

SCH No. 2011091055

GENERAL PLAN AMENDMENT No. 2010-01

ZONE RECLASSIFICATION No. 2010-02

CONDITIONAL USE PERMIT No. 2010-03





CRYSTAL GEYSER ROXANE CABIN BAR RANCH WATER BOTTLING FACILITY PROJECT

Inyo County, California

SCH No. 2011091055

GENERAL PLAN AMENDMENT No. 2010-01

ZONE RECLASSIFICATION No. 2010-02

CONDITIONAL USE PERMIT No. 2010-03

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1.0 INTRODUCTION AND EXECUTIVE SUMMARY

This chapter of the Final Environmental Impact Report is prepared pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15123. It includes: an overview of the purpose and focus of the EIR being prepared for the proposed Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Facility Project (proposed project); a description of the EIR process being conducted; a description of the contents and organization of the Draft EIR and Final EIR; summary descriptions of existing conditions, the proposed project, and the project alternatives; a discussion of the areas of controversy and issued to be resolved associated with the proposed project; and an updated summary of the potential environmental impacts of the proposed project.

A. INTRODUCTION

This Final EIR comprises the second and final part of the Environmental Impact Report (EIR) for the Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Facility Plan Project (proposed project). The Final EIR, together with the Draft EIR published in August 2012, addresses the potential environmental impacts of the proposed project pursuant to the California Environmental Quality Action (CEQA), Public Resources Code Section 21000 et.seq, and the CEQA Guidelines, Title 14 of the Code of California Regulation (CCR), Section 15000 et.seq. According to the CEQA Guidelines, Section 15132, the Final EIR shall consist of the following items: (a) the Draft EIR or a revision of the Draft, (b) comments and recommendations received on the Draft EIR, (c) a list of persons, organizations and public agencies commenting on the Draft EIR, (d) the responses of the Lead Agency to significant environmental points raised in the review and consultation process, and (e) any other information added by the Lead Agency.

The purpose of the EIR is to inform decision-makers and the general public of the potential environmental impacts resulting from the proposed project. The EIR is a Project EIR as defined by Sections 15161 and 15362 of the State CEQA Guidelines. The Inyo County Planning Department (the County) has the principal responsibility for approving the proposed project and, as the Lead Agency, is responsible for the preparation and distribution of this Draft EIR pursuant to CEQA Statute Section 21067. The EIR will be used in connection with all other permits and all other approvals necessary for the construction and operation of the proposed project. The EIR will be used by the Inyo County Planning Department and other responsible public agencies that must approve activities undertaken with respect to the project.

B. ENVIRONMENTAL REVIEW PROCESS

An Initial Study was prepared for the proposed project and, a Notice of Preparation (NOP) was distributed for public comment to the State Clearinghouse, Office of Planning and Research, responsible agencies, and other interested parties, on September 20, 2011, for a 30-day review period ending on October 20, 2011. In addition, a public scoping meeting was held on September 29, 2011. The NOP, Initial Study, and public comments on the NOP are included in Appendix I of the Draft EIR. The Draft EIR was published on August 16, 2012, and was circulated for the required 45-day public comment period, in addition to a one-week extension of the public comment period, for a total of 52 days. The public comment period for the Draft EIR ultimately ended on October 8, 2012. A list of those providing public comment on the Draft EIR, along with a breakdown of individual comments and responses to those comments by the County, is provided in Section 3.0, Comments and Responses on the Draft EIR, in this Final EIR.

C. CONTENTS OF THE FINAL EIR/EIR ORGANIZATION

1. Final EIR

This Final EIR is organized into the following chapters and appendices:

- **1.0 Introduction and Executive Summary.** This chapter of the Final EIR provides overview information regarding the purpose and structure of the Draft EIR and Final EIR (collectively, the EIR), as well as a summary of the project characteristics, its impacts and mitigation measures.
- **2.0 Corrections and Additions to the Draft EIR**. This chapter presents a list of revisions that have made to the Draft EIR, based on comments received from the public and agencies, and other items requiring updating and/or corrections.
- **3.0 Comments and Responses on the Draft EIR.** This chapter includes a list of those providing comments on the Draft EIR that was circulated to the public, a matrix that indicates the environmental issues that were addressed in each of the comment letters and all written comments on the Draft EIR that were presented to the County including one letter submitted after the 52-day circulation period along with County responses to each of the public comments.
- **4.0. Mitigation Monitoring and Reporting Program (MMRP).** This chapter provides the project's MMRP, which is the document used by the enforcement and monitoring agencies responsible for the implementation of the proposed project's mitigation measures. Mitigation measures are listed by environmental topic, and for each mitigation measure, the following is defined: phase of implementation, frequency and/or duration of required monitoring, and the enforcement/reporting agency.

Appendix A: Public Comment Letters

Appendix B: Updated Biological Resource Investigations

Appendix C: Updated LOS Output for the Project Driveway/Frontage Road (AM & PM Peaks)

In addition, the Final EIR incorporates the Draft EIR and associated appendices by reference.

2. Draft EIR

The Draft EIR is comprised of the following chapters and appendices:

- **1.0 Summary.** This chapter describes the purpose and focus of the Draft EIR, Draft EIR organization, background information regarding the project site, a summary of the project, areas of controversy/issues to be resolved, a description of the public review process, a summary of alternatives evaluated, and a summary of environmental impacts and mitigation measures.
- **2.0. Project Description**. This chapter describes the project location, existing conditions, project objectives, characteristics of the proposed project, and a description of the intended use of the Draft EIR.
- **3.0 General Description of Environmental Setting.** This chapter contains a description of the existing natural and built environments, as well as background information used to evaluate

cumulative impacts, including a list of past, present, and reasonably anticipated future projects to be built in the project vicinity.

- **4.0 Environmental Impact Analysis.** This chapter contains the environmental setting, project and cumulative impact analyses, mitigation measures, and conclusions regarding the level of significance after mitigation for each of the following environmental issues: (1) aesthetics/visual resources; (2) air quality; (3) global climate change; (4) biological resources; (5) archaeological/paleontological resources; (6) historical resources; (7) land use and planning; (8) hydrogeology and surface hydrology; (9) noise; and (10) transportation.
- **5.0 Project Alternatives.** This chapter provides analysis of each of the alternatives to the proposed project, which include the following three alternatives: No Project/No Action, Reduced Operations, and Project Site Reconfiguration.
- **6.0 Other Environmental Considerations.** This chapter of the Draft EIR addresses the additional topics required by the State CEQA regulations. First, it provides a discussion of significant unavoidable impacts that would result from the proposed project; the reasons why the project is being proposed notwithstanding the significant unavoidable impacts; and the project's significant irreversible changes in the environment. This section also analyzes growth-inducing impacts of the project to determine whether the project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Potential secondary effects caused by the implementation of the mitigation measures for the proposed project are also discussed. Finally, this section discusses the effects that were determined within the Initial Study not to be significant.
- **7.0 Report Preparers.** This chapter lists the persons, public agencies, and organizations that were consulted or contributed to the preparation of this Draft EIR.
- **8.0 References.** This chapter lists the documents, websites, and other technical resources consulted in the course of Draft EIR preparation.

Appendix A: Initial Study, Notice of Preparation (NOP), Scoping Meeting Presentation, Scoping Meeting Oral Comments, and NOP Comment Letters

Appendix B: Air Quality Technical Data

Appendix C: Biological Resources

Appendix D: Archaeological and Paleontological Resources Assessment

Appendix E: Historical Resources Assessment

Appendix F: Hydrogeologic Evaluation

Appendix G: Noise Technical Data

Appendix H: Traffic Impact Analysis

2.0 COMMENTS AND RESPONSES ON THE DRAFT EIR

CEQA Guidelines Section 15088(a) states that "The lead agency shall evaluate comments on environmental issues received from persons who reviewed the draft EIR and shall prepare a written response. The lead agency shall respond to comments that were received during the noticed comment period and any extensions . . ." In accordance with these requirements, this section of this Final EIR provides responses to each of the written comments received during the public comment period. **Table 2-1**, *Summary of Comments on the Draft EIR*, which starts on page 2-2, provides a list of the comment letters received and a summary of the issues raised in response to the Draft EIR.

Section 2.A, Topical Responses to Comments, provides a comprehensive, issue-specific response that addresses multiple comments raised during the public review period. The Topical Responses in this section include the following:

- TR-1: Biological Resources
- TR-2: Hydrogeology

Section 2.B, Responses to Public Comments, presents comments submitted during the public comment period for the Draft EIR from Federal, State, County, and City agencies, as well as from organizations and individuals as listed on **Table 2-1**. Each letter was assigned a number, based on the affiliation, if any of the commenter, and arranged alphabetically, as indicated in Table 2-1. Each comment that requires a response within the letters is also assigned a number. For example, the first Federal Agency (Letter 1) to provide comments was the Big Pine Paiute Tribe of the Owens Valley and therefore this is Letter Number 1. The first comment received from the Big Pine Paiute Tribe is therefore labeled Comment 1-1 and the responses to each comment are correspondingly numbered, (i.e., Response 1-1). A copy of each comment letter is provided in **Appendix A**, *Public Comment Letters*. Comments that have resulted in changes to the Draft EIR are identified in Table 2-1.

As required by the *CEQA Guidelines*, Section 15088 (c), the focus of the responses to comments is on "the disposition of significant environmental issues raised." Therefore, some comments that are introductory or provide background information about the commenter are not included as bracketed comments since no response is necessary.

Table 2-1
Comments on the Draft EIR

Fede	SUMMARY OF WRITTEN COMMENTS ral Agencies & Entities	EXECUTIVE SUMMARY	2.0 Project Description	3.0 EnvironmentalSetting	4.A. AESTHETICS/VISUAL RESOURCES	4.B-1. AIR QUALITY	4.B-2. GLOBAL CLIMATE CHANGE	4.C. Biological Resources	4.D. ARCHAEOLOGY AND PALEONTOLOGY	4.E. HISTORICAL RESOURCES	4.F. Land Use and Planning	4.G. HYDROGEOLOGY AND SURFACE HYDROLOGY	4.H. Noise	4.I. TRANSPORTATION	5.0 Alternatives	6.0 Other Environmental Considerations	REQUEST TO EXTEND COMMENT PERIOD	GENERAL SUPPORT FOR PROJECT	GENERAL OPPOSITION TO PROJECT	Отнек	Notes
1	Big Pine Paiute Tribe of the Owens Valley Virgil Moose, Tribal Chairperson PO Box 700/825 South Main Street Big Pine, CA 93513							x	X			x									Inadequate mitigation measures and technical studies
2	Lone Pine Paiute-Shoshone Reservation Mary L. Wuester, Tribal Chairperson PO Box 747 / 1103 South Main Street Lone Pine, CA 93545							X	X			X									
3	State of California Business, Transportation & Housing Agency Department of Transportation, District 9 Gayle J. Rosander, IGR/CEQA Coordinator 500 South Main Street Bishop, CA 93514	X	X											X							Contact info provided

4	SUMMARY OF WRITTEN COMMENTS State of California California State Lands Commission State Clearinghouse Unit Cy R. Oggins, Chief, Division of Environmental Planning and Management 100 Howe Avenue, Suite 100-South	EXECUTIVE SUMMARY	X 2.0 Project Description	3.0 EnvironmentalSetting	4.A. AESTHETICS/VISUAL RESOURCES	4.B-1. AIR QUALITY	X 4.B-2. GLOBAL CLIMATE CHANGE	4.C. BIOLOGICAL RESOURCES	4.D. ARCHAEOLOGY AND PALEONTOLOGY	4.E. HISTORICAL RESOURCES	4.F. LAND USE AND PLANNING	X 4.G. HYDROGEOLOGY AND SURFACE HYDROLOGY	4.H. NOISE	4.I. TRANSPORTATION	5.0 ALTERNATIVES	6.0 OTHER ENVIRONMENTAL CONSIDERATIONS	REQUEST TO EXTEND COMMENT PERIOD	GENERAL SUPPORT FOR PROJECT	GENERAL OPPOSITION TO PROJECT	Х	Notes Other (mineral resources; request for future notifications)
5	Sacramento, CA 95828-8202 State of California Natural Resources Agency Department of Fish and Game, Inland Deserts Region Debra Hawk, Acting Habitat Conservation Supervisor 407 West Line Street Bishop, CA 93514 Denal and Local Agencies		х					х													
6	Great Basin Unified Air Pollution Control District 157 Short Street Bishop, CA 93514 Jan Sudomier					X														X	Other (hazards & hazardous materials; permitting info)

	SUMMARY OF WRITTEN COMMENTS	EXECUTIVE SUMMARY	2.0 Project Description	3.0 EnvironmentalSetting	4.A. AESTHETICS/VISUAL RESOURCES	4.B-1. AIR QUALITY	4.B-2. GLOBAL CLIMATE CHANGE	4.C. BIOLOGICAL RESOURCES	4.D. Archaeology and Paleontology	4.E. HISTORICAL RESOURCES	4.F. LAND USE AND PLANNING	4.G. Hydrogeology and Surface Hydrology	4.H. Noise	4.I. Transportation	5.0 ALTERNATIVES	6.0 OTHER ENVIRONMENTAL CONSIDERATIONS	REQUEST TO EXTEND COMMENT PERIOD	GENERAL SUPPORT FOR PROJECT	GENERAL OPPOSITION TO PROJECT	Отнек	Notes
7	Lahontan Regional Water Quality Control Board 14440 Civic Drive, Suite 200 Victorville, CA 92392 Brianna Bergen, Engineering Geologist																			X	Other (hydrology & surface hydrology; permitting)
8	City of Los Angeles Department of Water and Power James G. Yannotta, Aqueduct Manager 300 Mandich Street Bishop, CA 93514-3449		x			x		x				x									permitting
Orga	nizations and Businesses			I	1		1														
9	California Native Plant Society Bristlecone Chapter Stephen P. McLaughlin P.O. Box 364 Bishop, CA 93515							X				x									

. 10	SUMMARY OF WRITTEN COMMENTS Taber Consultants On behalf of the Cartago Mutual Water Company Thomas E. Ballard, Principal, Senior Hydrologist 3911 West Capitol Avenue West Sacramento, CA 95691-2116	EXECUTIVE SUMMARY	2.0 Project Description	3.0 EnvironmentalSetting	4.A. AESTHETICS/VISUAL RESOURCES	4.B-1. AIR QUALITY	4.B-2. GLOBAL CLIMATE CHANGE	4.C. BIOLOGICAL RESOURCES	4.D. ARCHAEOLOGY AND PALEONTOLOGY	4.E. HISTORICAL RESOURCES	4.F. LAND USE AND PLANNING	X 4.G. HYDROGEOLOGY AND SURFACE HYDROLOGY	4.H. Noise	4.I. Transportation	5.0 ALTERNATIVES	6.0 OTHER ENVIRONMENTAL CONSIDERATIONS	REQUEST TO EXTEND COMMENT PERIOD	GENERAL SUPPORT FOR PROJECT	GENERAL OPPOSITION TO PROJECT	Отнек	Notes
11 12	Citizens for Common Sense and Fiscal Responsibility for Southern Inyo County Jeffrey Bohl Inyo County		X			X	x	x	X		X	x		x	x					x	Other (enforcement of mitigation; hazards and hazardous materials; provision of CEQA Guidelines) Other (certification of spring water
	Planning Commission Hearing Minutes September 26, 2012		X		X			X	X		X	X		X			X			X	of spring water source; living wage; conditions at existing plant)

Table 2-1 (Continued)

	SUMMARY OF WRITTEN COMMENTS	EXECUTIVE SUMMARY	2.0 Project Description	3.0 EnvironmentalSetting	4.A. AESTHETICS/VISUAL RESOURCES	4.B-1. AIR QUALITY	4.B-2. GLOBAL CLIMATE CHANGE	4.C. BIOLOGICAL RESOURCES	4.D. Archaeology and Paleontology	4.E. HISTORICAL RESOURCES	4.F. LAND USE AND PLANNING	4.G. HYDROGEOLOGY AND SURFACE HYDROLOGY	4.H. Noise	4.I. Transportation	5.0 Alternatives	6.0 Other Environmental Considerations	REQUEST TO EXTEND COMMENT PERIOD	GENEDA! SUBBODT FOR DROIECT	GENERAL OPPOSITION TO PROJECT	Отнек	Notes
13	Rio Tinto Minerals																				
	Owens Lake Operations Paul Lamos, Superintendent, Owens Lake Operations PO Box 37/209 North Main Street Lone Pine, CA 93545			X								X						X			
14	Sierra Club Mark Bagley, Executive Director, Owens Valley Committee and Sierra Club Owens Valley MOU Representative P.O. Box 1431 Bishop, CA 93515		x	x				x				x								x	Other (Inadequate EIR)
Indiv	iduals																				
15	Patricia Elton and Smilja Blackmon, Trustees																				
	The Elton Family Trust											X									
	PO Box 478 Scottsdale, Arizona 85261-4878																				

	SUMMARY OF WRITTEN COMMENTS	EXECUTIVE SUMMARY	2.0 Project Description	3.0 EnvironmentalSetting	4.A. AESTHETICS/VISUAL RESOURCES	4.B-1. AIR QUALITY	4.B-2. Global Climate Change	4.C. BIOLOGICAL RESOURCES	4.D. Archaeology and Paleontology	4.E. HISTORICAL RESOURCES	4.F. LAND USE AND PLANNING	4.G. HYDROGEOLOGY AND SURFACE HYDROLOGY	4.H. Noise	4.I. Transportation	5.0 Alternatives	6.0 Other Environmental Considerations	REQUEST TO EXTEND COMMENT PERIOD	GENERAL SUPPORT FOR PROJECT	GENERAL OPPOSITION TO PROJECT	Отнек	Notes
16	Daniel J. Hardwick PO Box 205 Olancha, CA 93549											X								X	Other (balance of interests)
17	Vernon L. Lawson PO Box 77 Olancha, CA 93549							X					x		х						
18	Sara J. "Sally" Manning, Ph.D. 401 E. Yaney St. Bishop, CA 93514							X				X								X	Other (inadequate EIR; recirculation request; general concerns over credibility)
19	Scott Palamar				X						X	X									
20	Troy and Susan Patton Patton's Place PO Box 157 Olancha, CA 93549		X					X				X									

	SUMMARY OF WRITTEN COMMENTS	EXECUTIVE SUMMARY	2.0 Project Description	3.0 EnvironmentalSetting	4.A. AESTHETICS/VISUAL RESOURCES	4.B-1. Air Quality	4.B-2. GLOBAL CLIMATE CHANGE	4.C. Biological Resources	4.D. Archaeology and Paleontology	4.E. HISTORICAL RESOURCES	4.F. LAND USE AND PLANNING	4.G. HYDROGEOLOGY AND SURFACE HYDROLOGY	4.H. Noise	4.I. Transportation	5.0 Alternatives	6.0 OTHER ENVIRONMENTAL CONSIDERATIONS	REQUEST TO EXTEND COMMENT PERIOD	GENERAL SUPPORT FOR PROJECT	GENERAL OPPOSITION TO PROJECT	Отнек	Notes
21	Michael Prather																				
	Drawer D		X					X				X									
	Lone Pine, CA 93545																				
22	Michael Prather																				
	Lone Pine																X				
23	Bill Schwartz																				
												X									
24	Earl Wilson																				
	PO Box 830				X	X		X		X		X									
	Lone Pine, CA93545																				
25	United States Department of the Interior																				
	Fish and Wildlife Service																				
	Carl T. Benz, Assistant Field Supervisor																				
	Ventura Fish and Wildlife Office																				
	2493 Portola Road, Suite B																				
	Ventura, CA 93001																				

2.A TOPICAL RESPONSES TO PUBLIC COMMENTS TOPICAL RESPONSE NO. 1: BIOLOGICAL RESOURCES

Public comments on the Draft EIR were received regarding the absence of current plant and animal surveys at the appropriate time of year, the potential impacts of lowering groundwater levels on riparian habitat, wetlands and natural spring flows, and the omission of the Owens Lake Master Plan (OLMP) from the cumulative impacts analysis. This topical response is intended to address these comments.

PLANT AND ANIMAL SURVEYS

As the primary basis for preparing the Draft EIR, considerable reliance was placed on comprehensive field surveys conducted by a team of biologists, with input from state and federal resource agencies representatives and the scientific community, and the documentation of survey findings by Montgomery Watson in 1996. The surveys were conducted in 1987, 1988, and 1989 during the months of October, November, January, February, March, April, May, June, July and August. Contributors to the survey efforts included: JMM subconsultants; Frank Hovore, P. Sullivan, C. Carter and Dede Gilman (Biological Assessment and Survey Services); Dr. Robert R. Miller (University of Michigan fisheries biologist); Dr. David L. Stoltz (fisheries biologist); Mary DeDecker (CNPS botanist); and Dr. Richard Veit (UC Irvine ornithologist). Individuals contacted for input and species occurrence information included: Susan Cochrane, L. Wickenheiser, Robert Holland, Carla Larsen, Darryl Wong, Denyse Racine, Mignon Moskowitz, and Phil Pister with the California Department of Fish and Game; Steven Sorenson with the U.S. Geological Service; Nancy Kaufman, Gail Kobetich, and Ray Bransfield with the U.S. Fish and Wildlife Service; Los Angeles Department of Water and Power biologist Patty Nowak; Michael Prather from the Inyo Audubon Society; and independent biologists Enid Larson and Derham Giuliani.

It is acknowledged that the information obtained from the Montgomery Watson documentation is dated. However, due to its comprehensive coverage of key topical areas for impact analysis, its coverage of all seasons of the year, the involvement of accredited professionals, and its outreach to resource agencies and individuals with local experience, the previous surveys and documentation served as a credible basis for the current impact assessment. This information was "ground-truthed" with respect to biological resource conditions as they exist today. PCR biologists and regulatory specialists performed recent surveys on September 29, 2011 and February 8, 2012. In addition, systematic sensitive plant surveys were performed by Resource Concepts, Inc. in May 2012 and by Garcia & Associates in October 2012, which are provided in their entirety in **Appendix B** of this Final EIR. As stated in those reports, no threatened, endangered or sensitive plant species were observed within the project area in the surveys conducted in 2012, and the project area does not provide critical habitat for any Federally- or State-listed threatened or endangered plant species. Accordingly, the proposed project is not likely to affect any federal or state listed threatened or endangered plant species and impacts on Federally- and State-listed plant species are considered less than significant.

The same circumstance exists for animals known or having the potential to occur in the project area. Comprehensive surveys of invertebrates and vertebrates were conducted during all seasons of the year in

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¹ Resource Concepts, Inc., Sensitive Plant Survey Report for the CGR Cabin Bar Ranch, May 29, 2012.

² Garcia & Associates (GANDA), Special-Status Plant Survey Report, Cabin Bar Ranch Water Bottling Facility Project, October 2012.

1987, 1988, and 1989. In addition, resource agency personnel, biologists with local knowledge, and the scientific community were consulted. As a result, a credible database with which to assess potential project-related impacts was available. As with plant species, ground-truthing was conducted and animal species observed or with the potential to occur in the project area were identified. For those wildlife species listed as threatened or endangered or otherwise of special concern to resource agencies, and for which habitat is present on the project site, unless the resource agencies expressed opinions otherwise in comments submitted on the Draft EIR, presence is now assumed and mitigation measures are provided that would reduce impacts to less than significant levels. Those mitigation measures will become conditions of approval, upon certification of the EIR. Mitigation measure BIO-1b, which addresses potential impacts on sensitive plant and wildlife species, has been updated to reflect the results of the focused surveys conducted in May 2012 and October 2012, and the opinions of resource agencies that commented on the Draft EIR. The updated mitigation measures are provided in **Section 3.0**, *Corrections and Additions to the Draft EIR*.

POTENTIAL IMPACTS FROM GROUNDWATER EXTRACTION

Based on the results of groundwater modeling by the project hydrogeological consultant, Richard C. Slade & Associates (see **Appendix F**, *Hydrogeologic Evaluation*, in the Draft EIR), which built on the findings of previous modeling efforts at the Cabin Bar Ranch, it was concluded that project-related pumping of the three proposed production water supply wells and domestic water supply well could reduce local static water levels in the shallow aquifer beneath Cabin Bar Ranch and in other on-site wells, and could also have a variable effect on spring flows along the Spring Line fault. Some spring flows showed a reduction in flow, whereas others were observed to exhibit no change in flows, and one spring showed an increase in flow. However, naturally-occurring seasonal water level changes may be greater than those that might be induced by pumping of the proposed water supply wells, and such natural fluctuations could mask changes that might be induced by pumping. As stated on page 4.C-35 of **Section 4.C**, *Biological Resources*, of the Draft EIR, impacts on wetlands and riparian vegetation that are at least partially dependent on spring flow were determined to be potentially significant. However, a quantitative assessment of impacts is not possible at this time.

For this reason, a precise approach to assessing impacts was developed and is described in the Riparian and Wetland Monitoring and Adaptive Management Program required by mitigation measure BIO-4 in the Draft EIR. Through implementation of this mitigation measure, the effects of groundwater withdrawal on wetland and riparian vegetation, if any, will be monitored, quantitatively assessed, and mitigated. Mitigation measure BIO-4 is provided on pages 4.C-44 through 4.C-47 of **Section 4.C**, *Biological Resources*, of the Draft EIR. This measure has also been updated as part of this Final EIR to clarify that it will be implemented for two periods of six years following each phase of project buildout, for a total of at least 12 years in duration; to add pumping restrictions in the event that riparian or wetland vegetation impacts are observed; and to clarify that, in that event, the County will ultimately determine appropriate mitigation in consultation with the applicant. See **Section 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR, for the updated text of mitigation measure BIO-4.

OWENS LAKE MASTER PLAN AS A CUMULATIVE IMPACT

The Los Angeles Department of Water and Power (LADWP) does not currently pump groundwater for use as part of the Owens Lake Dust Mitigation Project. LADWP has been exploring the feasibility of pumping groundwater for future dust mitigation and water conservation as part of its Owens Lake Master Plan (OLMP) and is considering a range of pumping rates and possible well locations. However, the specific

pumping rate and well locations have not been definitively selected. A Planning Committee Review Draft of the OLMP was released in December 2011, but the goals and policies of the draft are subject to future modifications and it is not clear if specific pumping rates and well locations will be included in the Master Plan.

Therefore, at this time, the OLMP is not considered a reasonably foreseeable project as defined under California Code of Regulations §15130 and the assessment of potential cumulative impacts associated with the OLMP would be cursory and speculative in nature. CEQA does not require that a cumulative impacts analysis consider projects for which no substantive information is available in the public record. (City of Maywood vs. Los Angeles Unified School District, July 18, 2012). Assessment of potential cumulative impacts is not required when future development is "unspecified or uncertain" as "no purpose can be served by requiring an EIR to engage in sheer speculation as to future environmental consequences." (Environmental Protection Information Center v. California Department of Forestry and Fire Protection (2008))³

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³ 44 Cal.4th 459, 503.

2.A TOPICAL RESPONSES TO PUBLIC COMMENTS TOPICAL RESPONSE NO. 2: HYDROGEOLOGY

Public comments on the Draft EIR were received regarding the impact of pumping of the proposed production and domestic water supply wells on Cabin Bar Ranch on other nearby off-site commercial, residential, domestic water supply and municipal wells and on-site springs. This topical response is intended to address these comments.

1. Project Site Hydrogeologic Conditions

The hydrogeology of the project area, within the proposed footprint of the Crystal Geyser water bottling facility and east of the northwest-southeast trending Spring Line fault that traverses Cabin Bar Ranch, is characterized by the presence of a local, shallow aquifer system consisting of intercalated (i.e., interfingering) deposits of fine-grained sand and gravel extending to a depth of approximately 80 feet below ground surface (bgs). Beneath the shallow aquifer is a silty clay and clayey silt aquitard of low permeability ranging from 80 to 100 feet bgs; this aquitard separates the local shallow aquifer system from deeper aquifers. These deeper aquifers also consist of intercalated deposits of fine-grained sand to gravel layers, and groundwater within the deeper aquifers may be in hydraulic communication with the overlying shallow aquifer system.

Calculation of the groundwater flow directions and gradients for late 2010, 2011, and January 2012, using static water level elevation data from selected piezometers on Cabin Bar Ranch, shows that groundwater in the shallow aquifer flows in an east-southeast direction towards Owens Lake, with a gradient of 0.0025 to 0.003 feet/feet.

The Spring Line fault may act as a partial barrier to the east-southeastward groundwater flow, as evidenced by a line of springs and a reported scarp at ground surface along at least a portion of the fault alignment. This fault causes eastward-flowing groundwater, at least in the shallow aquifer, to rise upward to ground surface. It is possible that the deeper aquifer systems are similarly affected. East of this fault are the fine-grained lacustrine sediments of the Owens Lake bed.

2. Project Groundwater Withdrawal

The proposed new water bottling facility will obtain its water supply for purposes of production from three existing wells (CGR-8, -9, and -10) on Cabin Bar Ranch, all of which are west of the Spring Line fault and are perforated within (and therefore will withdraw water from) the shallow aquifer. The plant will obtain its domestic water supply from existing well CBR-1, which also withdraws water from the shallow aquifer, and lies northeast of the Spring Line fault. Crystal Geyser proposes to pump a combined total of approximately 360 acre feet per year (AF/yr) of groundwater at full project buildout. Groundwater pumping would be phased to correspond to the construction of four proposed bottling lines, with approximately 180 AF/yr to be pumped for each pair of bottling lines, eventually reaching the full scheduled amount of 360 AF/yr at build-out of all four bottling lines. A peak demand period is anticipated to occur over the three-month summer period each year, and the bulk of production, or approximately 200 AF of the required annual

demand of 360 AF/yr, will be pumped during this summer period. (It should be noted that this 200 AF represents the maximum amount of groundwater to be extracted during the summer pumping period, and the actual amount pumped could be less). The remaining annual volume of groundwater production, 160 AF, will be pumped throughout the rest of the year.

3. Project Impacts on Off-Site Wells

Groundwater modeling of project pumping from on-site wells CGR-8, -9, and -10 and CBR-1, which all draw from the shallow aquifer beneath Cabin Bar Ranch, has indicated that there would be a local impact on static water levels in other on-site wells and springs to the north and south of the proposed water bottling facility. That is, pumping of the three water supply wells may cause a decline in static water levels within the shallow aquifer in the vicinity of those wells and springs.

It is possible that pumping of the three production wells and the domestic water supply well could also have an impact on water levels in off-site residential, domestic, and municipal wells in the community of Cartago, north of Cabin Bar Ranch. As stated in **Section 4.G**, *Hydrogeology and Surface Hydrology*, of the Draft EIR, a theoretical, model-induced water level drawdown value of approximately 0.80 feet was determined for Cartago Mutual Water Company (CMWC) Wells CMW-1 and CMW-2 as the result of the proposed project; these two wells lie approximately 2,850 feet from the nearest production well to be actively pumped by Crystal Geyser under the proposed project (CGR-10). There are other variables that could affect off-site well levels or pumping, including clogged perforations in a well, mechanical failure of pumps, or drawdown impacts induced by other, closer private wells (i.e., mutual water level drawdown interference between two closely-spaced residential wells that masks any possible drawdown induced by the three more distant CGR wells). Nonetheless, it is acknowledged that the precise amount of static groundwater level decline that could reduce production in an off-site well is unknown at this time.

Although impacts on off-site well levels were determined to be less than significant in the Draft EIR because of the low likelihood of project-related groundwater pumping measurably affecting off-site well production, mitigation measure HYDRO-2, on page 4.G-29 in **Section 4.G**, *Hydrogeology & Surface Hydrology*, in the Draft EIR, establishes a program to monitor changes over time in groundwater conditions. Mitigation measure HYDRO-2 has been updated to enhance the requirement that the applicant prepare and submit for Inyo County Water Department approval a comprehensive Groundwater Monitoring, Mitigation, and Reporting Plan, to be prepared by a qualified hydrogeologist approved by the Inyo County Water Department. The Plan requires the applicant to develop a detailed methodology for monitoring groundwater levels prior to and during project operation; to prepare a model for predicting groundwater changes and impacts on off-site wells based on data collected during monitoring; and to define triggers for on-site wells that correspond to potential impacts on off-site wells. The Plan also requires dispute resolution to be conducted by the Inyo County Water Department. See **Section 3.0** of this Final EIR, *Corrections and Additions to the Draft EIR*, for the complete text of the updated HYDRO-2 mitigation measure.

With respect to impacts on groundwater quality, the pumping of production wells CGR-8, -9, and -10 and domestic water supply well CBR-1 is not expected to significantly change the southeastward/eastward groundwater flow directions and gradients. Because brackish groundwater from Owens Lake would need to flow from east to west (i.e., in an upgradient direction) and because the overall southeastward/eastward flow direction and gradients will likely not be changed, the potential for the intrusion of brackish

groundwater from beneath Owens Lake is also low. Consequently, adverse effects on local groundwater quality as the result of project implementation are considered slight. Nonetheless, mitigation measure HYDRO-3, as set forth on page 4.G-30 in **Section 4.G**, *Hydrogeology & Surface Hydrology*, in the Draft EIR, requires the monitoring of groundwater quality over time. **Section 3.0** of this Final EIR, *Corrections and Additions to the Draft EIR*, for revisions to the text of HYDRO-3 mitigation measure, in response to comments on the Draft EIR.

4. Project Impacts on On-Site Springs

Modeling of groundwater pumping indicated that reduction of spring flow along the Spring Line fault following full project buildout could range from approximately 17 percent under the average year-round pumping scenario (360 AF/yr at full project buildout) to as much as 39 percent under the short-term high-production pumping scenario (200 AF during the summer months). Since modeling demonstrated that groundwater pumping could reduce static water levels in the shallow aquifer underlying the project area, it was concluded that pumping would also have an effect on spring flows along the Spring Line fault on the Cabin Bar Ranch property, and therefore pumping tests were conducted. Pumping tests of the three production wells and the domestic water supply well were conducted employing the high-production summer pumping rate, and springs along the Spring Line fault were variably affected. Some springs showed a reduction in flow (up to 52 percent), others were observed to exhibit no change, and one spring showed an increase in flow. Following high-production pumping during summer months, pumping would be reduced throughout the rest of the year in order to satisfy the remaining annual demand of 160 AF. The aquifer is expected to recover from summer pumping through recharge during the winter and spring months and would therefore be at its highest levels during winter and spring.

Project impacts on spring flow were determined based on the results of modeling, but the timing, degree, and magnitude of decrease in spring flows due to natural conditions (rainfall, recharge, etc) in the future is not known. For this reason, as stated on page 4.C-35 in **Section 4.C**, *Biological Resources*, of the Draft EIR, impacts on wetlands and riparian vegetation that are at least partially dependent on spring flow were determined to be potentially significant. A Riparian and Wetland Monitoring and Adaptive Management Program is required by mitigation measure BIO-4 in **Section 4.C**, which requires monitoring of impacts of groundwater pumping on wetland and riparian vegetation associated with the springs. Mitigation measure BIO-4 has been updated in response to public comments on the Draft EIR and for consistency with revisions to mitigation measure HYDRO-2. See **Section 3.0** of this Final EIR, *Corrections and Additions to the Draft EIR*, for the complete text of revised mitigation measure BIO-4.

The purpose of the applicant's project is to harvest and bottle spring water. In order for water produced from groundwater wells to be marketed as spring water, the wells must be drawing from the same aquifer as a spring, and wells must be in hydraulic connection with such a spring. Thus, the location and design of wells CGR-8, CGR-9, and CGR-10 are intended to capture spring flow; it is therefore expected and necessary that operating wells will reduce spring flow. The 52 percent decrease in spring flow was the maximum observed in any spring in any of the three aquifer tests. The individual tests of CGR-8, CGR-9, and CGR-10 resulted in overall declines in spring flow of 19.6 percent, 33.6 percent, and 32.4 percent respectively, and spring flow hydrographs reported by Geosyntec were at, or nearly at, steady-state by the end of each test (Geosyntec, 2011, Appendix I; the findings of this report are summarized in the *Hydrogeologic Evaluation* provided in **Appendix F** of the Draft EIR). This indicates that the spring system had re-equilibrated to sustainable flow rates by the end of each test. Water table elevations adjacent to the collector ditch were unaffected during

the aquifer tests, and off-site springs located south of the applicant's property were negligibly affected by the aquifer tests. Overall, the aquifer tests showed that the production wells measurably affect spring flow; that spring flow quickly equilibrates to operation of the wells; and that significant effects from pumping would be limited to the applicant's property.

2.B RESPONSES TO WRITTEN COMMENTS

LETTER NO. 1

Big Pine Paiute Tribe of the Owens Valley 825 South Main Street Big Pine, CA Virgil Moose, Tribal Chairperson

RESPONSE 1-1

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 1-2

As stated on page 4.D-18 in **Section 4.D**, *Archaeological/Paleontological Resources*, of the Draft EIR, Mitigation Measure ARCH-1a requires the Applicant to "retain a qualified archaeological monitor and Native American monitor who shall be present during construction excavations such as grading, trenching, grubbing, or any other construction excavation activity associated with the proposed project. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (native versus fill soils), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the archaeological monitor." This measure has been updated to reflect the inclusion of a Native American monitor in the decision-making process concerning the need for part-time versus full-time monitoring.

RESPONSE 1-3

Project hydrogeologic impacts are addressed in **Section 4.G**, *Hydrogeology & Surface Water Quality*, of the Draft EIR. As discussed on page 4.G-8, the proposed project is exempt from the groundwater transfer ordinance under Section 18.77.010.B.3, Exemptions, which exempts "a transfer or transport of water in the form of manufactured or processed goods or products, agricultural products, or in bottles or any other portable containers including tanker trucks, provided the total transfer or transport via tanker truck or trucks does not exceed one acre foot during a one-year period." Although the proposed project would extract greater than one-acre foot per year (i.e., 360 afy), because the proposed project would transport the water via bottles, the proposed project is exempt from the ordinance. The limiting language in the Ordinance concerning transfers above one acre feet per year relates only to those transfers involving tanker truck or trucks It should be noted that this exemption is routinely used for operations at the existing bottling facility in Olancha.

RESPONSE 1-4

Please see **Topical Response No. 1**, **Biological Resources**, for a discussion of the Riparian and Wetland Monitoring and Adaptive Management Program required by mitigation measure BIO-4 in **Section 4.C**,

Biological Resources, of the Draft EIR. The mitigation measure has been updated to clarify that it will be implemented for six years following buildout of each project phase, for a total of at least 12 years of monitoring; to add pumping restrictions in the event that riparian or wetland vegetation impacts are observed; and to clarify that, in that event, the County will ultimately determine appropriate mitigation in consultation with the applicant. See **Chapter 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR for the text of this mitigation measure.

The 52 percent decrease in spring flow was the maximum observed in any spring in any of the three aquifer tests. The individual tests of CGR-8, CGR-9, and CGR-10 resulted in overall declines in spring flow of 19.6 percent, 33.6 percent, and 32.4 percent respectively, and spring flow hydrographs reported by Geosyntec were at, or nearly at, steady-state by the end of each test. This indicates that the spring system had reequilibrated to sustainable flow rates by the end of each test (Geosyntec, 2011, Appendix I).

In order to determine the actual impact of pumping of the project's three water supply wells on the on-site springs along the Spring Line fault, additional monitoring of spring flow prior to and during project operation is necessary. This is required by mitigation measure HYDRO-2, which has been updated to enhance the requirement that the applicant prepare a comprehensive, long-term Groundwater Monitoring, Mitigation, and Reporting Plan for approval by Inyo County Water Department prior to the commencement of project operation.

Monitoring of spring flow effects on vegetation is directly addressed in mitigation measure BIO-4, Riparian and Wetland Monitoring and Adaptive Management Program, as set forth in **Section 4.C**, *Biological Resources*, of the Draft EIR. This mitigation measure establishes performance standards for the assessment of riparian and wetland vegetation health; measurement of woody species regeneration; establishment of monitoring stations and a monitoring regime; assessment of monitoring data; development of adaptive management measures, which include a possible reduction in pumping by the applicant or the creation, restoration, or enhancement of on- or off-site habitat; and annual reporting to the County. Mitigation measure BIO-4 has been updated to clarify that it will be implemented for six years following buildout of each project phase, for a total of at least 12 years of monitoring; to add pumping restrictions in the event that riparian or wetland vegetation impacts are observed; and to clarify that, in that event, the County will ultimately determine appropriate mitigation in consultation with the applicant.. See **Section 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR for the updated text of mitigation measure BIO-4.

See also **Topical Response No. 2, Hydrogeology**, in this Final EIR for additional discussion of project-related groundwater withdrawal and associated effects on aquifer levels and on-site springs.

RESPONSE 1-5

A reference to the previous studies of groundwater quality conducted in Cabin Bar Ranch is provided on page 12 of the *Hydrogeologic Evaluation* provided in **Appendix F** of the Draft EIR, under the heading "Previous Site-Specific Water Resource Studies". The particular studies that report modeling results are those performed by James M. Montgomery in 1983 and 1989; Luhdorff and Scalmanini Consulting Engineers in November 1989; and Geosyntec in 2011 and 2012. The testing and modeling results presented in these reports are summarized in the Draft EIR's **Appendix F** *Hydrogeologic Evaluation*.

RESPONSE 1-6

Generally, for drinking water, the California Department of Public Health (DPH) requires public water supply agencies to conduct Title 22 sampling and analysis of groundwater from their water-supply wells on a three-year frequency. However, private bottling plants fall under a different set of regulations that are not applicable to the public water supply sector. As discussed on pages 4.G-5 and 4.G-6 of **Section 4.G**, *Hydrogeology & Surface Hydrology*, water quality is regulated by the California Health and Safety Code, which requires operators of private water sources within the State to obtain a Private Water Source Operator License from the Department of Public Health's Food and Drug Branch. License issuance requires certification of the water source location; area hydrogeology, identification of actual and potential contamination, description of water collection, conveyance, and treatment methods; substantiation that a spring water source meets the definition of that term as contained in the California Health and Safety Code; and proof that water drawn from that source shares the same physical properties as that source.

Moreover, the Food and Drug Branch requires documentation from the local health agency or other approval authority of well logs; a sanitary appraisal report; and the results of analytical tests of water quality following construction of a water bottling facility, to ensure compliance with California water quality standards.

Finally, as stated in mitigation measure HYDRO-3, in accordance with the recommendations contained in the *Hydrogeologic Evaluation* provided in **Appendix F** of the Draft EIR, the applicant is required to conduct water quality monitoring during project operation. As required by mitigation measure HYDRO-3, Crystal Geyser will also be required to collect groundwater samples from the production wells and monitoring wells for analysis of physical constituents, for use in the establishment of a database of long-term trends in water quality. This mitigation measure has been updated; please see **Section 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR for the text of the mitigation measure.

RESPONSE 1-7

Please see **Topical Response No. 1, Biological Resources**, which addresses the topics raised in this comment.

RESPONSE 1-8

The commenter is correct that tribal consultation is required under Senate Bill 18 when certain project actions are proposed, including a General Plan amendment. Consultation with area Native American tribes was undertaken at the commencement of the environmental review process (i.e., during the Draft EIR Notice of Preparation, or NOP, comment period) as well as when the Draft EIR was released for public review. A discussion of SB18 has been added to page 4.D-5 of the Regulatory Framework discussion in **Section 4.D**, *Archaeological/Paleontological Resources*, of the Draft EIR.

