p>Future projects within the Western Solar Energy Group shall be limited to a combined maximum of 250 MW or 1,500 acres of development area). The County shall implement a tracking program to ensure all future solar development projects within the Western Solar Energy Group do not exceed 250 MW. Once the 250 MW (or 1,500 acres of development area) is reached, the County shall not approve further projects within the Western Solar Energy Group unless project applicants can provide proof of adequate and existing transmission capabilities for the project.</p>	<p>Prior to issuance of building permit</p>	<p>At the beginning and completion of each project</p>	<p>Inyo County Planning Department</p>	
<p>UTIL-2: Projects within the Southern and Eastern Solar Energy Groups will be required have necessary and/or adequate transmission lines.</p> <p>Future development within the Southern and Eastern Solar Energy Groups shall be required to include the necessary transmission lines or provide proof of adequate transmission capabilities for the project.</p>	<p>Prior to issuance of building permit</p>	<p>Prior to issuance of building permit</p>	<p>Inyo County Planning Department and/or other applicable agencies.</p>	

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