RESPONSE 1-9

The comment is noted and is hereby part of the Final EIR, and will be used by decision-makers for their consideration prior to taking any action on the proposed project. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

LETTER NO. 2

Mary Wuester, Tribal Chairperson, Lone Pine Paiute-Shoshone Reservation 1103 S. Main St. Lone Pine, CA 93545

RESPONSE 2-1

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 2-2

As described in mitigation measure BIO-4 in **Section 4.C**, *Biological Resources*, of the Draft EIR, the project applicant is required to monitor the effects of the project on groundwater-dependent ecosystems. The Riparian and Wetland Monitoring and Adaptive Management Program required by mitigation measure BIO-4 has been updated to clarify that it will be implemented for six years following buildout of each project phase, for a total of at least 12 years of monitoring; to add pumping restrictions in the event that riparian or wetland vegetation impacts are observed; and to clarify that, in that event, the County will ultimately determine appropriate mitigation in consultation with the applicant. It should See **Section 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR for the updated text of this mitigation measure.

RESPONSE 2-3

Please see **Topical Response No.1**, **Biological Resources**, and **Topical Response No. 2**, **Hydrogeology**, in this Final EIR. A Riparian and Wetland Monitoring and Adaptive Management Program is required by mitigation measure BIO-4 in **Section 4.C**. Mitigation measure BIO-4 has been updated to clarify that it will be implemented for six years following buildout of each project phase, for a total of at least 12 years of monitoring; to add pumping restrictions in the event that riparian or wetland vegetation impacts are observed; and to clarify that, in that event, the County will ultimately determine appropriate mitigation in consultation with the applicant. See **Section 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR, for the updated text of mitigation measures BIO-4 and HYDRO-2.

RESPONSE 2-4

The commenter notes that Cabin Bar Ranch is considered a sacred site, due in part to the presence of one or more springs. The ranch contains numerous springs, most of them concentrated along the Spring Line fault, which traverses a portion of the project site. PCR, the environmental consultant assisting the County with preparation of the EIR for the Cabin Bar Ranch Water Bottling Facility Project, sent project notification letters on July 11, 2011 to 10 Native American tribal organizations to solicit their comments on the proposed project and information regarding known archaeological or Native American resources within the project site and vicinity. PCR also conducted archaeological test excavations at the project site that were monitored by Ms. Katherine Bancroft of the Lone Pine Paiute-Shoshone Reservation. The Lone Pine Paiute-Shoshone Tribe has not previously brought the importance to the tribe of the on-site springs to the County's attention.

The proposed project would not result in the direct removal of any existing on-site springs, and the statement that the project would "destroy the surrounding environment" does not cite specific environmental impacts, other than to allude to the proposed construction and operation of the water bottling facility elsewhere on the 420-acre ranch. Groundwater withdrawal for production purposes is projected to reduce spring flows in some locations on the ranch; for this reason, mitigation measure BIO-4 in **Section 4.C**, *Biological Resources*, requires ongoing monitoring and implementation of a program of adaptive management following the two phases of project construction to ensure significant impacts on spring flows and surrounding vegetation are mitigated.

The comment concerning on-site springs is noted and no further response is required, as the comment does not provide sufficient information to allow for a more detailed response.

RESPONSE 2-5

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

LETTER NO. 3

State of California
Business, Transportation & Housing Agency
Department of Transportation, District 9
Gayle J. Rosander, IGR/CEQA Coordinator
500 South Main Street
Bishop, CA 93514

RESPONSE 3-1

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 3-2

The comment is noted, and the Executive Summary Table will be updated. See **Section 3.0**, *Corrections and Additions to the Draft EIR*, for the text of the updated table.

RESPONSE 3-3

The comment is noted. To better ensure safety, a mitigation measure has been added to **Section 4.I**, *Transportation*, of the Draft EIR, requiring the new driveway to be constructed at the onset of Phase I. See **Section 3.0**, *Corrections and Additions to the Draft EIR*, for the updated mitigation measure.

RESPONSE 3-4

As discussed on page 15 in the **Appendix H**, *Traffic Impact Analysis*, in the Draft EIR, at the time the traffic analysis was conducted and the report prepared for the proposed project, Caltrans was still considering two options in the Cartago area: one that would convert existing US 395 to a frontage road, and another that would use the existing US 395 lanes as the northbound lanes. Both options were therefore evaluated in the traffic study. The latter option provides the same intersection configuration as the current version of the Caltrans project (a divided 4-lane highway with a median crossover). Therefore, it is not necessary to update the Level of Service (LOS) analysis for the future cumulative peak hours at the US 395 intersection, because the results would be identical to the analysis provided in the traffic study (which indicates an acceptable LOS C).

The updated version of the 4-Lane Project, which occurred subsequent to completion of the project *Traffic Impact Analysis*, includes a new 4-legged intersection of the site driveway and the frontage road. This intersection was recently analyzed by project traffic engineer LSC, and the results indicate an acceptable LOS B[SH1] during the future 2031 AM and PM peak hours. The two new LOS outputs are provided in **Appendix C** of this Final EIR. No operational deficiencies are identified under the updated version of the 4-Lane Project.

As requested, driver sight distance was evaluated assuming a speed of 65 miles per hour. At this speed, 715 feet is needed for corner sight distance and 660 feet for stopping sight distance. At the proposed driveway, with the existing configuration of the highway, this amount of sight distance is provided. With implementation of the current version of the Olancha/Cartago 4-Lane Project, sufficient driver sight distance

will be provided at the frontage road connection to the new expressway at a median crossover. No driver sight distance deficiencies are identified.

RESPONSE 3-5

The comment is noted. The existing driveway is no longer planned to be used for utility access. If the Fire Department requests that the road remain for emergency access in the future, then the applicant would obtain an encroachment permit from Caltrans for that purpose. See **Section 3.0**, *Corrections and Additions to the Draft EIR*, for updated Project Description text to reflect this.

RESPONSE 3-6

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 3-7

This comment refers to an attachment provided with Caltrans's comment letter on the Draft EIR, showing the current configuration of the Olancha/Cartago 4-Lane project. Please see the response to Comment 3-4, which addresses project traffic impacts in light of this configuration.

LETTER NO. 4

California State Lands Commission
Division of Environmental Planning and Management
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202
Cy R. Oggins, Chief

RESPONSE 4-1

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 4-2

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 4-3

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 4-4

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 4-5

Refer to **Topical Response 2**, **Biological Resources**, in this Final EIR for discussion of this issue.

RESPONSE 4-6

As discussed on page 4.B.2-11 in **Section 4.B.2**, *Global Climate Change*, of the Draft EIR, the "*CEQA Guidelines* allow Lead Agencies to determine if a qualitative or quantitative analysis is most appropriate. For projects which are not expected to generate a substantial amount of GHG emissions, the County has determined that a nonnumeric threshold may be appropriate for the proposed project. Therefore, the project will be qualitatively assessed for consistency with GHG emissions reduction strategies in support of AB 32." The CEQA Guidelines do not mandate that greenhouse gas (GHG) emissions be calculated. The CEQA Guidelines Section 15064.4(a)(2) states that a lead agency shall have the discretion to "rely on a qualitative analysis or performance based standards." Since the Lead Agency has determined that the project is not expected to generate substantial GHG emissions, the Lead Agency, using its discretionary authority under CEQA, has qualitatively assessed the project based on consistency with GHG emissions reduction strategies in support

of AB 32. Based on this analysis, the project would be consistent with GHG emissions reduction strategies in support of AB 32 and thus would result in a less than significant impact.

RESPONSE 4-7

The comment is noted. The California State Lands Commission will be included in the Final EIR Notice of Availability.

LETTER NO. 5

State of California Natural Resources Agency Department of Fish and Game, Inland Deserts Region Debra Hawk, Acting Habitat Conservation Supervisor 407 West Line Street Bishop, CA 93514

RESPONSE 5-1

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 5-2

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 5-3

The commentor is correct that project implementation may remove up to 28 percent of the existing trees over 12 inches in diameter on the project site. As described under mitigation measure BIO-2 on page 4.C-43 of **Section 4.C**, *Biological Resources*, of the Draft EIR, mitigation for impacts to the sensitive natural community created by the presence of existing trees states that impacts to habitat will be offset by on- or offsite replacement, restoration, or enhancement at a mitigation-to-impact ratio of no less than 1:1. To clarify, for every acre of red willow thicket to be removed, the replacement, restoration, or enhancement of an equivalent acreage will be required. This is intended to be a more ecologically meaningful approach, since it reflects red willow thicket as a natural community/habitat for plants and wildlife, rather than addressing individual specimens of red willow.

RESPONSE 5-4

See the response to Comment 5-3.

RESPONSE 5-5

The information regarding species of special concern and other sensitive habitats is noted and is consistent with the Draft EIR analysis. Moreover, the mitigation measures for impacts to red willow thicket (**Section 4.C**, *Biological Resources*, of the Draft EIR, page 4.C-43), waters and wetlands (Draft EIR, page 4.C-44), and nesting birds (Draft EIR, page 4.C-47) will mitigate impacts to species of special concern known or assumed to be present through the replacement of habitat to be affected by the project.

With regard to the potential presence of the spotted bat and pallid bat, updated text and mitigation are provided in **Section 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR.

RESPONSE 5-6

The information provided in the comment regarding the Western Bat Working Group is noted.

RESPONSE 5-7

Potential impacts to nesting birds are discussed in **Section 4.C**, *Biological Resources*, of the Draft EIR on page 4.C-36, and are considered to be potentially significant. Mitigation for these impacts is provided in mitigation measure BIO-1b on pages 4.C-39 through -42. With regard to impacts on the loggerhead shrike, least bittern, and Owens Valley vole, the Draft EIR concluded that impacts to these species and their habitats were not potentially significant (Draft EIR, pages 4.C-30 and 4.C-31). Therefore, pursuant to CEQA, mitigation measures for these impacts are not warranted.

As accurately stated in the comment, the Draft EIR does provide for a mitigation-to-impact ratio of no less than 1:1 for impacts to the habitat of six riparian-dwelling bird species of special concern. The disagreement expressed by the comment that a 1:1 ratio, stating that this will not mitigate impacts to a less than significant level, is acknowledged and noted. It should be noted, however, that disagreement among professionals is acceptable under CEQA. Should the California Department of Fish and Game wish to modify this ratio, it has the regulatory power to do so as part of post-CEQA permitting process under Section 1602 of the State Fish and Game Code.

Concerning mitigation for potential impacts to Swainson's hawk, the only area under the control of the applicant is the property it owns. Given this circumstance, the applicant can mitigate its construction activities by ensuring, through a preconstruction survey, that no Swainson's hawks are nesting in the potential impacted area prior to removal of habitat. In response to this comment, mitigation measure BIO-1b has been updated to require a worker education program if an active Swainson's hawk nest is located within one-half mile of the project. In addition, the nesting bird season indicated in mitigation measure BIO-5 on page 4.C-47 of the Draft EIR has been updated to extend from February 15 through October 14. The updated text of these measures is provided in **Section 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR.

RESPONSE 5-8

The information provided in the comment has been incorporated into **Section 4.C**, *Biological Resources*, of the Draft EIR. See **Section 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR, for the corresponding text update.

RESPONSE 5-9

Please refer to **Topical Response No. 1**, **Biological Resources**, which addresses Plant and Animal Surveys.

RESPONSE 5-10

The comment is noted and the Final EIR hereby reflects the opinion of the California Department of Fish and Game that the Owens tui chub, Owens pupfish, and Mohave ground squirrel do not occur on-site based on lack of habitat, lack of historic presence, and known occurrence locations for these species. As a result, the mitigation measures for these species as presented on pages 4.C-40, 4.C-41, and 4.C-42 of the Draft EIR have been deleted. See **Section 3.0**, *Corrections and Additions to the Draft EIR*, for the updated mitigation measures.

RESPONSE 5-11

The permitting needs described in the comment are acknowledged. It should be noted that the applicant has already met with the California Department of Fish and Game to consult on project-related biological resource issues, and will continue to do so.

Great Basin Unified Air Pollution Control District Jan Sudomier 157 Short Street Bishop, CA 93514

RESPONSE 6-1

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 6-2

Project impacts related to hazards and hazardous materials are addressed in **Appendix A**, *Initial Study*, of the Draft EIR. The comment is noted and the list of necessary approvals included in **Section 2.0**, *Project Description*, of the Draft EIR, will be updated to include an Asbestos NESHAP Notification of Demolition and Renovation Form in accordance with District Rule 1002 and 40 CFR 216-A (see **Chapter 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR). Response 6-3

The proposed project would include the installation of a new emergency diesel generator rated at 210 horsepower (hp) to support the fire suppression system. As such, the applicant will need to comply with the applicable portions of Title 17, California Code of Regulations, Section 93115. A brief summary of the rule will be included in the Draft EIR (see **Chapter 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR).

RESPONSE 6-3

The County agrees that GBAPCD Rule 216-A is potentially applicable to the proposed project, and a brief summary of the rule will be included in the Final EIR (see **Chapter 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR). Under Rule 216-A a permit will not be issued to a secondary source if the Air Pollution Control Officer determines operation of the source will cause a violation or contribute to the continued violation of any state or national ambient air quality standard. As discussed in **Section 4.B.1**, *Air Quality*, of the Draft EIR, under Impact AQ-2 (starting on page 4.B.1-15 of the Draft EIR), operational emissions from the proposed project would be relatively low, less than 7 percent of any pollutant-specific mass emissions CEQA threshold, and no exceedances of the air quality standards are expected. The project applicant will submit the required information (and pay the required fees) when applying for their permits, at a later date.

RESPONSE 6-4

The County agrees that GBAPCD Rule 216-A is potentially applicable to the proposed project, and a brief summary of the rule will be included in the Final EIR (see **Chapter 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR). Under Rule 216-A a permit will not be issued to a secondary source if the Air Pollution Control Officer determines operation of the source will cause a violation or contribute to the continued violation of any state or national ambient air quality standard. As discussed in **Section 4.B.1**, *Air Quality*, of the Draft EIR, under Impact AQ-2 (starting on page 4.B.1-15 of the Draft EIR), operational emissions from the proposed project would be relatively low, less than 7 percent of any pollutant-specific mass emissions CEQA

threshold, and no exceedances of the air quality standards are expected. The project applicant will submit the required information (and pay the required fees) when applying for their permits, at a later date.

Lahontan Regional Water Quality Control Board 14440 Civic Drive Victorville, CA

Author: Brianna Bergen, Engineering Geologist

RESPONSE 7-1

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 7-2

Surface water impacts are addressed in **Section 4.G**, *Hydrogeology & Surface Water Quality*, and in **Appendix A**, *Initial Study*, of the Draft EIR. As discussed on page 31 of that Appendix, approximately once every two to three months, the bottling plant's ceramic filtration system would be cleaned with non-toxic cleaning agents. The process wastewater from this cleaning operation would be transferred to a holding tank where the pH would be balanced (i.e., the operational wastewater would undergo elementary neutralization), and then ultimately discharged into the proposed stormwater retention basin. The operation of the proposed stormwater retention basin would require a permit from the Lahontan Regional Water Quality Control Board (LRWQCB). The stormwater basin would also comply with Inyo County standards, and must be approved by the Inyo County Public Works (Building and Safety) Department. (It should be noted that domestic effluent is separately regulated by the Inyo County Department of Environmental Health.)

The list of necessary approvals included in **Section 2.0**, *Project Description*, of the Draft EIR includes permits from the Regional Water Quality Control Board, Lahontan Region (NPDES requirements, SWPPP). Further, as detailed on page 4.G-28 of the Draft EIR, approved BMPs will be will be utilized to effectively control degradation of water quality due to short-term construction activities. Detailed BMPs would be developed and approved by the LRWQCB during the SWPPP approval process. Nonetheless, the comment is noted and the list of necessary approvals included in **Section 2.0**, *Project Description*, of the Draft EIR, will be updated to include the following permit requirements:

- Clean Water Act (CWA) Section 402(p) stormwater permit
- Waste Discharge Requirements (WDRs)
- Report of Waste Discharge (ROWD)

RESPONSE 7-3

Impacts to jurisdictional waters are addressed in **Section 4.C**, *Biological Resources* of the Draft EIR. As discussed in Section 4.C-1.b(6), a jurisdictional delineation was conducted within the project study area by PCR. The jurisdictional delineation determined that the study area supports approximately 6.03 acres of jurisdictional features regulated as "waters of the U.S." by the ACOE and the Lahontan Water Board, of which 5.97 acres are wetlands. Non-federal "isolated" drainage features or wetlands regulated by the Lahontan Regional Water Quality Control Board as "waters of the State" were not observed by PCR within the project study area. The proposed project is anticipated to obtain concurrence regarding the limits of federal

jurisdictional "waters of the U.S." from the US Army Corps of Engineers (ACOE) through submittal of a Preliminary Jurisdictional Determination as part of a subsequent CWA Section 404 Nationwide Permit (NWP) application for impacts to ACOE jurisdictional features. As described in Section 4.C-2.d(3) of the DEIR, the proposed project avoids wetland resources and proposes only minimal adverse impacts to 0.01 acre of non-wetland federal ACOE jurisdictional "waters of the U.S." also regulated by the Lahontan Water Board as "waters of the State." Therefore, the proposed project would require a CWA Section 401 Water Quality Certification prior to issuance of the ACOE Section 404 NWP and is not anticipated to require dredge and fill WDRs as no "isolated" non-federal waters or wetlands are proposed for impact by the proposed Project. Because the issuance of the ACOE Section 404 NWP permit constitutes a federal action, the Section 404 NWP would also trigger the need for a US Fish and Wildlife Service (USFWS) Federal Endangered Species Act (ESA) Permit and a State Historic Preservation Office Section 106 Permit. In addition, the proposed project would be required to comply with the California State ESA, under which, the proposed project would require California Department of Fish and Game Section 2080.1 and 2081(b) Take Permits. Accordingly, the list of necessary approvals included in Section 6.b, List of Necessary Approvals: State of California Agencies, will be updated to include the following:

- Clean Water Act Section 401 Permit
- Clean Water Act Army Corps of Engineers Section 404 Nationwide Permit
- California Department of Fish and Game Section 1602 Streambed Alteration Agreement
- US Fish and Wildlife Service Endangered Species Act (ESA) Permit
- California Department of Fish and Game Section 2080.1 and 2081(b) Take Permits
- State Historic Preservation Office Section 106 Permit

RESPONSE 7-4

Please refer to response to Comment 7-3.

RESPONSE 7-5

Please refer to response to Comment 7-3.

RESPONSE 7-6

Surface water impacts are addressed in **Section 4.G**, Hydrogeology & Surface Water Quality, of the Draft EIR. As discussed on page **4.G-28**, the proposed project would create new impervious surfaces on relatively undeveloped, rural land, and there are currently no existing or planned stormwater drainage systems in Cartago. As a result, a stormwater detention basin has been would be designed to capture wastewater/process water and control stormwater flow patterns across the site, in accordance with LRWQCB standards. Construction and post-construction water quality best-management practices (BMPs) have been designed in compliance with federal and State guidelines including, SWPPP and NPDES requirements. The post-construction hydrology design for the proposed project incorporates efforts to address increased runoff from impervious surfaces and maintain the pre-development hydrograph to the greatest extent feasible. For instance, the stormwater detention basin would be designed so that no increase in stormwater flows is discharged off-site during project operation, as it would be protected by rip-rap or another material designed to eliminate the possibility of erosion at the detention basin outflow.

The construction and post-construction hydrology design will be subjected to review during the Section 401 Water Quality Certification approval process which is anticipated to address any potential affects to beneficial uses including treatment of pollutants, groundwater degradation, hydrologic modification, and/or watershed-level effects to the satisfaction of the Lahontan Water Board. Therefore, no significant impacts to water quality as defined by Section 401 of the CWA or significant impacts to beneficial uses for "waters of the State" as set forth in the Water Quality Control Plan for the Lahontan Region are anticipated by the proposed project.

With respect to wetlands, the proposed project would incorporate full avoidance of wetland "waters of the State" and significant avoidance and minimization of impacts to non-wetland jurisdictional features. Final mitigation for permanent impacts to non-wetland jurisdictional features will be developed and implemented with guidance from the ACOE, Lahontan Regional Water Quality Control Board, and the California Department of Fish and Game. Minimal adverse impacts to jurisdictional "waters of the State" and potential on- and off-site impacts to water quality associated with the proposed Project will be evaluated by the Lahontan Regional Water Quality Control Board during the Section 401 Water Quality Certification approval process.

RESPONSE 7-7

With respect to surface water quality, please see response to comment 7-6 above.

With respect to groundwater quality, see the response to Comment 1-6, which summarizes the Food and Drug Agency's regulatory oversight of water quality by private water source operators and discusses water quality monitoring required of Crystal Geyser per mitigation measures contained in the Draft EIR. The mitigation measures were developed based on recommendations of the project's *Hydrogeologic Evaluation*, contained in **Appendix F** of the Draft EIR.

RESPONSE 7-8

Surface water impacts are addressed in **Section 4.G**, *Hydrogeology & Surface Water Quality*, of the Draft EIR. As discussed on page **4.G-28**, project construction would be subject to the requirements of an LRWQCB-approved SWPPP. Approved BMPs will be will be utilized to effectively control degradation of water quality due to short-term construction activities. As such, construction-related impacts on water quality will be less than significant. With respect to operation, the proposed project would create new impervious surfaces on relatively undeveloped, rural land, and there are currently no existing or planned stormwater drainage systems in Cartago. As a result, a stormwater detention basin would be designed to capture wastewater/process water and control stormwater flow patterns across the site, in accordance with LRWQCB standards. In addition, the stormwater detention basin would be designed so that no increase in stormwater flows is discharged off-site during project operation, as it would be protected by rip-rap or another material designed to eliminate the possibility of erosion at the detention basin outflow. As the stormwater retention basin would be designed to mitigate and treat surface water flows, impacts would be less than significant. As discussed in Response 7-2 above, the list of necessary approvals included in **Section 2.0**, *Project Description*, of the Draft EIR, will be updated to include the following permit requirements:

- Clean Water Act (CWA) Section 402(p) stormwater permit
- Waste Discharge Requirements (WDRs)

Report of Waste Discharge (ROWD)

RESPONSE 7-9

Please see Response 7-8 above.

RESPONSE 7-10

Please see the Response 7-6 above.

RESPONSE 7-11

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

City of Los Angeles Department of Water and Power James G. Yannotta 300 Mandich Street Bishop, CA 93514-3449

RESPONSE 8-1

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 8-2

The discussion of the Los Angeles Department of Water and Power (LADWP) Owen Lake Dust Mitigation Plan in **Section 4.C**, *Biological Resources*, of the Draft EIR has been updated as part of this Final EIR to reflect the approximate number of acres that have been treated to date (40 square miles) and the total area that will be treated upon completion of Phases 8 and 7A (45 square miles), according to LADWP. These updates are provided in **Chapter 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR.

As stated on page 4.B.1-4 in **Section 4.B.1**, *Air Quality*, of the Draft EIR, the "Great Basin Valley Air Basin (GBVAB) is designated as having attained state standards for all pollutants except ozone and particulates PM₁₀ (24-hour) and having attained all federal standards except 24-hour PM₁₀." The analysis of air quality impacts presented in Draft EIR concluded that the "GBUAPCD maintains that all fugitive dust emissions from construction activities represent a potentially significant but mitigable impact" (see page 4.B.1-16 in **Section 4.B.1**, *Air Quality*, of the Draft EIR). Therefore, the Draft EIR includes required mitigation measures to reduce construction-related fugitive dust emissions. As stated on page 4.B.1-18, "mitigation measures are included to ensure project compliance with GBUAPCD Rule 401, which requires that excessive fugitive dust emissions be controlled by regular watering or other dust preventive measures, as specified in the GBUAPCD Rules and Regulations, and GBUAPCD Rule 402, which requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site." The comment recommends that several mitigation measures included in **Section 4.B.1**, *Air Quality*, of the Draft EIR be amended. Responses to these recommended amendments are provided below.

The comment recommends that mitigation measures AQ-1 and AQ-3 specify the frequency of watering. The GBUAPCD Rule 402 (Fugitive Dust) does not require that watering to control fugitive dust emissions be conducted at a specific frequency. However, mitigation measure AQ-4 requires watering at least twice daily. Mitigation measures AQ-1 and AQ-3 have been updated accordingly to require watering at least twice daily. In addition, the mitigation measures have been clarified such that the frequency of watering could be reduced if the site is dampened by natural processes, such as rain. These updates are provided in **Chapter 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR.

The comment recommends that mitigation measure AQ-4 define "excessive amounts of dust" to provide a measureable performance standard. Mitigation measure AQ-4 has been updated to clarify that watering will be sufficient to suppress dust, not just excessive amounts of dust. In addition, the mitigation measure has

been clarified such that the frequency of watering could be reduced if the site is dampened by natural processes, such as rain. These updates are provided in **Chapter 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR.

The comment recommends that mitigation measure AO-5 not be limited to when dust is visibly generated beyond the site boundaries and should be applicable during periods of high winds or during Stage 1 or Stage 2 smog episodes regardless of whether or not visible dust is generated beyond the site boundaries. However, as discussed on pages 4.B.1-15 and 4.B.1-16 in Section 4.B.1, Air Quality, of the Draft EIR, construction exhaust emissions were determined to be less than significant and construction fugitive dust emissions were determined to be potentially significant but mitigable. Therefore, air quality mitigation measures are required for fugitive dust and not exhaust emissions. The GBUAPCD Rule 402 (Fugitive Dust) recommends "reasonable precautions to prevent visible particulate matter from being airborne, under normal wind conditions, beyond the property from which the emission originates." Because potentially significant impacts were identified for construction-related fugitive dust and not exhaust, and because the GBUAPCD recommends reasonable precautions for fugitive dust beyond the property line, mitigation measure AQ-5 applies to clearing, grading, earth moving or excavation activities if it would generate visible dust beyond the property line. Furthermore, mitigation measure AQ-5 is more stringent than GBUAPCD Rule 402 because it applies to periods of high winds (i.e., greater than 25 mph averaged over one hour) or during Stage 1 or Stage 2 smog episodes. Based on the above, no amendments to mitigation measure AQ-5 are required.

The comment recommends that mitigation measure AQ-6 require all material transported off-site be securely covered to prevent dust. Mitigation measure AQ-6 states: "All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust." The GBUAPCD Rule 402 (Fugitive Dust) does not require that all material transported off-site be securely covered. The GBUAPCD Rule 402 broadly recommends as a reasonable precaution the use of water or chemicals for controlling fugitive dust including the handling of dusty materials to mobile equipment. Based on the above, no amendments to mitigation measure AQ-6 are required.

RESPONSE 8-3

The comment recommends that the project apply non-toxic soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for ten days or more). The GBUAPCD Rule 402 (Fugitive Dust) does not require that non-toxic soil stabilizers be applied to all inactive construction areas. Therefore, this measure is not required to mitigate construction-related fugitive dust impacts to less than significant.

The comment recommends that the project use electricity from power supply sources rather than temporary gasoline or diesel generators, as feasible. However, as discussed on page 4.B.1-15 in **Section 4.B.1**, *Air Quality*, of the Draft EIR, construction exhaust emissions were determined to be less than significant. Therefore, air quality mitigation measures are not required for construction-related exhaust emissions.

The comment recommends that the project prohibit heavy duty truck from idling in excess of five minutes, both on and off site, except under certain conditions. However, as discussed on page 4.B.1-15 in **Section 4.B.1**, *Air Quality*, of the Draft EIR, construction exhaust emissions were determined to be less than

significant. Therefore, air quality mitigation measures are not required for construction-related exhaust emissions.

The comment recommends that the project require the use of internal combustion engines/construction equipment certified to the U.S. Environmental Protection Agency (USEPA)-Certified Tier 3 emission standards or higher according to the conditions stated in the comment. As discussed on page 4.B.1-15 in **Section 4.B.1**, *Air Quality*, of the Draft EIR, construction exhaust emissions were determined to be less than significant. Therefore, air quality mitigation measures are not required for construction-related exhaust emissions.

The comment recommends that the project sweep streets at the end of the day if visible soil is carried onto adjacent public paved roads. The GBUAPCD Rule 402 (Fugitive Dust) does not require that streets be swept at the end of the day if visible soil is carried onto adjacent public paved roads. Therefore, this measure is not required to mitigate construction-related fugitive dust impacts to less than significant.

The comment recommends that the project install fencing to prevent dust from blowing onto the adjacent habitat areas. The GBUAPCD Rule 402 (Fugitive Dust) does not require that fencing be installed to prevent dust from blowing onto the adjacent habitat areas. Therefore, this measure is not required to mitigate construction-related fugitive dust impacts to less than significant.

RESPONSE 8-4

Please see **Topical Response No. 1, Biological Resources**, which addresses Plant and Animal Surveys. Field investigations conducted on September 29, 2011, February 8, 2012, May 29, 2012, and October 10, 2012 verified that site conditions had not changed markedly since surveys were completed in 1987, 1988, and 1989. Accordingly, the information used in the Draft EIR assessment does comply with CEQA.

RESPONSE 8-5

It is the opinion of the California Department of Fish and Game that potential habitat for listed native fish does not occur in the project area (see the response to Comment 5-10). Regarding the endangered fish rearing pond that was originally proposed in Attachment A, Project Description, to the Initial Study, provided in **Appendix A** of the Draft EIR, the applicant and California Department of Fish and Game are in discussions on the matter; however, no agreement has been reached to date. Therefore, it is not a component of the proposed project at the time of this writing.

RESPONSE 8-6

With respect to the tree mitigation and monitoring plan, it is not a requirement of CEQA to go into this level of detail in order to avoid deferral. In **Section 4.C**, *Biological Resources*, of the Draft EIR, on page 4.C-43, mitigation measure BIO-2 describes the detailed plan to be prepared as focusing on the creation of equivalent habitats within disturbed habitat areas of the project area and/or off-site areas having suitable soils and hydrology. The description goes on to state the subject areas to be addressed in detail and clearly states that a mitigation-to-impact ratio of 1:1 is required. With regard to wildlife species utilizing the trees to be removed, mitigation measure BIO-1b on page 4.C-39 and BIO-5 on page 4.C-47 of the Draft EIR require surveys to be conducted prior to ground disturbance and tree removal and describe the mitigation to be required in the event active bird nests or bat roosts are present in the project area. The potential presence of

other sensitive wildlife species on the project site has been ruled out based on surveys conducted in May 2012 and October 2012 and comments provided on the Draft EIR by regulatory agencies.

RESPONSE 8-7

As stated by mitigation measure BIO-4 in **Section 4.C**, *Biological Resources*, in the DEIR, determining the amounts of supporting water to riparian and wetland vegetation associated with groundwater table and spring flow sources would require several years of data collection and interpretation. Analysis of that data to accurately predict the affects to riparian/wetland habitat that could be affected by the proposed groundwater pumping would be difficult to accurately interpret based on seasonal variations and other factors such as local geology, sub-surface hydrology, and the extent of biological responses to changes in environmental conditions.

The proposed Riparian and Wetland Monitoring and Adaptive Management Program summarized in mitigation measure BIO-4 will require pre-operational monitoring of riparian and wetland vegetation in proximity to the project production wells, followed by two six-year monitoring programs, to be implemented following each phase of project buildout. At the end of each of the two six-year monitoring programs, mitigation will be implemented as needed to compensate for adverse effects to riparian and wetland habitat, if any, pursuant to the requirements of the subsequent regulatory and incidental take permits from the ACOE, RWQCB, CDFG, and USFWS.

RESPONSE 8-8

No data are or were available for groundwater conditions within the Owens Lake bed on the eastern side of the Spring Line fault, and event evaluation of that information is not within the scope of this Draft EIR. It is assumed that by "emissivity" that the commenter is referring to fugitive dust from the surface of the lakebed. Project operation would not increase fugitive dust from the Owens Lakebed, since the volume of groundwater to be pumped for production purposes is from the shallow aquifer and confined to the area west of the Spring Line fault, which acts as a partial barrier to groundwater flow and is west of and off the Owens Lakebed. The shallow aquifer would be seasonally replenished by direct rainfall and runoff emanating from the west, originating in the Sierra Nevada. Due to the nature of groundwater underflow and hydrogeological conditions of the project site, groundwater withdrawal for the proposed project is not expected to draw groundwater from beneath the Owens Lake bed, and therefore the dust generated by, and emissivity of, the lakebed will remain unchanged.

RESPONSE 8-9

The comment is noted and is hereby part of the Final EIR, and will be used by decision-makers for their consideration prior to taking any action on the proposed project. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

California Native Plant Society Bristlecone Chapter Stephen P. McLaughlin P.O. Box 364 Bishop, CA 93515

RESPONSE 9-1

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 9-2

With reference to the comments regarding plant and animal surveys, please see **Topical Response No. 1**, **Biological Resources**, which addresses Plant and Animal Surveys. The Draft EIR discusses sensitive natural communities, wetlands, and special status plant and animal species that have the potential to occur in the project area on pages 4.C-12 through 4.C-24 of **Section 4.C**, *Biological Resources*. Potential impacts to these resources are analyzed on pages 4.C-28 through 4.C-38. Mitigation for potentially significant impacts on these resources is described on pages 4.C-38 through 4.C-47. As discussed in the topical response, based on focused surveys conducted in May 1012 and October 2012, and on comments on the Draft EIR by regulatory agencies, the presence of certain sensitive plant and animal species has been ruled out in some instances, and presence is assumed in other instances. Please see **Section 3.0**, *Corrections and Additions to the Draft EIR*, for updated text and mitigation measures originally provide in the Draft EIR.

The list of plants provided in **Appendix C** of the Draft EIR is not intended to be exhaustive, nor is it required by CEQA. Rather, it is intended to provide a representative list of plant species occurring on-site so the reader may adequately understand the composition and structure of plant communities and habitats on site. It should also be noted that the project area encompasses a relatively small portion of the entire Cabin Bar Ranch property surveyed in 1988 and 1989. For additional discussion, see **Topical Response No. 1**, **Biological Resources**, which addresses Plant and Animal Surveys.

As described in mitigation measure BIO-4, within the bullet entitled Monitoring Stations and Monitoring Regime on page 4.C-46 of **Section 4.C**, *Biological Resources*, of the Draft EIR, the Riparian and Wetland Monitoring and Adaptive Management Program will monitor the effects of the project on groundwater-dependent ecosystems at three locations: 1) Cartago Creek upstream from the project area; 2) two locations where natural springs exist; and 3) a location removed from the proposed project area. These locations are intended to allow evaluation of the effects, if any, of the cone of depression.

RESPONSE 9-3

Please see **Topical Response No. 1**, **Biological Resources**, which addresses Plant and Animal Surveys. The Owens Valley checkerbloom was found on-site during the 1988 and 1989 surveys. The locations of populations of this species were mapped as occurring in the southern portion of the Cabin Bar Ranch property and not within the subject project area. Focused surveys were conducted for this species, as well as

for Parish's popcorn flower, in May and October 2012 and no specimens were observed. The findings of the October 2012 survey, which are provided in **Appendix B** of this Final EIR, noted that potential habitat for these species exists in the northwestern portion of Cabin Bar Ranch, but is outside the project impact area and therefore would not be adversely impacted by project implementation.

RESPONSE 9-4

The Draft EIR accurately describes the locations of previously recorded populations of Owens Valley checkerbloom on other areas of the Cabin Bar Ranch property. See the response to Comment 9-3 for further discussion of this topic.

RESPONSE 9-5

Focused surveys for this species were conducted on the project site and in the project area in May and October 2012, and no specimens were observed. The species is assumed not to be present on the project site.

RESPONSE 9-6

Please see **Topical Response No. 1, Biological Resources**, which addresses Potential Impacts from Groundwater Extraction. See also the response to Comment 9-2.

RESPONSE 9-7

As described in mitigation measure BIO-4 in **Section 4.C**, *Biological Resources*, of the Draft EIR, the Riparian and Wetland Monitoring and Adaptive Management Program will monitor the effects of the project on groundwater dependent ecosystems at three locations: 1) Cartago Creek upstream from the project area; 2) at two locations where natural springs exist; and 3) at a location removed from the proposed project area. These locations are intended to disclose the effects, if any, of the cone of depression.

Mitigation measure BIO-4 has been updated to clarify that it will be implemented for six years following buildout of each project phase, for a total of at least 12 years of monitoring; to add pumping restrictions in the event that riparian or wetland vegetation impacts are observed; and to clarify that, in that event, the County will ultimately determine appropriate mitigation in consultation with the applicant. See **Section 3.0**, *Corrections and Additions to the Draft EIR*, for the updated mitigation measure.

With respect to the comments concerning mitigation measures contained in **Section 4.G**, *Hydrogeology and Surface Hydrology*, in the Draft EIR, mitigation measure HYDRO-2 has been updated to enhance the requirement that the project applicant prepare a comprehensive Groundwater Monitoring, Mitigation, and Reporting Plan for approval by the Inyo County Water Department prior to the commencement of project operation. See **Section 3.0**, *Corrections and Additions to the Draft EIR*, for the text of the updated mitigation measure.

RESPONSE 9-8

Please see **Topical Response No. 1, Biological Resources**, which addresses the Owens Lake Master Plan.

Project hydrogeologic impacts are addressed in **Section 4.G**, *Hydrogeology & Surface Water Quality*, of the Draft EIR. As stated therein, the proposed project would result in incremental hydrogeological effects that

could be cumulatively considerable. Nonetheless, the Los Angeles Department of Water and Power (LADWP) does not currently pump groundwater for use as part of the Owens Lake Dust Mitigation Project, and the feasibility of using groundwater as part of the Owens Lake Dust Mitigation program has not been determined. See the response to Comment 4-5 for further discussion of this topic.

Taber Consultants, on behalf of Cartago Mutual Water Company 3911 West Capitol Ave West Sacramento Thomas Ballard, Principal, Senior Hydrogeologist

RESPONSE 10-1

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 10-2

The comments from Taber Consultants regarding the "lack of monitoring" of the Cartago Mutual Water Company wells are noted. Please refer to **Topical Response No. 2, Hydrogeology**, in this Final EIR for further discussion. Furthermore, CMWC owns these wells and as a public water-supply agency should already have ongoing water level and water quality monitoring programs in place.

RESPONSE 10-3

The commenter states of the *Hydrologic Evaluation* provided in **Appendix F** of the Draft EIR that, "Based on geologic cross sections, the aquitard discussed in the report may not be as laterally extensive as assumed in the report." The commenter subsequently notes that the aquitard encountered in drilling for well CRW-2 is only five feet thick, and therefore in unlikely to be the "substantial aquitard" referred to in the *Hydrologic Evaluation*, and that this demonstrates the lateral variability in lithologies that would be expected in alluvial sediments. The commenter seeks to make the point that the aquitard is variable in lateral extent and thickness, and therefore should not be assumed to serve as an absolute barrier between the shallow and deep aquifer systems.

It is acknowledged in the *Hydrogeologic Evaluation* and in **Section 4.G**, *Hydrogeology and Surface Hydrology*, of the Draft EIR that by their very nature, sands and clay beds within alluvial sediments tend to be intercalated and of variable thickness and lithology and this was taken into consideration in the analysis of hydrogeologic conditions. As a consequence, it was not assumed or inferred in the *Hydrologic Evaluation* that the aquitard is laterally extensive. Indeed, on page 54 of the *Hydrologic Evaluation* (under the heading "Preliminary Conclusions"), it is stated that this aquitard is assumed to be local and extend westward to at least PW-1; there is no statement in the technical report as to its continuation north of the study area. Further, this aquitard may also be the lower portion of the shallow aquifer system defined by James M. Montgomery (JMM) and, as such, is likely hydraulically connected with those sediments below the shallow aquifer system; leakage from the deeper sediments to the shallow aquifer system could also be occurring. Such statements provided on page 54 indicate the opposite of what the commenter suggests.

This commenter also notes the leaky nature of the aquifers and suggests that leakage flux should be taken into account. Subsequently, the author notes that no data have been provided on leakage between the aquifers; the Draft EIR acknowledges this and states that the shallow and deep aquifer zones are not expected to be hydrologically isolated from each other.

There are no available data on the leakage between the aquifer systems, because this condition has not been previously studied. However, such data are not needed. Rather, monitoring the impact on nearby groundwater monitoring wells, as is required in mitigation measure HYDRO-2, which has been updated to enhance the requirement that the project applicant prepare a comprehensive Groundwater Monitoring, Mitigation, and Reporting Plan for approval by the Inyo County Water Department prior to the commencement of project operation. See **Section 3.0**, *Corrections & Additions to the Draft EIR*, in this Final EIR for the text of the mitigation measure. For additional detail regarding monitoring of and mitigation for project-related impacts on static groundwater levels and on-site wells, refer to **Topical Response No. 2**, **Hydrogeology**, in this Final EIR.

RESPONSE 10-4

The commenter notes that, "pumping from existing Crystal Geyser wells has been known to substantially affect flow from the springs, as documented in the pumping tests conducted at the site and personal communications..." Based on evidence from the Geosyntec 2010 pumping tests of other wells and personal communications, as summarized in the *Hydrogeologic Evaluation* provided in **Appendix F** of the Draft EIR, this statement is not supported. The pumping tests performed by Geosyntec in 2010 are only applicable to the pumping from the tested wells and cannot be used as evidence of the effect of the pumping of other wells on the springs, for which there is no direct evidence. Further, the "personal communications" cited as evidence for the commenter's claims are not documented in the comment.

RESPONSE 10-5

The commenter notes the need to obtain data over time from piezometers and monitoring wells and using these data to calibrate groundwater flow models to verify predicted drawdowns. This is acknowledged in the *Hydrogeologic Evaluation* provided in **Appendix F** of the Draft EIR and in **Section 4.G**, *Hydrogeology & Surface Hydrology*. As stated in mitigation measure HYDRO-2, the updated text of which is provided in **Section 3.0**, *Corrections & Additions to the Draft EIR*, the project applicant will be required to conduct monitoring of static groundwater water levels on a long-term basis, prior to and during project operation, and implement specific required actions in response to any impacts on off-site wells. Please refer to **Topical Response No. 2**, **Hydrogeology**, in this Final EIR for further discussion of this issue.

RESPONSE 10-6

The commenter states that, "there are indications we may be moving back into a dry or drought period – a situation that does not appear to have been anticipated by the hydrogeological evaluation."

This is highly speculative and unsupported by citations, other than the general belief that "global warming" (now climate change) might be occurring, there is no acknowledged trend of drought in this region. In contrast, the current "wet" hydrologic period (from rainfall data) may continue into the future for several more years (see Figure 9B of the RCS Hydrogeologic Evaluation, which shows a general upward trend in precipitation starting in 1960; this is still trending upward as of 2011). Regardless, any prediction of long-term dry or drought periods, other than those that can be seasonally predicted, remains speculative.

RESPONSE 10-7

The commenter notes that not enough detailed consideration was given to the water quality and implies that no valid assessment was provided of the extent of potential groundwater transmission across the Spring

Line fault. Further, the author notes that this fault has been assumed in the report to be a barrier to groundwater flow.

At the present time, no evaluation of the water quality can be performed because of the paucity of such data for any of the wells (or springs) on the property. Further, there are no available water quality data for groundwater on the east side of the Spring Line fault. Thus, monitoring of the water quality data is required by mitigation measure HYDRO-3 as set forth in **Section 4.G**, *Hydrogeology and Surface Hydrology*, and that groundwater should be sampled and analyzed for typical water quality constituents from the pumping wells and key groundwater monitoring wells (to be determined by others) on a regular basis (at least every three years). This is necessary to build a database where key water quality parameters can be evaluated and checked for possible changes in concentration trends.

With regard to the Spring Line fault, contrary to what the author asserts, the report makes no assumptions or implications that the fault is a barrier. Rather, on page 54 of the hydrogeological report, it is stated that the fault is, at least, a partial barrier to groundwater flow to the east, as noted by the existence of springs. It was acknowledged in the report that it is possible, although highly unlikely, that brackish water could be drawn across the fault, and the recommended water quality monitoring is expected to confirm that this will not occur.

RESPONSE 10-8

The commentor requests that data collection from the CMWC wells be performed. However, as noted above in Response 10-2, CMWC should already have a program in place to regularly monitor both water levels and water quality in its 2 wells as a public water-supply agency. These data might be useful in future analysis of the effects of pumping of the CGR wells on the CMWC wells. However, it is notable that the project water wells are perforated in the shallow aquifer system, whereas available construction data for the CMWC wells suggest these 2 wells are perforated in the underlying deeper aquifer system.

RESPONSE 10-9

The recommendations provided by Taber are similar in scope to those provided in the *Hydrogeologic Evaluation* prepared for the project and included in the Draft EIR as Appendix F and incorporated into the Draft EIR as mitigation measures HYDRO-1 and HYDRO-2, with minor exceptions.

With respect to the comment requesting verification of data by an independent third party, page 62 of the project *Hydrogeologic Evaluation* specifically recommends an ongoing process of review, evaluation and interpretation of those data by qualified groundwater professionals, thereby recommending that an independent third party be utilized.

RESPONSE 10-10

With respect to further evaluation of pumping on water quality, any publicly accessible, verifiable data concerning groundwater quality in wells in the region or in groundwater beneath Owens Lake will be considered in the comprehensive Groundwater Monitoring, Mitigation, and Reporting Plan required by mitigation measure HYDRO-2, the updated version of which is provided in **Section 3.0**, *Corrections and Additions to the Draft EIR*. These data should be obtained for future evaluation against onsite water quality data when obtained during the recommended monitoring and reporting program."

With respect to the collection of water quality data from CMWC wells on a routine basis, because CMWC is a public water system, Title 22 water quality constituents are required to be collected and analyzed every three years. Thus, historic water quality data for CMWC wells should be currently available.

RESPONSE 10-11

With respect to well interference analysis using dry season/low recharge hydrologic conditions, this type of analysis has already been performed, when Geosyntec performed aquifer testing in September and November of 2010. During these months water levels are typically at their seasonal low periods.

Finally, with respect to provisions for backup water supply for CMWC in case pumping by Crystal Geyser does create well interference to the degree it affects CMWC's ability to meet customer water needs: as was shown by RCS, such a scenario is very unlikely because drawdown in CMW-1 and CMW-2 wells was predicted to be minimal (0.80 feet maximum after 360 days of continuous pumping each well at their maximum production rates). Thus, this measure is not necessary. Further, as previously noted, the project wells are perforated in the shallow aquifer zone, whereas the CMWC wells appear to be perforated in the underlying, deeper aquifer system.

Nonetheless, a comprehensive Groundwater Monitoring, Mitigation, and Reporting Plan is required by mitigation measure HYDRO-2, which has been updated and is provided in **Section 3.0**, *Corrections & Additions to the Draft EIR*, in this Final EIR. As stated therein, the project applicant will be required to conduct monitoring of static groundwater water levels on a long-term basis, prior to and during project operation, and implement specific required actions in response to any impacts on off-site wells. Please refer to **Topical Response No. 2**, **Hydrogeology**, in this Final EIR for further discussion of this issue.

Jeffrey Bohl

Citizens for Common Sense and Fiscal Responsibility for Southern Inyo County

RESPONSE 11-1

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 11-2

In accordance with California Code of Regulations §15097, all mitigation measures identified in the Draft EIR in conjunction with approving the proposed project would be required to be implemented through a Mitigation Monitoring and Reporting Plan, as carried out under the authority of the Lead Agency.

RESPONSE 11-3

Avoidance is the preferred means by which to avoid potentially significant impacts, followed by minimization and then compensation. Total avoidance of trees was not a practicable approach in the design of the project. However, in order to reduce impacts to trees, the applicant has modified the alignment of the access road to avoid the removal of a number of red willow trees, as depicted in the updated **Figure II-4** provided in **Section 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR. Therefore, the number of trees to be removed by the project has been reduced. Rather than using a tree replacement ratio and because nearly all of the trees to be removed are considered to represent a sensitive natural community (red willow thicket), the project uses a habitat-based approach to mitigation. As described under Mitigation Measure BIO-2 on page 4.C-43 of the Draft EIR, mitigation for impacts to this sensitive natural community shall be offset by on- or off-site replacement, restoration, or enhancement at a mitigation-to-impact ratio of no less than 1:1. To clarify, for every acre of red willow thicket to be removed, the replacement, restoration, or enhancement of an equivalent acreage will be required. This is a more ecologically meaningful approach since it reflects red willow thicket as a natural community/habitat for plants and wildlife.

RESPONSE 11-4

Project land use impacts, including those related to zoning, are addressed in **Section 4.F**, *Land Use and Planning*, of the Draft EIR. The current zoning of surrounding parcels is discussed on page 4.F-7. As discussed therein, with the exception of several parcels adjacent to US 395 that are zoned C-2 (Highway Services and Tourist Commercial), the majority of Cartago is zoned RMH (Single Residence and Mobile Home Combined District), which is intended to protect established neighborhoods of one-family dwellings (including mobile homes) and to provide space in suitable locations for additional development of this kind, with appropriate community facilities.

The proposed project's indirect impacts on surrounding parcels are discussed throughout the Draft EIR. Indirect impacts would primarily occur to residents of Cartago north of the project site, as properties to the west, east, and south are undeveloped. Conflicts of land use between residential and non-residential uses are generally caused by higher land use density and activity associated with non-residential uses that can

conflict with the visual character of nearby residential uses, result in odors or other air quality conflicts, or disrupt the use or quiet of a residential land use.

As summarized in **Table 4.F-1**, *Comparison of the Project to Applicable Policies of the Inyo County General Plan*, **Section 4.A**, *Aesthetics*, of the Draft EIR concludes that the proposed project would result in a less than significant impact with respect to visual character, scale and massing, and light and glare. For instance, the project would retain the existing vegetation along the northern side of the project site and along US 395. This vegetation would visually screen the bottling facility from the residences of Cartago. With respect to air quality, **Section 4.B.1**, *Air Quality*, of this Draft EIR, concludes that the proposed project would result in a less than significant impact with respect to odors and air quality standards. Similarly, as discussed in **Section 4.H**, *Noise*, of the Draft EIR, operational noise impacts would be less than significant on nearby receptors. While construction noise levels would exceed the levels established in Table 9-9 of the Inyo County General Plan at the nearest off-site residential uses, the implementation of the required mitigation measures would reduce impacts to a less than significant level. As summarized in **Table 4.F-1**, the proposed project would locate noise-generating uses away from residential uses in Cartago by: (a) relocating the access road approximately 2,500 feet south of its existing location, (b) locating truck operations to the back (east) side of the proposed building, and (c) locating exterior noise-generating machinery on the south side of the bottling plant.

With respect to zoning, the Inyo County Code establishes height and setback standards in the light industrial (M-2) to respect adjacent non-industrial uses. For instance, Inyo County Code Section 18.56.050 (Development Standards) limits principal buildings to a height of three stories or 25 feet, and requires a 5 foot setback for each story of development if adjacent to an R district. In this way, the proposed project greatly exceeds this requirement because the bottling facility would be set back approximately 150 feet from the property's northern boundary.

RESPONSE 11-5

Project traffic impacts are addressed in **Section 4.I**, *Transportation*, of the Draft EIR. As discussed on page 4.I-6, the traffic distribution pattern was based on detailed information provided by the distribution manager at the existing bottling facility in Olancha (approximately 0.75 mile south of the project site) and then applied to the size of the proposed project in relationship to that facility. It was determined that approximately 99 percent of truck trips would be made to/from the south, while 60 percent of service vehicles and visitors would be made to/from the south, as the nearest sizable residential area and commercial markets are located to the south.

RESPONSE 11-6

Please see Response 8-8 above. The Long-Term Water Agreement is not applicable to the proposed project.

RESPONSE 11-7

Project land use impacts, including those related to consistency with the General Plan and Zoning Code, are addressed in **Section 4.F**, *Land Use and Planning*, of the Draft EIR. Inyo County Code Chapter 18.81 (Procedures–Enforcement) recognizes that certain uses may be desirable, and properly related to other uses and to transportation and service facilities in the vicinity, and allows the Planning Commission to approve such conditional uses. In the approval of these variances, the Planning Commission must consider whether

or not the use would, under all the circumstances of the particular case, affect adversely the health or safety of persons living or working in the vicinity or be materially detrimental to the public welfare.

As described in **Section 2.0**, *Project Description*, the objectives of the proposed project are to take advantage of the availability and high quality of existing spring water on the property, and to site the new bottling facility in proximity to the existing bottling facility, to realize economic and environmental efficiencies through shared use of raw materials for packaging, transportation of finished products, management, and other inputs required for Crystal Geyser Roxane's operations. Additionally, the proposed project seeks to create new employment opportunities for the local and nearby communities, promote sustainable economic development, provide for adequate services and infrastructure to support the project, and contribute to the County's tax base. The proposed project site was chosen because it fully satisfies these objectives. In this regard, the primary reason for locating the proposed water bottling facility on Cabin Bar Ranch is because of favorable hydrogeologic conditions, and in particular, the presence of the Spring Fault line on the project site, which creates a line of surface springs where runoff from the Sierra Nevada Mountains flows toward Owens Lake as surface flow and within underground aquifers.

Because there are limited sites in the proximity of the existing bottling facility with adequate high-quality springwater, the project site meets the provisions of Inyo County Code Chapter 18.81 because it is "desirable and related to other uses and to transportation facilities in the vicinity." As a result, the proposed project meets the conditions for a general plan amendment and conditional use permit. As discussed throughout the Draft EIR, with the incorporation of mitigation measures, the proposed project would result in less than significant environmental impact. Therefore, the proposed project would not affect adversely the health or safety of persons living or working in the vicinity or be materially detrimental to the public welfare.

RESPONSE 11-8

The comment cites the *CEQA Guidelines* Section 15125(a)-(d). This portion of the comment is acknowledged and will be included in the Final EIR and made available to the decision makers. Specific concerns related to the Draft EIR are provided in the next portion of this comment. Responses to the specific comments related to the Draft EIR are provided below.

The region in which the proposed project is located is designated as non-attainment for the state and federal standards for respirable particulate matter (PM10) and for the state standards for ozone (see page 4.B.1-4 in **Section 4.B.1**, *Air Quality*, of the Draft EIR). As discussed on page 4.B.1-10, Inyo County is not required to develop an ozone implementation plan for attainment because the ozone exceedance is due to transported pollutants from upwind air basins that are not under the jurisdiction of either Inyo County or the GBUAPCD. With respect to PM10, as stated on page 4.B.1-10, the Owens Dry Lake "exposed lakebed is a major source of dust in southern Owens Valley, causing violations of Federal PM10 standards. Since 1998, the GBUAPCD has been working with the City of Los Angeles under a Memorandum of Agreement (MOA) to mitigate dust emissions resulting from Owens Lake. The MOA has been formally included in the GBUAPCD's air quality control plan since 1999 and has resulted in the LADWP's Owens Lake Dust Mitigation Program." Furthermore, the GBUAPCD has prepared the *2008 Owens Valley PM10 Planning Area Demonstration of Attainment State Implementation Plan.* The plan provides control strategies to bring the area into

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⁴ Great Basin Unified Air Pollution Control District, 2008 Owens Valley PM10 Planning Area Demonstration of Attainment State Implementation Plan, (January 2008).

attainment with the federal air quality standard for particulate matter. The control strategies are outlined in Chapter 5, PM10 Control Measures, of the plan and include measures such as shallow flooding, managed vegetation, gravel blanket, and moat and row (an array of earthen berms flanked on either side by slope-sided ditches). The LADWP's Owens Lake Dust Mitigation Program and the 2008 Owens Valley PM10 Plan do not address emissions that would result from the proposed project. Nonetheless, the proposed project would not conflict with or impede the implementation of the control measures specified in the LADWP's Owens Lake Dust Mitigation Program or the 2008 Owens Valley PM10 Plan.

The GBUAPCD also adopts rules and regulations to control emissions from projects and facilities in the region under its jurisdiction. GBUAPCD Rule 401 (Fugitive Dust) requires that mitigation techniques approved by the GBUAPCD be implemented to ensure that fugitive dust is contained while Rule 402 prohibits the discharge from any source, such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property (see page 4.B.1-6 in **Section 4.B.1**, *Air Quality*, of the Draft EIR). Compliance with these rules is provided by implementing recommended control measures. For the purposes of this project, the recommended control measures are incorporated as required mitigation measures as discussed below.

As stated on page 4.B.1-12 in Section 4.B.1, Air Quality, of the Draft EIR, "[t]he GBUAPCD considers short-term construction equipment exhaust emissions to be less than significant. However, since the air basin is within the Owens Valley PM10 Planning Area, fugitive dust emissions from construction must be mitigated." Consistent with GBUAPCD requirements, the analysis of air quality impacts presented in Draft EIR concluded that the "GBUAPCD maintains that all fugitive dust emissions from construction activities represent a potentially significant but mitigable impact" (see page 4.B.1-16 in **Section 4.B.1**, Air Quality, of the Draft EIR). Therefore, the Draft EIR includes required mitigation measures to reduce constructionrelated fugitive dust emissions. As stated on page 4.B.1-18, "mitigation measures are included to ensure project compliance with GBUAPCD Rule 401, which requires that excessive fugitive dust emissions be controlled by regular watering or other dust preventive measures, as specified in the GBUAPCD Rules and Regulations, and GBUAPCD Rule 402, which requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site." The mitigation measures are provided on page 4.B.1-19 and would reduce fugitive dust impacts to a less than significant level. Furthermore, see the response to Comment 8-2 for a discussion on updates to mitigation measures AQ-1, AQ-3, and AQ-4. The updated measures are provided in Chapter 3.0, Corrections and Additions to the Draft EIR, in this Final EIR. Compliance with the mitigation measures will be enforced by the County through the Mitigation Monitoring and Reporting Program (MMRP). Compliance with applicable GBUAPCD rules and regulations are enforced by the GBUAPCD.

Cumulative construction impacts, including cumulative impacts associated with fugitive dust, were assessed on pages 4.B.1-19 and 4.B.1-20 in **Section 4.B.1**, *Air Quality*, of the Draft EIR. As stated, the "GBUAPCD has developed strategies to reduce criteria pollutant emissions pursuant to [Clean Air Act] mandates. Accordingly, the project and the related projects would comply with GBAUPCD Rule 200-A, 200-B, Rules 401 and 402, and implement feasible PM mitigation measures. In addition, the project and related projects would comply with adopted Air Quality Element emissions control measures and as such would not contribute to localized impacts at nearby sensitive receptors. Thus, project construction emissions,

considered together with those of the related projects, would constitute a less than cumulatively considerable contribution to cumulatively significant air quality impacts."

The comment refers to the previous Independence Four Lane project and describes that treatment measures for hazardous waste present in the Community of Independence, which according to the comment included provisions to "monitor PM10 dust hourly, cover the disturbed soil daily after work and water the disturbed soil so the hazardous would not become airborne," were not enforced by the County. As discussed on pages 6-6 and 6-7 in **Section 6.0**, Other Environmental Considerations, of the Draft EIR, "[b] ased on a review of the EnviroStor database, neither the project site nor the overall Cabin Bar Ranch are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5." In addition, "a Phase I Environmental Site Assessment (ESA) was prepared for the proposed project. This Phase I ESA included a records review to identify any reported current and historical environmental conditions (RECs, HRECs, and DMECs) and operating permits involving hazardous materials within an approximate minimum search distance of two miles of the project site. According to the Phase I ESA, there were no mappable or orphan sites within the minimum search distance from the site." The analysis notes that "the Phase I ESA did identify several De Minimus conditions within and adjacent to the project site. These include a former gas station approximately 0.5 mile north of the project site, the proximity of soda facility operations (including the soda ash pile), minor soil staining in the parking and miscellaneous storage areas adjacent to the metal barn, and potentially asbestos-containing materials in the two existing ranch houses and mobile home. However, as noted in their designation, these conditions are minor, do not represent recognized environmental conditions (RECs), and would not represent a hazardous condition with respect to proposed Therefore, hazardous materials would not create a significant hazard to the public or the environment. As previously discussed, compliance with required mitigation measures identified in the Draft EIR will be enforced by the County through the Mitigation Monitoring and Reporting Program (MMRP). Compliance with applicable GBUAPCD rules and regulations, including those related to dust control, are enforced by the GBUAPCD.

RESPONSE 11-9

Project-related hazards and hazardous materials are addressed in **Appendix A**, *Initial Study*, of the Draft EIR. As discussed therein, the project's potential to result in hazard or hazardous materials impacts were determined to be less than significant and no additional study was required. Construction activities would be short-term and one-time in nature, and would involve the limited transport, storage, use, or disposal of hazardous materials. Some examples of hazardous materials handling include fueling and servicing construction equipment on site, and the transport of fuels, lubricating fluids, and solvents. These types of materials, however, are not acutely hazardous, and all storage, handling, and disposal of these materials are regulated by the Department of Toxic Substances Control, the U.S. EPA, the Occupational Safety & Health Administration, and the volunteer Olancha Community Services District.

With respect to lead, hazardous waste sites, or soil contamination, the Initial Study included a review of California Environmental Protection Agency (CalEPA) hazardous materials databases compiled in accordance with Government Code Section 65962.5. A review of the EnviroStor database maintained the Department of Toxic Substances Control (DTSC) concluded that neither the project site nor the overall Cabin Bar Ranch are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. A field investigation of the project site did not reveal the presence of any hazardous materials that would negate these findings. Therefore, project construction would not disturb soils or lead deposits that would result in a significant hazard to the public or the environment.

RESPONSE 11-10

Historic Resources

As discussed in **Section 4.E.** Historical Resources, on pages 4.E-6 through 4.E-22, of the Draft EIR, archival record searches, historic background research, and a pedestrian survey were conducted to identify historical resources within the project site. As a result of these analyses, a combination of historic sites and landscape elements existing within the property boundaries was identified, both within and outside of the project site, including the ca. 1872 Cartago Station House (ruin) (P-14-011515), the ca. 1872 Cartago Boat Landing site (Daneri's Landing) (CHPI-INY-006/P-14-005197), the ca. 1871 squared timber Espitacio Gomez homestead cabin now contained within the walls of the substantially altered Residence 2 (P-14-011514) and the old carriage road associated with Residence 2. In order to determine whether the identified resources qualified as historical resources pursuant to §15064.5 of the CEQA Guidelines, eligibility evaluations of these resources were conducted, only one of which was identified as being within the project site, the Gomez Homestead (Residence 2) and associated carriage road. As discussed in Section 4.E, page 24, both the Cartago Boat Landing (Daneri's Landing) (CHPI-INY-006/P-14-005197) and the Cartago Station House (P-14-011515) are located outside of the impact area and would not be affected by the proposed project. These two resources will be retained in place undisturbed under the proposed project. Therefore, impacts to these resources are not considered a significant impact on the environment and treatment measures outlined in Section 21083.2(b) of the Public Resources Code need not apply. There is no "violation of numerous CEQA guidelines" as suggested in the comment.

As discussed in **Section 4.E**, on pages 17 through 22, the Gomez Homestead (Residence 2) (P-14-011514), is substantially altered and lacks the necessary architectural integrity for eligibility as a historical resource under National Register Criteria A, B or C, or California Register Criteria 1, 2 or 3. However, the existing segment of squared timber wall observed in Residence 2, and the documentary evidence uncovered in the assessor's site records for Residence 2, indicate further physical remains of the Gomez Homestead may be hidden within the walls of Residence 2. Therefore, Residence 2 and the associated adjacent carriage road were found eligible as a historical resource under National Register Criterion D and California Register Criterion 4. Furthermore, based upon the documentary and physical evidence collected during the historical resources investigations, the property has a high probability to yield historic period remains and important information associated with the activities of Espitacio Gomez and the Cerro Gordo Freighting Company from 1871 to the early 1880s.

As discussed in **Section 4.E**, on page 24 through 27, the Gomez Homestead (Residence 2) (P-14-011514) and associated carriage road are located within the impact area and would be demolished under the proposed project, resulting in the loss of important information associated with the significant historic activities of Espitacio Gomez and the Cerro Gordo Freighting Company on the property. Demolition monitoring and data recovery was identified as the only feasible mitigation under the proposed project. In accordance with the CEQA guidelines, comprehensive mitigation measures HIST-1, HIST-2, HIST-3, HIST-4, HIST-5 and HIST-6 were developed in **Section 4.E.**, on pages 25, 26 and 27, to recover, interpret and archive any valuable information or artifacts that may be recovered from the Gomez Homestead (Residence 2) (P-14-011514) during demolition or uncovered during ground disturbing activities on the project site. All documentation components are required to be prepared in accordance with the *Secretary of the Interior's Standards for Historical Documentation* and the completed documentation shall be placed on file at the Historical Resources Regional Information Center, at the Eastern Information Center (CHRIS-EIC) at the University of California, Riverside, as well as the more locally accessible Eastern California Museum and the County of Inyo Public Library. No archaeological sites known to contain human remains were identified on the project site;

however, mitigation measure HIST-5 is included in **Section 4.E** on pages 26 and 27 in the event human remains are encountered unexpectedly during implementation of the proposed project.

Archeological/Paleontological Resources

As discussed on pages 4.D-6 through 4.D-17 in **Section 4.D**, *Archaeological/Paleontological Resources*, of the Draft EIR, various archival record searches, historic background research, and a pedestrian survey were conducted to identify archaeological resources within the project site. As a result of these analyses, four archaeological resources (CBR-S-2, CBR-I-1, -2, -3) were identified within the project site. In order to determine whether the identified resources qualified as an archaeological resource pursuant to §15064.5 of the CEQA Guidelines, an eligibility evaluation was conducted of the four resources identified within the project site, including a subsurface archaeological testing and evaluation program, for the resource CBR-S-2, which was monitored by a member of the Lone Pine Paiute-Shoshone Reservation.

The scattered and random nature of the three isolated archaeological resources (CBR-I-1, -2, and -3) suggests that past and current land-use disturbances transported these items out of context from their original location. The lack of solid provenance data for the isolate resources has diminished their research potential to contribute information important to the study of history or prehistory. In addition, isolate resources are unlikely to retain additional buried components that would provide additional information as to the prehistory of the region (Criterion 4 of the California Register of Historical Resources). Finally, PCR has thoroughly recorded all of the resources on California Department of Parks and Recreation Site Forms for additional research.

Regarding CBR-S-2, lithic scatters (i.e., scatters of chipped stone artifacts resulting from prehistoric stone tool manufacturing activities) are one of the most abundant resource types in California and several are known to exist in the vicinity of the project site as indicated by the cultural resources records search results. The results of PCR's phase II testing and evaluation effort revealed that the resource lacks a buried stratified archaeological deposit which reduces the potential for accurate interpretations of the resource and its potential to contribute information important to the study of history or prehistory (Criterion 4 of the California Register of Historical Resources). In addition, PCR conducted a thorough testing program and formal recordation at the resource that likely recovered the majority of the data potential from the resource. If additional research on the resources is requested, the artifacts and this analysis will be provided to the interested individuals. Finally, PCR has collected all the artifacts from the resources which will limit many of the impacts to the resources from the proposed project.

As result of the evaluation effort, the four archaeological resources (CBR-S-2, CBR-I-1, -2, -3) are recommended as ineligible for listing in the California Register of Historical Resources and therefore do not qualify as historical resources or unique archaeological resources under State CEQA Guidelines Section 15064.5 and Section 21083.2 of the Public Resources Code, respectively. Therefore, impacts to these resources are not considered a significant impact on the environment and treatment measures outlined in Section 21083.2(b) of the Public Resources Code need not apply. There is no "violation of numerous CEQA guidelines" as the commenter suggests.

RESPONSE 11-11

The comment cites the *CEQA Guidelines*, Section 15126.4(c). The comment does not raise a specific issue with the Draft EIR. It is noted that Section 15126.4(c) of the *CEQA Guidelines* refers to mitigation measures

related to greenhouse gas (GHG) emissions. As discussed in **Section 4.B.2**, *Global Climate Change*, of the Draft EIR, impacts related to GHG emissions are less than significant with inclusion of GHG-reducing project features. CEQA Guidelines Section 15126.4(2) states that "[m]itigation measures are not required for effects which are not found to be significant." Therefore, mitigation measures are not required to further reduce GHG emissions.

RESPONSE 11-12

In accordance with California Code of Regulations §15126.6, a complete range of alternatives is evaluated in **Section 5.0**, *Alternatives*, of the Draft EIR, to reduce the project's significant but mitigable impacts. Alternatives considered but rejected include an Expansion of Existing Olancha Crystal Geyser Bottling Plant Alternative and an Alternative Project Location. These alternatives were rejected because they are not feasible for reasons of logistics or economy.

Alternatives analyzed in detail include a No Project Alternative as required by CEQA, a Reduced Operations Alternative, and a Project Site Alternative. This analysis concludes that the Reduced Operations Alternative is the environmentally superior alternative amongst the alternatives analyzed. The Reduced Operations Alternative, however, would only partially meet the project objective related to construction and operation of a spring water bottling facility, since it would reduce the size and capacity of the proposed plant. Additionally, this alternative would only partially achieve the objective related to creating new local employment opportunities, provide for adequate services and infrastructure to serve the project, and contribute to the County's tax base, since the reduced facility size, bottling capacity, and production would create fewer jobs, reduced revenue, and likely reduced infrastructure improvements.

RESPONSE 11-13

The comment is noted and is hereby part of the Final EIR, and will be used by decision-makers for their consideration prior to taking any action on the proposed project. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 11-14

The comment is noted and is hereby part of the Final EIR, and will be used by decision-makers for their consideration prior to taking any action on the proposed project. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 11-15

The comment is noted and is hereby part of the Final EIR, and will be used by decision-makers for their consideration prior to taking any action on the proposed project. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 11-16

The comment is noted and is hereby part of the Final EIR, and will be used by decision-makers for their consideration prior to taking any action on the proposed project. No further response is required because

the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 11-17

The comment is noted and is hereby part of the Final EIR, and will be used by decision-makers for their consideration prior to taking any action on the proposed project. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 11-18

The comment is noted and is hereby part of the Final EIR, and will be used by decision-makers for their consideration prior to taking any action on the proposed project. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 11-19

Project traffic impacts are addressed in **Section 4.I**, *Transportation*, of the Draft EIR. The Caltrans report referred to in this comment is referring to *roadway* level of service which indeed is predicted to be LOS D currently or E in the future. The level of service in the DEIR traffic study is intersection level of service. Therefore they can't be compared directly.

The comment also states, "... this DEIR incorporates a reduction of traffic in the future." Despite the commenter's assertions, as shown on **Table 4.I-2**, *Hourly Trip Generation*, and discussed on page 4.I-11, the DEIR and associated Traffic Impact Study indicate an increase in traffic in the future. For instance, as shown on pages 5 and 14 of **Appendix H**, *Traffic Impact Analysis*, of the Draft EIR, the total two-way PM traffic volume on the highway at a point immediately north of the proposed site access point is estimated to increase from 735 in 2011 to 952 in 2031. Further, the DEIR and Traffic Impact Analysis assume the same annual growth rate in traffic volumes as the Caltrans Initial Study with Proposed MND/EA.

As shown on **Table 4.I-3**, *Intersection Level of Service (LOS) at Access Point*, the level of service was predicted to degrade to LOS D in the future if no upgrades, such as the planned Olancha Cartago 4 lane project, occurred. With those planned improvements, whichever alignment is chosen, the level of service will improve because the intersection of the project driveway and US 395 will be improved.

RESPONSE 11-20

Project traffic impacts are addressed in **Section 4.I**, *Transportation*, of the Draft EIR. The commenter's assertion that "fatalities and injuries from the Traffic Accident in the area are 1 ½ times the statewide average" is a misleading interpretation of available data. According to Table 2-18 in the Caltrans Study, while the fatal accident rate is 1.5 times the statewide average, the injury accident rate and the total accident rate are both lower than the statewide average. Table 1-1 in the Caltrans Study indicates that traffic on the highway was comprised of 21.5 percent trucks in 2008. However, according to Caltrans truck data from 2011, the percentage of trucks on the highway has decreased to approximately 8.7 percent of the total traffic

(based on Caltrans data collected at a point on US 395 between SR 190 and SR 136).⁵ The proposed Crystal Geyser project is estimated to generate a total of 174 one-way truck trips per day (or 87 trucks) at the site access point on a busy day when all phases of the project are complete.⁶ According to Caltrans traffic data from 2011, the Average Annual Daily Traffic (AADT) volume at a point on US 395 between SR 190 and SR 36 is 5,600, including 487 truck trips. Adding the project-generated truck trips (174) could increase the percent trucks on the highway to approximately 11.8 percent.

According to CEQA Guidelines, the project would result in a significant impact if it would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). As discussed on page 4.I-9 of the Draft EIR, the proposed project plans include construction of auxiliary lanes on the highway for vehicles turning into and out of the project site (northbound right-turn acceleration and deceleration lanes, and southbound left-turn acceleration and deceleration lanes). These lanes will allow trucks and other vehicles to accelerate and decelerate off the high-speed through lanes. Considering that the intersection of the site access and the highway will be constructed to meet Caltrans design standards, and trucks are a compatible use on US 395, the project would not significantly impact motorist safety.

RESPONSE 11-21

As discussed in Response 11-7 above, the County has the discretion to implement General Plan amendments, zoning variations, and/or conditional uses should it deem certain uses desirable and properly related to other uses and to transportation and service facilities in the vicinity. The County is not required to adjust adjacent land use and/or zoning designations upon approval of such action for a subject site. Therefore, any other revisions to the General Plan land use designation or underlying zoning of off-site properties is outside the scope of this Draft EIR and further study is not warranted or required under CEQA. The public was provided an opportunity to comment on the General Plan amendment and zoning reclassification requested for the proposed project at numerous times during the preparation of the Draft EIR. As no action is proposed on nearby properties, no additional action is considered. The public will be provided an opportunity to comment on any General Plan revisions during the General Plan update process.

RESPONSE 11-22

The comment is noted and is hereby part of the Final EIR, and will be used by decision-makers for their consideration prior to taking any action on the proposed project. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

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⁵ Truck data taken at a point on US 395 between SR 190 (PM34.674) and SR 136 (PM55.827).

According to the Caltrans Study, about 6,730 vehicles per day (in 2011, the design year) will use US 395 in the project area. About 20 percent of vehicles on 395 are trucks, or about 1,360 trucks. According to Caltrans truck and traffic data from 2011, the Average Annual Daily Traffic (AADT) volume on US 395 within the vicinity of the project site is 5,600, of which about 9 percent is truck traffic (504 truck trips). The percent heavy vehicles on the highway would increase to about 12 percent over 2011 conditions.

Inyo County Planning Commission Hearing Minutes September 26, 2012

RESPONSE 12-1

Please see **Topical Response No. 2, Hydrogeology,** in this Final EIR for discussion of this topic.

RESPONSE 12-2

The comment is noted and is hereby part of the Final EIR, and will be considered by decision-makers prior to taking any action on the proposed project. When considering the proposed driveway, it is important to note that both the existing and proposed driveway alignments are located on the Crystal Geyser property. The alignment of the proposed driveway was chosen to reduce potential impacts to the residents of Cartago. Should the existing driveway be used, existing residents would experience greater aesthetic, air quality, noise, and traffic impacts from trucks operating along the driveway when compared to the proposed driveway alignment.

RESPONSE 12-3

See the response to Comment 12-1 and **Topical Response No. 2, Hydrogeology,** in this Final EIR.

RESPONSE 12-4

The comment is noted and is hereby part of the Final EIR, and will be considered by decision-makers prior to taking any action on the proposed project. When considering the proposed driveway, it is important to note that both the existing and proposed driveway alignments are located on the Crystal Geyser property. The alignment of the proposed driveway was chosen to reduce potential impacts to the residents of Cartago. Should the existing driveway be used, existing residents would experience greater aesthetic, air quality, noise, and traffic impacts from trucks operating along the driveway when compared to the proposed driveway alignment.

RESPONSE 12-5

Please See the **Topical Response No. 3**, **Hydrogeology**, in this Final EIR.

RESPONSE 12-6

As discussed on pages 4.G-5 and 4.G-6 of **Section 4.G**, *Hydrogeology & Surface Hydrology*, water quality is regulated by the California Health and Safety Code, which requires operators of private water sources within the State to obtain a Private Water Source Operator License from the Department of Public Health's Food and Drug Branch. License issuance requires certification of the water source location; area hydrogeology, identification of actual and potential contamination, description of water collection, conveyance, and treatment methods; substantiation that a spring water source meets the definition of that term as contained in the California Health and Safety Code; and proof that water drawn from that source shares the same physical properties as the source. Moreover, the Food and Drug Branch requires documentation from the local health agency or other approval authority of well logs; a sanitary appraisal report; and the results of

analytical tests of water quality following construction of a water bottling facility, to ensure compliance with California water quality standards.

RESPONSE 12-7

The public review period was extended one week to October 8, 2012, resulting in a 52-day comment period. This exceeds the 30-day public review period required under California Code of Regulations §15105. Moreover, the OLMP will not be finalized in the near future, thus putting the proposed project in an indeterminate delay.

RESPONSE 12-8

Project traffic impacts are addressed in **Section 4.I**, *Transportation*, of the Draft EIR. Traveling on the shoulder of the road is not allowed except 'when the vehicle is necessarily traveling so slowly as to impede the normal movement of traffic, that portion of the highway adjacent to the right edge of the roadway may be utilized temporarily when in a condition permitting safe operation' (California Vehicle Code, 21650). According to staff at the Olancha plant, travel between the existing plant and the proposed plant will be minimal. Trucks traveling between the two facilities would not utilize the shoulder as the maneuver violates the vehicle code and offers no advantage.

RESPONSE 12-9

This comment cites the presence of a "small spring" on Cabin Bar Ranch that is significant or sacred to Native Americans, and asks whether the spring can be respected by the project. It is not clear which of the numerous springs on Cabin Bar Ranch the commenter is referring to; there are a number of springs marking the presence of the Spring Line Fault, which traverses a portion of the ranch where a fault line is believed to cause shallow groundwater to rise to the surface. Furthermore, although it is not clear what constitutes respect for the spring, it is generally understood to mean protection from removal or disturbance as the result of project implementation. Please refer to the response to Comment 2-4, which also cites the importance of an on-site spring or springs to the Lone Pine Paiute-Shoshone Tribe. As stated in the response to that comment, the project is not anticipated to result in direct impacts through removal of any on-site springs, and a monitoring and adaptive management program is required to reduce potential future impacts on the springs and associated vegetation due to groundwater withdrawal as set forth in mitigation measure BIO-4 in the Draft EIR.

RESPONSE 12-10

See the response to Comment 12-1 and **Topical Response No. 2, Hydrogeology,** in this Final EIR. These comments apply equally to the south side of the property.

RESPONSE 12-11

As discussed on pages 4.G-5 and 4.G-6 of **Section 4.G**, *Hydrogeology & Surface Hydrology*, water quality is regulated by the California Health and Safety Code, which requires operators of private water sources within the State to obtain a Private Water Source Operator License from the Department of Public Health's Food and Drug Branch. License issuance requires certification of the water source location; area hydrogeology, identification of actual and potential contamination, description of water collection, conveyance, and treatment methods; substantiation that a spring water source meets the definition of that term as contained in the California Health and Safety Code; and proof that water drawn from that source shares the same

physical properties as that source. Moreover, the Food and Drug Branch requires documentation from the local health agency or other approval authority of well logs; a sanitary appraisal report; and the results of analytical tests of water quality following construction of a water bottling facility, to ensure compliance with California water quality standards.

RESPONSE 12-12

The public review period was extended one week to October 8, 2012, resulting in a 52-day comment period. This exceeds the 30-day public review period required under California Code of Regulations §15105. Moreover, the OLMP will not be finalized in the near future, and waiting for such a determination would involve an indeterminate delay for the proposed project.

RESPONSE 12-13

Please refer to Response 12-8 above.

RESPONSE 12-14

This comment refers to the presents of a spring on Cabin Bar Ranch that is of significance to one of more local Native American tribes, and notes that access to the spring has been granted in the past to tribal members, including upon the occasion of the passage of a tribal member. The commenter wishes "to alert the archaeologist" about the presence of this spring. Please refer to the response to Comment 2-4, which also cites the importance of an on-site spring or springs to the Lone Pine Paiute-Shoshone Tribe. As stated in that response, the project would not result in the direct removal of on-site springs, and a program of adaptive management is required during project operation to ensure significant impacts on spring flows and surrounding vegetation are mitigated. The comment concerning the on-site spring is noted and no further response is required, as the comment does not provide sufficient information to allow for a more detailed response.

RESPONSE 12-15

Please see **Topical Response No. 1, Biological Resources**, which addresses Plant and Animal Surveys.

RESPONSE 12-16

Please see **Topical Response No. 1, Biological Resources**, which addresses potential Impacts from Groundwater Extraction.

Mitigation measure HYDRO-2 in **Section 4.G**, *Hydrogeology and Surface Hydrology*, of the Draft EIR has been updated to enhance the requirement that the project applicant to prepare a comprehensive, long-term Groundwater Monitoring, Mitigation, and Reporting Plan for approval by Inyo County Water Department prior to the commencement of project operation. Mitigation measure BIO-4 in **Section 4.C**, *Biological Resources*, in the Draft EIR has also been updated to clarify that it will be implemented for six years following buildout of each project phase, for a total of at least 12 years of monitoring; to add pumping restrictions in the event that riparian or wetland vegetation impacts are observed; and to clarify that, in that event, the County will ultimately determine appropriate mitigation in consultation with the applicant. The text of these mitigation measures is provided in **Section 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR.

RESPONSE 12-17

Please see **Topical Response No. 1, Biological Resources**, which addresses the Owens Lake Master Plan as a related project.

RESPONSE 12-18

Please see **Topical Response No. 1, Biological Resources**, which addresses Plant and Animal Surveys. See also the responses to Comments 8-4 and 9-2.

RESPONSE 12-19

The potential for groundwater extraction to affect wetlands and groundwater-dependent ecosystems was acknowledged in the Draft EIR. It is also the reason that Mitigation Measure BIO-4, which provides for the Riparian and Wetland Monitoring and Adaptive Management Program, has been included as a condition of approval. See also the response to Comment 9-7.

RESPONSE 12-20

Please see the response to Comments 9-3 and 9-5, which address the same issues raised in this comment.

RESPONSE 12-21

Please see **Topical Response No. 1, Biological Resources**, which addresses Potential Impacts from Groundwater Extraction. See also the responses to Comments 9-7, 11-3, and 12-19.

RESPONSE 12-22

Please refer to **Topical Response No. 1**, **Biological Resources**, **Topical Response No. 2**, **Hydrogeology**, and the updated text of mitigation measures BIO-4 and HYDRO-2 in **Section 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR for discussion of the effects of project-related groundwater pumping on offsite wells and on-site vegetation, respectively. As stated in those topical responses and updated mitigation measures, the project applicant will be required to conduct monitoring of static groundwater water levels on a long-term basis, prior to and during project operation (in accordance with mitigation measure HYDRO-2), and implement specific required actions in response to any impacts on off-site wells, and will also be required to monitor spring flow and vegetation health on the project site and implement specific actions in response to significant impacts (in accordance with mitigation measure BIO-4).

RESPONSE 12-23

The comment is noted and is hereby part of the Final EIR, and will be used by decision-makers for their consideration prior to taking any action on the proposed project. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 12-24

Please see **Topical Response No. 1, Biological Resources**, which addresses the Owens Lake Master Plan as a related project.

Please see the Response 4-5 for discussion of this topic.

RESPONSE 12-25

Project aesthetics and views impacts, including those related to nighttime light conditions, are addressed in **Section 4.A**, *Aesthetics*, of the Draft EIR. As discussed on page 4.A-19, Cabin Bar Ranch is located in a relatively undeveloped area of Inyo County characterized by low ambient nighttime lighting conditions and dark nighttime skies. However, as noted on page 4.A-22, the proposed project would include design features intended to respect low ambient nighttime lighting conditions. For example, all exterior lighting would be fully shielded to direct lighting downward and to prevent spillover onto adjacent properties. On-site lighting would be designed to meet Leadership in Energy and Environmental Design (LEED) requirements for the Light Pollution Reduction credit for industrial projects and in a manner to avoid impact to nearby residents and the low ambient lighting conditions in the vicinity. As a result of these design features, the analysis on page 4.A-26 concludes the light spillover would be contained to the project site, not directed at nearby residents or motorists, and would not result in a material increase in the nighttime ambient lighting conditions. In this way, the proposed project would maintain the rural ambient nighttime light environment in the project vicinity.

RESPONSE 12-26

The comment is noted and is hereby part of the Final EIR, and will be used by decision-makers for their consideration prior to taking any action on the proposed project. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 12-27

Project aesthetics and views impacts, including those related to the existing visual character in the project vicinity, are addressed in **Section 4.A**, *Aesthetics*, of the Draft EIR. Design elements and operations at the existing Crystal Geyser Spring Water Plant in Olancha are outside the scope of analysis for this Draft EIR.

RESPONSE 12-28

The proposed project components are discussed in **Section 2.0**, *Project Description*, of the Draft EIR. As discussed on page 2-15, development of the proposed bottling facility would construct a permanent new 24-foot-wide access road into the site from US 395. This new roadway would be located approximately 2,500 feet south of the existing Cabin Bar Ranch Road. This proposed roadway would be the only entrance and exit utilized by operations at the bottling facility, as the existing Cabin Bar Ranch Road would be demolished in Phase I of the proposed project. The road would be left in an unimproved condition (e.g., dirt or gravel) to maintain utility access along its alignment. Providing a combined access roadway to the Olancha plant and the proposed Cabin Bar Ranch facility is not possible because Crystal Geyser Roxane does not own the property located between the two facilities.

RESPONSE 12-29

The comment is noted and is hereby part of the Final EIR, and will be considered by decision-makers prior to taking any action on the proposed project. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

Rio Tinto Minerals Owens Lake Operations Paul Lamos, Superintendent, Owens Lake Operations PO Box 37/209 North Main Street Lone Pine, CA 93545

RESPONSE 13-1

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 13-2

The commenter expresses concern over the possible impact of the project on a water well that Rio Tinto uses to supply its operations. The Rio Tinto property on which this well is located, APN 29-180-26, is approximately 2.5 miles north of the proposed project site. Review of this property further reveals that it is located within the southern portion of the Braley Creek alluvial fan. Thus, the Rio Tinto well is recharged from different sources than the project wells. Further, because of its distance from the project area, and because groundwater in Rio Tinto is recharged and/or affected by a different drainage system, pumping of the project wells would have no impact on the Rio Tinto well. Consequently, it is not necessary to conduct any additional groundwater modeling to map drawdown in this area ("isobar" map) because no significant drawdown will be detected in the off-site Rio Tinto well from the pumping of the Crystal Geyser wells. See **Topical Response No. 2, Hydrogeology**, for further discussion of potential impacts of project-related groundwater pumping on off-site wells.

RESPONSE 13-3

The comment is noted and the Final EIR will be updated accordingly (see **Chapter 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR).

RESPONSE 13-4

The comment is noted and is hereby part of the Final EIR, and will be considered by decision-makers prior to taking any action on the proposed project. No further response is required.

Sierra Club Mark Bagley, Executive Director, Owens Valley Committee and Sierra Club Owens Valley MOU Representative P.O. Box 1431 Bishop, CA 93515

RESPONSE 14-1

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 14-2

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 14-3

The comment has been noted and will be considered by decision-makers prior to taking any action on the proposed project. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 14-4

The location of production wells is shown on **Figure 2-3**, *Existing Site Conditions*, of **Section 2.0**, *Project Description*, of the Draft EIR. **Figure 2-4**, *Project Site Plan*, in the Final EIR has been updated accordingly to depict the location of pipelines, the analysis of potential environmental impacts has been updated accordingly. Please refer to **Chapter 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR for any updates to the impact analysis resulting from the inclusion of these features within the project study area.

RESPONSE 14-5

Section 2.0, *Project Description*, in the Draft EIR has been updated to include discussion of the proposed production and domestic water supply pipeline alignments. With respect to the comment regarding impacts on biological resources resulting from the creation of these alignments and service roads accessing the wells, a jurisdictional delineation was performed by Garcia & Associates in November 2012 to determine the potential for impacts on jurisdictional resources as the result of construction of the pipeline alignment between the production and domestic wells and the proposed plant site. The wetland delineation forms for this delineation are provided in **Appendix B** of this Final EIR. The wetland delineation forms noted that soil pits 1, 2, and 3, which follow the alignment of the proposed water supply pipeline, did not indicate the presence of jurisdictional wetlands or waters of the U.S.⁷ The alignment marked by these soil pits crosses an

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Garcia & Associates (GANDA), November 2012, Cabin Bar Ranch Water Bottling Facility Project Preliminary Determination of Jurisdictional Waters.

area identified as an upland environment and characterized by saltgrass flat vegetation and Baltic rush meadow. No indicators of wetland hydrology were found at any of these three soil pits; some hydrophytic vegetation was observed and assumed to be a remnant of prior flooding for irrigation when the property was used for cattle grazing. Wells CGR-8, -9, and -10, which are proposed for as the production wells for the project, already exist and are in disturbed areas designated as upland and lacking any indicators of wetland hydrology.

The domestic water well CBR-1 and the proposed alignment of the water supply line between this well and the new plant will follow that of the existing alignment for that supply line, since it will merely be replaced. The alignment is already disturbed and replacement of the pipeline would not impact any jurisdictional resources.

Section 4.C, *Biological Resources*, has been updated to reflect these updates. See **Section 3,0**, *Corrections and Additions to the Draft EIR*, for the updated text.

RESPONSE 14-6

Please see **Topical Response No. 1, Biological Resources**, which addresses Potential Impacts from Groundwater Extraction. See also the response to Comments 9-7, 11-3, and 12-19.

RESPONSE 14-7

Please see **Topical Response No. 1**, **Biological Resources**, which addresses Plant and Animal Surveys.

RESPONSE 14-8

The mitigation measures for potential impacts to sensitive species are considered to be appropriate. As discussed and described under mitigation measures BIO-1b and BIO-5 in **Section 4.C**, *Biological Resources*, of the Draft EIR, pre-construction surveys and/or avoidance of construction being initiated during the bird breeding season are protocols accepted by state and federal resource agencies as evidenced by their use in hundreds of projects across California. In addition, the use of habitat creation, restoration, and enhancement, as well as the acquisition of habitat to be conserved in perpetuity are accepted by these same agencies as evidenced by their inclusion in numerous HCP/NCCP programs in California. Given the opinion of the California Department of Fish and Game that the special status fish and Mohave ground squirrel do not occur on-site, the remaining high-sensitivity animals are birds and bats for which the proposed mitigation has been shown to be effective.

With respect to sensitive plants, the comment is not without merit. However, transplantation and/or seeding suitable hydrological and edaphic conditions have been shown to be successful in many cases. To be sure, such mitigation will involve the input of recognized experts on the species, if any, to be mitigated for; it should be noted that any such programs will include performance criteria which, if not met, will require additional attempts until such time as they are deemed successful.

As a final note, if there are no off-site mitigation banks or off-site purchase and set-aside opportunities in the area surrounding the project area, the applicant will be required to mitigate on-site.

RESPONSE 14-9

Mitigation measure HYDRO-2 has been updated to enhance the requirement that the applicant prepare a comprehensive, long-term Groundwater Monitoring, Mitigation, and Reporting Plan for approval by Inyo County Water Department prior to the commencement of project operation. In addition, mitigation measure BIO-4 has been updated. See **Topical Response No.1**, **Biological Resources**, and **Topical Response No. 2**, **Hydrogeology**, as well as the updated text of the mitigation measures in **Section 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR.

Patricia Elton and Smilja Blackmon, Trustees The Elton Family Trust PO Box 478 Scottsdale, Arizona 85261-4878

RESPONSE 15-1

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 15-2

Please see **Topical Response No. 2, Hydrogeology**, in this Final EIR, for discussion of potential impacts of project-related groundwater pumping on off-site wells. As discussed therein, mitigation measure HYDRO-2, on page 4.G-29 in **Section 4.G**, *Hydrogeology & Surface Hydrology*, in the Draft EIR, established a program to monitor changes over time in groundwater conditions. The Plan also requires dispute resolution to be conducted by the Inyo County Water Department. See **Section 3.0** of this Final EIR, *Corrections and Additions to the Draft EIR*, for the complete text of the updated HYDRO-2 mitigation measure.

Daniel Hardwick W. Lake St. Olancha, CA Daniel Hardwick

RESPONSE 16-1

Mr. Hardwick notes that when he first drilled his well in 1967, the water table was 68 feet deep and that since Crystal Geyser has moved in the water levels have dropped 90 feet. In response, he has lowered his pump twice. He also states that his neighbors have lower water tables. He also will be monitoring his well and his neighbor's wells and water quality.

There are no available data to either confirm or refute Mr. Hardwick's statements. Water level measurements need to be conducted on a regular basis over many seasons and years, and the resulting data need to be reviewed in order to determine trends in water level data. Anecdotal evidence does not lend itself to rigorous review and examination. There may be other reasons for the reported declines, if such declines did occur.

Nonetheless, mitigation measure HYDRO-2 has been updated to enhance the requirement that the applicant prepare a comprehensive, long-term Groundwater Monitoring, Mitigation, and Reporting Plan for approval by Inyo County Water Department prior to the commencement of project operation. See **Section 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR, for the text of this mitigation measure.

RESPONSE 16-2

See the response to **Comment No. 16-1**, which notes that mitigation measure HYDRO-2 has been clarified to require long-term monitoring and mitigation of impacts on static groundwater levels and on-site wells. See also **Topical Response No. 2**, **Hydrogeology**, for further discussion of this issue.

RESPONSE 16-3

The comment is noted and is hereby part of the Final EIR, and will be used by decision-makers for their consideration prior to taking any action on the proposed project. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

Vernon L. Lawson PO Box 77 Olancha, CA 93549

RESPONSE 17-1

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 17-2

The proposed project is not expected to have a significant adverse impact on biological resources with the incorporation of mitigation measures as described in the Draft EIR. Consequently, populations of valley quail and other wildlife species in the surrounding are not expected to decline to less than sustainable levels as a result of the project.

RESPONSE 17-3

Project-related noise and air quality effects are not expected to have significant adverse impacts on wildlife for several reasons. First, project construction with mitigation will not result in the generation of problematic fugitive dust which could otherwise coat vegetation and prevent its interactions with the Sun and air. The mitigations are listed on page 4.C.1-19 of the Draft EIR and include the stabilization of soil surfaces upon exposure, vehicular speed limits, and restrictions on grading during high winds. Second, project-related operational impacts are *de minimis*, as shown in Table 4.C.1-4 on page 4.C.1-16 of **Section 4.C**, *Biological Resources*, of the Draft EIR. As shown, the maximum incremental increase in project-related operational emissions is negligible. Therefore, air quality in the local area surrounding the project area will not change. Third, although construction-related noise levels will increase, they will be temporary and experienced during the construction phase only. Construction activities in which heavy equipment is to be used are expected to last for only several weeks for each phase of the project. Such temporary noise levels are not expected to result in the long-term abandonment of surrounding habitats by wildlife. Fourth and finally, project operational noise will not result in increased ambient noise levels either on-site of off-site (see pages 4.H-5 and 4.H-6 of **Section 4.H**, *Noise*, of the Draft EIR).

RESPONSE 17-4

As indicated on page 4.H-5 of **Section 4.H**, *Noise*, project-generated trips would not create a significant impact at any nearby signalized intersection. The traffic-related noise levels on off-site roadways, including from project trucks, would not result in a significant change in ambient noise levels in the project area, since project-related traffic volumes would be dispersed to various roadways. As such, traffic noise impacts would be less than significant and no mitigation measures are necessary.

RESPONSE 17-5

As described in **Section 2.0**, *Project Description*, the objectives of the proposed project are to take advantage of the availability and high quality of existing spring water on the property; to site the new bottling facility in

proximity to the existing bottling facility; and to realize economic and environmental efficiencies through shared use of raw materials for packaging, transportation of finished products, management, and other inputs required for Crystal Geyser Roxane's operations. The proposed project site was chosen because it fully satisfies these objectives.

Sara J. "Sally" Manning, Ph.D. 401 E. Yaney St. Bishop, CA 93514

RESPONSE 18-1

Please see **Topical Response No. 1, Biological Resources**, which addresses Potential Impacts from Groundwater Extraction.

RESPONSE 18-2

Please see **Topical Response No. 1, Biological Resources**, which addresses Plant and Animal Surveys.

RESPONSE 18-3

The thresholds of significance used in the Draft EIR for biological resources were taken directly from the Appendix G of the State *CEQA Guidelines*. As such, they were not arbitrarily established.

Please see **Topical Response No. 1, Biological Resources**, which addresses Owens Lake Master Plan as a related project.

On-site, in-kind mitigation is considered to be possible. Areas surrounding the project area within the Cabin Bar Ranch property possess the same or similar soils and hydrogeological features that make them suitable for on-site, in kind mitigation. Moreover, if on-site, in kind mitigation fails to meet success criteria, off-site alternatives are provided for.

RESPONSE 18-4

In accordance with California Code of Regulations §15087 and §15105, the Lead Agency provided notice of a 45-day review period ending October 1, 2012. The Notice of Availability (NOA) was mailed to persons who requested notification and persons who commented on the EIR Notice of Preparation. In addition, both the NOA and Draft EIR were made available to the public on the Inyo County Planning Department's website. Contrary to the commenter's assertion, a Notice of Public Comment Hearing was also made available on this website. The Public Comment Hearing was held September 26, 2012, in the Board of Supervisor's Room at the County Administrative Building, and included a presentation of the proposed project. Subsequent to the Public Comment Hearing, the Lead Agency extended the comment period one week to October 8, 2012, to allow for additional public comment. This extension resulted in a 52-day comment period, thus exceeding the 30-day public review period required under California Code of Regulations §15105.

With respect to the comment that "either (a) the project be abandoned or (b) Inyo County Planning Department demand the DEIR be rewritten and circulated after all missing, necessary information is obtained", the comment has been noted and is hereby part of the Final EIR, and will be considered by decision-makers prior to taking any action on the proposed project. No further response is required because the comment does not raise any new significant environmental issues or specifically address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 18-5

Please see **Topical Response No. 1, Biological Resources**, which addresses Plant and Animal Surveys.

RESPONSE 18-6

Please see **Topical Response No. 1, Biological Resources**, which addresses this issue. The opinion expressed in the comment is noted and will be considered by the decisionmakers.

RESPONSE 18-7

Please see **Topical Response No. 1, Biological Resources**, which addresses Owens Lake Master Plan as a related project.

RESPONSE 18-8

The comment is noted and the grammatical revisions will be incorporated into the Final EIR. No further response is required because the commenter is not prejudiced because of non-substantial typos in the Draft EIR.

RESPONSE 18-9

The commenter's correction regarding presidency of the Bristlecone Chapter of the California Native Plant Society is noted and the Draft EIR is hereby corrected (see **Chapter 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR). With reference to the potential impacts on the Owens Valley checkerbloom from groundwater extraction, please see the response to Comment 9-4.

RESPONSE 18-10

Please see the response to Comment 9-4. No attempt was made to manipulate the responses received from the commenter. However, surveys conducted in October 2012 did not reveal the presence of this species, and it was concluded that suitable habitat for the species, including Baltic rush marsh and salt grass flats in the northeastern portion of Cabin Bar Ranch, lie outside the potential impact area and would not be adversely affected by project implementation.⁸

RESPONSE 18-11

Please see **Topical Response No. 1, Biological Resources**, which addresses Potential Impacts from Groundwater Extraction, and **Topical Response No. 2, Hydrogeology**. The groundwater impact assessment was based on hydrogeological modeling performed by Richard C. Slade & Associates, who are licensed and accredited hydrogeological experts. As stated in the respective topical responses, mitigation measure HYDRO-2 has been updated to enhance the requirement that the applicant prepare a comprehensive, long-term Groundwater Monitoring, Mitigation, and Reporting Plan for approval by Inyo County Water Department prior to the commencement of project operation. Moreover, mitigation measure BIO-4, as set forth on pages 4.C-44 through 4.C-47 in **Section 4.C**, *Biological Resources*, requires Crystal Geyser to establish a Riparian and Wetland Monitoring and Adaptive Management Program, in **Section 4.C**, *Biological Resources*, of the Draft EIR. This mitigation measure established performance standards for the

⁸ Garcia & Associates (GANDA), Special-Status Plant Survey Report, Cabin Bar Ranch Water Bottling Facility Project, October 2012.

assessment of vegetation health, including riparian and wetland vegetation; the measurement of woody species regeneration; the establishment of monitoring stations in three locations and a monitoring regime to evaluate effects on vegetation; the assessment of monitoring data; the development of adaptive management measures, which include possible creation, restoration, or enhancement of on- or off-site habitat; and annual reporting to the County. Monitoring is required for six years to ensure long-term impacts are evaluated. This program would allow the County to ascertain whether groundwater pumping is adversely impacting groundwater levels as well as spring flows, and vegetation that is at least partially dependent on groundwater and spring flows. Mitigation measure BIO-4 has also been updated, to clarify that it will be implemented for six years following buildout of each project phase, for a total of at least 12 years of monitoring; to add pumping restrictions in the event that riparian or wetland vegetation impacts are observed; and to clarify that, in that event, the County will ultimately determine appropriate mitigation in consultation with the applicant. The updated mitigation measures are provided in **Section 3.0**, *Corrections and Additions to the Draft EIR*.

The qualifications of Dr. Manning are acknowledged and the comments contained in this letter will be considered by the decisionmakers.

RESPONSE 18-12

Please see **Topical Response No. 1, Biological Resources**, in this Final EIR, with respect to the comments vegetation health, and the response to Comment 1-3 for discussion of the County's Groundwater Ordinance.

Scott Palamar palamar@gmail.com

RESPONSE 19-1

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 19-2

The comment is noted and is hereby part of the Final EIR, and will be considered by decision-makers prior to taking any action on the proposed project. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 19-3

Project land use impacts, including those related to zoning, are addressed in **Section 4.F**, *Land Use and Planning*, of the Draft EIR. As discussed therein, 11.04 acres of the project site would be rezoned from RR-1.0 (Rural Residential, one-acre minimum) to the M-2 (Light Industrial) land use designation.

With respect to the residences of Cartago, conflicts of land use between residential and non-residential uses are generally caused by higher land use density and activity associated with non-residential uses that can conflict with the visual character of nearby residential uses, result in odors or other air quality conflicts, or disrupt the use or quiet of a residential land use. The proposed project's indirect impacts on surrounding parcels, including residents in Cartago, are discussed throughout the Draft EIR. As summarized in Table 4.F-1, Comparison of the Project to Applicable Policies of the Inyo County General Plan, **Section 4.A**, Aesthetics, of the Draft EIR concludes that the proposed project would result in a less than significant impact with respect to visual character, scale and massing, and light and glare. With respect to air quality, **Section 4.C-1**, Air Quality, of this Draft EIR, concludes that the proposed project would result in a less than significant impact with respect to odors or air quality standards. Similarly, as discussed in Section 4.H, Noise, of the Draft EIR, operational noise impacts would be less than significant a nearby receptors. While construction noise levels would exceed the levels established in Table 9-9 of the Inyo County General Plan at the nearest off-site residential uses, the implementation of the required mitigation measures would reduce impacts to a less than significant level. As summarized in **Table 4.F-1**, the proposed project would locate noise-generating uses away from residential uses in Cartago by: (a) relocating the access road approximately 2,500 feet south of its existing location, (b) locating truck operations to the back (east) side of the proposed building, and (c) locating exterior noise-generating machinery on the south side of the bottling plant. Lastly, the proposed project greatly exceeds the setback requirements for the M-2 (Light Industrial) zone because the bottling facility would be located approximately 150 feet from the property's northern boundary.

The facility has been sited to minimize the overall environmental impact of the proposed project. The proposed plant site has been the subject of previous technical study for proposed Anheuser-Busch operations, and has experienced grading and ground-disturbing activity for the construction of roadways,

utility infrastructure, and landscaping ponds associated with the former residential development. In this regard, **Section 5.0**, *Alternatives*, of the Draft EIR, evaluated a Project Site Reconfiguration Alternative, wherein the bottling facility would be relocated within Cabin Bar Ranch adjacent to US 395, south of Cartago Creek and in the vicinity of the proposed new roadway access from US 395. This was determined to be the only other sizeable developable area on Cabin Bar Ranch, given the presence of sensitive archaeological and biological resources on other areas of the property, as well as the presence of existing springs and wells. Although construction noise impacts would be reduced when compared to the project in that fewer offsite receptors would be affected, the Project Site Reconfiguration Alternative would result in greater impacts to Aesthetics and Hydrogeology. Specifically, the alternative would result in greater impacts from US 395 and CGR could be required to drill new test wells to determine their suitability to serve the water bottling facility, and then build new wells and associated piping to the bottling facility.

RESPONSE 19-4

Modeling has predicted 0.80 feet of water level drawdown in well PW-10 at the northern boundary of Cabin Bar Ranch. Mr. Palamar's residence is located approximately 2,200 feet northeast of this monitoring point and, as a result, any amount of induced drawdown is expected to be significantly less at his residence. Nonetheless, mitigation measure HYDRO-2 has been updated to enhance the requirement that the applicant prepare a comprehensive, long-term Groundwater Monitoring, Mitigation, and Reporting Plan for approval by Inyo County Water Department prior to the commencement of project operation. See the text of the mitigation measures in **Section 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR.

RESPONSE 19-5

Project aesthetics and views impacts, including those related to the site's proposed visual character, are addressed in **Section 4.A**, *Aesthetics*, of the Draft EIR. Design elements and operations at the existing Crystal Geyser Spring Water Plant in Olancha are outside the scope of analysis for this Draft EIR.

With respect to the proposed project, the Draft EIR acknowledges on page 4.A-27 that the proposed project "would introduce a large man-made feature on a portion of the project site largely comprised of existing vegetation, and would result in an increase in the mass and scale of on-site development and development within the project vicinity. In addition, the project would replace vegetation that has an organic visual character with a large, man-made structure with a warehouse-like appearance." However, although the proposed project would introduce a change to the visual character of the project site, the Draft EIR also states that the bottling facility's strategic on-site location and the retention of existing vegetation would screen the proposed buildings and other features so that they constitute a subordinate aesthetic feature on the project site. For these reasons, although the proposed project would change the visual character of the project site, this change would not be significant.

The proposed plant has been situated and designed to minimize a wide range of environmental impacts, including those that are aesthetically related. Planting new trees outside the study area (i.e., the area subject to disturbance for the project) could increase impacts on biological resources, cultural resources, and noise resources, as well as compromise the ability to meet the project objectives. Additionally, the provision of additional vegetation would not likely completely obstruct views of the plant, and would not substantially further reduce aesthetic impacts.

Troy and Susan Patton Patton's Place PO Box 157 Olancha, CA 93549

RESPONSE 20-1

Mitigation measure HYDRO-2 has been updated to enhance the requirement that the applicant prepare a comprehensive, long-term Groundwater Monitoring, Mitigation, and Reporting Plan for approval by Inyo County Water Department prior to the commencement of project operation. See also **Topical Response No. 2, Hydrogeology**, in this Final EIR, for discussion of potential impacts of project-related groundwater pumping on off-site wells.

RESPONSE 20-2

The comment is noted and is hereby part of the Final EIR, and will be considered by decision-makers prior to taking any action on the proposed project. When considering the proposed driveway, it is important to note that both the existing and proposed driveway alignments are located on the Crystal Geyser property. The alignment of the proposed driveway was chosen to reduce potential impacts to the residents of Cartago. Should the existing driveway be used, existing residents would experience greater aesthetic, air quality, noise, and traffic impacts from trucks operating along the driveway when compared to the proposed driveway alignment.

RESPONSE 20-3

Cartago Creek was determined to be an intermittent drainage feature that conveys runoff and snow melt. Upon close examination as part of the Draft EIR analysis, it was determined that no wetlands (indicative of springs) are found along Cartago Creek. Therefore, no impacts to this drainage feature are expected to result from the project. However, a monitoring station will be established along the creek upstream of the project area to assess any unexpected impacts to the flow regime (see also the response to Comment 9-7).

When the initial site reconnaissance was performed, it was observed that Cartago Creek was dry in December 2011 (see page 33 of the *Hydrologic Evaluation* provided in **Appendix F** of the Draft EIR and the accompanying photographs in Appendix 4 of this report). Further, at that time, the three CGR project wells were not pumping. Cartago Creek is ephemeral by nature and will flow aboveground only a part of the year, during the spring months when winter snowmelt and storm runoff contribute to it, and it, in turn, contributes to groundwater recharge (and thus to spring flows). Thus, the creek does, indeed, seasonally "disappear". There are no available gauge records for historic flows for this creek, at least in the vicinity of Highway 395 and to the east or west.

However, mitigation measure BIO-4, as set forth on pages 4.C-44 through 4.C-47 in **Section 4.C**, *Biological Resources*, requires Crystal Geyser to establish a Riparian and Wetland Monitoring and Adaptive Management Program, in **Section 4.C**, *Biological Resources*, of the Draft EIR. This mitigation measure established performance standards for the assessment of vegetation health, including riparian and wetland vegetation; the measurement of woody species regeneration; the establishment of monitoring stations in

three locations and a monitoring regime to evaluate effects on vegetation; the assessment of monitoring data; the development of adaptive management measures, which include possible creation, restoration, or enhancement of on- or off-site habitat; and annual reporting to the County. Monitoring is required for six years after each phase of project construction, or a total of at least twelve years, to ensure long-term impacts are evaluated. This program would allow the County to ascertain whether groundwater pumping is adversely impacting groundwater levels as well as spring flows, and vegetation that is at least partially dependent on groundwater and spring flows.

Michael Prather Drawer D Lone Pine, CA 93545

RESPONSE 21-1

The comment is noted. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 21-2

The comment is noted and is hereby part of the Final EIR, and will be used by decision-makers for their consideration prior to taking any action on the proposed project. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 21-3

The comment is noted and is hereby part of the Final EIR, and will be used by decision-makers for their consideration prior to taking any action on the proposed project. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 21-4

Please see the responses to Comments 5-7 and 11-3 for discussion of the details of the mitigation plan to be developed in response to sensitive species habitat impacts, including the ratio of habitat replacement. The commenter's suggestions regarding appropriate understory species, including velvet ash, will be considered when the detailed mitigation plan is prepared.

RESPONSE 21-5

The comment is acknowledged and noted for the decision-makers.

RESPONSE 21-6

Based on the hydrogeological modeling completed for the project, no flow reductions in the Cartago Springs Wildlife Area are expected to result from the proposed project. Nonetheless, mitigation measure HYDRO-2 in **Section 4.G**, *Hydrogeology and Surface Hydrology*, in the Draft EIR has been updated to enhance the requirement that the project applicant implement a comprehensive Groundwater Monitoring, Mitigation, and Reporting Plan to evaluate the effects of project groundwater pumping on static groundwater levels, onsite springs, and on-site and off-site wells, over time. No significant noise, light and glare, or other aesthetic impacts are anticipated.

The commenter reports there is a water well in the Cartago Springs Wildlife Area; this information was not available to the preparers of the Draft EIR and the *Hydrologic Evaluation* provided in **Appendix F** of the Draft EIR. Nevertheless, at its closest point, this wildlife area lies about 2,100 feet northeast of the northernmost project pumping well on Cabin Bar Ranch (CGR-10). Based on the modeling and the distance of that property from the wells to be pumped, the potential impact of project pumping on this reported well is expected to be less than significant with respect to induced water level drawdown.

However, mitigation measure HYDRO-2 in **Section 4.G**, *Hydrogeology & Surface Hydrology*, of the Draft EIR has been updated to enhance the requirement for the project applicant to prepare a comprehensive, long-term Groundwater Monitoring, Mitigation, and Reporting Plan for approval by Inyo County Water Department prior to the commencement of project operation. See **Topical Response No. 2**, **Hydrogeology**, in this Final EIR for further discussion of this issue.

RESPONSE 21-7

The applicant is available to discuss the possibility of allowing limited access to certain portions of the Cabin Bar Ranch property to regional conservation groups, such as the Audubon Society, for purposes of observing wildlife. The comment is noted and is hereby part of the Final EIR, and will be used by decision-makers for their consideration prior to taking any action on the proposed project. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 21-8

Please refer to **Topical Response 2a, Biological Resources**, in this Final EIR. As discussed therein, additional focused surveys for sensitive species were conducted on the project site in May and October 2012. In response to the findings of these surveys and comments on the Draft EIR by regulatory agencies, the potential presence of a number of sensitive species has been ruled out in some instances and assumed in others. See **Section 3.0**, *Corrections and Additions to the Draft EIR*, for updates of the pertinent impact analysis and mitigation measures originally contained in **Section 4.C**, *Biological Resources*, in the Draft EIR.

Mike Prather Lone Pine

RESPONSE 22-1

The public review period was extended one week to October 8, 2012, resulting in a 52-day comment period. This exceeds the 45-day public review period required under California Code of Regulations §15105.

Bill Schwartz(e-mail) macbills@gmail.com

RESPONSE 23-1

The objectives of the proposed project are discussed in **Section 2.0**, *Project Description*, of the Draft EIR. Potential hydrogeologic impacts are discussed in **Section 4.G**, *Hydrogeology and Surface Hydrology*, of the Draft EIR. As discussed therein, at the planned pumping rate, the proposed project would result in a less than significant impact to groundwater resources.

Earl Wilson PO Box 830 Lone Pine, CA93545

RESPONSE 24-1

The comment is noted and is hereby part of the Final EIR, and will be used by decision-makers for their consideration prior to taking any action on the proposed project. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

RESPONSE 24-2

The term "smog episodes" as included in mitigation measure AQ-5 shown on page ES-8 in the **Executive Summary** of the Draft EIR refers to defined air pollution alert levels. A Stage 1 smog episode is when ozone levels reach 0.20 parts per million (ppm). A Stage 2 smog episode is when ozone levels reach 0.35 ppm. There are no similarly defined air pollution alert levels for dust.

RESPONSE 24-3

The comment is noted. Based on the comment letter on the Draft EIR provided by the California Department of Fish and Game, it is assumed no pupfish habitat exists on the project site and therefore no relocation is necessary or proposed. The Draft EIR has updated to reflect this comment; see **Section 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR for the pertinent updated text. It should be noted that it is the preference of state and federal resource agencies to use in-lieu fee programs as close to the impact area as possible. It is unlikely that such mitigation, if implemented for the project, will be any different.

RESPONSE 24-4

Please see **Topical Response No. 1, Biological Resources**, which addresses Potential Impacts from Groundwater Extraction. Nevertheless, the Draft EIR provides for a Riparian and Wetland Monitoring and Adaptive Management Program, as set forth in mitigation measure BIO-4 in **Section 4.C**, *Biological Resources*, to monitor the effects of the project on groundwater levels and spring flows. Should there be a significant reduction in spring flows that affect the associated habitat, mitigation will be required as set forth in this mitigation measure. This mitigation measure has been updated to require a reduction in project pumping as one of the possible mitigation responses based on monitoring. See **Section 3.0**, *Corrections and Additions to the Draft EIR*, of this Final EIR for the text of this mitigation measure.

See the response to **Comment 12-22**, above.

RESPONSE 24-5

See the response to Comment 9-7, which addresses this topic. The monitoring program set forth in mitigation measure BIO-4 in **Section 4.**C, *Biological* Resources, in the Draft EIR has been updated to clarify that it will be implemented for six years following buildout of each project phase, for a total of at least 12 years of monitoring; to add pumping restrictions in the event that riparian or wetland vegetation impacts are

observed; and to clarify that, in that event, the County will ultimately determine appropriate mitigation in consultation with the applicant. See **Section 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR for the text of this mitigation measure.

RESPONSE 24-6

As discussed above in the response to Comment 11-10 and in **Section 4.E.** *Historical Resources*, in accordance with the State *CEQA Guidelines*, comprehensive mitigation measures HIST-1, HIST-2, HIST-3, HIST-4, HIST-5 and HIST-6 were developed in **Section 4.E**, on pages 25, 26 and 27, to recover, interpret and archive any valuable information or artifacts that may be recovered from the Gomez Homestead (Residence 2) (P-14-011514) during demolition or that may be encountered during ground disturbing activities on the project site. Specifically, on pages 25 and 26, mitigation measure HIST-1 states that "significant material retrieved from the site shall be salvaged, inventoried and properly archived in a suitable publically accessible historical collection for further analysis and interpretation." The Eastern California Museum was included, along with the County of Inyo Public Library and the Eastern Information Center (CHRIS-EIC) at the University of California, Riverside, as a suitable repository for the recovered artifacts and site documentation, including the square cut timber wall to be salvaged from the Gomez Homestead (Residence 2) and other valuable artifacts that may be uncovered during demolition.

Response 24-7

Project aesthetics and views impacts, including those related to light and glare, are addressed in **Section 4.A**, *Aesthetics*, of the Draft EIR. There are numerous organizations dedicated to the preservation of low ambient lighting and dark sky conditions, including the Leadership in Energy and Environmental Design (LEED) and International Dark-Sky Association (IDA). As discussed on page 4.A-26, the proposed project would be designed in accordance with the Light Pollution Reduction credit, which seeks to: "(a) minimize light trespass from the building and site; (b) reduce skyglow to increase night sky access; (c) improve nighttime visibility through glare reduction; and (d) reduce development impact from lighting on nocturnal environments." These goals are similar to those of the IDA. As with many development projects, the proposed project is seeking its lighting reduction through the LEED certification process because it also allows for other environmentally friendly design features, such as those related to energy use, in a single certifying organization. At this time, the IDA does not offer an accreditation process.

RESPONSE 24-8

The actual water use for the proposed project would be 360 acre-feet per year (AF/yr) at final buildout. This volume of groundwater withdrawal, together with groundwater already being pumped by Crystal Geyser for its existing Olancha facility, would indeed total approximately 760 AF/yr. However, this was determined in the *Hydrogeologic Evaluation* provided in **Appendix F** of the Draft EIR, and in **Section 4.G**, *Hydrogeology and Surface Hydrology*, to be a less than significant impact on groundwater levels within the shallow aquifer beneath the project area, given that aquifer's estimated capacity and seasonal replenishment through direct precipitation and receipt of runoff from the Sierra Nevada mountains to the west. Nonetheless, mitigation measure HYDRO-2 in **Section 4.G**, *Hydrogeology and Surface Hydrology*, of the Draft EIR has been updated to enhance the requirement for the project applicant to prepare a comprehensive, long-term Groundwater Monitoring, Mitigation, and Reporting Plan for approval by Inyo County Water Department prior to the commencement of project operation.

RESPONSE 24-9

See the response to Comment 9-2. The Draft EIR does not dispute the occurrences of the species named in the comment; and they, as well as many others, could occur in the project area.

RESPONSE 24-10

The comment is noted and is hereby part of the Final EIR, and will be used by decision-makers for their consideration prior to taking any action on the proposed project. No further response is required because the comment does not raise any new significant environmental issues or address the adequacy of the environmental analysis included in the Draft EIR.

United States Department of the Interior Fish and Wildlife Service Ventura Fish and Wildlife Office 2493 Portola Road, Suite B Ventura, CA 93003

RESPONSE 25-1

The comment is noted. In consideration of the comments received, as well as subsequent consultation with the California Department of Fish and Game, the project applicant would seek appropriate agency take permits. Accordingly, on page 2-21, Section 6.b, List of Necessary Approvals: State of California Agencies, will be updated to add the following permits:

- US Fish and Wildlife Service Endangered Species Act (ESA) Permit
- California Department of Fish and Game Section 2080.1 and 2081(b) Take Permits

RESPONSE 25-2

The comment summarizes development considered under the proposed project. No further response is required.

RESPONSE 25-3

The comment summarizes the US Fish and Wildlife Service's Responsibilities under the Endangered Species Act. No further response is required.

RESPONSE 25-4

The potential for groundwater extraction to affect groundwater-dependent ecosystems was acknowledged in the Draft EIR. As described in mitigation measure BIO-4 on page 4.C-46 of **Section 4.C**, *Biological Resources*, of the Draft EIR, the Riparian and Wetland Monitoring and Adaptive Management Program will monitor the effects of the project on groundwater-dependent ecosystems at three locations: 1) Cartago Creek upstream from the project area; 2) two locations where natural springs exist; and 3) a location removed from the proposed project area. These locations are intended to disclose the effects, if any, of the cone of depression. Additionally, mitigation measure HYDRO-2 in **Section 4.G**, *Hydrogeology and Surface Hydrology*, requires the applicant to implement a comprehensive Groundwater Monitoring, Mitigation, and Reporting Plan to monitor changes over time in groundwater conditions.

Mitigation measure BIO-4 has been updated to clarify that it will be implemented for six years following buildout of each project phase, for a total of at least 12 years of monitoring; to add pumping restrictions in the event that riparian or wetland vegetation impacts are observed; and to clarify that, in that event, the County will ultimately determine appropriate mitigation in consultation with the applicant. Mitigation measure HYDRO-2 has been updated to enhance the requirements for the Groundwater Monitoring, Mitigation, and Reporting Plan. See **Chapter 3.0**, *Corrections and Additions to the Draft EIR*, in this Final EIR, for the text of these mitigation measures.

See also **Topical Response No. 1**, **Biological Resources**, for a discussion of the Riparian and Wetland Monitoring and Adaptive Management Program as it related to possible impacts on vegetation from groundwater extraction, and **Topical Response No. 2**, **Hydrogeology**, for discussion of the monitoring of groundwater pumping effects on spring flows.

RESPONSE 25-5

The potential for the proposed project to impact nesting birds is discussed on page 4.C-36 of **Section 4.C**, Biological Resources, of the Draft EIR. As discussed therein, the study area has the potential to support both raptor and songbird nests due to the presence of trees, shrubs, and ground cover. Disturbing or destroying active nests is a violation of the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.) and the California Department of Fish and Game Code Sections 3503, 3503.5 and 3513. Mitigation measure BIO-5 is required to reduce impacts to nesting birds. This measure requires that vegetation removal activities be scheduled outside the nesting season for raptor and songbird species (typically September 1 to February 14) to avoid potential impacts to nesting species, and requires that all suitable habitat be thoroughly surveyed for the presence of nesting raptor and songbird species by a qualified biologist before commencement of clearing and/or construction activities that occur during the raptor and songbird nesting season (typically February 15 to August 31). (It should be noted that the nesting bird season indicated in mitigation measure BIO-5 on page 4.C-47 of the Draft EIR has been updated to extend from February 15 to October 14, as indicated in Section 3.0, Corrections and Additions to the Draft EIR, in this Final EIR.) If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors) shall be delineated, flagged, and avoided until the nesting cycle is complete as determined by the qualified biologist. With implementation of this mitigation measure, potentially significant impacts to migratory raptor and songbird species would be reduced to a less than significant level.

3.0 CORRECTIONS AND ADDITIONS TO THE DRAFT EIR

This section of the Final EIR provides changes and additions to the Draft EIR that have been made to clarify, correct, or add to the information provided in that document. Such changes and additions are a result of public and agency comments received in response to the Draft EIR and/or new information that has become available since publication of the Draft EIR. The changes described in this section do not result in any new or changed conclusions to the Draft EIR analyses or increased significant environmental impacts that would result from the proposed project.

ES. EXECUTIVE SUMMARY

On page ES-10, Table ES-1, Summary of Project Impacts and Mitigation Measures, under the description of Biological Resources, the level of significance for potential impacts to special status plants is less than significant. As such, under the "Level of Significance" subheading for Biological Resources, the table will be modified as follows:

Less Than Significant

On pages ES-10 through ES-14, the misspelled references to "Owen's Valley" are revised to Owens Valley.

On pages ES-10 through -12, the summary of impacts to the Owens Valley checkerbloom plant and corresponding mitigation measure are deleted, since this species was determined not to be present on the project site during field surveys conducted in October 2012.

On page ES-13, the following text is amended based on based on comments on the Draft EIR from the California Department of Fish and Game:

Special Status Wildlife

Sensitive wildlife species with the potential to occur on the project site due to the presence of suitable habitat include Owen's tui chub, Owen's pupfish, Swainson's hawk, loggerhead shrike, yellow breasted chat, yellow warbler, least bittern, least Bell's vireo, southwestern willow flycatcher, western yellow-billed cuckoo, spotted bat, pallid bat, and Owen's Valley vole, and Mohave ground squirrel.

On pages ES-12 and -13, mitigation measure BIO-1b is renumbered BIO-1 and mitigation for the yellow-breasted chat is revised as follows, based on comments on the Draft EIR from the California Department of Fish and Game:

Yellow breasted chat

<u>Should focused surveys determine</u>The presence of the SSC yellow breasted chat <u>is assumed</u> and impacts are determined to be significant, <u>and therefore</u> impacts to the species shall be avoided or minimized to the maximum extent practicable. If impacts to the species cannot be avoided, mitigation shall include one or more of the following

measures at a mitigation-to-impact ratio of no less than 1:1 which would reduce impacts to less than significant:

- On- or off-site creation and/or restoration of 2.88 acres of riparian woodland.
- Payment into an agency-approved off-site mitigation bank or agency-approved in-lieu fee agreement.
- Off-site purchase and set aside and enhancement of land with suitable yellow breasted chat habitat.
- In addition, mitigation areas shall be placed under a conservation easement, deed restriction, or comparable legal instrument which restricts land uses and provides for its long-term preservation.

On page ES-13, mitigation for the yellow warbler is revised as follows, based on comments on the Draft EIR from the California Department of Fish and Game:

Should focused surveys determine The presence of the SSC yellow warbler <u>is assumed</u> and impacts are determined to be significant, <u>and therefore</u> impacts to the species shall be avoided or minimized to the maximum extent practicable. If impacts to the species cannot be avoided, mitigation shall include one or more of the following measures at a mitigation-to-impact ratio of no less than 1:1 which would reduce impacts to less than significant:

- On- or off-site creation and/or restoration of 2.88 acres of riparian woodland.
- Payment into an agency-approved off-site mitigation bank or agency-approved in-lieu fee agreement.
- Off-site purchase and set aside and enhancement of land with suitable yellow breasted chat habitat.
- In addition, mitigation areas shall be placed under a conservation easement, deed restriction, or comparable legal instrument which restricts land uses and provides for its long-term preservation.

On page ES-13 through -15, the summary of impacts and corresponding mitigation measures for the Owens tui chub, Owens pupfish, and Owens speckled dace are deleted, based on the comment letter California Department of Fish and Game, as provided in their comment letter on the Draft EIR, is that there is no potential for these species to occur on the project site.

On pages ES-15 and-16, mitigation for the Swainson's hawk is updated as follows:

Swainson's hawk

The CDFG considers a nest site to be active if it was used at least once during the past 5 years. Impacts to suitable habitat or individual birds within a five-mile radius of an active nest will be considered significant and to have the potential to "take" Swainson's hawks as that term is defined in Fish and Game Code Section 86. Should focused surveys determine the presence of the State Threatened Swainson's hawk and impacts are

determined to be significant, impacts to the species shall be avoided or minimized to the maximum extent practicable. If impacts to the species cannot be avoided, mitigation in consultation with the CDFG shall include the following measures which would reduce impacts to less than significant:

- Prepare a Swainson's hawk Monitoring and Mitigation Plan. Plans shall be prepared by a qualified biologist approved by the CDFG and the appropriate lead agency and include detailed measures to avoid and minimize impacts to Swainson's hawks in and near the construction areas. For example:
 - o If a nest site is found, design the project to allow sufficient foraging and fledging area to maintain the nest site.
 - O During the nesting season, ensure no new disturbances, habitat conversions, or other project-related activities that may cause nest abandonment or forced fledging occur within ½ mile of an active nest <u>during the nesting season, which typically occurs</u> between <u>March 1 and September 15 February 15 and October 14</u>. Buffer zones shall be adjusted in consultation with the CDFG and the lead agency.
 - Do not remove Swainson's hawk nest trees unless avoidance measures are determined to be infeasible. Removal of such trees shall occur only during the nesting season, which typically occurs during the through the last day in February 14.
 - O A worker education component shall be included in the Plan and shall apply to both construction crews and employees at the bottling plant. This component shall include, but may not be limited to, restrictions on parking, vehicular access, and pedestrian access to portions of the project site and surrounding area during the nesting season.

The Monitoring and Mitigation Plan shall also include measures for injured Swainson's hawks as well as focus on providing habitat management lands.

In addition, the applicant shall coordinate with the CDFG to determine the need for an Incidental Take Permit in compliance with the State ESA.

On page ES-17, the mitigation measure for the least Bell's vireo is updated as follows:

Least Bell's vireo

Should focused surveys determine tThe presence of the Federal and State Endangered least Bell's vireo <u>is assumed</u> and impacts are <u>therefore</u> determined to be significant. 7 impacts to the species shall be avoided or minimized to the maximum extent practicable. If impacts to the species cannot be avoided, m Mitigation shall include one or more of the following measures at a mitigation-to-impact ratio of no less than 1:1 which would reduce impacts to less than significant:

- On- or off-site creation and/or restoration of 2.88 acres of riparian woodland.
- Payment into an agency-approved off-site mitigation bank or agency-approved in-lieu fee agreement.

• Off-site purchase and set aside and enhancement of land with suitable <u>Heast Bell's</u> vireo habitat.

In addition, mitigation areas shall be placed under a conservation easement, deed restriction, or comparable legal instrument which restricts land uses and provides for its long-term preservation. This mitigation can be satisfied with other riparian-warranted mitigation. Furthermore, the Applicant shall coordinate with the USFWS and CDFG to determine the need for a Section 7 consultation in compliance with the Federal ESA and obtaining an Incidental Take Permit in compliance with the State ESA, respectively.

On page ES-17, following the mitigation measure for the least Bell's vireo, new mitigation measures for impacts to the southwestern willow flycatcher, yellow-billed cuckoo, spotted bat, and pallid bat are added as follows:

Southwestern willow flycatcher

The presence of this species is assumed on the project site. Mitigation shall include one or more of the following measures at a mitigation-to-impact ratio of no less than 1:1 which would reduce impacts to less than significant:

- On- or off-site creation and/or restoration of 2.88 acres of riparian woodland.
- Payment into an agency-approved off-site mitigation bank or agency-approved in-lieu fee agreement.
- Off-site purchase and set aside and enhancement of land with suitable southwestern willow flycatcher habitat.

In addition, mitigation areas shall be placed under a conservation easement or comparable legal instrument which restricts land uses and provides for its long-term preservation.

Western yellow-billed cuckoo

The presence of this species is assumed on the project site. Mitigation shall include one or more of the following measures at a mitigation-to-impact ratio of no less than 1:1 which would reduce impacts to less than significant:

- On- or off-site creation and/or restoration of 2.88 acres of riparian woodland.
- Payment into an agency-approved off-site mitigation bank or agency-approved in-lieu fee agreement.
- Off-site purchase and set aside and enhancement of land with suitable western yellow-billed cuckoo habitat.

In addition, mitigation areas shall be placed under a conservation easement or comparable legal instrument which restricts land uses and provides for its long-term preservation.

Pallid and Spotted Bats

The presence of these species is assumed on the project site, Mitigation shall include the following:

- Pre-construction surveys for roosting bats must be performed 30 days prior to construction by a qualified biologist to be retained by the applicant.
- If roosts are found, a Memorandum of Understanding (MOU) with the CDFG shall be obtained by the contractor in order to remove bat species, or the construction schedule shall be modified to initiate construction after August 1, when young are assumed to have fledged.
- Alternative habitat shall be provided if bats are to be excluded from maternity roosts. If this is the case, a species-specific roost with comparable spatial and thermal characteristics shall be constructed and provided.
- CDFG and species-specific bat experts shall be consulted regarding specific designs if roost removal becomes necessary.

On page ES-17 and -18, the summary of impacts and corresponding mitigation measures for the Mojave ground squirrel are deleted in response to comments on the Draft EIR provided by the California Department of Fish & Game regarding the potential presence of these species.

On pages ES-20 through -27, mitigation measure BIO-4 is updated as follows:

- Riparian and wetland vegetation associated with jurisdictional features regulated by the USACE, RWQCB, and/or CDFG, exist within and adjacent to the proposed project. As suggested by the geohydrology report Hydrogeologic Evaluation provided in Appendix F of the Draft EIR, this riparian and wetland vegetation is supported by the groundwater table which receives hydrologic inputs from rain and snowmelt runoff, and likely affects the shallow aguifer that contributes to surface flow from natural seeps and springs associated with geologic fracturing and fault scarps such as the Spring Line fault. Mitigation measure HYDRO-2 in **Section 4.G**, Hydrogeology & Surface Hydrology, requires a comprehensive Groundwater Monitoring, Mitigation, and Reporting Program to be developed that will evaluate the impacts of project-related groundwater pumping on static groundwater levels in the project area. However, It it is not known what percentage of the supporting water annually comes from each of these sources. to what degree on-site riparian and wetland vegetation are dependent on spring flows and shallow aquifer levels. In addition, determining the amounts, by source, of supporting water and its relationship to the presence of riparian and wetland plant species, would require several years of data and installation of additional gauges, where the data ultimately collected could be difficult to interpret given seasonal variations and other factors. Therefore, the potential for impacts associated with the proposed project increase in extracting groundwater cannot be accurately determined based on available information. Due to this uncertainty, a Riparian and Wetland Monitoring and Adaptive Management Program (RWMAMP) for vegetation associated with jurisdictional areas, is proposed as mitigation.
- The RWMAMP is designed with a performance standard to respond to any significant loss of riparian and wetland vegetation and habitats within jurisdictional areas, due to the increased pumping and production. The County, as lead agency for the proposed project, will be the entity responsible for

ensuring the RWMAMP is implemented and annual reports are prepared. In addition, the need for responsive measures and how they will be carried out will be documented. As trustee agencies, the state and federal resource agencies, as appropriate, will be provided copies of the annual reports and related documentation concerning responsive measures for their review and comment.

- Monitoring Stations and Monitoring Regime. To best elucidate the relationship between the increased pumping and the maintenance, health, and vigor of riparian and wetland vegetation, as well as the role of rain, snowmelt runoff, and/or inputs from several natural seeps and springs along its length, and natural accretion in supporting riparian and wetland vegetation in the area, three monitoring stations will be established: 1) just upstream from the point where Cartago Creek's bed and bank characteristics are lost due to sheet flow; and 2) at two locations where existing natural springs exist that can be monitored along one or more of the five transects established at each monitoring station near the proposed plant facility, 3) at a location removed from the proposed plant facility. The measurement of baseline, or starting conditions, following the methods outlined above, will be conducted in mid- to late August (corresponding to the arid and most stressful conditions for riparian and wetland plant species in the beginning year of the RWMAMP) prior to the commencement of project operation. Monitoring at these stations, following the methods outlined above, will take place in mid- to late August during each following year of monitoring; monitoring will take place for six years following the buildout of each of the two proposed project phases, for a total duration of 12 years of monitoring. Monitoring will be conducted annually for the first three (3) years following buildout of each project phase in order to discern the potential loss of riparian wetland vegetation in the area, and implement responsive measures if necessary, as set forth below. Following year three (3) of monitoring following buildout of each project phase, if no loss of riparian and wetland communities is detected due to the increased pumping, monitoring will take place at year six (6) following the buildout of each project phase following the onset of increased pumping. If, at the end of the entire 126-year monitoring program, no significant loss of riparian and wetland communities is detected, the monitoring program will be terminated.
- Adaptive Management Measures. The adaptive management strategy for identified degradation and/or loss of riparian and wetland communities within jurisdictional areas shall include creation, restoration and/or enhancement of riparian and/or wetland habitat. The adaptive management shall be accomplished in one or more of the following ways, as determined by the Inyo County Water Department in consultation with the applicant: a) a short-term and/or long-term reduction in pumping of the project's water supply wells; ab) creation, restoration and/or enhancement of habitat on property owned by Crystal Geyser; bc) creation, restoration and/or enhancement outside the property, but within lower Owens River Basin; and ed) payment of in lieu fees to an existing riparian or wetland mitigation/conservation bank and/or existing management and/or enhancement program in the Eastern Sierra region. The selection of a site or program to which adaptive management measures will be applied will set a priority for locations where the highest benefit to habitat can be realized. The payment of in lieu fees, if such a program exists, will fulfill these requirements, in part or in full. For adaptive management entailing habitat creation, restoration and/or enhancement, a Habitat Management and Monitoring Plan shall be prepared for review and approval by the County and trustee agencies, as appropriate. The plan will stipulate success criteria for the habitat being created, restored and/or enhanced and will be monitored by a qualified restoration ecologist for five years or until such time as the success criteria are met, but no sooner than one year following cessation of all inputs (e.g., soil amendments, irrigation, etc.) to the creation,

restoration and/or enhancement project. The success criteria will address requirements for no significant net loss of riparian and/or wetland habitat regulated by the USACE, RWQCB, and/or CDFG and will focus on habitat replacement to the extent practicable and satisfactory to the participating trustee resource agencies.

On pages ES-27 and -28, mitigation measure BIO-5 is updated as follows:

Mitigation Measure BIO-5: The Applicant shall be responsible for implementing mitigation to reduce potential impacts to migratory raptor and songbird species to below a level of significance by the following: (1) Vegetation removal activities shall be scheduled outside the nesting season for raptor and songbird species (typically September 1 to February 14) to avoid potential impacts to nesting species (this will ensure that no active nests will be disturbed and that habitat removal could proceed rapidly); and/or (2) Any construction activities that occur during the raptor and songbird nesting season (typically February 15 to August 31—October 14) shall require that all potentially impacted suitable habitat be thoroughly surveyed for the presence of nesting raptor and songbird species by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors) shall be delineated, flagged, and avoided until the nesting cycle is complete as determined by the qualified biologist to minimize impacts.

On page ES-28, mitigation measure ARCH-1A is revised as follows:

Mitigation Measure ARCH-1a: The Applicant shall retain a qualified archaeological monitor and Native American monitor who shall be present during construction excavations such as grading, trenching, grubbing, or any other construction excavation activity associated with the proposed project. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (native versus fill soils), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the archaeological monitor and Native American monitor.

On page ES-39, mitigation measure HYDRO-1, which was inadvertently omitted from the Executive Summary, is added, with updated text as follows:

Mitigation Measure HYDRO-1: During the initial sequential activation of the first two production lines after Phase I building has been completed, all three wells shall be utilized so that the total groundwater demand is spread between the three wells, as opposed to pumping only one well at full capacity while leaving the other two wells idle. This will mitigate water level drawdown impacts in the vicinity of any one pumping well. During the initial phase in period, with all three wells in operation, the actual effect of the pumping on water levels shall be evaluated by conducting water-level monitoring in piezometers, springs and groundwater monitoring wells in the surrounding area.

On pages ES-39 and -40, mitigation measure HYDRO-1 is revised as follows.

Mitigation Measure <u>HYDRO-1</u> <u>HYDRO-2</u>: A regular program of data collection and database maintenance shall be undertaken to develop a long-term data set that can be reviewed for changes in groundwater conditions over time. Data collection efforts shall include the following: <u>The applicant</u> shall submit a Groundwater Monitoring, Mitigation, and Reporting Plan (prepared by a qualified

hydrogeologist or other specialist approved in advance by the Inyo County Water Department) to the Inyo County Water Department for review and approval prior to the operation of the three water supply wells, as follows:

- For all wells on Cabin Bar Ranch that are currently pumped or are proposed to be pumped in the future, Crystal Geyser Roxane shall install meters inside their facility buildings (for security and/or maintenance reasons) or at the wellheads. Meters shall be equipped with properly calibrated and accurately-reading flow meters that read in both instantaneous flow (in gpm) and total flow (in gallons or AF), and that are located at a proper location on the discharge pipe near each wellhead. The totalizer flow dial data shall be monitored and recorded on a regular basis (i.e., at each well at least once each week). Flow meters shall be placed on each pumping well to allow for a more accurate determination of the amounts of groundwater to be pumped from CGR-8, CGR-9, and CGR-10, and also the amount currently pumped from the existing active plant wells (CGR-2 and CGR-7) and the two active domestic supply wells for the plant (CGR-3 and CGR-4).
- Two active plant wells, CGR-2 and CGR-7, are equipped with pressure transducers which provide continuous monitoring of SWLs. Wells CGR-3 and CGR-4 shall be equipped with pressure transducers as well.
- To monitor future water levels near the northern boundary of the proposed facility, well CBR-1 (the proposed domestic production well), located approximately 1,070 feet northeast of CGR-10, shall be equipped with a transducer to continuously record water levels. The well casing for CBR-1 is perforated between 60 and 120 feet bgs; these depths are in the same general perforation zones of CGR-8, CGR-9 and CGR-10 (53 feet to 88 feet bgs). Monitoring of the water levels in this on-site domestic-supply well would yield data on possible changes in the water levels that might be caused, as a result of the proposed pumping, on shallow off-site wells north and northwest of the facility.
- In addition to collection of water level data via transducers, all active wells, inactive wells, observation or monitoring wells, and piezometers on Cabin Bar Ranch shall be manually measured and water levels recorded on a monthly basis. These data shall be tabulated including a listing of the date and time of measurement, the depth to water bgs, the respective groundwater elevation, and the current operating status of each well (static or pumping condition). If a well is pumping, a measurement for a SWL shall be collected 24 hours after shutdown of pumping in that well. As an alternative to manual measurements, a Supervisory Control and Data Acquisition (SCADA) system may be set up to record SWLs in CGR wells on a daily basis, twice each day (say at 8:00 AM and 8:00 PM), with the date, time, and depth to water measurements. These data shall be preserved for later review, graphing and analysis.
- Little long-term and regularly scheduled water quality data was available from the wells that could be analyzed for selected key water quality constituents, such as the general minerals (e.g. the common cations and anions) and inorganic chemicals (trace elements). To establish a database where possible long term trends and changes in water quality may be evaluated, groundwater samples shall be collected at least once every three years from the pumping wells and key groundwater monitoring wells for analysis of physical constituents (e.g. temperature, electrical conductivity, turbidity, pH; general minerals, trace metals; and the radiological constituents is recommended.

- The Plan shall be submitted to the Inyo County Water Department at least three months prior to the commencement of project operation to allow for adequate review time and any necessary revisions.
- The Plan shall provide a detailed methodology for monitoring background groundwater levels. The monitoring period shall include pre-operation and project operation. The Plan shall establish pre-operation and project-related groundwater level trends that can be quantitatively compared against predicted trends near the project pumping wells and potentially impacted resources.
- The Plan shall include the applicant's existing model for predicting changes in the groundwater flow system resulting from the project. This model has the capability to assess changes in hydraulic head, flow rate, flow direction, and water budget. In addition, the Plan shall include model runs which predict effects of the planned groundwater pumping for the project on offsite wells.
- The Plan shall define triggers for on-site monitoring wells that correspond to potential impacts on off-site wells. The triggers shall be based on the results of monitoring and modeling. The applicant shall also use the model to provide an evaluation of the sustainability of the water supply for the life of the project, including the cumulative sustainability when considered with other pumping occurring or projected to occur in the groundwater basin.
- The Plan shall also include the following:
 - 1. Initiation: Provisions for initiation of evaluation of the water level data;
 - 2. <u>Verification: A plan for verifying the predictive tools described above and for revising or recalibrating the tools as necessary; and</u>
 - 3. Revisions: A plan for revising thresholds as dictated by new data concerning system response to project operation.
- Monitoring. Water level monitoring shall be conducted and reported at monthly intervals for the first two years of project operation following each phase of project buildout. Data shall be collected and analyzed by a qualified specialist to be retained by the applicant and approved by the Inyo County Water Department. Monitoring reports shall be prepared by the applicant's approved specialist and submitted to the Inyo County Water Department within 20 days of data collection. After the first two-year operational and monitoring period following each phase of project buildout, the applicant's approved specialist shall evaluate the data. If appropriate, the applicant's approved specialist shall recommend whether the monitoring program shall be revised or eliminated, based on observed groundwater level changes as compared with predicted modeling, and on the consistency of the data collected. The final determination of whether the monitoring program is to be revised or eliminated shall be made by the Inyo County Water Department.

Off-Site Well Impacts. In the event that a well owner notifies the Inyo County Water Department that impacts to off-site wells have occurred or will occur due to the project, and impacts are confirmed through verifiable data as determined by the Inyo County Water Department, the applicant shall take one or more of the following steps in consultation with and as approved by the Inyo County Water Department to maintain less than significant impacts: (1) a short-term or long-term reduction in pumping from one or more wells at the

Cabin Bar Ranch or other wells within its control, (2) direct provision of water from Crystal Geyser to the impacted well owner(s), and/or (3) direct financial compensation from Crystal Geyser to the impacted owner(s) for the costs to modify well(s) and/or for increased electrical costs. Disputes as to the cause of well water drawdown or appropriate corrective measures shall be resolved by the County.

<u>It is understood that the Inyo County Water Department will consider, but will not be limited to, the following as part of its confirmation of impacts and mitigation for off-site well impacts:</u>

- 1. <u>Mitigation for project effects on off-site wells shall depend upon the specific characteristics of each well, and the use of the well.</u>
- 2. The applicant shall work with the Inyo County Water Department to evaluate wells that may be affected by groundwater drawdown as the project progresses.
- 3. The Inyo County Water Department shall consider in its evaluation the applicant's monitoring data, as required pursuant to this mitigation measure, and the groundwater model, as it may be amended.

On page ES-40, mitigation measure HYDRO-2 is revised as follows:

Mitigation Measure HYDRO-2 HYDRO-3: After data has been collected for each phase of development, the The project applicant shall retain qualified groundwater professionals to evaluate water quality as set forth in this mitigation measure. Since, since pumping is conducted continuously and groundwater conditions may change, this These data will allow the proposed pumping program to be modified to adjust to changes in conditions prior to increasing groundwater withdrawal to expand production. Examples of such data review and interpretation may include, but not be limited to, the following:

- Little long-term and regularly scheduled water quality data was available from the wells that could be analyzed for selected key water quality constituents, such as the general minerals (e.g. the common cations and anions) and inorganic chemicals (trace elements). To establish a database where possible long-term trends and changes in water quality may be evaluated, groundwater samples shall be collected at least once every three years from the pumping wells and key groundwater monitoring wells for analysis of physical constituents (e.g., temperature, electrical conductivity, turbidity, pH; general minerals, trace metals; and the radiological constituents is recommended.
- Plot the production quantities from each well, along with rainfall and SWLs, in order to assess the impact of pumping on SWLs in all monitored sites.
- Plot temporal changes in key water quality constituents in groundwater samples from the wells. Typical key water quality constituents include total dissolved solids, electrical conductivity, color and selected cations and anions, such as calcium, magnesium, sodium and boron, and cations, such as bicarbonate, sulfate and chlorides. Tracking changes in these constituents in those wells close to the Spring Line fault will may provide indication of any possible intrusion of

any water quality <u>brackish groundwater</u> from the east side of the fault into the <u>sediments</u> aquifer on the west side of the fault.

In the event that verifiable data are presented to the Inyo County Water Department demonstrating impacts to water quality due to the applicant's pumping activities, the applicant shall undertake a short-term or long-term reduction in pumping from one or more wells at the Cabin Bar Ranch to maintain less than significant impacts, in consultation with and as approved by the Inyo County Water Department.

On page ES-47, **Table ES-1**, *Summary of Project Impacts and Mitigation Measures*, the Transportation section is revised as shown on the following page.

Table ES-1
Summary of Project Impacts and Mitigation Measures

Environmental Impacts	Mitigation Measures	Level of Significance
I. TRANSPORTATION		
Threshold 4.I-1: Would the proposed project cause an intersection or roadway segment within Inyo County to operate LOS C or lower?		
Threshold 4.I-2: Would the proposed project substantially increase hazards due to traffic volumes, a design feature (e.g., sharp curves or dangerous intersections), incompatible uses, or vehicles entering US 395.		
Threshold 4.I-1 The proposed project would not result in a less than significant impact because no intersection or roadway within Inyo County would operate at LOS C or lower as a result of the proposed project.	No mitigation required.	Less Than Significant
Threshold 4.I-2 The proposed project would not substantially increase hazards due to traffic volumes, a design feature (e.g., sharp curves or dangerous intersections), incompatible uses, or vehicles entering US 395.	No mitigation required.	Less Than Significant

2.0 PROJECT DESCRIPTION

On page 2-1, the 4th paragraph will be amended to read as follows:

The majority of the ranch, approximately 402 acres, is currently zoned OS-40 (Open Space, 40-Acre Minimum), with the undeveloped 17.90-acre subdivision zoned RR-1.0 (Rural Residential, one-acre minimum). The 34.41-acre project site is proposed as a single parcel to be created from the overall 420-acre ranch through a lot line adjustment and merger of 16 lots from the undeveloped subdivision. Approximately 23.46 acres of the proposed project site, including 11.04 acres currently zoned RR-1.0 and 12.42 acres currently zoned OS-40, would be rezoned M-2 (Light Industrial), with a Conditional Use Permit (CUP) to allow for the specific use of a bottling plant. Approximately 6.86 acres of Cabin Bar Ranch that are currently zoned RR-1.0, but outside the proposed project site, would be merged or extinguished and rezoned to OS-40 under the County's reversion to acreage process, so that there is no RR-1.0 zoning remaining on Cabin Bar Ranch. A General Plan amendment is also requested to apply the Light Industrial (LI) land use designation to this portion of the proposed project site.

Figure 2.0-4, *Project Site Plan,* within **Section 2.0,** *Project Description,* is revised to display the revised site design.

On page 2-16, the 1st full paragraph is amended as follows:

Since the proposed project's new access road would be constructed approximately four years prior to the planned improvements to US 395, proposed project improvements along US 395 would conform to Caltrans standards based on the current configuration of US 395. Accordingly, project-related improvements to US 395 would include the appropriate acceleration and deceleration lanes, as well as turning lanes, on both the northbound and southbound side of US 395. The on-site access road would be approximately 3,1003,175 feet in length and would cross the site in a northeastern direction from US 395 towards the proposed bottling facility. The alignment of the access road is intended to avoid red willow trees within the project site to the degree possible. The on-site access roadway would be constructed at the onset of Phase I. When the Caltrans project is completed, the proposed access road's intersection with US 395/US 395 Frontage Road would be modified accordingly, although these modifications are not considered a part of this proposed project.

On page 2-16, the 2nd full paragraph is amended as follows:

The existing Cabin Bar Ranch Road would be demolished in Phase I of the proposed project. The asphalt from the road would be pulverized and recycled for use in the base of the proposed new access road. The road would be left in an unimproved condition (e.g., dirt or gravel) to maintain utility access along its alignment and is not intended to be used during project operation, unless the Fire Department requests that it be maintained for emergency access. The existing stone and wood Cabin Bar Ranch sign at the US 395 entrance to Cabin Bar Ranch Road would remain in place.

On page 2-21, Section 6.a, *List of Necessary Approvals: Inyo County*, Bullet Point 5 will be amended to read as follows:

• Lot Line Adjustment (LLA) process to create the <u>34.4123.46</u>-acre project site from the overall 420-acre Cabin Bar Ranch property

On page 2-21, Section 6.a , *List of Necessary Approvals: Inyo County*, will be amended to add the following permit:

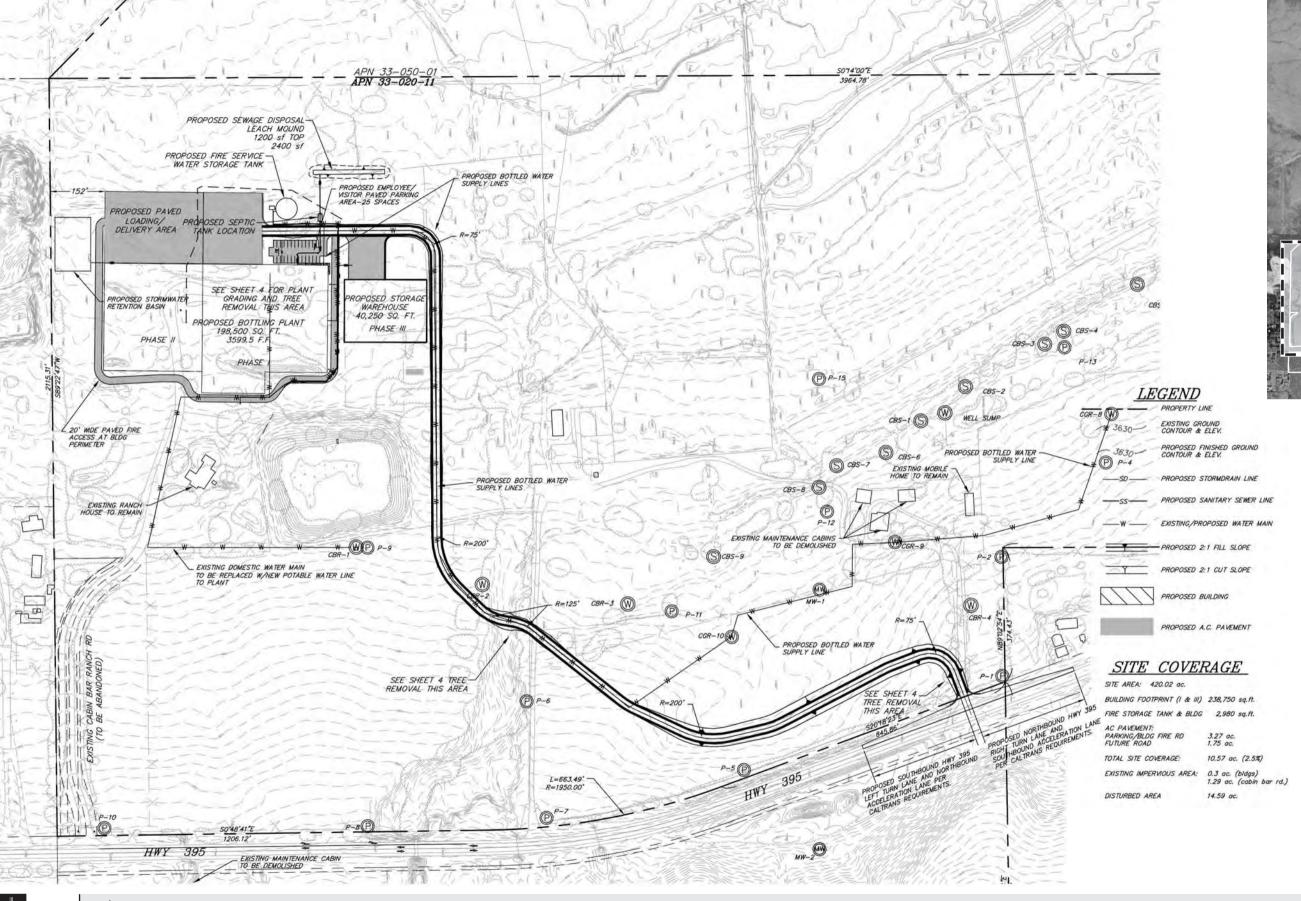
 Zone Reclassification for a Zone Change of 6.86 acres of Rural Residential One-Acre Minimum (R-1.0) to Open Space, 40-Acre Minimum (OS-40).

On page 2-21, Section 6.b , List of Necessary Approvals: State of California Agencies, will be amended as follows:

 California Department of Transportation, District 9 (Encroachment Permit in the event future Fire Department emergency access is requested for existing Cabin Bar Ranch Road)

On page 2-21, Section 6.b , *List of Necessary Approvals: State of California Agencies*, will be amended to add the following permits:

- Great Basin Unified Air Pollution Control District (Asbestos NESHAP Notification of Demolition and Renovation Form)
- State Historic Preservation Office Section 106 Permit
- Clean Water Act Section 401 Permit
- Clean Water Act Section 402(b) Stormwater Permit
- Clean Water Act Army Corps of Engineers Section 404 Nationwide Permit
- California Department of Fish and Game Section 1602 Streambed Alteration Agreement
- US Fish and Wildlife Service Endangered Species Act (ESA) Permit
- California Department of Fish and Game Section 2080.1 and 2081(b) Take Permits
- Waste Discharge Requirements (WDRs)
- Report of Waste Discharge (ROWD)





240 Feet

Project Site Plan

2.0-4

Image Area

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3.0 GENERAL DESCRIPTION OF ENVIRONMENTAL SETTING

On page 3-4, the misspelled references to "Owen's Valley" are revised to Owens Valley.

Table 3-1, *Related Projects List*, will be amended so that the size of Related Project No. 7 is <u>15,700 acres</u>.

Table 3-1, *Related Projects List*, will be amended to remove Related Project No. 4 (the LADWP Owens Lake Master Use Plan). The remaining related projects will be renumbered accordingly.

4.0 ENVIRONMENTAL IMPACT ANALYSIS

B-1. Air Quality

On page 4.B.1-5, after the third paragraph under subsection **(4) California Air Resources Board Emission Control Measures**, add the following:

CARB adopted an Airborne Toxic Control Measure for Stationary Compression Ignition Engines, codified in Title 17, California Code of Regulations, Section 93115, effective October 18, 2007, The purpose of this ATCM is to reduce diesel particulate matter (DPM) and other criteria pollutant emissions from stationary diesel-fueled compression ignition (CI) engines. This ATCM regulates the type of fuel to be used in engines subject to the rule, and establishes operating limitations and emission standards for engines greater than 50 brake-horse power (b-hp). Due to the recognized negative health impacts to children from DPM, CARB set more stringent limits for engines to be located on or near schools.

On page 4.B.1-6, after the first bulleted paragraph, add the following:

• GBUAPCD Rule 216-A. New Source Review requirements for Determining Impacts on Air Quality Secondary Sources: Before any individual builds or operates a secondary source (defined as any structure, building, facility, or equipment) which will cause the issuance of any manmade air pollutant for which there is a state or national ambient air quality standard, such person must obtain a permit from an Air Pollution Control Officer. The Air Pollution Control Officer shall deny a permit for any new secondary source or modification determined to cause a violation or contribute to the continued violation of any state or national ambient air quality standard.

On page 4.B.1-13, under subsection **(2) Operational Impacts**, the last sentence of the first paragraph is edited as follows:

Stationary sources include off-site generation of electricity used on-site for the project and a diesel-powered emergency generator for the fire suppression system. The emergency generator is expected to be used only in the event of power loss during an on-site fire; therefore routine emissions from the generator are not expected or calculated in this EIR.

On page 4.B.1-19, Mitigation Measures AQ-1, AQ-3, and AQ-4 are revised as follows:

- **Mitigation Measure AQ-1:** All active portions of the construction site shall be watered <u>at least twice daily,</u> or less if the site is dampened by natural processes (rain, etc.) sufficiently to suppress dust. to prevent excessive amounts of dust.
- **Mitigation Measure AQ-3:** All on-site roads shall be paved as soon as feasible or watered periodically at least twice daily, or less if the site is dampened by natural processes (rain, etc.), or chemically stabilized.
- **Mitigation Measure AQ-4:** All material excavated or graded shall be sufficiently watered to <u>suppress dust;</u> prevent excessive amounts of dust; watering, with complete coverage, shall occur at least twice daily, or less if the site is dampened by natural processes (rain, etc.), preferably in the late morning and after work is done for the day.

C. Biological Resources

On pages 4.C-13, 4.C-14, 4.C-15, 4.C-16, 4.C-19, 4.C-30, 4.C-31, 4.C-37, 4.C-38, 4.C-39, 4.C-40, 4.C-41, 4.C-49 and 4.C-50, the misspelled references to "Owen's Valley" are revised to <u>Owens Valley</u>.

On page 4.C-14, the following paragraphs are updated with respect to the potential presence of the southwestern willow flycatcher and the western yellow-billed cuckoo, based on California Department of Fish and Game comments on the Draft EIR:

No sensitive wildlife species were observed during the field surveys. All wildlife species observed within the study area were recorded and compiled and are included in **Appendix C**, *Floral and Faunal Compendium*. The following sensitive species are not expected to occur due to lack of suitable habitat, foraging habitat, or because the project area is outside of the known elevation or distribution range for the species: Wong's springsnail, Owen's tui chub, Owen's pupfish, Yosemite toad, pallid bat, western snowy plover, California wolverine, Pacific fisher, Volcano Creek golden trout, Sierra Nevada bighorn sheep, Sierra Madre yellow legged-frog, American badger, Le Conte's thrasher, and Sierra Nevada red fox, and Mohave ground squirrel.

Sensitive wildlife species with potential to occur due to suitable habitat on-site include Wong's springsnail, Owen's tui chub, Owen's pupfish, Swainson's hawk, loggerhead shrike, yellow breasted chat, yellow warbler, least bittern, least Bell's vireo, southwestern willow flycatcher, western yellow-billed cuckoo, spotted bat, pallid bat, and Owen's Valley vole, and Mohave ground squirrel. These species are described in further detail below.

On pages 4.C-14 and -15, the following text is amended based on focused surveys conducted in May 2012 and October 2012 that confirmed that no sensitive plant species are present on the project site:

All plant species observed within the study were recorded and compiled and are included in **Appendix C**, *Floral and Faunal Compendium*. No sensitive plants listed above were observed during the field surveys, but based on the environmental conditions in which some have been known to occur and the

habitat seen in the study area, there is potential for these species to occur on-site. Focused surveys are recommended for the following species due to the presence of potentially suitable habitat: Tulare rockcress, upswept moonwort, scalloped moonwort, mingan moonwort, Kern Plateau bird's beak, sanicle cymopterus, Kern River fleabane, field ivesia, creamy blazing star, Charlotte's phacelia, Parish's popcorn-flower, Bailey's greasewood, Owen's Valley checkerbloom, cut-leaf checkerbloom, marsh arrow-grass, and grey-leaved violet. Surveys should be conducted for these plants during the appropriate seasons making sure to encompass the flowering periods of all potentially present sensitive plants. Based on known blooming periods, it is recommended that three sensitive plant surveys be conducted to maximize the chance to observe each species during its blooming period during April, May/June, and August. The location of any observed sensitive plant species will be recorded and mapped, if detected.

The Owen's Valley checkerbloom, a State Endangered species, is found only in the Owen's Valley. Cartago is at the southernmost edge of its distribution range and there are records of it occurring in only three locations near the town. CNDDB records show that in 1988 approximately 1,500 – 2,000 plants were found on the Cabin Bar Ranch property in one of the former pasture areas, which is approximately 1,300 feet to the south of the study area. In 1999, another population was recorded approximately one mile to the south-southeast and again, in 2002, another population was reported one mile to the north-northeast. According to Sally Manning, president of the local Bristlecone Chapter of the CNPS, currently this species is not known to occur in any other locations in the vicinity (pers. comm. Manning 2012). At Cabin Bar there have been no subsequent significant alterations to the pastures since 1988 and it should be presumed the plant is still there. Focused surveys for this species are recommended. Based on focused surveys conducted on the project site in May 2012 and October 2012, it was concluded that habitat for this species, in the northwestern portion of Cabin Bar Ranch, lay outside the project impact area.

Parish's popcorn-flower is a CRPR List 1B.1 species. CNDDB records show an occurrence of this species documented 0.6 mile to the north of the study area. Focused surveys for this species are recommended were conducted in May 2012 and October 2012 and no occurrences were observed, and the species is presumed not to be present on the project site.

On page 4.C-16, immediately after the text addressing the least Bell's vireo, the following information is added, in response to comments on the Draft EIR provided by the California Department of Fish & Game regarding the potential presence of these species:

Based on documented occurrences of the southwestern willow flycatcher and yellow-billed cuckoo in the project area, these species have the potential to occur on the project site. Both are migratory species that migrate to the Owens Valley during the breeding season, and because of their listed status as endangered by the State or Federal resource agencies, any take or impacts to the habitat of these species is a potentially significant impact.

On page 4.C-29, **Figure 4.C-3**, *Jurisdictional Features*, is updated to depict the slightly realigned entry road and associated relocated crossing of Cartago Creek, and to depict the soil pit locations from the jurisdictional delineation performed on the project site. The updated figure is provided on page 3-21.

On page 4.C-23, **Table 4.C-2**, *Jurisdictional Features*, is updated to reflect the updated calculation of affected jurisdictional acreage on the project site, as the result of the slightly realigned entry road and associated relocated crossing of Cartago Creek:

Table 4.C-1

Jurisdictional Features

Jurisdictional Feature	ACOE/RWQCB Jurisdiction (Acres)	CDFG Jurisdiction (Acres)
Cartago Creek*	0.06 <u>0.019</u>	0.19 <u>0.113</u>
Owens Lake Playa Wetlands	(5.97)	(5.97)
TOTAL	6.03 <u>5.989</u> (5.97)	6.16 <u>6.083 (</u> 5.97)

^{*}The total for Cartago Creek is inclusive of the man-made ditch

Source: PCR Services Corporation, 2012.

On page 4.C-28, the following text is updated to include discussion of the pipeline alignments between the proposed plant site, the three production wells, and domestic well.

c. Project Features

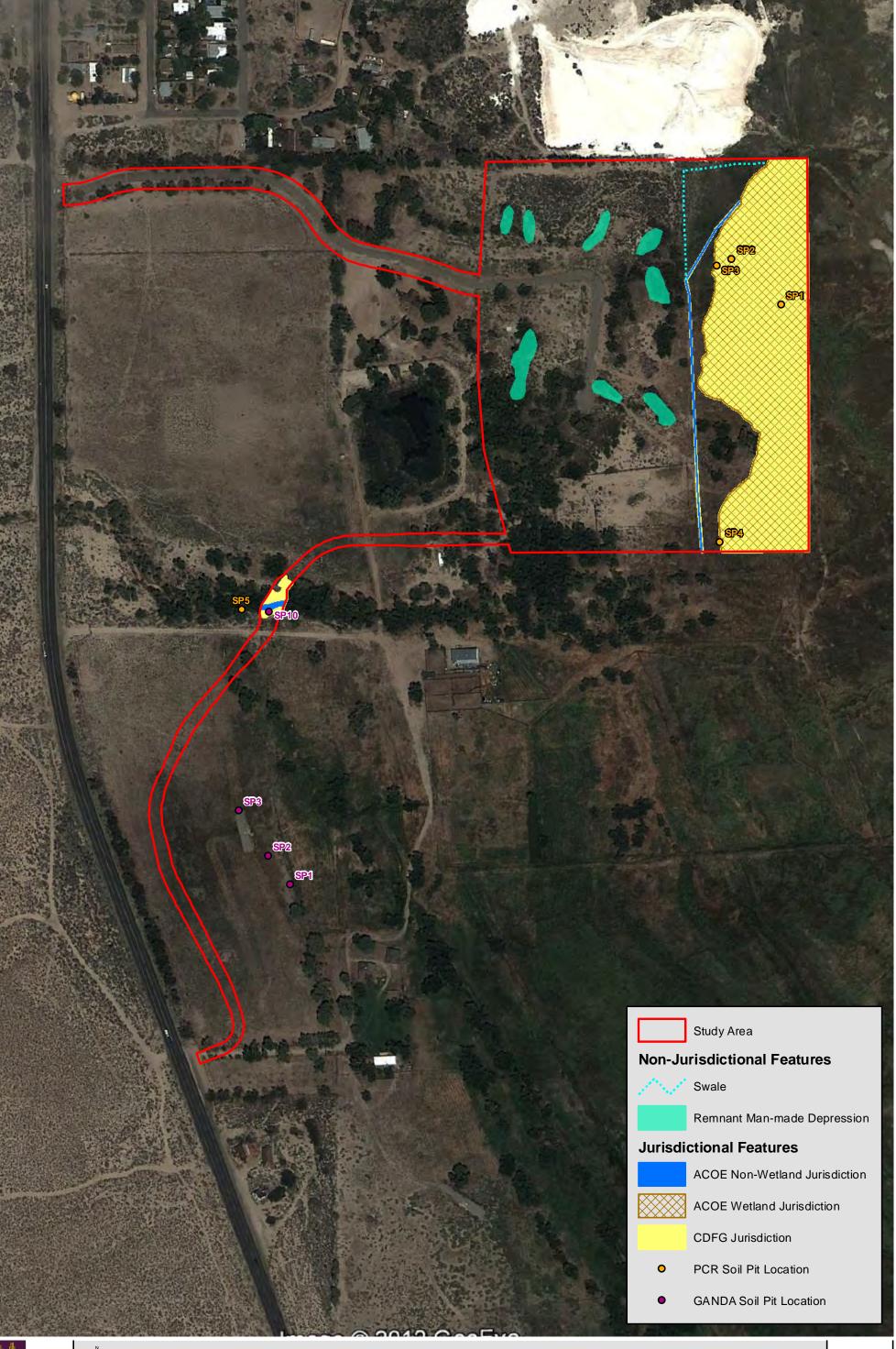
The project proposes a spring water bottling facility and ancillary uses. The water bottling facility would include an approximately 198,500-square foot bottling plant and an approximately 40,000-square-foot storage warehouse. Ancillary uses to the bottling facility would include a fire suppression building, stormwater retention basin, leach mound, fire access road, and parking and truck staging area. To provide adequate access from US 395 to the bottling facility, the project would remove the existing access road (i.e., Cabin Bar Ranch Road) and construct a new permanent access road approximately 2,500 feet to the south.

The bottling facility would use spring water from three existing production wells located in the central portion of the 420-acre ranch. The proposed project would also draw from a fourth existing well <u>west of the proposed plant site</u> to provide domestic potable water to the water bottling facility. <u>Existing production wells CGR-8, -9, and -10 are located southwest of the proposed plant site within an area designated as upland and assumed to have served as cattle grazing land in the past.</u>

On page 4.C-29, the following text is amended in response to field surveys performed in October 2012, which determined that no suitable habitat exists on the project site:

No focused sensitive wildlife surveys were conducted during the field survey. Sensitive wildlife species known to occur within the vicinity but not expected to occur on-site due to lack of suitable habitat or because the project area is outside of the known elevation or distribution range for the species include: Yosemite toad, western snowy plover, California wolverine, Pacific fisher,

^{**} Acreage in parentheses indicates acreage of wetlands and are a subset of the total, not additive.





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Volcano Creek golden trout, Sierra Nevada bighorn sheep, Sierra Madre yellow legged-frog, American badger, Le Conte's thrasher, and Sierra Nevada red fox.

On page 4.C-31, the following text is amended in response to comments on the Draft EIR by the California Department of Fish & Game:

There does not appear to be suitable habitat for the Owen's tui chub on-site. (i.e., lack of the presence of water since the drainage features on-site were dry at the time of the site visit.), due to the multiple occurrences in the vicinity and the presence of the ephemeral Cartago Creek, dried ponds, and irrigation ditches within the study area, a habitat assessment and, if warranted, pre-construction surveys by a local specialist are recommended in order to determine its presence or absence. Should the Owen's tui-chub be found on-site and impacts are determined to be potentially significant, mitigation would be required. Mitigation measures described in Section 3.2a below will reduce these impacts to a less than significant level.

There does not appear to be suitable habitat for the Owen's pupfish on-site, (i.e., lack of the presence of water since the drainage features on site were dry at the time of the site visit), due to the occurrence and the presence of the ephemeral Cartago Creek, dried ponds, and irrigation ditches within the study area, a habitat assessment and, if warranted, pre-construction surveys by a local specialist are recommended in order to determine its presence or absence. Should the Owen's pupfish be found on-site and impacts are determined to be potentially significant, mitigation would be required. Mitigation measures described in Section 3.2a below will reduce these impacts to a less than significant level.

On page 4.C-32, the following text is amended in response to comments on the Draft EIR by the California Department of Fish & Game:

The Mohave ground squirrel is a State Threatened species. As previously mentioned, although t There are no recorded occurrences of the Mohave ground squirrel on-site and based on this fact and the lack of habitat onsite, the species is assumed not to be present, the study area supports potentially suitable habitat for the species, open desert scrub and alkali scrub; thus, focused surveys to determine presence or absence of the Mohave ground squirrel are recommended. Should the Mohave ground squirrel be found on-site and impacts are determined to be potentially significant, mitigation would be required. Mitigation measures described in Section 3.2a below will reduce these impacts to a less than significant level.

On page 4.C-32, the following text is amended to reflect the results of the jurisdictional delineation of the production well pipeline alignment, and the slight realignment of the access road between US 395 and the new plant site:

Implementation of the proposed project will result in permanent impacts through removal of approximately 0.01 acres of non-wetland ACOE/RWQCB "water of the U.S." and 0.12 0.113 acres of CDFG jurisdiction associated with Cartago Creek, in order to install a culvert crossing. The project would also result in permanent impacts through removal of approximately 0.03 acres of unvegetated non-wetland ACOE/RWQCB jurisdiction and 0.04 acre of CDFG jurisdiction within an

unvegetated man-made swale to construct the main bottling facility. The pipeline alignment between the three production wells CGR-8, CGR-9, and CGR-10 and the new plant site cross upland plant communities and would not impact wetlands or non-wetland "waters of the US." The pipeline alignment between the domestic well CBR-1 and proposed plant site is contained within existing Cabin Bar Ranch Road and would likewise not impact sensitive plant communities or jurisdictional resources. Therefore, permanent impacts through removal to non-wetland ACOE/RWQCB "waters of the U.S." totals approximately 0.04 0.049 acres, and permanent impacts to non-wetland CDFG jurisdictional resources total 0.16 0.153 acres for the proposed project, as shown in Figure 4.C-6, Impacts to Jurisdictional Features. Impacts to jurisdictional waters are considered potentially significant. Mitigation to reduce these impacts to a less than significant level is provided in Section 3.2.c.

On page 4.C-34, **Figure 4.C-6**, *Impacts to Jurisdictional Features*, is updated to depict the slightly realigned entry road and associated relocated crossing of Cartago Creek. The updated figure is provided on the following page.

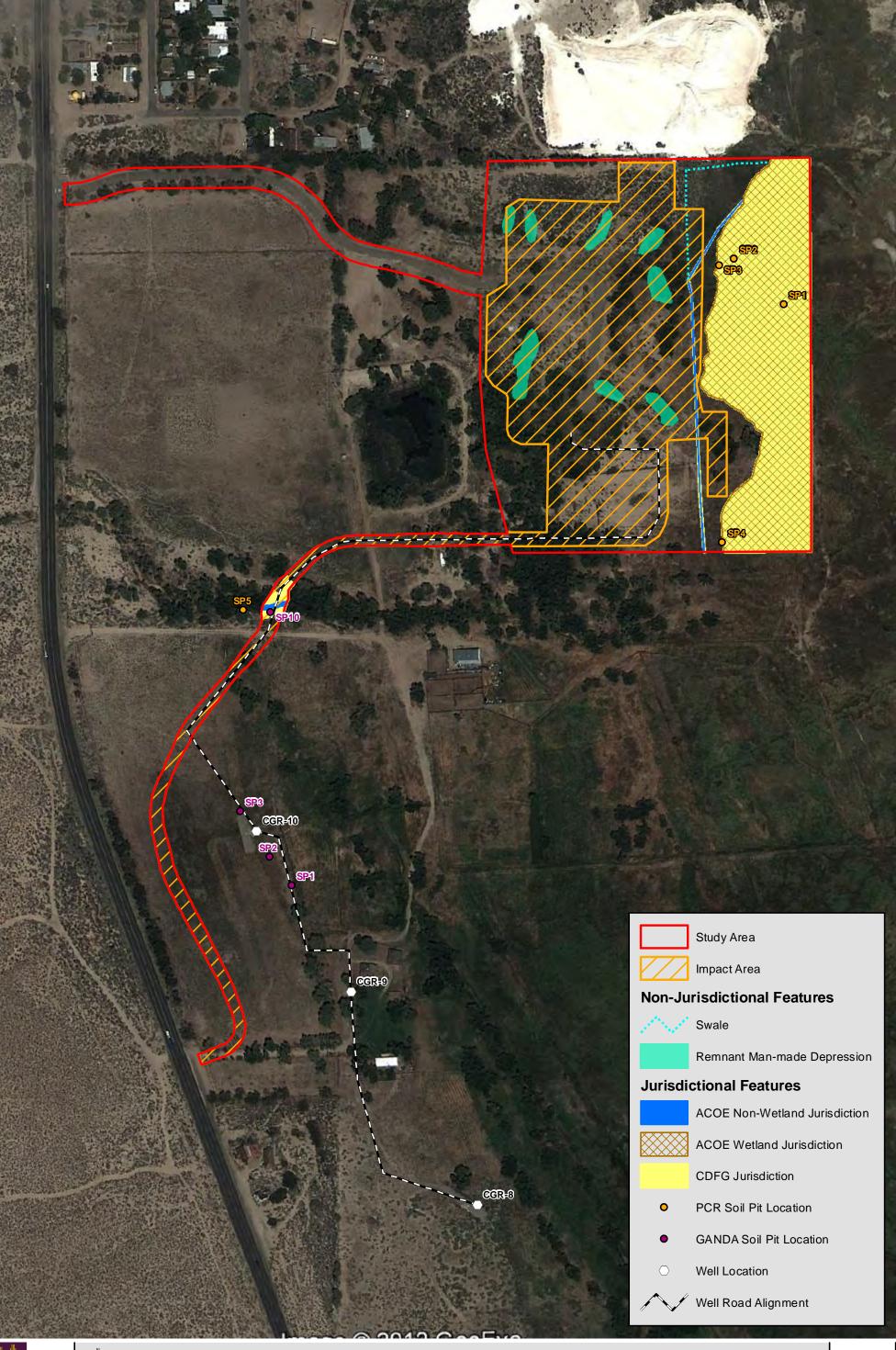
On page 4.C-37, the following paragraphs are amended in response to comments on the Draft EIR provided by the California Department of Fish & Game regarding the potential presence of these species:

Due to the lack of suitable habitat or because the study area is outside of the known range or elevation for these species, the following Recovery Plan species, which were not analyzed in Section 2d(1) above, are not expected to occur: hot springs fimbristylis, Owens springsnail, Fish Slough springsnail, Aardhal's springsnail, Long Valley speckled dace, <u>and</u> Owens sucker, <u>southwestern willow flycatcher</u>, and <u>western yellow-billed cuckoo</u>.

Owens speckled dace is a Species of Special Concern. Although t There does not appear to be suitable habitat for the Owens speckled dace on-site and the species is assumed not to be present. (i.e., lack of the presence of water since the drainage features on site were dry at the time of the site visit), due to the presence of the ephemeral Cartago Creek, dried ponds, and irrigation ditches within the study area, there is a low potential for Owens speckled dace to be found on site. Due to the limited suitable habitat found within the region (i.e., limited streams and springs within Owens Valley), surveys for this species will be conducted concurrently with the habitat assessment and, if warranted, pre-construction surveys by a local specialist is recommended for the Owen's tui chub and Owen's pupfish in order to determine its presence or absence. If large populations of the Owens speckled dace are found on-site, impacts would be potentially significant, and mitigation would be required. Mitigation measures described in Section 3.b, below, will reduce these impacts to a less than significant level.

Mitigation measure BIO-1a is deleted, since focused surveys conducted in May 2012 and October 2012 confirmed that no sensitive plant species are present on the project site, including the area proposed for the alignment of the pipelines between the proposed production and domestic water wells and the proposed plant site.

Mitigation Measure BIO-1a: Should focused surveys determine the presence of the Owen's Valley checkerbloom, Fish Slough milk-vetch, Inyo County mariposa lily, silverleaf milk-vetch, alkali ivesia, Inyo phacelia, or any other sensitive plant species and impacts are determined to be significant, impacts to the species shall be avoided or minimized to the





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maximum extent practicable. If impacts to the sensitive plant species cannot be avoided, mitigation shall include one or more of the following measures at a mitigation-to-impact ratio of no less than 1:1, along with the preparation of a Species Mitigation and Monitoring Plan (SMMP), as appropriate, which would reduce impacts to less than significant. The Applicant shall work with a biologist or restoration specialist experienced with planning and implementing mitigation for special status plants in California.

- Prior to disturbance activities, on- or off-site transplantation and/or seed and topsoil collection and seeding of individual plant species to a site where suitable habitat conditions exist shall be implemented. The Applicant shall ensure that the impacted plant species is restored at an appropriate off-site location. Restoration shall be implemented by the following measures:
 - o For the Owen's Valley checkerbloom, all plant specimens shall be counted and all specimens within potential impact areas retained in place until they become dormant and the seed can be collected. Seed shall be stored in brown paper bags in a cool location until they have fully dried out and the seeds dehisced. Seeds must be planted within two years to assure preservation of the seed crop. If not planted in a designated mitigation site, seeds shall be propagated at a native plant nursery in pots until they may be outplanted to the mitigation site. As appropriate, this methodology may be used for other plant species, if present, as recommended by a biologist or restoration specialist experienced with special status plants in California.
- Identify an appropriate off-site receptor area within the local watershed that has been designated for conservation (or shall be conserved) and where permission has been secured from the landowner / manager to accept a transplanted population of special plant species. The site shall be suitable and comparable-sized until a 1:1 ratio is met for the number of individuals and/or habitat impacted, as determined appropriate by a biologist or restoration specialist experienced with special status plants in California. The Applicant shall be responsible for locating the off-site area, securing permission from the owner or management entity for the site(s) to receive seed or transplanted specimens, the success of the restoration, and to ensure the off-site area is conserved in perpetuity by a conservation entity.
- Payment into an agency-approved off-site mitigation bank or agency-approved in-lieu fee agreement.
- Off-site purchase and set aside and enhancement of land (either in-kind or out-of-kind).

In addition, mitigation areas shall be placed under a conservation easement, deed restriction, or comparable legal instrument which prohibits or restricts land uses that are not compatible with conservation objectives and provides for long-term preservation.

Mitigation measure BIO-1b is renumbered BIO-1 and is revised as follows, in response to comments on the Draft EIR provided by the California Department of Fish & Game regarding the potential presence of these species:

Mitigation Measure BIO-1ba

Yellow breasted chat

<u>should focused surveys determine</u> The presence of the SSC yellow breasted chat <u>is</u> <u>assumed</u> and impacts are determined to be significant, <u>and therefore impacts</u> to the species shall be avoided or minimized to the maximum extent practicable. If impacts to the species cannot be avoided, mitigation shall include one or more of the following measures at a mitigation-to-impact ratio of no less than 1:1 which would reduce impacts to less than significant:

- On- or off-site creation and/or restoration of 2.88 acres of riparian woodland.
- Payment into an agency-approved off-site mitigation bank or agency-approved in-lieu fee agreement.
- Off-site purchase and set aside and enhancement of land with suitable yellow breasted chat habitat.

In addition, mitigation areas shall be placed under a conservation easement, deed restriction, or comparable legal instrument which restricts land uses and provides for its long-term preservation.

Yellow warbler

Should focused surveys determine the presence of the SSC yellow warbler <u>is assumed</u> and impacts are determined to be significant, <u>and therefore</u> impacts to the species shall be avoided or minimized to the maximum extent practicable. If impacts to the species cannot be avoided, mitigation shall include one or more of the following measures at a mitigation-to-impact ratio of no less than 1:1 which would reduce impacts to less than significant:

- On- or off-site creation and/or restoration of 2.88 acres of riparian woodland.
- Payment into an agency-approved off-site mitigation bank or agency-approved in-lieu fee agreement.
- Off-site purchase and set aside and enhancement of land with suitable yellow breasted chat habitat.

In addition, mitigation areas shall be placed under a conservation easement, deed restriction, or comparable legal instrument which restricts land uses and provides for its long-term preservation.

Owen's tui chub

Should pre-construction surveys determine the presence of the Federal and State Endangered Owen's tui chub and impacts are determined to be significant, then impacts to the species shall be avoided or minimized to the maximum extent practicable. If impacts to the species cannot be avoided, mitigation shall include one or more of the following measures which would reduce impacts to less than significant:

Payment into an agency-approved off-site mitigation bank or agency-approved in-lieu fee agreement.

Off-site relocation.

In addition, mitigation areas shall be placed under a conservation easement, deed restriction, or comparable legal instrument which restricts land uses and provides for its long-term preservation. Furthermore, the Applicant shall coordinate with the USFWS and CDFG to determine the need for a Section 7 consultation in compliance with the Federal Endangered Species Act (ESA) and obtaining an Incidental Take Permit in compliance with the State ESA, respectively.

Owen's pupfish

Should pre-construction surveys determine the presence of the Federal and State Endangered Owen's pupfish and impacts are determined to be significant, then impacts to the species shall be avoided or minimized to the maximum extent practicable. If impacts to the species cannot be avoided, mitigation shall include one or more of the following measures which would reduce impacts to less than significant:

Payment into an agency-approved off-site mitigation bank or agency-approved in-lieu fee agreement.

Off-site relocation.

In addition, mitigation areas shall be placed under a conservation easement, deed restriction, or comparable legal instrument which restricts land uses and provides for its long-term preservation. Furthermore, the Applicant shall coordinate with the USFWS and CDFG to determine the need for a Section 7 consultation in compliance with the Federal ESA and obtaining an Incidental Take Permit in compliance with the State ESA, respectively.

Owens speckled dace

Should pre-construction surveys determine the presence of the SSC Owens speckled dace and impacts are determined to be significant, then impacts to the species will be avoided or minimized to the maximum extent practicable. If impacts to the species cannot be avoided, mitigation will include one or more of the following measures which would reduce impacts to less than significant:

Payment into an agency-approved off-site mitigation bank or agency-approved in-lieu fee agreement.

Off-site relocation.

In addition, mitigation areas will be placed under a conservation easement, deed restriction, or comparable legal instrument which restricts land uses and provides for its long term preservation.

Swainson's hawk

The CDFG considers a nest site to be active if it was used at least once during the past 5 years. Impacts to suitable habitat or individual birds within a five-mile radius of an active nest will be considered significant and to have the potential to "take" Swainson's hawks as that term is defined in Fish and Game Code Section 86. Should focused surveys determine the presence of the State Threatened Swainson's hawk and impacts are determined to be significant, impacts to the species shall be avoided or minimized to the maximum extent practicable. If impacts to the species cannot be avoided, mitigation in consultation with the CDFG shall include the following measures which would reduce impacts to less than significant:

- Prepare a Swainson's hawk Monitoring and Mitigation Plan. Plans shall be prepared by a qualified biologist approved by the CDFG and the appropriate lead agency and include detailed measures to avoid and minimize impacts to Swainson's hawks in and near the construction areas. For example:
 - o If a nest site is found, design the project to allow sufficient foraging and fledging area to maintain the nest site.
 - During the nesting season, ensure no new disturbances, habitat conversions, or other project-related activities that may cause nest abandonment or forced fledging occur within ½ mile of an active nest <u>during the nesting season, which typically occurs</u> between <u>March 1 and September 15 February 15 and October 14</u>. Buffer zones shall be adjusted in consultation with the CDFG and the lead agency.
 - Do not remove Swainson's hawk nest trees unless avoidance measures are determined to be infeasible. Removal of such trees shall occur only during the nesting season, which typically occurs during the through the last day in February 14.
 - A worker education component shall be included in the Plan and shall apply to both construction crews and employees at the bottling plant. This component shall include, but may not be limited to, restrictions on parking, vehicular access, and pedestrian access to portions of the project site and surrounding area during the nesting season.

The Monitoring and Mitigation Plan shall also include measures for injured Swainson's hawks as well as focus on providing habitat management lands.

In addition, the applicant shall coordinate with the CDFG to determine the need for an Incidental Take Permit in compliance with the State ESA.

Least Bell's vireo

Should focused surveys determine t<u>The</u> presence of the Federal and State Endangered least Bell's vireo <u>is assumed</u> and impacts are <u>therefore</u> determined to be significant. ; impacts to the species shall be avoided or minimized to the maximum extent practicable.

If impacts to the species cannot be avoided, m $\underline{\underline{M}}$ itigation shall include one or more of the following measures at a mitigation-to-impact ratio of no less than 1:1 which would reduce impacts to less than significant:

- On- or off-site creation and/or restoration of 2.88 acres of riparian woodland.
- Payment into an agency-approved off-site mitigation bank or agency-approved in-lieu fee agreement.
- Off-site purchase and set aside and enhancement of land with suitable <u>Heast Bell's</u> vireo habitat.

In addition, mitigation areas shall be placed under a conservation easement, deed restriction, or comparable legal instrument which restricts land uses and provides for its long-term preservation. This mitigation can be satisfied with other riparian-warranted mitigation. Furthermore, the Applicant shall coordinate with the USFWS and CDFG to determine the need for a Section 7 consultation in compliance with the Federal ESA and obtaining an Incidental Take Permit in compliance with the State ESA, respectively.

Mohave Ground Squirrel

Should focused surveys determine the presence of the State Threatened Mohave ground squirrel and impacts are determined to be significant, impacts to the species shall be avoided or minimized to the maximum extent practicable. If impacts to the species cannot be avoided, mitigation in consultation with the CDFG shall include one or more of the following measures at a mitigation to impact ratio of no less than 1:1 which would reduce impacts to less than significant:

- * Relocation of the species by a qualified biologist who shall manage the safe capture of the species and move them to suitable alternate site.
- Acquire lands that support high quality Mohave ground squirrel habitat and pay a one-time fee to manage these lands.
- Purchase grazing leases on BLM grazing allotments with suitable habitat for the species and eliminate the grazing there.
- Restore disturbed native vegetation to create habitat suitable to the Mohave ground squirrel on public or State lands in the vicinity.

In addition, mitigation areas shall be placed under a conservation easement, deed restriction, or comparable legal instrument which restricts land uses and provides for its long term preservation. This mitigation can be satisfied with other riparian-warranted mitigation. Furthermore, the Applicant shall coordinate with the CDFG to determine the need for an Incidental Take Permit in compliance with the State ESA.

Southwestern willow flycatcher

The presence of this species is assumed on the project site. Mitigation shall include one or more of the following measures at a mitigation-to-impact ratio of no less than 1:1 which would reduce impacts to less than significant:

- On- or off-site creation and/or restoration of 2.88 acres of riparian woodland.
- Payment into an agency-approved off-site mitigation bank or agency-approved in-lieu fee agreement.
- Off-site purchase and set aside and enhancement of land with suitable southwestern willow flycatcher habitat.

In addition, mitigation areas shall be placed under a conservation easement or comparable legal instrument which restricts land uses and provides for its long-term preservation.

Western yellow-billed cuckoo

The presence of this species is assumed on the project site. Mitigation shall include one or more of the following measures at a mitigation-to-impact ratio of no less than 1:1 which would reduce impacts to less than significant:

- On- or off-site creation and/or restoration of 2.88 acres of riparian woodland.
- Payment into an agency-approved off-site mitigation bank or agency-approved in-lieu fee agreement.
- Off-site purchase and set aside and enhancement of land with suitable western vellow-billed cuckoo habitat.

In addition, mitigation areas shall be placed under a conservation easement or comparable legal instrument which restricts land uses and provides for its long-term preservation.

Pallid and Spotted Bats

The presence of these species are assumed on the project site, Mitigation shall include the following:

- <u>Pre-construction surveys for roosting bats must be performed 30 days prior to construction by a qualified biologist to be retained by the applicant.</u>
- If roosts are found, a Memorandum of Understanding (MOU) with the CDFG shall be obtained by the contractor in order to remove bat species, or the construction schedule shall be modified to initiate construction after August 1, when young are assumed to have fledged.
- Alternative habitat shall be provided if bats are to be excluded from maternity roosts. If this is the case, a species-specific roost with comparable spatial and thermal characteristics shall be constructed and provided.
- <u>CDFG and species-specific bat experts shall be consulted regarding specific designs if roost removal becomes necessary.</u>

Mitigation measure BIO-4 on page 4.C-44 through -47 is revised as follows:

- Riparian and wetland vegetation associated with jurisdictional features regulated by the USACE, RWQCB, and/or CDFG, exist within and adjacent to the proposed project. As suggested by the geohydrology report Hydrogeologic Evaluation provided in Appendix F of the Draft EIR, this riparian and wetland vegetation is supported by the groundwater table which receives hydrologic inputs from rain and snowmelt runoff, and likely affects the shallow aquifer that contributes to surface flow from natural seeps and springs associated with geologic fracturing and fault scarps such as the Spring Line fault. Mitigation measure HYDRO-2 in **Section 4.G**, Hydrogeology & Surface Hydrology, requires a comprehensive Groundwater Monitoring, Mitigation, and Reporting Program to be developed that will evaluate the impacts of project-related groundwater pumping on static groundwater levels in the project area. However, Lit is not known what percentage of the supporting water annually comes from each of these sources. to what degree on-site riparian and wetland vegetation are dependent on spring flows and shallow aquifer levels. In addition, determining the amounts, by source, of supporting water and its relationship to the presence of riparian and wetland plant species, would require several years of data and installation of additional gauges, where the data ultimately collected could be difficult to interpret given seasonal variations and other factors. Therefore, the potential for impacts associated with the proposed project increase in extracting groundwater cannot be accurately determined based on available information. uncertainty, a Riparian and Wetland Monitoring and Adaptive Management Program (RWMAMP) for vegetation associated with jurisdictional areas, is proposed as mitigation.
- The RWMAMP is designed with a performance standard to respond to any significant loss of riparian and wetland vegetation and habitats within jurisdictional areas, due to the increased pumping and production. The County, as lead agency for the proposed project, will be the entity responsible for ensuring the RWMAMP is implemented and annual reports are prepared. In addition, the need for responsive measures and how they will be carried out will be documented. As trustee agencies, the state and federal resource agencies, as appropriate, will be provided copies of the annual reports and related documentation concerning responsive measures for their review and comment.
- Monitoring Stations and Monitoring Regime. To best elucidate the relationship between the increased pumping and the maintenance, health, and vigor of riparian and wetland vegetation, as well as the role of rain, snowmelt runoff, and/or inputs from several natural seeps and springs along its length, and natural accretion in supporting riparian and wetland vegetation in the area, three monitoring stations will be established: 1) just upstream from the point where Cartago Creek's bed and bank characteristics are lost due to sheet flow; and 2) at a two locations where existing natural springs exist that can be monitored along one or more of the five transects established at each monitoring station near the proposed plant facility, 3) at a location removed from the proposed plant facility. The measurement of baseline, or starting conditions, following the methods outlined above, will be conducted in mid- to late August (corresponding to the arid and most stressful conditions for riparian and wetland plant species in the beginning year of the RWMAMP) prior to the commencement of project operation. Monitoring at these stations, following the methods outlined above, will take place in mid- to late August during each following year of monitoring; monitoring will take place for six years following the buildout of each of the two proposed project phases, for a total duration of 12 years of monitoring. Monitoring will be conducted annually for the first three (3) years following buildout of each project phase in order to discern the potential loss of riparian wetland vegetation in the area, and implement responsive measures if necessary, as set forth below. Following year three (3) of monitoring following buildout of each project phase, if no loss of riparian

and wetland communities is detected due to the increased pumping, monitoring will take place at year six (6) <u>following the buildout of each project phase</u> following the onset of increased pumping. If, at the end of the entire <u>126</u>-year monitoring program, no significant loss of riparian and wetland communities is detected, the monitoring program will be terminated.

Adaptive Management Measures. The adaptive management strategy for identified degradation and/or loss of riparian and wetland communities within jurisdictional areas shall include creation, restoration and/or enhancement of riparian and/or wetland habitat. The adaptive management shall be accomplished in one or more of the following ways, as determined by the Inyo County Water Department in consultation with the applicant: a) a short-term and/or long-term reduction in pumping of the project's water supply wells: ab) creation, restoration and/or enhancement of habitat on property owned by Crystal Geyser; bc) creation, restoration and/or enhancement outside the property, but within lower Owens River Basin; and ed) payment of in lieu fees to an existing riparian or wetland mitigation/conservation bank and/or existing management and/or enhancement program in the Eastern Sierra region. The selection of a site or program to which adaptive management measures will be applied will set a priority for locations where the highest benefit to habitat can be realized. The payment of in lieu fees, if such a program exists, will fulfill these requirements, in part or in full. For adaptive management entailing habitat creation, restoration and/or enhancement, a Habitat Management and Monitoring Plan shall be prepared for review and approval by the County and trustee agencies, as appropriate. The plan will stipulate success criteria for the habitat being created, restored and/or enhanced and will be monitored by a qualified restoration ecologist for five years or until such time as the success criteria are met, but no sooner than one year following cessation of all inputs (e.g., soil amendments, irrigation, etc.) to the creation, restoration and/or enhancement project. The success criteria will address requirements for no significant net loss of riparian and/or wetland habitat regulated by the USACE, RWQCB, and/or CDFG and will focus on habitat replacement to the extent practicable and satisfactory to the participating trustee resource agencies.

Mitigation measure BIO-5 on page 4.C-47 is updated as follows:

(4) Measures to Mitigate Potentially Significant Impacts to Nesting Birds

Mitigation Measure BIO-5: The Applicant shall be responsible for implementing mitigation to reduce potential impacts to migratory raptor and songbird species to below a level of significance by the following: (1) Vegetation removal activities shall be scheduled outside the nesting season for raptor and songbird species (typically September 1 to February 14) to avoid potential impacts to nesting species (this will ensure that no active nests will be disturbed and that habitat removal could proceed rapidly); and/or (2) Any construction activities that occur during the raptor and songbird nesting season (typically February 15 to August 31 October 14) shall require that all potentially impacted suitable habitat be thoroughly surveyed for the presence of nesting raptor and songbird species by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors) shall be delineated, flagged, and avoided until the nesting cycle is complete as determined by the qualified biologist to minimize impacts.

On page 4.C-48, the text of the last bulleted paragraph is revised as follows:

• LADWP's "Owens Lake Dust Mitigation Plan" that has been implemented in conjunction with the Great Basin Air Pollution Control District to reduce fugitive dust generated by wind blowing across the dry lakebed by best available control measures, including shallow flooding and managed native vegetation. To date approximately 40 square miles have been 19 acres are being treated with approximately 5 11 more square miles acres to be treated in the near future upon completion of Phases 8 and 7A, according to LADWP. It should be noted that the July 2012 date for LADWP's Solar Ranch project has passed without additional information being made available.

E. Historical Resources

On page 4.D-5, the following text is added regarding SB 18:

The proposed project will entail an amendment to the County's General Plan, which will in turn require compliance with Senate Bill (SB) 18. SB 18 is California legislation that sets out a system of government-to-government consultation between local governments and locally affiliated Native Americans prior to changes or adoptions in General or Specific Plans. The purpose of consultation is to identify traditional tribal "cultural places" within the project site and vicinity and to address any concerns regarding any impacts to them from the proposed project. On October 14, 2011, each Native American group and/or individual listed in the NAHC's Native American contact list for the project was sent a project notification letter and map by PCR and was asked to convey any knowledge regarding prehistoric or Native American resources (archaeological sites, sacred lands, or artifacts) located within the project site or surrounding vicinity. Furthermore, the County initiated SB 18 consultation when they submitted "request to consult" letters to locally affiliated Native Americans when the Draft EIR was released to the public.

On pages 4.E-10 and 4.E-22, the misspelled references to "Owen's Valley" are revised to Owens Valley.

On page 4.D-18, mitigation measure ARCH-1A is revised as follows:

Mitigation Measure ARCH-1a: The Applicant shall retain a qualified archaeological monitor and Native American monitor who shall be present during construction excavations such as grading, trenching, grubbing, or any other construction excavation activity associated with the proposed project. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (native versus fill soils), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the archaeological monitor and Native American monitor.

F. Land Use and Planning

On page 4.F-6, Section a(4), Owens Lake Master Use Plan, is revised as follows:

Cabin Bar Ranch is bordered on the east by the shoreline of Owens Dry Lake, which has largely dried up as a result of water conveyance from the Owens River through the Los Angeles Aqueduct. As mentioned above, during windy days, the largely dry lakebed is a prominent source of airborne dust. The dry lakebed also reduces the quantity and quality of wildlife habitat in the region. To mitigate these conditions, the Los Angeles Department of Water and Power (LADWP) is currently implementing Best

Available Control Measures (BACM) and is in the early process of developing a "Master Use Plan" for the Owens dry lakebed, which would incorporate the goals and policies of previous management plans into one document with broadly supported goals and objectives to enhance the Owens Lakebed with respect to dust mitigation, habitat and wildlife, water efficiency methods, and potential renewable energy development. A diverse group of interest groups are working together to reach consensus on a final plan in early 2012. The project's consistency with the Owens Lake Master Plan is discussed in detail in Section 4.C, Biological Resources, of this Draft EIR. Although a Planning Committee Review Draft of the OLMP was released in December 2011, the goals and policies of the OLMP are subject to future modifications. Therefore, an analysis of the proposed project's consistency with the goals and policies of the Master Use Plan is not included in this Draft EIR.

G. Hydrogeology and Surface Hydrology

On pages 4.G-29, mitigation measure HYDRO-1 is revised as follows.

Mitigation Measure HYDRO-1: During the initial sequential activation of the first two production lines after Phase I building has been completed, all three wells shall be utilized so that the total groundwater demand is spread between the three wells, as opposed to pumping only one well at full capacity while leaving the other two wells idle. This will mitigate water level drawdown impacts in the vicinity of any one pumping well. During the initial phase in period, with all three wells in operation, the actual effect of the pumping on water levels shall be evaluated by conducting water-level monitoring in piezometers, springs and groundwater monitoring wells in the surrounding area.

On pages 4.G-29 and -30, mitigation measure HYDRO-2 is revised as follows.

- Mitigation Measure HYDRO-2: A regular program of data collection and database maintenance shall be undertaken to develop a long-term data set that can be reviewed for changes in groundwater conditions over time. Data collection efforts shall include the following: The applicant shall submit a Groundwater Monitoring, Mitigation, and Reporting Plan (prepared by a qualified hydrogeologist or other specialist approved in advance by the Inyo County Water Department) to the Inyo County Water Department for review and approval prior to the operation of the three water supply wells, as follows:
 - For all wells on Cabin Bar Ranch that are currently pumped or are proposed to be pumped in the future, Crystal Geyser Roxane shall install meters inside their facility buildings (for security and/or maintenance reasons) or at the wellheads. Meters shall be equipped with properly calibrated and accurately-reading flow meters that read in both instantaneous flow (in gpm) and total flow (in gallons or AF), and that are located at a proper location on the discharge pipe near each wellhead. The totalizer flow dial data shall be monitored and recorded on a regular basis (i.e., at each well at least once each week). Flow meters shall be placed on each pumping well to allow for a more accurate determination of the amounts of groundwater to be pumped from CGR-8, CGR-9, and CGR-10, and also the amount currently pumped from the existing active plant wells (CGR-2 and CGR-7) and the two active domestic supply wells for the plant (CGR-3 and CGR-4).

- Two active plant wells, CGR-2 and CGR-7, are equipped with pressure transducers which provide continuous monitoring of SWLs. Wells CGR-3 and CGR-4 shall be equipped with pressure transducers as well.
- To monitor future water levels near the northern boundary of the proposed facility, well CBR-1 (the proposed domestic production well), located approximately 1,070 feet northeast of CGR-10, shall be equipped with a transducer to continuously record water levels. The well casing for CBR-1 is perforated between 60 and 120 feet bgs; these depths are in the same general perforation zones of CGR-8, CGR-9 and CGR-10 (53 feet to 88 feet bgs). Monitoring of the water levels in this on-site domestic-supply well would yield data on possible changes in the water levels that might be caused, as a result of the proposed pumping, on shallow off-site wells north and northwest of the facility.
- In addition to collection of water level data via transducers, all active wells, inactive wells, observation or monitoring wells, and piezometers on Cabin Bar Ranch shall be manually measured and water levels recorded on a monthly basis. These data shall be tabulated including a listing of the date and time of measurement, the depth to water bgs, the respective groundwater elevation, and the current operating status of each well (static or pumping condition). If a well is pumping, a measurement for a SWL shall be collected 24 hours after shutdown of pumping in that well. As an alternative to manual measurements, a Supervisory Control and Data Acquisition (SCADA) system may be set up to record SWLs in CGR wells on a daily basis, twice each day (say at 8:00 AM and 8:00 PM), with the date, time, and depth to water measurements. These data shall be preserved for later review, graphing and analysis.
- Little long-term and regularly scheduled water quality data was available from the wells that could be analyzed for selected key water quality constituents, such as the general minerals (e.g. the common cations and anions) and inorganic chemicals (trace elements). To establish a database where possible long-term trends and changes in water quality may be evaluated, groundwater samples shall be collected at least once every three years from the pumping wells and key groundwater monitoring wells for analysis of physical constituents (e.g. temperature, electrical conductivity, turbidity, pH; general minerals, trace metals; and the radiological constituents is recommended.
- The Plan shall be submitted to the Inyo County Water Department at least three months prior to the commencement of project operation to allow for adequate review time and any necessary revisions.
- The Plan shall provide a detailed methodology for monitoring background groundwater levels. The monitoring period shall include pre-operation and project operation. The Plan shall establish pre-operation and project-related groundwater level trends that can be quantitatively compared against predicted trends near the project pumping wells and potentially impacted resources.
- The Plan shall include the applicant's existing model for predicting changes in the groundwater flow system resulting from the project. This model has the capability to assess changes in hydraulic head, flow rate, flow direction, and water budget. In

addition, the Plan shall include model runs which predict effects of the planned groundwater pumping for the project on off-site wells.

- The Plan shall define triggers for on-site monitoring wells that correspond to potential impacts on off-site wells. The triggers shall be based on the results of monitoring and modeling. The applicant shall also use the model to provide an evaluation of the sustainability of the water supply for the life of the project, including the cumulative sustainability when considered with other pumping occurring or projected to occur in the groundwater basin.
- The Plan shall also include the following:
 - 4. Initiation: Provisions for initiation of evaluation of the water level data;
 - 5. <u>Verification: A plan for verifying the predictive tools described above and for revising or recalibrating the tools as necessary; and</u>
 - 6. Revisions: A plan for revising thresholds as dictated by new data concerning system response to project operation.
- Monitoring. Water level monitoring shall be conducted and reported at monthly intervals for the first two years of project operation following each phase of project buildout. Data shall be collected and analyzed by a qualified specialist to be retained by the applicant and approved by the Inyo County Water Department. Monitoring reports shall be prepared by the applicant's approved specialist and submitted to the Inyo County Water Department within 20 days of data collection. After the first two-year operational and monitoring period following each phase of project buildout, the applicant's approved specialist shall evaluate the data. If appropriate, the applicant's approved specialist shall recommend whether the monitoring program shall be revised or eliminated, based on observed groundwater level changes as compared with predicted modeling, and on the consistency of the data collected. The final determination of whether the monitoring program is to be revised or eliminated shall be made by the Inyo County Water Department.

Off-Site Well Impacts. In the event that a well owner notifies the Inyo County Water Department that impacts to off-site wells have occurred or will occur due to the project, and impacts are confirmed through verifiable data as determined by the Inyo County Water Department, the applicant shall take one or more of the following steps in consultation with and as approved by the Inyo County Water Department to maintain less than significant impacts: (1) a short-term or long-term reduction in pumping from one or more wells at the Cabin Bar Ranch or other wells within its control, (2) direct provision of water from Crystal Geyser to the impacted well owner(s), and/or (3) direct financial compensation from Crystal Geyser to the impacted owner(s) for the costs to modify well(s) and/or for increased electrical costs. Disputes as to the cause of well water drawdown or appropriate corrective measures shall be resolved by the County.

<u>It is understood that the Inyo County Water Department will consider, but will not be limited to, the following as part of its confirmation of impacts and mitigation for off-site well impacts:</u>

- 4. <u>Mitigation for project effects on off-site wells shall depend upon the specific characteristics of each well, and the use of the well.</u>
- 5. The applicant shall work with the Inyo County Water Department to evaluate wells that may be affected by groundwater drawdown as the project progresses.
- 6. The Inyo County Water Department shall consider in its evaluation the applicant's monitoring data, as required pursuant to this mitigation measure, and the groundwater model, as it may be amended.

On page 4.G-30, mitigation measure HYDRO-3 is revised as follows:

- Mitigation Measure HYDRO-3: After data has been collected for each phase of development, the The project applicant shall retain qualified groundwater professionals to evaluate water quality as set forth in this mitigation measure. Since since pumping is conducted continuously and groundwater conditions may change, this These data will allow the proposed pumping program to be modified to adjust to changes in conditions prior to increasing groundwater withdrawal to expand production. Examples of such data review and interpretation may include, but not be limited to, the following:
 - Little long-term and regularly scheduled water quality data was available from the wells that could be analyzed for selected key water quality constituents, such as the general minerals (e.g. the common cations and anions) and inorganic chemicals (trace elements). To establish a database where possible long-term trends and changes in water quality may be evaluated, groundwater samples shall be collected at least once every three years from the pumping wells and key groundwater monitoring wells for analysis of physical constituents (e.g., temperature, electrical conductivity, turbidity, pH; general minerals, trace metals; and the radiological constituents is recommended.
 - Plot the production quantities from each well, along with rainfall and SWLs, in order to assess the impact of pumping on SWLs in all monitored sites.
 - Plot temporal changes in key water quality constituents in groundwater samples from the wells. Typical key water quality constituents include total dissolved solids, electrical conductivity, color—and selected cations and anions, such as calcium, magnesium, sodium and boron, and cations, such as bicarbonate, sulfate and chlorides. Tracking changes in these constituents in those wells close to the Spring Line fault will may provide indication of any possible intrusion of any water quality brackish groundwater from the east side of the fault into the sediments aquifer on the west side of the fault.

In the event that verifiable data are presented to the Inyo County Water Department demonstrating impacts to water quality due to the applicant's pumping activities, the applicant shall undertake a short-term or long-term reduction in pumping from one or more wells at the Cabin Bar Ranch to maintain less than significant impacts, in consultation with and as approved by the Inyo County Water Department.

On page 4.G-32, Section 4(d), LADWP's Owens Lake Master Plan, is deleted as follows:

d. LADWP's Owens Lake Master Plan

LADWP's Owens Lake Master Plan (Master Plan) provides a framework to manage the diverse resources of Owens Lake, while continuing to control dust emissions from its surface. A diverse group of interest groups are working together to reach a final consensus on the Master Plan. The Master Plan framework considers methods, that when implemented together, can collectively control dust, conserve water, maintain habitat value, and protect or enhance other resources on Owens Lake. The Master Plan does not propose projects for implementation on Owens Lake. The term of the Master Plan is 20 years, which is intended to provide a reasonable planning horizon for guide management decisions on Owens Lake. The Master Plan is not a water-intensive project, but rather is a plan to promote water conservation and enhancement of resources on Owens Lake. When considered in conjunction with the proposed project, there would be no cumulatively considerable impact to hydrology.

On page 4.G-32, Section 4(e), *Desert Renewable Energy Conservation Plan*, is renumbered to be Section 4(d).

On page 4.G-32, Section 4(f), *Dirty Socks Club*, is renumbered to be Section 4(e).

On page 4.G-32, Section 4(g), *Rio Tinto Mine*, is renumbered to be Section 4(f).

On page 4.G-32, Section 4(h), *Caltrans Highway 395 – Olancha/Cartago Four-Lane Project*, is renumbered to be Section 4(g).

I. Transportation

On page 4.I-8, the last paragraph is revised to read as follows:

Development of the proposed bottling facility would require a new 24-foot-wide site access roadway leading into the site from US 395. This new permanent site access roadway would be located approximately 2,500 feet south of the existing Cabin Bar Ranch Road. The internal access road would be approximately 3,1003,175 feet in length and would cross the site in a northeastern alignment from US 395 towards the proposed bottling facility. The alignment of the access road would meander to avoid red willow trees within the project site.

On page 4.I-9, the 2nd full paragraph is revised to read as follows:

1

Owens Lake Master Plan, Planning Committee Review Draft, December 2011; https://owenslakebed.pubspsvr.com/Master percent20Plan/Owens_Lake_Master_Plan_Planning_Committee_Review_Draft_December_2011.pdf; accessed May 2012.

As the project's proposed new site access roadway would be constructed approximately four years prior to the planned improvements to US 395, the project would construct improvements along US 395 per Caltrans standards based on the current configuration of US 395. Improvements to US 395 would include the appropriate acceleration and deceleration lanes, as well as turning lanes, on both the northbound and southbound side of US 395. The internal access roadway and improvements to US 395 would be completed at the outset of Phase I construction. At the point in time that the Caltrans project is completed, the proposed access road's tie in with US 395/US 395 Frontage Road would be modified accordingly, although these modifications are not considered a part of this proposed project. The pavement on the existing Cabin Bar Ranch Road would be demolished and removed in Phase I of the proposed project. The unimproved alignment and gate along Cabin Bar Ranch Road would be retained to allow utility companies access to their utilities. The roadway would remain unused for all other purposes.

On page 4.I-15, Section 2(b)(i), Stopping Sight Distance, the following paragraph will be added:

Although the posted speed limit on this segment of US 395 if 55 mph, motorists occasionally travel at speeds approaching 65 mph. At this speed, 660 feet of stopping sight distance is required for drivers approaching the proposed project access point in either direction along US 395. As more than 700 feet of stopping sight distance is provided for drivers approaching the proposed project access point in either direction along US 395, adequate stopping distance would also provided for motorists exceeding the posted speed limit.

On page 4.I-15, Section 2(b)(ii), Corner Sight Distance, the following paragraph will be added:

As discussed above, motorists occasionally travel at speeds that exceed the posted 55 mph speed limit. At 65 mph, 715 feet is needed to provide adequate corner sight distance. Over 1,200 feet of corner sight distance would be provided at the proposed site access point. As this exceeds the minimum requirements, the corner sight distance is considered to be adequate for motorists exceeding the posted speed limit.

On page 4.I-16, Section 2(b)(iii), *Driver Sight Distance With Caltrans Project*, the following paragraph will be added:

In the event that motorists exceed the posted speed limit, the current version of the Olancha/Cartago 4-Lane Project would provide sufficient driver sight distance at the frontage road connection to the new expressway at a median crossover.

On page 4.I-16, Section 3, *Mitigation Measures*, is revised to read as follows:

As concluded above, with the implementation of the project's proposed traffic design features (i.e., acceleration/deceleration lanes, turn lanes), the proposed access point would operate at LOS C or better during both the A.M. and P.M. peak hours and a less than significant impact would result. Additionally, the proposed project would have adequate stopping sight and cornering sight distances, resulting in a less than significant impact with respect to safety. As the proposed project would result in a less than significant impact with the incorporation of the proposed traffic design features, no mitigation measures are necessary. Nonetheless, to ensure truck and motorist safety along, US 395, the following mitigation

measure is proposed, which requires the internal access roadway to be constructed at the onset of Phase I construction.

<u>Mitigation Measure TRANS-1:</u> To ensure truck and motorist safety, the proposed internal access roadway shall be constructed at the onset of Phase I construction activities.

5.0 ALTERNATIVES

On page 5-3, the misspelled references to "Owen's Valley" are revised to Owens Valley.

APPENDIX C, BIOLOGICAL RESOURCES

The Wetland Determination Data Forms provided in **Appendix C** in the Draft EIR have been updated to include additional data. Those forms are provided in **Appendix B** of this Final EIR. In addition, **Appendix B** of this Final EIR includes Wetland Determination Data Forms prepared by Garcia & Associates (GANDA) fto document the November 2012 jurisdictional delineation conducted on the project site; the Sensitive Plant Survey Report for the CGR Cabin Bar Ranch prepared by Resource Concepts, Inc. in June 2012; and the Cabin Bar Ranch Water Bottling Facility Project–Special-status Plant Survey Report prepared by Garcia & Associates (GANDA) in October 2012.

APPENDIX H, TRAFFIC IMPACT ANALYSIS

Appendix H of the Draft EIR is updated to include two pages containing new LOS output data, prepared by the project traffic engineer, LSC, in response to Comment 3-4. The new data confirms that project impacts at the future 4-legged intersection of the project driveway and frontage road during the future 2031 AM and PM peak hours would be less than significant

4.0 MITIGATION MONITORING AND REPORTING PROGRAM

A. INTRODUCTION

Section 21081.6 of the Public Resources Code requires a Lead Agency to adopt a "reporting or monitoring program for changes to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment." In addition, Section 15097(a) of the California Environmental Quality Act (CEQA) Guidelines requires that:

[I]n order to ensure that the mitigation measures and project revisions identified in the EIR or negative declaration are implemented, the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program.

Inyo County (County) has been designated as the Lead Agency for the proposed project.

Where appropriate, the project's Draft and Final EIRs identified mitigation measures to avoid or to mitigate potential impacts identified to a level where no significant impact on the environment would occur. This Mitigation Monitoring and Reporting Program (MMRP) is designed to monitor implementation of the project's mitigation measures.

As shown on the following pages, each required mitigation measure for the proposed project is listed and categorized by impact area, with an identification accompanying of the applicable:

- **Enforcement Agency:** The agency with the power to enforce the Mitigation Measure.
- Monitoring Agency: The agency to which reports involving feasibility, compliance, implementation and development are made.
- **Monitoring Phase:** The phase of the Project during which the Mitigation Measure shall be monitored, and can be pre-construction, construction, prior to occupancy or post-occupancy.
- Monitoring Frequency: The frequency at which the Mitigation Measure shall be monitored.
- **Action Indicating Compliance:** The action of which the Enforcement or Monitoring Agency indicates that compliance with the required Mitigation Measure has been implemented.

The project's MMRP will be in place throughout all phases of the project. The project applicant will be responsible for implementing all mitigation measures unless otherwise noted. The applicant shall also be obligated to provide certification, as identified below, to the appropriate monitoring agency and the appropriate enforcement agency that compliance with the required mitigation measure has been implemented. The County's existing planning, engineering, review, and inspection processes will be used as the basic foundation for the MMRP procedures and will also serve to provide the documentation for the reporting program.

The substance and timing of each certification report that is submitted to the County shall be at the discretion of the County Planning Department. Generally, each report will be submitted to the County Planning Department in a timely manner following completion/implementation of the applicable mitigation measure and shall include sufficient information to reasonably determine whether the intent of the measure has been satisfied. The County Planning Department, in conjunction with the Project applicant, shall assure that project construction occurs in accordance with the MMRP. The Great Basin Unified Air Pollution Control District (GBUAPCD) shall be responsible for the implementation of corrective actions relative to violations of GBUAPCD rules associated with mitigation. Departments listed below are all departments of the County of Inyo, unless otherwise noted.

B. MITIGATION MONITORING AND REPORTING PROGRAM

The MMRP is presented in below, in **Table 5-1**, *Mitigation Monitoring and Reporting Program*, and it lists each mitigation measure, phase of implementation, frequency and/or duration of required monitoring, method of reporting monitoring results to the County, and the responsible monitoring party.

Table 4-1

Mitigation Monitoring and Reporting Program

Mitigation Measure	Phase of Implementation	Frequency and/or Duration of Required Monitoring	Enforcement / Reporting Agency
1. AIR QUALITY			
Mitigation Measure AQ-1: All active portions of the construction site shall be watered at least twice daily, or less if the site is dampened by natural processes (rain, etc.) sufficiently to suppress dust.	During construction	During construction	Inyo County Building and Safety Department
Mitigation Measure AQ -2: On-site vehicles' speed shall be limited to 15 miles per hour (mph).	During construction	During construction	Inyo County Building and Safety Department
Mitigation Measure AQ-3: All on-site roads shall be paved as soon as feasible or watered at least twice daily, or less if the site is dampened by natural processes (rain, etc.), or chemically stabilized.	During construction	During construction	Inyo County Building and Safety Department
Mitigation Measure AQ-4: All material excavated or graded shall be sufficiently watered to suppress dust; watering, with complete coverage, shall occur at least twice daily, or less if the site is dampened by natural processes (rain, etc.), preferably in the late morning and after work is done for the day.	During construction	During construction	Inyo County Building and Safety Department
Mitigation Measure AQ-5: If dust is visibly generated that travels beyond the site boundaries, clearing, grading, earth moving or excavation activities that are generating dust shall cease during periods of high winds (i.e., greater than 25 mph averaged over one hour) or during Stage 1 or Stage 2 smog episodes.	During construction	During construction	Inyo County Building and Safety Department
Mitigation Measure AQ-6: All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.	During construction	During construction	Inyo County Building and Safety Department

Mitigation Measure	Phase of Implementation	Frequency and/or Duration of Required Monitoring	Enforcement / Reporting Agency
2. BIOLOGICAL RESOURCES			
Mitigation Measure BIO-1: Yellow breasted chat The presence of the SSC yellow breasted chat is assumed and impacts are determined to be significant, and therefore impacts to the species shall be avoided or minimized to the maximum extent practicable. If impacts to the species cannot be avoided, mitigation shall include one or more of the following measures at a mitigation-to-impact ratio of no less than 1:1 which would reduce impacts to less than significant: On- or off-site creation and/or restoration of 2.88 acres of riparian woodland. Payment into an agency-approved off-site mitigation bank or agency-approved in-lieu fee agreement. Off-site purchase and set aside and enhancement of land with suitable yellow breasted chat habitat. In addition, mitigation areas shall be placed under a conservation easement or comparable legal instrument which restricts land uses and provides for its long-term preservation. Yellow warbler Should focused surveys determine the presence of the SSC yellow warbler is assumed and impacts are determined to be significant, and therefore impacts to the species shall be avoided or minimized to the maximum extent practicable. If impacts to the species cannot be avoided, mitigation shall include one or more of the following measures at a mitigation-to-impact ratio of no less than 1:1 which would reduce impacts to less than significant: On- or off-site creation and/or restoration of 2.88 acres of riparian woodland. Payment into an agency-approved off-site mitigation bank or agency-approved in-lieu fee agreement.	Prior to construction / During construction	Prior to construction / During construction	Inyo County Planning Department California Department of Fish & Game

	Phase of	Frequency and/or Duration of Required	Enforcement /
Mitigation Measure	Implementation	Monitoring	Reporting Agency
 Off-site purchase and set aside and enhancement of land with suitable yellow breasted chat habitat. 			
In addition, mitigation areas shall be placed under a conservation easement or comparable legal instrument which restricts land uses and provides for its long-term preservation.			
<u>Swainson's hawk</u>			
The CDFG considers a nest site to be active if it was used at least once during the past 5 years. Impacts to suitable habitat or individual birds within a five-mile radius of an active nest will be considered significant and to have the potential to "take" Swainson's hawks as that term is defined in Fish and Game Code Section 86. Should focused surveys determine the presence of the State Threatened Swainson's hawk and impacts are determined to be significant, impacts to the species shall be avoided or minimized to the maximum extent practicable. If impacts to the species cannot be avoided, mitigation in consultation with the CDFG shall include the following measure which would reduce impacts to less than significant:			
 Prepare a Swainson's hawk Monitoring and Mitigation Plan. Plans shall be prepared by a qualified biologist approved by the CDFG and the appropriate lead agency and include detailed measures to avoid and minimize impacts to Swainson's hawks in and near the construction areas. For example: 			
• If a nest site is found, design the project to allow sufficient foraging and fledging area to maintain the nest site.			
 During the nesting season, ensure no new disturbances, habitat conversions, or other project-related activities that may cause nest abandonment or forced fledging occur within 1/2 mile of an active nest during the nesting season, which typically occurs between February 15 and October 14. Buffer zones shall be adjusted in consultation with the CDFG and the lead agency. 			
• Do not remove Swainson's hawk nest trees unless avoidance measures are determined to be infeasible. Removal of such trees shall occur only during the nesting season, which typically occurs during the timeframe of October 15 through February 14.			

Mitigation Measure	Phase of Implementation	Frequency and/or Duration of Required Monitoring	Enforcement / Reporting Agency
 A worker education component shall be included in the Plan and shall apply to both construction crews and employees at the bottling plant. This component shall include, but may not be limited to, restrictions on parking, vehicular access, and pedestrian access to portions of the project site and surrounding area during the nesting season. 			
The Monitoring and Mitigation Plan shall also include measures for injured Swainson's hawks as well as focus on providing habitat management lands.			
In addition, the Applicant shall coordinate with the CDFG to determine the need for an Incidental Take Permit in compliance with the State ESA.			
<u>Least Bell's vireo</u>			
The presence of the Federal and State Endangered least Bell's vireo is assumed and impacts are therefore determined to be significant. Mitigation shall include one or more of the following measures at a mitigation-to-impact ratio of no less than 1:1 which would reduce impacts to less than significant:			
On- or off-site creation and/or restoration of 2.88 acres of riparian woodland.			
Payment into an agency-approved off-site mitigation bank or agency-approved in-lieu fee agreement.			
Off-site purchase and set aside and enhancement of land with suitable least Bell's vireo habitat.			
In addition, mitigation areas shall be placed under a conservation easement or comparable legal instrument which restricts land uses and provides for its long-term preservation. This mitigation can be satisfied with other riparian-warranted mitigation. Furthermore, the Applicant shall coordinate with the USFWS and CDFG to determine the need for a Section 7 consultation in compliance with the Federal ESA and obtaining an Incidental Take Permit in compliance with the State ESA, respectively.			

Mitigation Measure	Phase of Implementation	Frequency and/or Duration of Required Monitoring	Enforcement / Reporting Agency
Southwestern willow flycatcher	<u> </u>		
The presence of this species is assumed on the project site. Mitigation shall include one or more of the following measures at a mitigation-to-impact ratio of no less than 1:1 which would reduce impacts to less than significant:			
• On- or off-site creation and/or restoration of 2.88 acres of riparian woodland.			
 Payment into an agency-approved off-site mitigation bank or agency-approved in-lieu fee agreement. 			
 Off-site purchase and set aside and enhancement of land with suitable southwestern willow flycatcher habitat. 			
In addition, mitigation areas shall be placed under a conservation easement or comparable legal instrument which restricts land uses and provides for its long-term preservation.			
Western yellow-billed cuckoo			
The presence of this species is assumed on the project site. Mitigation shall include one or more of the following measures at a mitigation-to-impact ratio of no less than 1:1 which would reduce impacts to less than significant:			
• On- or off-site creation and/or restoration of 2.88 acres of riparian woodland.			
 Payment into an agency-approved off-site mitigation bank or agency-approved in-lieu fee agreement. 			
 Off-site purchase and set aside and enhancement of land with suitable western yellow- billed cuckoo habitat. 			
In addition, mitigation areas shall be placed under a conservation easement or comparable legal instrument which restricts land uses and provides for its long-term preservation.			
Pallid and Spotted Bats			
The presence of these species are assumed on the project site, Mitigation shall include the following:			
• Pre-construction surveys for roosting bats must be performed 30 days prior to			

Mitigation Measure	Phase of Implementation	Frequency and/or Duration of Required Monitoring	Enforcement / Reporting Agency
construction by a qualified biologist to be retained by the applicant.			
 If roosts are found, a Memorandum of Understanding (MOU) with the CDFG shall be obtained by the contractor in order to remove bat species, or the construction schedule shall be modified to initiate construction after August 1, when young are assumed to have fledged. 			
 Alternative habitat shall be provided if bats are to be excluded from maternity roosts. If this is the case, a species-specific roost with comparable spatial and thermal characteristics shall be constructed and provided. 			
 CDFG and species-specific bat experts shall be consulted regarding specific designs if roost removal becomes necessary. 			
Mitigation Measure BIO-2: Prior to the issuance of any grading permit in the areas designated as red willow thicket, a mitigation and monitoring plan shall be prepared. The plan shall focus on the creation of equivalent habitats within disturbed habitat areas of the study area and/or off-site areas beyond the study area with suitable soils and hydrology. In addition, the plan shall provide details as to the implementation of the plan, maintenance, monitoring, success criteria, and long-term management. Mitigation for impacts to this sensitive plant community shall be offset by on- or off-site replacement, restoration, or enhancement of each respective sensitive plant community at a mitigation-to-impact ratio of no less than 1:1 in one or more of the following ways, which would reduce impacts to below a level of significance. The Applicant shall work with a biologist or restoration specialist experienced with planning and implementing mitigation for plant communities in California.	Prior to construction	Prior to construction	Inyo County Planning Department California Department of Fish & Game
 Prior to disturbance activities, on- or off-site transplantation and/or seed and topsoil collection and seeding of individual plant species to a site where suitable habitat conditions exist shall be implemented. 			
Seeding of sensitive plant community species.			
Planting of container plants of sensitive plant community species.			
Salvage of duff and seed bank prior to disturbance activities, and subsequent dispersal.			

Mitigation Measure	Phase of Implementation	Frequency and/or Duration of Required Monitoring	Enforcement / Reporting Agency
A 1:1 mitigation ratio for impacts to sensitive plant communities is considered to be adequate due to the disturbed condition of such communities on-site today (for example, the on-site red willow thicket contains invasive plant species as well as ornamental trees and shrubs).			
Mitigation Measure BIO-3: Prior to the issuance of any grading permit for impacts jurisdictional features, the project applicant shall obtain a CWA Section 404 Permit from the ACOE, a CWA Section 401 Water Quality Certification from the RWQCB, and California FGC Section 1602 Streambed Alteration Agreement from the CDFG. Mitigation for impacts to ACOE, RWQCB, and CDFG jurisdictional features shall include one or more of the following measures, which would reduce impacts to below a level of significance: • On- and/or off-site replacement of ACOE/RWQCB jurisdictional "waters of the	Prior to construction	Prior to construction	US Army Corps of Engineers Lahontan Regional Water Quality Control Board
U.S."/"waters of the State" and wetlands at a ratio no less than 1:1 mitigation to impact ratio, or as required by the agencies. Off-site replacement may include the purchase of mitigation credits at an agency-approved mitigation bank or payment into an in-lieu fee agreement.			California Department of Fish and Game
 On- and/or off-site replacement of CDFG jurisdictional streambed and associated riparian habitat at a ratio no less than 1:1 replacement to impact ratio, or as required by CDFG. Off- site replacement may include the purchase of mitigation credits at a CDFDG-approved mitigation bank or payment into an in-lieu fee agreement. 			
 Mitigation Measure BIO-4: Riparian and Wetland Monitoring and Adaptive Management Program Riparian and wetland vegetation associated with jurisdictional features regulated by the USACE, RWQCB, and/or CDFG, exist within and adjacent to the proposed project. As suggested by the <i>Hydrogeologic Evaluation</i> provided in Appendix F of the Draft EIR, this riparian and wetland vegetation is supported by the groundwater table which receives hydrologic inputs from rain and snowmelt runoff, and likely affects the shallow aquifer that contributes to surface flow from natural seeps and springs associated with geologic fracturing and fault scarps such as the Spring Line fault. Mitigation measure HYDRO-3 in Section 4.G, Hydrogeology & Surface Hydrology, requires a comprehensive Groundwater Monitoring, Mitigation, and Reporting Program to be developed that will evaluate the impacts of project-related groundwater pumping on static groundwater levels in the 	Prior to and during project operation	Prior to and during project operation	Inyo County Water Department US Army Corps of Engineers Lahontan Regional Water Quality Control Board California

	Dhoo of	Frequency and/or Duration of	Foforment /
Mitigation Measure	Phase of Implementation	Required Monitoring	Enforcement / Reporting Agency
project area. However, it is not known to what degree on-site riparian and wetland vegetation are dependent on spring flows and shallow aquifer levels. Therefore, the potential for impacts associated with the proposed project increase in extracting groundwater cannot be accurately determined based on available information. Due to this uncertainty, a Riparian and Wetland Monitoring and Adaptive Management Program (RWMAMP) for vegetation associated with jurisdictional areas, is proposed as mitigation.			Department of Fish and Game
• The RWMAMP is designed with a performance standard to respond to any significant loss of riparian and wetland vegetation and habitats within jurisdictional areas, due to the increased pumping and production. The County, as lead agency for the proposed project, will be the entity responsible for ensuring the RWMAMP is implemented and annual reports are prepared. In addition, the need for responsive measures and how they will be carried out will be documented. As trustee agencies, the state and federal resource agencies, as appropriate, will be provided copies of the annual reports and related documentation concerning responsive measures for their review and comment.			
• Approach . The methodology for monitoring is a variation of methods presented in Monitoring the Vegetation Resources in Riparian Areas (Winward 2000). This General Technical Report prepared by the U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, provides information on the use and application of three sampling methods to inventory and monitor the vegetation resources in jurisdictional areas. These methods are: 1) the vegetation cross-section method that evaluates the health of vegetation across a riparian corridor; 2) the greenline method that provides a measurement of the streambed associated vegetation and/or wetlands; and, 3) the woody species regeneration that measures the density and age class structure of shrub and tree species that may be in the sampling area. It should be noted that modifications made to the Winward methodology and incorporated into the RWMAMP are intended to reduce observer variability as discussed in Coles-Ritchie, et. al. (2004).			
 Assessment of Vegetation Health. The vegetation cross-section method will consist of at least five permanently marked line-point transects aligned perpendicular to USACE, RWQCB, and CDFG jurisdiction associated with Cartago Creek and the edge of the wetland area at three (3) established monitoring stations. The transects will be placed in such a way to best represent the riparian and/or wetland communities being monitored and, to 			

Mitigation Measure	Phase of Implementation	Frequency and/or Duration of Required Monitoring	Enforcement / Reporting Agency
the extent practicable, will be long enough to span the observed riparian corridor and delineated wetland edge. Species composition and cover will be obtained by collecting data on species present every 0.5 meter (approximately 20 inches). Cover data will be determined by dividing the number of points where vegetation cover is observed by the total number of points on the transect. Composition data will be determined by dividing the number of points where a particular plant species is observed by the total number of points where vegetation cover is observed on the transect. Photographs will also be taken in the direction of the transect from the start and end points).			
• Measurement of Riparian and Wetland Vegetation. The greenline method will be used to provide an indication of the immediate riparian and wetland edge vegetation composition associated with jurisdictional areas. The greenline itself will be identified by the edge of riparian and wetland vegetation. As such, the greenline method is designed to account for a continuous line of vegetation along the wetland edge and on each side of Cartago Creek (excepting road and trail crossings) even when this line of vegetation occurs several feet above or away from the stream's edge (usually the ordinary high water mark). The greenline transect will begin at the crossing of the most "uphill" cross-section transect, on the right side (looking downstream) of Cartago Creek and the most "uphill" cross-section transect across the wetland edge. Using the step transect method, the monitor will proceed downstream a minimum of 100 meters (approximately 328 feet and considered to be the minimum distance needed to encompass the potential variation within a riparian complex), cross Cartago Creek, and walk upstream on the opposite side of the creek until opposite the starting point. In the case of the wetland edge, the transect will follow the edge in one direction only. Data on riparian and wetland plant species (obligate and facultative hydrophytes) canopy and understory will be collected every four (4) steps (approximately 8 feet). Percent cover and species composition will be calculated as described above for the cross-section method.).			
 Measurement of Woody Riparian Species Regeneration. Woody species regeneration will be measured by using the same transects used for greenline measurements. At each data collection step for the greenline method, the observer will use a 1-meter stick to collect data on woody vegetation within a circle having a radius of one (1) meter from the toe-point of the step. All woody plants rooted within the circle will be tallied based on age-class categories (sprout, young, mature, decadent and dead, as defined by Winward 			

Mitigation Measure	Phase of Implementation	Frequency and/or Duration of Required Monitoring	Enforcement / Reporting Agency
(2000). Data will be analyzed for age class distribution and species composition as described above.	•		
• Monitoring Stations and Monitoring Regime. To best elucidate the relationship between the increased pumping and the maintenance, health, and vigor of riparian and wetland vegetation, as well as the role of rain, snowmelt runoff, and/or inputs from several natural seeps and springs along its length, and natural accretion in supporting riparian and wetland vegetation in the area, three monitoring stations will be established: 1) just upstream from the point where Cartago Creek's bed and bank characteristics are lost due to sheet flow; and 2) at two locations where existing natural springs exist that can be monitored along one or more of the five transects established at each monitoring station near the proposed plant facility, 3) at a location removed from the proposed plant facility. The measurement of baseline, or starting conditions, following the methods outlined above, will be conducted prior to the commencement of project operation. Monitoring at these stations, following the methods outlined above, will take place in midto late August during each year of monitoring; monitoring will take place for six years following the buildout of each of the two proposed project phases, for a total duration of 12 years of monitoring. Monitoring will be conducted annually for the first three (3) years following buildout of each project phase in order to discern the potential loss of riparian wetland vegetation in the area, and implement responsive measures if necessary, as set forth below. Following year three (3) of monitoring following buildout of each project phase, if no loss of riparian and wetland communities is detected due to the increased pumping, monitoring will take place at year six (6) following the buildout of each project phase following the onset of increased pumping. If, at the end of the entire 12-year monitoring program, no significant loss of riparian and wetland communities is detected, the monitoring program will be terminated.			
 Assessment of Monitoring Data. The effects of increased pumping, if any, will be assessed through examination of the various data collected during monitoring and the identification of trends regarding the stability of the riparian and wetland communities being monitored. First, the percent cover of obligate and facultative hydrophytes obtained through application of the vegetation cross-section method will be analyzed. Should the percent cover of these plant species exhibit a decreasing trend and/or decrease on a 			

	Phase of	Frequency and/or Duration of Required	Enforcement /
Mitigation Measure	Implementation	Monitoring	Reporting Agency
cumulative basis by more than 20 percent of their baseline values at any time during the monitoring program, responsive measures will be implemented as presented below. Second, should the percent cover along the greenline exhibit a decreasing trend and/or decrease on a cumulative basis by more than 20 percent of their baseline values at any time during the monitoring program, responsive measures will be implemented as set out below. Third, should the woody recruitment data exhibit a decreasing trend in young (>3 years old) or mature riparian woody plants and/or decrease on a cumulative basis by more than 20 percent of their baseline values, again, adaptive management measures will be implemented as set out below. Assessment of all three data sets will be used to determine the need and type of adaptive management measures to be implemented. It should also be noted, however, that in its analysis, the monitoring program will assess any losses stipulated above against the amount of snow- melt runoff and rainfall in that year. That is, during dry years, the health and vigor of hydrophytic plants may decrease independent of the increased pumping. Conversely, hydrophytes may flourish during wet years. In both cases, consideration will be made for climatic conditions when examining community and population trends.			
• Adaptive Management Measures. The adaptive management strategy for identified degradation and/or loss of riparian and wetland communities within jurisdictional areas shall include creation, restoration and/or enhancement of riparian and/or wetland habitat. The adaptive management shall be accomplished in one or more of the following ways, as determined by the Inyo County Water Department in consultation with the applicant: a) a short-term and/or long-term reduction in pumping of the project's water supply wells; b) creation, restoration and/or enhancement of habitat on property owned by Crystal Geyser; c) creation, restoration and/or enhancement outside the property, but within lower Owens River Basin; and cd) payment of in lieu fees to an existing riparian or wetland mitigation/conservation bank and/or existing management and/or enhancement program in the Eastern Sierra region. The selection of a site or program to which adaptive management measures will be applied will set a priority for locations where the highest benefit to habitat can be realized. The payment of in lieu fees, if such a program exists, will fulfill these requirements, in part or in full. For adaptive management entailing habitat creation, restoration and/or enhancement, a Habitat Management and Monitoring Plan shall be prepared for review and approval by the County and trustee agencies, as			

Mitigation Measure	Phase of Implementation	Frequency and/or Duration of Required Monitoring	Enforcement / Reporting Agency
appropriate. The plan will stipulate success criteria for the habitat being created, restored and/or enhanced and will be monitored by a qualified restoration ecologist for five years or until such time as the success criteria are met, but no sooner than one year following cessation of all inputs (e.g., soil amendments, irrigation, etc.) to the creation, restoration and/or enhancement project. The success criteria will address requirements for no significant net loss of riparian and/or wetland habitat regulated by the USACE, RWQCB, and/or CDFG and will focus on habitat replacement to the extent practicable and satisfactory to the participating trustee resource agencies.			
• Reporting Procedures . Annual reports and data records will be submitted by the monitor to the County at the end of each year of monitoring. Following the submittal and depending on the need for adaptive management responses or remedial action, the County may elect to consult with trustee agencies.			
Mitigation Measure BIO-5: The Applicant shall be responsible for implementing mitigation to reduce potential impacts to migratory raptor and songbird species to below a level of significance by the following: (1) Vegetation removal activities shall be scheduled outside the nesting season for raptor and songbird species (typically September 1 to February 14) to avoid potential impacts to nesting species (this will ensure that no active nests will be disturbed and that habitat removal could proceed rapidly); and/or (2) Any construction activities that occur during the raptor and songbird nesting season (typically February 15 to October 14) shall require that all potentially impacted suitable habitat be thoroughly surveyed for the presence of nesting raptor and songbird species by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors) shall be delineated, flagged, and avoided until the nesting cycle is complete as determined by the qualified biologist to minimize impacts.	Prior to construction	Prior to construction	California Department of Fish and Game
3. ARCHAEOLOGICAL/PALEONTOLOGICAL RESOURCES			
Mitigation Measure ARCH-1a: The Applicant shall retain a qualified archaeological monitor and Native American monitor who shall be present during construction excavations such as grading, trenching, grubbing, or any other construction excavation activity associated with the proposed project. The frequency of monitoring shall be based on the rate of excavation and	During construction	During construction	Inyo County Planning Department

Mitigation Measure	Phase of Implementation	Frequency and/or Duration of Required Monitoring	Enforcement / Reporting Agency
grading activities, proximity to known archaeological resources, the materials being excavated (native versus fill soils), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the archaeological monitor and native American monitor.			
Mitigation Measure ARCH-1b: In the event that archaeological resources are unearthed during ground-disturbing activities, the archaeological monitor shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of the find so that the find can be evaluated. Work shall be allowed to continue outside of the vicinity of the find. All archaeological resources unearthed by project construction activities shall be evaluated by the archaeologist. The Applicant shall coordinate with the archaeologist, the County, and the Native American representative to develop an appropriate treatment plan for the resources. Treatment may include implementation of archaeological data recovery excavations to remove the resource or preservation in place. The landowner, in consultation with the archaeologist, the County, and the Native American representative shall designate repositories in the event that archaeological material is recovered.	During construction	During construction	Inyo County Planning Department
Mitigation Measure ARCH-1c: The archaeological monitor shall prepare a final report at the conclusion of archaeological monitoring. The report shall be submitted by the Applicant to the County, the Eastern Information Center, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the project and required mitigation measures. The report shall include a description of resources unearthed, if any, treatment of the resources, and evaluation of the resources with respect to the California Register of Historical Resources and the National Register of Historic Places.	During construction	During construction	Inyo County Planning Department
Mitigation Measure ARCH-2a: If human remains are encountered unexpectedly during implementation of the proposed project, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC shall then identify the person(s) thought to be the Most Likely Descendent (MLD). The MLD may, with the permission of the land owner, or his or her authorized representative, inspect the site of the discovery of the Native	During construction	During construction	Inyo County Planning Department

Table 4-1 (Continued)

Mitigation Measure	Phase of Implementation	Frequency and/or Duration of Required Monitoring	Enforcement / Reporting Agency
American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the land owner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.			
Whenever the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendants and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance.			
Mitigation Measure ARCH-3a: If construction excavations will reach depths of five feet or greater, a qualified paleontologist shall attend a pre-grading/excavation meeting and develop a paleontological monitoring program for excavations into older Quaternary Alluvium deposits. A qualified paleontologist is defined as a paleontologist meeting the criteria established by the Society for Vertebrate Paleontology. The qualified paleontologist shall supervise a paleontological monitor who shall be present at such times as required by the paleontologist during construction excavations below five feet or greater into older Quaternary Alluvium deposits. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting wet or dry screened sediment samples of promising horizons for smaller fossil remains. The frequency of	During construction	During construction	Inyo County Planning Department

Mitigation Measure	Phase of Implementation	Frequency and/or Duration of Required Monitoring	Enforcement / Reporting Agency
monitoring inspections shall be determined by the paleontologist and shall be based on the rate of excavation and grading activities, the materials being excavated, and the depth of excavation, and if found, the abundance and type of fossils encountered.			
Mitigation Measure ARCH-3b: If a potential fossil is found, the paleontological monitor shall be allowed to temporarily divert or redirect grading and excavation activities in the area of the exposed fossil to facilitate evaluation and, if necessary, salvage. At the paleontologist's discretion and to reduce any construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing. Any fossils encountered and recovered shall be prepared to the point of identification and catalogued before they are donated to their final repository. Any fossils collected shall be donated to a public, non-profit institution with a research interest in the materials, such as the Eastern California Museum or the Natural History Museum of Los Angeles County. Accompanying notes, maps, and photographs shall also be filed at the repository.	During construction	During construction	Inyo County Planning Department
Mitigation Measure ARCH-3c: The paleontologist shall prepare a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted by the Applicant to the lead agency, the Eastern California Museum, the Natural History Museum of Los Angeles County, and other appropriate or concerned agencies to signify the satisfactory completion of the project and required mitigation measures.	During construction	During construction	
3. HISTORICAL RESOURCES			
Mitigation Measure HIST-1: As part of the project, Residence 2 will be demolished. Residence 2 contains squared timber construction which appears to remain from the ca. 1871 cabin and has a potential to yield important information about significant historic activities conducted on the project site associated with the period of significance, ca. 1871-1883. The squared timber construction of the extant visible wall and any other historic fabric associated with the period of significance that may exist inside other walls, roof and floor of Residence 2, have a potential to yield important information about the site. The project applicant shall retain a qualified architectural historian or historical archaeologist to conduct construction monitoring during demolition of Residence 2. Any important historic fabric or artifacts associated with the period of significance, ca. 1871-1883, shall be fully recorded in	During construction	During construction	Inyo County Planning Department

Table 4-1 (Continued)

Mitigation Measure	Phase of Implementation	Frequency and/or Duration of Required Monitoring	Enforcement / Reporting Agency
photographic images and written manuscript notes. Significant material retrieved from the site shall be salvaged, inventoried and properly archived in a suitable publically accessible historical collection for further analysis and interpretation. A qualified architectural historian, historical archaeologist or historic preservation professional who satisfies the Secretary of the Interior's Professional Qualification Standards for History, Archaeology, or Architectural History pursuant to 36 CFR 61, shall prepare the necessary written and illustrated documentation in a construction monitoring and data recovery report. This document shall record the history of Residence 2 during the period of significance as well document its present physical condition through site plans; historic maps and photographs; sketch maps; 35mm photography; and written data and text. All documentation components shall be completed in accordance with the Secretary of the Interior's Standards for Historical Documentation. The completed documentation shall be placed on file at the Eastern Information Center (CHRIS-EIC), University of California, Riverside, CA; the Eastern California Museum; and the County of Inyo Public Library.			
Mitigation Measure HIST-2: The Applicant shall retain a qualified archaeological monitor for ground disturbing activities associated with the proposed project. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (native versus fill soils), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the archaeological monitor.	During construction	During construction	Inyo County Planning Department
Mitigation Measure HIST-3: In the event that historic period archaeological resources are unearthed during ground-disturbing activities, the archaeological monitor shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of the find so that the find can be evaluated. Work shall be allowed to continue outside of the vicinity of the find. All archaeological resources unearthed by Project construction activities shall be evaluated by the archaeologist. The Applicant shall coordinate with the historic archaeologist and the County to develop an appropriate treatment plan for the resources. Treatment may include implementation of archaeological data recovery excavations to remove the resource or preservation in place. The landowner, in consultation with the historic archaeologist and the County, shall designate repositories in the event that archaeological material is recovered.			Inyo County Planning Department

Mitigation Measure	Phase of Implementation	Frequency and/or Duration of Required Monitoring	Enforcement / Reporting Agency
Mitigation Measure HIST-4: The archaeological monitor shall prepare a final report at the conclusion of archaeological monitoring. The report shall be submitted by the Applicant to the County, the Eastern Information Center, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the project and required mitigation measures. The report shall include a description of resources unearthed, if any, treatment of the resources, and evaluation of the resources with respect to the California Register of Historical Resources and the National Register of Historic Places.	During construction	During construction	Inyo County Planning Department
Mitigation Measure HIST-5: If human remains are encountered unexpectedly during implementation of the proposed project, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC shall then identify the person(s) thought to be the Most Likely Descendent (MLD). The MLD may, with the permission of the land owner, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the land owner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.	construction	During construction	Inyo County Planning Department
Whenever the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendants and the mediation provided for in Subdivision (k) of			

Mitigation Measure	Phase of Implementation	Frequency and/or Duration of Required Monitoring	Enforcement / Reporting Agency
Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance.			
4. HYDROGEOLOGY & SURFACE HYDROLOGY			
Mitigation Measure HYDRO-1: During the initial sequential activation of the first two production lines after Phase I building has been completed, all three wells shall be utilized so that the total groundwater demand is spread between the three wells, as opposed to pumping only one well at full capacity while leaving the other two wells idle. This will mitigate water level drawdown impacts in the vicinity of any one pumping well.	During project operation	During project operation	Inyo County Planning Department Inyo County Water Department
Mitigation Measure HYDRO-2: The applicant shall submit a Groundwater Monitoring, Mitigation, and Reporting Plan (prepared by a qualified hydrogeologist or other specialist approved in advance by the Inyo County Water Department) to the Inyo County Water Department for review and approval prior to the operation of the three water supply wells, as follows:	Prior to and during project operation	Prior to and during project operation	Inyo County Water Department
The Plan shall be submitted to the Inyo County Water Department at least three months prior to the commencement of project operation to allow for adequate review time and any necessary revisions.			
• The Plan shall provide a detailed methodology for monitoring background groundwater levels. The monitoring period shall include pre-operation and project operation. The Plan shall establish pre-operation and project-related groundwater level trends that can be quantitatively compared against predicted trends near the project pumping wells and potentially impacted resources.			
The Plan shall include the applicant's existing model for predicting changes in the groundwater flow system resulting from the project. This model has the capability to assess changes in hydraulic head, flow rate, flow direction, and water budget. In addition,			

	Mitigation Measure	Phase of Implementation	Frequency and/or Duration of Required Monitoring	Enforcement / Reporting Agency
	the Plan shall include model runs which predict effects of the planned groundwater pumping for the project on off-site wells.			
•	The Plan shall define triggers for on-site monitoring wells that correspond to potential impacts on off-site wells. The triggers shall be based on the results of monitoring and modeling. The applicant shall also use the model to provide an evaluation of the sustainability of the water supply for the life of the project, including the cumulative sustainability when considered with other pumping occurring or projected to occur in the groundwater basin.			
•	The Plan shall also include the following:			
	1. Initiation: Provisions for initiation of evaluation of the water level data;			
	2. Verification: A plan for verifying the predictive tools described above and for revising or recalibrating the tools as necessary; and			
	3. Revisions: A plan for revising thresholds as dictated by new data concerning system response to project operation.			
•	Monitoring. Water level monitoring shall be conducted and reported at monthly intervals for the first two years of project operation following each phase of project buildout. Data shall be collected and analyzed by a qualified specialist to be retained by the applicant and approved by the Inyo County Water Department. Monitoring reports shall be prepared by the applicant's approved specialist and submitted to the Inyo County Water Department within 20 days of data collection. After the first two-year operational and monitoring period following each phase of project buildout, the applicant's approved specialist shall evaluate the data. If appropriate, the applicant's approved specialist shall recommend whether the monitoring program shall be revised or eliminated, based on observed groundwater level changes as compared with predicted modeling, and on the consistency of the data collected. The final determination of whether the monitoring program is to be revised or eliminated shall be made by the Inyo County Water Department.			
Dej	-Site Well Impacts. In the event that a well owner notifies the Inyo County Water partment that impacts to off-site wells have occurred or will occur due to the project, and pacts are confirmed through verifiable data as determined by the Inyo County Water			

	Phase of	Frequency and/or Duration of Required	Enforcement /
Mitigation Measure	Implementation	Monitoring	Reporting Agency
Department, the applicant shall take one or more of the following steps in consultation with and as approved by the Inyo County Water Department to maintain less than significant impacts: (1) a short-term or long-term reduction in pumping from one or more wells at the Cabin Bar Ranch or other wells within its control, (2) direct provision of water from Crystal Geyser to the impacted well owner(s), and/or (3) direct financial compensation from Crystal Geyser to the impacted owner(s) for the costs to modify well(s) and/or for increased electrical costs. Disputes as to the cause of well water drawdown or appropriate corrective measures shall be resolved by the County.			
It is understood that the Inyo County Water Department will consider, but will not be limited to, the following as part of its confirmation of impacts and mitigation for off-site well impacts:			
1. Mitigation for project effects on off-site wells shall depend upon the specific characteristics of each well, and the use of the well.			
2. The applicant shall work with the Inyo County Water Department to evaluate wells that may be affected by groundwater drawdown as the project progresses.			
3. The Inyo County Water Department shall consider in its evaluation the applicant's monitoring data, as required pursuant to this mitigation measure, and the groundwater model, as it may be amended.			
Mitigation Measure HYDRO-3: The project applicant shall retain qualified groundwater professionals to evaluate water quality as set forth in this mitigation measure, since pumping is conducted continuously and groundwater conditions may change. Examples of such data review and interpretation may include, but not be limited to, the following:	During project operation	During project operation	Inyo County Water Department
• To establish a database where possible long-term trends and changes in water quality may be evaluated, groundwater samples shall be collected at least once every three years from the pumping wells and key groundwater monitoring wells for analysis of physical constituents (e.g., temperature, electrical conductivity, turbidity, pH; general minerals, trace metals; and the radiological constituents is recommended.			

Mitigation Measure	Phase of Implementation	Frequency and/or Duration of Required Monitoring	Enforcement / Reporting Agency
 Plot the production quantities from each well, along with rainfall and SWLs, in order to assess the impact of pumping on SWLs in all monitored sites. 			
 Plot temporal changes in key water quality constituents in groundwater samples from the wells. Typical key water quality constituents include total dissolved solids, electrical conductivity and selected cations, such as calcium, magnesium, sodium and boron, and cations, such as bicarbonate, sulfate and chlorides. Tracking changes in these constituents in those wells close to the Spring Line fault may provide indication of any possible intrusion of brackish groundwater from the east side of the fault into the aquifers on the west side of the fault. 			
• In the event that verifiable data are presented to the Inyo County Water Department demonstrating impacts to water quality due to the applicant's pumping activities, the applicant shall undertake a short-term or long-term reduction in pumping from one or more wells at the Cabin Bar Ranch to maintain less than significant impacts, in consultation with and as approved by the Inyo County Water Department.			
5. NOISE			
Mitigation Measure NOISE-1: Noise-generating equipment operated at the project site shall be equipped with the most effective noise control devises, i.e., mufflers, lagging, and/or motor enclosures. All equipment shall be properly maintained to assure that no additional noise, due to worn or improperly maintained parts, would be generated.	During construction	During construction	Building and Safety Department
Mitigation Measure NOISE-2: A 15-foot-tall temporary noise barrier shall be provided along north boundary of the project site to block line-of-sight to the residential uses north of the project site.	During construction	During construction	Building and Safety Department
6. TRAFFIC		•	•
Mitigation Measure TRANS-1: To ensure truck and motorist safety, the proposed internal access roadway shall be constructed at the onset of Phase I construction activities.	Onset of Phase I construction	Onset of Phase I construction	Inyo County Planning Department





Letter No. 1



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

October 8, 2012

via email with signed hardcopy to follow

Ms. Tanda Gretz, Senior Planner Inyo County Planning Department P. O. Drawer L Independence, CA 93526

Dear Ms. Gretz:

Subject: Comments on the Draft Environmental Impact Report for the Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Facility Project

The Big Pine Paiute Tribe of the Owens Valley (Tribe), a federally recognized Tribe, would like to thank you for the opportunity to submit comments on the Draft Environmental Impact Report (DEIR) for the Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Facility Project. The Tribe is committed to the responsible stewardship of natural resources and the preservation of American Indian cultural resources. With regard to this project, we have an interest in the development, use and export of water from Owens Valley and the environmental consequences of such activities.

Cultural Resources

The DEIS states on p. 4.D-18 that the "overall sensitivity of the project site with respect to buried human remains appears to be high. Therefore, impacts on buried human remains are considered to be potentially significant." Because of this, there should be full-time monitoring by an archaeological monitor and a Native American monitor for all construction excavation activities in the project area. It is impossible for the archaeological monitor to determine if human remains may be encountered in future construction excavations by an analysis of past construction excavation activities. Human remains may not be associated with any other archaeological resources or indicators.

Water Resources

On Page 4.G-8 of the DEIS it states that "the proposed project is exempt form the groundwater transfer ordinance under Section 18.77.010.B.3, Exemptions, which exempts 'a transfer or

1-1

1-2

transport of water in the form of manufactured or processed goods or products, agricultural products, or in bottles or any other portable containers including tanker trucks, provided the total transfer or transport via tanker truck or trucks does not exceed one acre foot during a one-year period." (italics added) The exemption in County Ordinance No. 1004 is clearly to allow the transport of water in bottles out of the county, as long as, it is less than one acre foot of water moved annually. On page ES-1 of the DEIS it states that "The bottling facility would utilize spring water from three existing production wells to supply the bottling operations." The production wells will "eventually produce a total of 360 acre-feet per year of groundwater" according to page 4.G-24. Therefore, this project can not be included as part of the exemption cited from County Ordinance No. 1004 because it is transporting more than one acre foot of water per year.

1-3 (cont.)

On page 4.G-26 the DEIS states that, "it can be inferred that the pumping of existing CGR wells has had no detrimental impact on water levels to date in the shallow aquifer system." However, in the preceding page in the Spring Flows section, the DEIS shared that pump tests for a 72 hour period result in a decrease in spring flows of up to 52%. When a more realistic operational modeling was done with the wells pumping at 67 gpm, (which is by the way, below the operational plan of 75 gpm [p.4.G-24]) the spring flows were still impacted by a decrease of 17.6%. It is apparent from the DEIS that spring flows will be impacted by groundwater pumping for this project, but there is no mitigation strategy for a reduction in spring flows. Springs provide water for an abundance of species and the DEIS fails to determine what a decrease of any amount in spring flows will do to the plant and animal species which rely on the springs in the area.

1-4

On page 4.G-27, the section dealing with water level drawdown impacts was very confusing. The DEIS shares information from a Hydrologic Investigation completed in 2012 and attached in the technical documents as Appendix F, but by the end of the paragraph the DEIS shares that previous investigations were more sophisticated and had reduced drawdown impacts than the 2012 investigation so the previous studies should be used for the present analysis. It was not revealed in the DEIS any details that would allow the reader to find the previous studies which are now being used in the DEIS to determine drawdown impacts. The Tribe does not understand how decision makers will be able to use this section in determining drawdown impacts of pumping because there is no way of understanding where the numbers from the previous investigations came from.

1-5

It is interesting to note that Crystal Geyser Roxane is a water bottling company that is desiring to increase its production in an area which has limited water quality data even though they have the ability to sample water at the three production wells that are currently on site. On page 4.C-25 it states that "limited data exists regarding the nature of current water quality in the shallow and deep aquifers beneath the property; however, it is clear that the water quality is appropriate for use as a source for bottled water." It is highly important from a human

health perspective to gather water quality data at the three proposed production well sites prior to selling water to consumers.

Endangered Species

On page 4.C-7 the DEIS states that a "general biological investigation of the study area was conducted on February 8, 2012." The DEIS further states on page 4.C-26 that, "the purpose of the general survey was to identify potential habitat for any threatened, endangered or otherwise sensitive species that may occur within the study area."

The Tribe does not consider the level of investigation conducted on February 8, 2012 to be sufficient in establishing an accurate understanding of the plant and animal communities which are located within the project area. The investigation conducted on February 8, 2012 was completed during the winter season when the sensitive and endangered plant and animal species were not likely to be encountered by those conducting the investigation. The limitations of the investigation are seen on pages 4.C-13, 4.C-15 and 4.C-16 where the DEIS concludes that additional surveys need to be conducted for specific sensitive or endangered species (Tulare rockcress, upswept moonwort, scalloped moonwort, mingan, moonwort, Kern Plateau bird's beak, sanicle cymopterus, Kern River fleabane, field ivesia, creamy blazing star, Charlotte's phacelia, Parish's popcorn-flower, Bailey's greasewood, Owens Valley checkerbloom, cut-leaf checkerbloom, marsh arrow-grass, grey-leved violet, Owens Tui Chub, Owens Pupfish, Swainson's Hawk, least Bell's vireo, Mojave Ground Squirrel) during the appropriate season to determine the presence or absence of species.

An Initial Study and Evaluation for Potential Impacts (IS) for this project was conducted by the Inyo County Planning Department and concluded that an Environmental Impact Report would be required for this project because of the potential for significant impact in a number of areas. One of the areas of concern that the Inyo County Planning Department wanted further analysis was for biological resources. On page P. 15 of the IS it states that, "the proposed project has the potential, either directly or through habitat modifications, to have an impact on candidate, sensitive or special status species as identified by the CDFG or the US Wildlife Service (USFWS). Thus, it is recommended that the potential for the project to have a substantive adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species...be further analyzed in an EIR". It is obvious from reading the DEIS that the February 2012 investigation was not able to analyze effects of the project on populations of sensitive and endangered plant and animal species because the investigation was not able to even delineate what species were present at the study area. Additional investigations should have been conducted prior to the release of the DEIS to determine presence of sensitive or endangered species so that the DEIS could analyze the impacts of the project on those species.

The Tribe asserts that this DEIS is inadequate because it is unable to analyze the impacts of the project on the biological resources using the "general biological investigation" that was conducted on February 8, 2012.

1-7 (cont.)

Consultation

Pages 4.D-1 to 4.D-6 describe the regulatory framework under which to consider the effects of a proposed project on cultural resources. In addition to the federal, state and local laws and regulations listed in this section, the DEIS needs to cite state law SB-18 (Government Code Section 65352.3). SB-18 is a state requirement to have consultation with local Native American tribes when a county General Plan Amendment is proposed. On page 1-1, the DEIS shares that this project will result in a General Plan amendment due to a change in land use designation.

1-8

Summary

As illustrated in this comment letter, the Tribe is concerned with the content shared within the DEIS for this project. The DEIS was lengthy, but it did not have substantial evidence to assist Inyo County in making an informed decision on deciding the proper mitigation measures to put in place for the environmental impact caused by the project. It is the Tribe's recommendation that Inyo County find this DEIS inadequate and have the project proponent do the necessary studies to answer the guestions posed by Inyo County in the Initial Study.

1-9

Sincerely,

Virgil Moose

Tribal Chairperson

Lone Pine Paiute-Shoshone Reservation

P.O. Box 747 • 1103 South Main Street Lone Pine, CA 93545 (760) 876-1034 Fax (760) 876-8302 Web Site: www.lppsr.org

October 4, 2012

Ms. Tanda Gretz, Senior Planner Inyo County Planning Department PO Drawer L Independence, CA 93526

Re: General Plan Amendment #2010-01/ Zone Reclassification 2010-02/ Conditional Use Permit #2010-03/ Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Facility Project.

Dear Ms. Gretz:

The Lone Pine Paiute-Shoshone Reservation (LPPSR) appreciates the opportunity the Inyo County Planning Department has given to comment and provide input on the Draft Environmental Impact Report (DEIR) for the Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Plant Project.

After thorough review of the DEIR, LPPSR has the following comments regarding the potentially significant impact(s) that could result from the project:

Monitoring Program

Groundwater dependent vegetation should be monitored in order to show how CG Roxane affects the local hydrology and habitat over time. The "Riparian and Wetland Monitoring and Adaptive Management Program," or RWMAMP (ES-21 through ES-27) addresses this in part. The RWMAMP is like a micro version of the Inyo County – City of Los Angeles Long Term Water Agreement, with comparable goals, methods, and shortcomings.

One key shortcoming is mitigation. The DEIR mentions an adaptive management strategy that would entail "creation, restoration, and/or enhancement of riparian and/or wetland habitat" (ES-26). Mitigation is practiced in various parts of Owens Valley, and it often means additional pumping. It seems contradictory to pump water to mitigate water pumping. CG Roxane water extraction should be scaled back if there is a "decrease on a cumulative basis by more than 20 percent of their baseline values," (ES-25).

Longevity of monitoring is another shortcoming. The RWMAMP program could be terminated six years after its inception, while the phase II completion of the 4th and 5th bottling lines would not be completed until 2024-2025. Monitoring should occur when the maximum amount of water is being extracted, and with enough longevity to detect long term effects.

2-1

2-2

Cultural Resources

The abundant amount of cultural resources present on the Cabin Bar property is due to the fact that it has been inhabited by the Native people of this valley continuously throughout prehistoric and historic times. The dense concentrations of artifacts which have been located and wrongfully removed from this property are evidence of not only habitation, but of ceremonial usage. The people of the Lone Pine Paiute-Shoshone Reservation have long considered this a sacred site. One of the reasons for this is the presence of the spring. This also accounts for the large number of burials present in the immediate and surrounding vicinity. Because our people have lived there in the recent past, some of the people buried there are close relatives and others known to those still alive today. To destroy this spring and the surrounding environment is yet a further injustice on this Tribe, our culture, our ethnography and our people.

Once again, LPPSR would like to thank the Inyo County Planning Department for the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Plant Project.

2-5

2-4

Sincerely,

Mary L. Wuester, Tribal Chairperson
Lone Pine Paiute-Shoshone Reservation

Cc: Honorable Tribal Officers

Mel O. Joseph, LPPSR Environmental Director Kathy Bancroft, LPPSR Cultural Committee

Inyo County Planning Commission



DEPARTMENT OF TRANSPORTATION

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Flex your power!
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October 1, 2012

Tanda Gretz
Inyo County Planning Department
P.O. Drawer L
Independence, California 93526

File: Iny-395-37.2 DEIR SCH #: 2011091055

Dear Ms. Gretz:

Crystal Geyser Cabin Bar Ranch Water Bottling - Draft Environmental Impact Report (DEIR) - GPA #2010-01/ZC 2010-02/CUP #2010-03

Thank you for giving the California Department of Transportation (Caltrans) the opportunity to review the DEIR for the Cabin Bar Ranch Water Bottling facility (CBR) east of US 395 in the community of Cartago. We appreciate our continued interaction with the project proponent and the County. We have the following comments:

3-1

• The Executive Summary Transportation section in Table ES-1 (page ES-47) has not been filled out.

3-2

• As stated in the DEIR, the proposed CBR US 395 driveway, with acceleration/deceleration lanes, would be built to Caltrans standards under the encroachment permit process, prior to the Olancha/Cartago 4-Lane project. To better assure safety; please include a project condition that this new driveway is to be constructed at the onset of phase 1.

3-3

• Design details can be worked out during the encroachment permit review phase. However, the project proponent should be aware that the proposed driveway configuration is predicated upon a previous version of the Olancha/Cartago 4-Lane project. The driveway improvements should be based upon the current 4-Lane configuration, wherein the frontage road access to the new expressway would be at a median crossover and align with the proposed CBR driveway. (See enclosed proposed alignment sheet.) Also, evaluate Stopping Sight Distance and Corner Sight Distance upon actual speed (i.e. 65 mph) rather than the posted speed (55 mph). The driveway will need to adhere to the updated Highway Design Manual (05/07/2012). See: http://www.dot.ca.gov/hq/oppd/hdm/hdmtoc.htm.

• The DEIR states that the existing CBR (northern) driveway would be removed, but the gate retained for utility access. Optimally, utility access should be provided via the new driveway. If this driveway were still to remain it would also require an encroachment permit (we find none for it in our records). We would be reluctant to authorize this as a US 395 access for any type of use.

3-5

3-6

- Our District Encroachment Permit contact is now Kurt Weiermann, who may be reached at (760) 872-0781 or kurt weiermann@dot.ca.gov.
- The 4-Lane project Manager is Cedrik Zemitis, who may be reached at (760) 872-5250 or cedrik.zemitis@dot.ca.gov.

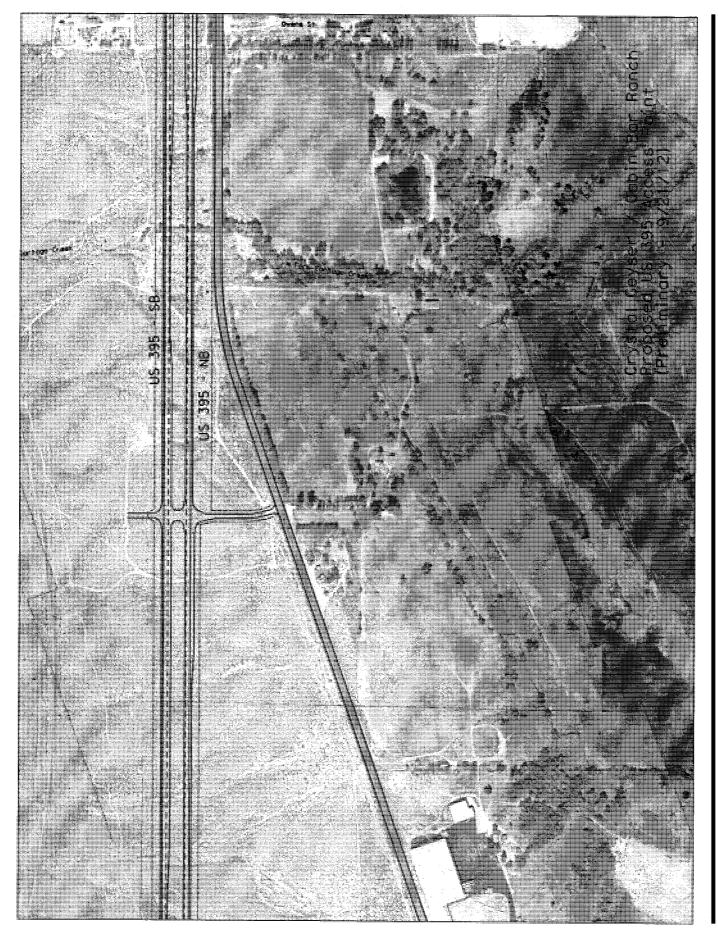
We value our ongoing cooperative relationship with Inyo County regarding State highway issues. Feel free to contact me at (760) 872-0785, with any questions.

Sincerely,

Lange J. Horander
GAYLE J. ROSANDER
IGR/CEQA Coordinator

Enclosure

c: State Clearinghouse
Mark Reistetter, Cedrik Zemitis; Caltrans



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



October 8, 2012

CURTIS L. FOSSUM, Executive Officer (916) 574-1800 FAX (916) 574-1810 California Relay Service From TDD Phone 1-800-735-2929 from Voice Phone 1-800-735-2922

> Contact Phone: (916) 574-1900 Contact FAX: (916) 574-1885

File Ref: SCH #2011091055

Ms. Tanda Gretz, Senior Planner Inyo County Planning Department P. O. Drawer L Independence, CA 93526

Subject: Draft Environmental Impact Report (DEIR) for Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Facility Project, Inyo County

Dear Ms.Gretz:

The California State Lands Commission (CSLC) staff has reviewed the subject DEIR for the Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Facility project (Project), which is being prepared by Inyo County (County). The County has the principal responsibility for approving the Project and is, therefore, the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). The CSLC will act as a trustee agency because of its trust responsibility for projects that could directly or indirectly affect sovereign lands, their accompanying Public Trust resources or uses.

CSLC Jurisdiction and Public Trust Lands

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 tidal waterways, the State's sovereign fee ownership extends landward to the mean high tide line, except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court. 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.

In addition, shortly after becoming a State, California was also granted Sections 16 and 36 (2 square miles), or lands in lieu thereof, out of each township (36 square miles) then held by the federal government. The lands, classified as "School Lands," were given to the State to help support public education. While many of the School Lands were sold over the years, the State retains an interest in approximately 1.3 million acres of mostly desert and forest lands. State legislation has mandated that revenues from these school lands accrue to the State Teachers Retirement System. The CSLC also has jurisdiction and authority over School Lands and lieu lands.

4-1 (cont.)

The Project is located adjacent to the Owens Dry Lakebed, which is ungranted sovereign land under the ownership and jurisdiction of the CSLC. Additionally, based on CSLC staff's review of in-house records and mapping, it appears that the southernmost portion of the proposed Project area is located within lands the State patented as lieu lands with 1/16th mineral reservation (Southwest ¼ of the Southeast ¼ of Section 6, Township 19 South, Range 37 East, Mount Diablo Meridian). Based on the project description, however, a lease from the CSLC is not required.

4-2

The CSLC is responsible for ensuring that projects on, adjacent to, or otherwise affecting State sovereign lands avoid or minimize impacts to Public Trust resources and uses including, but not limited to, groundwater. In the interest of all Public Trust values of the sovereign land at Owens Lake, CSLC staff provides the following comments on the DEIR.

4-3

At this time, CSLC staff does not have sufficient information to determine whether the Project will intrude upon State sovereign lands or may interfere with other public rights. This conclusion is without prejudice to any future assertion of State ownership or public rights, should circumstances change, or should additional information become available. This letter is not intended, nor should it be construed as, a waiver or limitation of any right, title, or interest of the State of California in any lands under its jurisdiction.

Project Description

The Project proposes the construction and operation of a spring water bottling facility and ancillary uses by Crystal Geyser Roxane on Cabin Bar Ranch, near Cartago, California. Cabin Bar Ranch spans U.S. 395 and totals 420 acres; the proposed Project site encompasses approximately 34.41 acres in the north-central ranch, of which approximately 14.59 acres would be subject to ground disturbance and improvements. The Project would construct a 198,500-square-foot bottling plant with four bottling lines and a 40,000-square-foot warehouse. Groundwater would be withdrawn from three existing on-site wells perforated in the shallow aquifer underlying the Project area at a combined average rate of 170 gallons per minute (gpm) year-round and up to a combined rate of 500 gpm during summer months, for a total of approximately 360 acrefeet per year.

4-4

Environmental Review

CSLC staff requests that the County consider the following comments on the DEIR:

Hydrology/Cumulative Impacts

1. The resources under the bed of Owens Lake are under the jurisdiction of the CSLC, inclusive of groundwater. Aquifer testing and water level drawdown calculations noted in the DEIR indicate that impacts to adjacent springs and aquifers due to Project operations would be less than significant. However, the cumulative impact discussion in the "Hydrogeology and Surface Hydrology" section in regards to the Los Angeles Department of Water and Power's (LADWP's) Owens Lake Dust Mitigation Program (Program) neglects to incorporate potential changes to the Program that are currently under review, including groundwater use being contemplated in association with the draft Owens Lake Master Plan. As described below, CSLC staff believes increased groundwater use, either through implementation of the Owens Lake Master Plan or other changes to the Program, constitutes a "probable future project" subject to disclosure and analysis obligations under section 15130, subdivision (b) of the State CEQA Guidelines.¹

On Page 4.G-31, the DEIR states "[w]ater for the Owens Lake Dust Mitigation Program is not obtained from groundwater pumping." Although this statement is currently true, analysis of the effects of using local groundwater to supplement dust abatement measures on Owens Lake has been ongoing since 1994, beginning with the Owens Lake Groundwater Evaluation Project (OLGEP) Initial Study and Negative Declaration (GBUAPCD 1994). LADWP, in cooperation with Inyo County Water Department (ICWD) and Great Basin Unified Air Pollution Control District (GBUAPCD), continues to conduct studies of the groundwater under Owens Lake under the OLGEP to evaluate the feasibility of utilizing groundwater to supply part of the water demand for the dust mitigation program on Owens Lake (refer to LADWP's website [www.ladwp.com] under Water/Los Angeles Aqueduct/Owens Lake Groundwater Evaluation). The draft Owens Lake Master Plan also discusses the use of groundwater as part of future dust mitigation and water conservation efforts.

Because LADWP has stated its intent to use local groundwater sources to supplement the Program if it is found environmentally feasible to do so, has provided funding for analysis to support that intent, and is working in cooperation with other agencies to achieve that goal, CSLC staff believes that the proposed use of groundwater in LADWP's dust mitigation program and its inclusion in the Master Plan are sufficiently advanced to require an evaluation in the DEIR of the cumulative impacts of groundwater withdrawal. This evaluation should include whether the environmental effects are "cumulatively considerable" as defined in section 15065, subdivision (a)(3) of the State CEQA Guidelines, and should address the issues specified in section 15130 of the State CEQA Guidelines.

As part of the discussion, the DEIR should make a reasonable effort to disclose information or estimated amounts of groundwater that might be withdrawn due to the Project in combination with other projects contributing to the cumulative environment. As the court in *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 729, explained:

¹ The State "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

The [CEQA] Guidelines require that an adequate cumulative impacts analysis include a list of the projects producing related or cumulative impacts, a summary of the expected environmental impacts from those projects and a reasonable analysis of the cumulative impacts of the relevant projects. (Guidelines,§ 15130.).... Absent some data indicating the volume of groundwater used by all such projects, it is impossible to evaluate whether the impacts associated with their use of groundwater are significant and whether such impacts will indeed be mitigated....

4-5 (cont.)

Climate Change

2. Greenhouse Gases: A greenhouse gas (GHG) emissions analysis consistent with the California Global Warming Solutions Act (AB 32) and required by the State CEQA Guidelines should be included in the DEIR. This analysis should identify a threshold for significance for GHG emissions, calculate the level of GHGs that will be emitted as a result of construction and ultimate build-out of the Project, determine the significance of the impacts of those emissions, and, if impacts are significant, identify mitigation measures that would reduce them to less than significant. Although the DEIR states that the proposed Project would incorporate GHG reduction measures, in order to provide a more complete analysis of proposed impacts and more fully comply with section 15064.4 of the State GEQA Guidelines, which state in part "...describe, calculate or estimate the amount" of GHG emissions, CSLC staff recommends that the potential GHG construction and operation emissions be quantified or estimated in the DEIR. If it is not feasible to quantify expected emissions, which the County has not indicated is the case, the DEIR should include instead a qualitative analysis that includes performance based standards.

4-6

Thank you for the opportunity to comment on the DEIR for the Project. We request that you consider our comments prior to certification of the EIR. Please send copies of future Project-related documents, including electronic copies of the Final EIR, Notice of Determination (NOD), Mitigation Monitoring and Reporting Program (MMRP), CEQA Findings and, if applicable, Statement of Overriding Considerations when they become available, and refer questions concerning environmental review to Cynthia Herzog, Environmental Scientist, at (916) 574-1310 or via e-mail at Cynthia Herzog@slc.ca.gov.

4-7

Sincerely,

Cy R. Oggins, thief

Division of Environmental Planning

and Management

cc: Office of Planning and Research Cynthia Herzog, DEPM, CSLC Pam Griggs, Legal, CSLC

Sal roam

Letter No. 5

October 8, 2012

www.dfg.ca.gov

Ms. Tanda Gretz Inyo County Planning Department P.O. Drawer L Independence, CA 93526

Subject: Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Facility Project

SCH No. 2011091055

Dear Ms. Gretz,

The Department of Fish and Game (Department) has reviewed the August 2012 Draft Environmental Impact Report (DEIR), for the Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Facility Project (Project) prepared by PCR Services Corp. on behalf of Inyo County Planning Department (Lead Agency). The Department is providing comments as the State agency which has the statutory and common law responsibilities with regard to fish and wildlife resources and habitats. California's fish and wildlife resources, including their habitats, are held in trust for the people of the State by the Department (Fish and Game Code §711.7). The Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitats necessary for biologically sustainable populations of those species (Fish and Game Code §1802). The Department's fish and wildlife management functions are implemented through its administration and enforcement of the Fish and Game Code (Fish and Game Code §702). The Department is a trustee agency for fish and wildlife under the California Environmental Quality Act (CEQA; see CEQA Guidelines, Title 14, California Code of Regulations §15386(a)). The Department is providing these comments in furtherance of these statutory responsibilities, as well as its common law role as trustee for the public's fish and wildlife.

The 35-acre Project is located south of the town of Cartago and shares part of its north border with the Department's Cartago Wildlife Area (CWA) (please note, the CWA *includes* the remnant soda ash processing plant area, contrary to the location description of the CWA as, "immediately east of the soda ash processing plant remnants" DEIR, page 2-5). Approximately 16 of the 35 project site acres would be

5-1

Inyo County Planning Crystal Geyser Roxane Page 2 of 6

subject to ground disturbance as a result of Project construction. Project construction, as depicted in the DEIR on page 69, would occur on a portion of the Cabin Bar Ranch property and consist of a 198,500 square-foot water bottling facility utilizing spring water from four existing production wells (three for bottling and one for domestic potable water), 40,000 square-foot warehouse, fire suppression building, paved 20-foot wide facility perimeter fire access road including fire hydrants and chain-link fence installation, storm water detention basin, leach mound, removal of existing access road asphalt (the resulting dirt or gravel road will maintain its utility), paved 24-foot wide and 2,500-linear foot permanent access road, parking and staging areas and rooftop solar photovoltaic array.

5-2 (cont.)

The Project would be built in three phases over a 10-15 year period and requires a General Plan Amendment, Zone Reclassification for a Zone Change, and Conditional Use Permit. The DEIR identifies the 'Reduced Operations Alternative' as the environmentally superior alternative; however, this alternative would only partially meet the project objective.

Vegetation

The DEIR, pages 2-19, 4.A-22 and 4.A-24, describes the removal of approximately 281 trees over 12-inces in diameter and states these trees are primarily non-protected willows located within the access route alignment (described in the DEIR, pages 4.C-7 and 4.C-8 and depicted in the DEIR, Plant Communities, Figure 4.C-1). The DEIR, page 2-19 describes Cabin Bar Ranch as containing, "hundreds of mature trees on the property" and states, "The number of trees to be removed constitutes a relatively small percentage of the total number of Cabin Bar Ranch." The DEIR description of 'hundreds' of trees translates to no more than 999 trees, which means the removal of 281 trees consists of removing 28% of the mature trees. As such, the Department does not concur with the Lead Agency's characterization that tree removal is a small percentage (of the total) number of trees.

5-3

Additionally, the DEIR, pages 4.C-35 through 4.C-37, Impacts to Wildlife Movement, states, "Although implementation of the proposed project would result in the removal of a large number of the trees within the immediate vicinity of the project site, there would still be large mature trees providing canopy cover within the red willow thicket found within Cartago Creek that can be utilized by wildlife. Thus, the removal of canopy cover of the mature trees on-site would be an adverse, but less than significant, impact to wildlife movement." The Department concurs tree removal may be a less than significant impact to wildlife movement, but the characterization of a 'relatively small percentage' of total trees being removed (as described in the paragraph above) is inconsistent with 'removal of a large number of trees'.

On 27 September 2012 Department staff met with representatives of Crystal Geyser Roxane. During that meeting a proposed access road realignment was described and an updated Project Site Plan (Figure 2-4) was shared. **If the Lead Agency plans to**

5-4 (cont.)

amend the DEIR to reflect the proposed access road realignment, the Department requests a recalculation of the total number of trees that will be removed.

Bats and Nesting Birds

As described in the DEIR, the proposed project area contains native vegetation such as mature cottonwoods, willow species and various upland shrub species and the DEIR identifies potential presence of several special status wildlife species based on literature search and 'suitable habitat'. The natural plant communities and existing structures described in the DEIR may be utilized as foraging and roost sites by bats or for nesting by birds-of-prey and numerous passerines and other migratory birds (including song birds). The DEIR, page 4.C-14, identifies 'sensitive wildlife species' that may occur on the project site based on occurrence data reported to the California Natural Diversity Data Base (CNDDB). The list of species includes pallid bat and spotted bat, and although not listed, there are other (non-sensitive) bat species that are known to occur in the area.

Pallid bat (Antrozous pallidus) and spotted bat (Euderma maculatum) are state Species of Special Concern (SSC). The Department considers SSC to be those of greatest conservation need and appear in California's Wildlife Action Plan (available at: http://www.dfg.ca.gov/wildlife/WAP). SSC is an administrative designation and carries no formal legal status; however, the intent of this designation is to focus attention on species at conservation risk; stimulate research on poorly known species; and achieve conservation and recovery of these species before they meet California Endangered Species Act (CESA) criteria for listing as threatened or endangered. The Department appreciates all consideration given to SSC and suggests appropriate mitigation measures, similar to those provided to candidate species, be included.

With regard to sensitive bat species, the DEIR, pages 4.C-14 and 4.C-29 state, "No sensitive wildlife species were observed during the field survey." and "certain sensitive species are not expected to occur due to a lack of suitable habitat, foraging habitat, or because the project area is outside of the known elevation or distribution range..." and pallid bat is included in this list of sensitive species. **The Department does not concur with this determination.** The project site provides suitable foraging and nesting habitat for both pallid bat and spotted bat. The project site is within the known distribution range for both species and pallid bat has been reported to CNDDB (Owens Lake Quadrangle). The observation and field survey form, completed by Dr. Joe Szewczak in 1996, included three individuals observed at the northeast margin of the Owens dry lakebed.

Additionally, both bat species are listed by the Bureau of Land Management (BLM) as 'sensitive' and by the Western Bat Working Group as 'high priority'. The pallid bat is also listed as 'sensitive' by the U.S. Forest Service. BLM Manual §6840 defines sensitive species as "... those species that are (1) under status review by the

Inyo County Planning Crystal Geyser Roxane Page 4 of 6

FWS/NMFS; or (2) whose numbers are declining so rapidly that Federal listing may become necessary, or (3) with typically small and widely dispersed populations; or (4) those inhabiting ecological refugia or other specialized or unique habitats." It is BLM policy to provide sensitive species with the same level of protection that is given federal candidate species.

5-5 (cont.)

The Western Bat Working Group is comprised of agencies, organizations and individuals interested in bat research, management and conservation from the 13 western states and provinces. The goals are (1) to facilitate communication among interested parties and reduce risks of species decline or extinction; (2) to provide a mechanism by which current information on bat ecology, distribution and research techniques can be readily accessed; and (3) to develop a forum to discuss conservation strategies, provide technical assistance and encourage education programs. Species designated as 'High Priority' are imperiled or are at high risk of imperilment based on available information on distribution, status, ecology and known threats. More information is available at: http://www.wbwg.org.

5-6

Section 3503 of the Fish and Game Code states that "it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation adopted pursuant thereto [usually requiring a license or permit]." Section 3503.5 of the Fish and Game Code further says that "it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birdsof-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provide by this code or any regulation adopted pursuant thereto [usually requiring a license or permit]." The DEIR, Table ES-1, "Summary of Project Impacts and Mitigation Measures" beginning on page ES-5, provides a summary of impacts and mitigation measures for those species with the potential to occur on the project site. Special Status Wildlife species that are listed include Owen's Tui chub, Owen's pupfish, Swainson's hawk, loggerhead shrike, yellow breasted chat, least bittern, least Bell's vireo, spotted bat, Owens's Valley vole, Mohave ground squirrel and yellow warbler. Table ES-1 and page 3-4 identify loggerhead shrike, least bittern, spotted bat, and Owens Valley vole among the species with the potential to occur on the project site, but mitigation measures are not proposed. The Department requests the Lead Agency identify appropriate mitigation measures to avoid, minimize or mitigation potential impacts to these species.

5-7

With regard to the six bird species listed above, including riparian obligate species, if these species are detected during species specific surveys, the Department does not concur with the Lead Agency determination that a "mitigation-to-impact ratio of no less than 1:1 ..." would reduce impacts to less than significant. The mitigation ratio for permanent (vs. temporary) impacts to sensitive species habitat is 3:1 and if compensatory mitigation is required, the Department will not accept deed restricted property.

Additionally, with regard to Swainson's hawk, the DEIR page ES-13 further states, "impacts to the species shall be avoided or minimized to the maximum extent

Inyo County Planning Crystal Geyser Roxane Page 5 of 6

practicable." Unlike yellow breasted chat and yellow warbler, which are state SSC, Swainson's hawk is a state-threatened species, protected under CESA. The DEIR page 4.C-36 identifies February 15 to August 31 as the nesting activity period, but Table ES-1, "Summary of Project Impacts and Mitigation Measures" does not propose methods to avoid take of individuals, nests, eggs protected under State and Federal laws. The Department requests the Lead Agency propose mitigation measures that limit tree removal and construction activities to October 15 – February 15 which is outside of the breeding bird season in Inyo County.

5-7 (cont.)

Although the DEIR, page 4.C-36 identifies potential presence of southwestern willow flycatcher and western yellow-billed cuckoo via the Southern Owens Conservation Area of the Owens Basin Wetland Aquatic Species Recovery Plan for Inyo and Mono Counties, these bird species are not considered "Due to the lack of suitable habitat or because the study area is outside of the known range or elevation for these species..." Both listed bird species have been observed in the immediate vicinity of the project site and those documented occurrences are referenced in the Los Angeles Department of Water and Powers Lower Owens River Project (DEIR page 4.C-49) and the Draft Habitat Conservation Plan currently being prepared. As such, the Department does not concur with this determination and requests the Lead Agency identify these bird species as potentially occurring and identify appropriate mitigation measures to avoid, minimize or reduce impacts.

5-8

The DEIR on page 4.C-1 states, "The scope of this assessment encompasses the documentation of existing biological resources in the study area; however, no focused survey have been conducted." The DEIR does state that a 'field investigation' was conducted in February 2012. The DEIR on page 4.3-13 recommends focused plant surveys for those species that have the potential to occur on the project site and recommends three surveys for sensitive plant species. On 4 October 2012, the Lead Agency sent the Department an electronic copy of a botanical report prepared in June 2012. With the exception of confirming presence of red willow thicket, no sensitive plant species were observed during the 29 May 2012 focused plant survey. The Department does not concur with the Lead Agency that additional sensitive plant surveys are needed.

5-9

The DEIR, pages ES-13, 4.C-14 and 4.C-15, identifies potential impacts on three potentially occurring sensitive fish species and Mohave ground squirrel and recommends pre-construction surveys to determine presence. It is the opinion of the Department, based on lack of habitat, historic presence and known occurrence locations that these species do not occur on the project site and therefore will not be impacted by the Project. However, should the project proponent wish to proceed with focused surveys, the Department reminds the Lead Agency that presence of these fish species cannot be determined via 'pre-construction surveys' and these state-listed Endangered and state fully-protected fish species cannot be handled without species permits issued by the Department. Similarly, Mohave ground squirrel surveys, which include trapping, can only be conducted by

individuals permitted by the Department. A list of individuals currently permitted to conduct these activities can be provided.

5-10 (cont.)

5-11

Permitting Needs

The DEIR summarizes permits, reviews and approvals need for the project. A California Endangered Species Act (CESA) Permit is identified; and the Department was contacted by Crystal Geyser Roxane in regard to obtaining a CESA Permit. Although the DEIR does not specifically state which species may require take authorization, based on a lack of species specific data, the DEIR does suggest one is needed if the project has the potential to result in take of species of plants or animals listed under CESA, either during construction or over the life of the project. CESA Permits are issued to conserve, protect, enhance, and restore State-listed threatened or endangered species and their habitats. Early consultation is encouraged and the Department appreciates having already been contacted. The Department's issuance of a CESA Permit for a project that is subject to CEQA will require CEQA compliance actions by the Department as a responsible agency. The Department as a responsible agency under CEQA may consider the Lead Agency's EIR for the project. As such, the Department requests the Lead Agency notify the Department should significant modifications to the Project be made or the EIR is amended. Revisions to the Fish and Game Code, effective January 1998, may require that the Department issue a separate CEQA document for the issuance of a CESA Permit unless the project CEQA document addresses all project impacts to listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of a CESA Permit. Information requirements for a CESA application may be found at 14 CCR §783.2. Biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA Permit.

Thank you for the opportunity to provide comment. Please call me with questions regarding this letter and further coordination on these issues at (760) 872-1126.

Sincerely,

Debra Hawk

Acting Habitat Conservation Supervisor

cc: State Clearinghouse

Chron



Tanda Gretz

From:

Jan Sudomier <jsudomier@gbuapcd.org>

Sent:

Sunday, October 07, 2012 3:53 PM

To:

Tanda Gretz 'Duane Ono'

Cc: Subject:

FW: General Plan Amendment @2010-01; Crystal Geyser Roxane Cabin Bar Ranch Water

Btlg Fac

Greetings Tanda Gretz,

Thank you for this additional opportunity to comment on the Crystal Geyser project in Cartago.

6-1

Besides the Secondary Source regulation (District Rule 216-A) discussed below, there are two other Regulations this project may be subject to;

• The Asbestos NESHAP (District Rule 1002 / 40 CFR 61 subpart M) for demolition of any existing structures, and,

if Crystal Geyser Roxane has or will have emergency standby or fire pump diesel engines 50 HP or bigger, the
diesel engines will require District permitting (California Diesel Air Toxic Control Measure for stationary sources
17 CCR 93115).

6-3

Thank you,
Jan Sudomier
Great Basin Unified Air Pollution Control District
157 Short Street, Bishop, CA 93514
(760) 872-8211 x 228 fax (760) 872-6109

From: Jan Sudomier [mailto:jsudomier@gbuapcd.org]

Sent: Wednesday, August 29, 2012 10:55 AM

To: 'Tanda Gretz'

Cc: 'Pierre Boulier'; Theodore D. Schade

Subject: General Plan Amendment @2010-01; Crystal Geyser Roxane Cabin Bar Ranch Water Btlg Fac

Greetings Tanda Gretz,

The Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Facility near Cartago, which includes the construction of a 198,500 sq ft bottling plant and a 40,000 sq ft warehouse requires a Secondary Source Permit from the District.

The previous Roxane project - General Plan Amendment #2009-03, that did not go forward, both the contractor and Roxane were dismayed at the Secondary Source Rule and fee schedule, so I've included a copy of each here, so the project participants are aware.

6-4

RULE 216-A. NEW SOURCE REVIEW REQUIREMENTS FOR DETERMINING IMPACT ON AIR QUALITY SECONDARY SOURCES

Adopted: 10/15/79 Revised: 07/07/05

A. GENERAL

1. A person shall not initiate, modify, construct or operate any secondary source which will cause the emission of any manmade air pollutant for which there is a state or national ambient air quality standard without first obtaining a permit from the Air Pollution Control Officer.

2. The Air Pollution Control Officer shall deny a permit for any new secondary source or modification which he determines will cause a violation or contribute to the continued violation of any state or national ambient air quality standard.

B. EXEMPTIONS

- 1. The Air Pollution Control Officer may exempt from the provisions of this rule any new secondary source or modification which includes:
 - a. Vehicular parking facilities without dust retardant agents and which have a parking capacity of less than 50 vehicles.
 - b. Unpaved roads having less than 100 vehicle trip-ends in any one hour period, or less than 300 vehicle trip-ends in an eight hour period per a 20 mile continuous road length.
 - c. Unpaved runways and airports having less than 60 operations per month.
 - d. [Deleted: 07/07/05]
 - e. Other secondary sources deemed by the Air Pollution Control Officer that emit insignificant amounts of air contaminants.

C. APPLICATIONS

- 1. Before granting or denying a permit for any new secondary source or modification, subject to the requirements of this rule, the Air Pollution Control Officer shall:
 - a. Require the applicant to submit information sufficient to describe the nature and amounts of emissions, location, design, construction, and operation of the secondary source; and to submit any additional information required by the Air Pollution Control Officer to make the analysis.
 - b. Require the applicant to submit the projected expansion plans for the secondary source for the ten-year period subsequent to the date of application for the permit.
 - c. Analyze the effect of the new secondary source or modification on air quality. Such analysis shall consider expected air contaminant emissions and air quality in the vicinity of the new secondary source or modification, within the Air Basin and within adjoining air basins at the time the secondary source or modification is proposed to commence operation.
 - d. Make available for public inspection at the Air Pollution Control District office, the information submitted by the applicant, the Air Pollution Control Officer's analysis of the effect on air quality, and the preliminary decision to grant or deny the permit.
 - e. Publish a notice by prominent advertisement in at least one newspaper of general circulation in the District stating where the public may inspect the information required in subparagraph (d) of this paragraph. The notice shall provide 30 days, beginning on the date of publication, for the public to submit comments on the application.
 - f. Forward copies of the notice required in sub-paragraph (e) of this paragraph to the U.S. Environmental Protection Agency, the California Air Resources Board, all counties within the air basin and all adjoining Air Pollution Control Districts in other air basins.
 - g. Consider public comments submitted.

D. CONDITIONAL APPROVAL

The Air Pollution Control Officer shall impose conditions on the permit as he deems necessary to ensure the secondary source or modification will be operated in such a manner assumed in making the analysis required by this rule.

E. EFFECTIVE DATE

This rule shall become effective upon adoption. All new secondary sources or modifications pending on the date of adoption of this rule are subject to its provisions.

F. DEFINITIONS

- 1. "Secondary Source" includes any structure, building, facility, equipment, installation or operation (or aggregation thereof) which is located on one or more bordering properties within the District and which is owned, operated or under shared entitlement to use by the same person.
- 2. "Manmade air pollutant" means air pollution which results directly or indirectly from human activities.
- 3. "Modification" means any physical change in, change in method of, or addition to an existing secondary source, except that routine maintenance or repair shall not be considered to be a physical change.

G. SEVERABILITY

If any portion of this rule is found to be unenforceable, such finding shall have no effect on the enforceability of the remaining portions of the rule which shall continue to be in full force and effect.

6-4 (cont.) District Rule 301 - Permit Fee Schedule

Schedule 8 - Commercial Building Schedule

Any secondary source consisting of a commercial building or structure shall be assessed a permit fee based on the total square footage of all such buildings or structures, in accordance with the following schedule:

1 5	<u> </u>
	Authority to Construct Initial
Commercial Building	Fee
Initial Fee per square foot	\$0.30
Minimum Fee per source	\$115.00
Maximum Fee per source	\$11,582.00

6-4 (cont.)

Thank you for the opportunity to comment.

Thank you,
Jan Sudomier
Great Basin Unified Air Pollution Control District
157 Short Street, Bishop, CA 93514
(760) 872-8211 x 228 fax (760) 872-6109



Letter No.7



Lahontan Regional Water Quality Control Board

October 1, 2012

File: Environmental Doc Review Inyo County

Tanda Gretz Inyo County Planning Department P.O. Drawer L Independence, CA 93526 FAX: (661) 862-8601

COMMENTS ON DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE CRYSTAL GEYSER ROXANE CABIN BAR RANCH WATER BOTTLING FACILITY PROJECT, INYO COUNTY, STATE CLEARINGHOUSE NO. 2011091055

The California Regional Water Quality Control Board, Lahontan Region (Water Board) staff received the Notice of Public Comment Hearing on a Draft Environmental Impact Report (DEIR) for the above-referenced project (Project) on September 17, 2012. The DEIR was prepared by PCR Services Corporation on behalf of Inyo County Planning Department (County), and submitted in compliance with the provisions of the California Environmental Quality Act (CEQA). The proposed Project is a spring water bottling facility and ancillary uses to be built in three phases over an approximate 10 to 15 year period. The Project also includes a leach mound system, a stormwater detention basin, and the development of an 8.3-acre solar array. Water Board staff previously commented on the Notice of Preparation for the Project on October 17, 2011. Our comments on the DEIR and proposed development are outlined below.

Pursuant to CEQA guidelines, California Code of Regulations (CCR), title 14, section 15096, responsible agencies must specify the scope and content of the environmental information germane to their statutory responsibilities. Water Board staff, acting as a responsible agency, is providing these comments to help guide in the development of Project alternatives in an effort to maintain water quality and hydrologic function, and ultimately, for the protection of the beneficial use of waters of the State. We expect the County will value our position with respect to protecting and maintaining water quality within the Lahontan region, and request that the following comments be incorporated in the final environmental document.

Authority

The State Water Resources Control Board (State Water Board) and the Water Boards regulate discharges of waste in order to protect water quality and, ultimately, the beneficial uses of waters of the State. State law assigns responsibility for protection of water quality in the Lahontan Region (Region) to the Lahontan Water Board.

Basin Plan

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 water quality within the Region. The Basin Plan provides guidance regarding water guality and how the Water Board may regulate activities that have the potential to affect water quality within the Region. All surface waters and groundwaters are considered waters of the State, which include, but are not limited to, aguifers, drainages, streams, washes, ponds, pools, or wetlands. Surface water bodies may be permanent or intermittent. All waters of the State are protected under California law. Additional protection is provided for waters of the United States (U.S.) under the Federal Clean Water Act (CWA). The Basin Plan sets forth water quality standards for the surface waters and groundwaters of the Region, which include both designated beneficial uses of water and the narrative and numerical water quality objectives which must be maintained or attained to protect those uses. The Basin Plan includes prohibitions and policies for implementation of standards. The Basin Plan identifies general types of water quality problems which can threaten beneficial uses in the Region and identifies required or recommended control measures for these problems. In some cases, it prohibits certain types of discharges in particular areas. The Basin Plan includes a program of implementation to protect beneficial uses and to achieve water quality objectives.

7-1 (cont.)

The current Basin Plan was adopted by the Water Board in 1995 and has since been amended several times. The Basin Plan can be accessed via the Water Board's web site (http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.shtml). Water Board staff request that the final environmental document reference the Basin Plan, and that the Project complies with all applicable water quality standards, prohibitions, and provisions of this Basin Plan.

PERMITTING

A number of activities associated with the Project may require permits issued by the State Water Board or Water Board. Section 6.b. of the DEIR lists permits that are required to be obtained for the Project. However, the list is incomplete.

A CWA section 402, subdivision (p) stormwater permit, including a National Pollutant Discharge Elimination System (NPDES) General Construction Stormwater Permit, may be required for land disturbance associated with the Project. The NPDES permit requires the development of a Stormwater Pollution Prevention Plan (SWPPP) and implementation of best management practices (BMPs).

7-2

As described in multiple sections throughout the DEIR, the Project would include construction of a stormwater detention pond for the capture of stormwater runoff and <u>disposal of cleaning solutions from operation of the Project</u>. Stormwater detention ponds must only capture **stormwater**. If the Project intends to discharge cleaning solution, then waste discharge requirements (WDRs) for the discharge of waste in excess of water quality objectives may be required pursuant to California Code of Regulations (CCR), title 27 requirements, and a report of Waste Discharge (ROWD) must be filed with the Water Board that fully characterizes this waste.

Streambed alteration and/or discharge of fill material to a surface water may require a CWA, section 401 water quality certification (WQC) for impacts to federal waters (waters of the U.S.), or dredge and fill WDRs for impacts to non-federal waters, both issued by the Water Board.

7-3

Some waters of the State are "isolated" from waters of the U.S.; determinations of the jurisdictional extent of the waters of the U.S. are made by the United States Army Corps of Engineers (USACE). Projects that have the potential to impact surface waters will require the appropriate jurisdictional determinations. These determinations are necessary to discern if the proposed surface water impacts will be regulated under section 401 of the CWA or through dredge and fill WDRs issued by the Water Board. If the project is not subject to federal requirements, activities that involve fill or alteration of surface waters, including drainage channels, may still be subject to state permitting.

7-4

The NPDES General Construction Stormwater Permit and section 401 Water Quality Certification were identified as items required to be obtained prior to commencement of the Project in the DEIR. We request that the final environmental document list all permits that may be required, as outlined above, and identify the specific activities that may trigger these permitting actions in the appropriate sections of the environmental document. Information regarding these permits, including application forms, can be downloaded from our web site at http://www.waterboards.ca.gov/lahontan/. If the Project is not subject to federal requirements, activities that involve fill or alteration of surface waters, including drainage channels, may still be subject to state permitting.

7-5

POTENTIAL IMPACTS TO WATERS OF THE STATE AND WATERS OF THE U.S.

Watersheds are complex natural systems in which physical, chemical, and biological components can interact to create a source of high quality water on which our economy and well-being depend. Poorly planned development can upset these natural interactions and degrade water quality through a web of interrelated effects. The primary impacts of poorly planned development projects on water quality can include:

7-6

- Direct impacts the direct physical impacts of filling and excavation on wetlands, riparian areas, and other waters;
- Pollutants the generation of urban pollutants during and after construction;
- Hydrologic modification the alteration of flow regimes and groundwater recharge by impervious surfaces and stormwater collector systems; and
- Watershed-level effects the disruption of watershed-level aquatic functions, including pollutant removal, floodwater retention, and habitat connectivity.

These impacts have the potential to degrade water quality and impair a number of beneficial uses by reducing the available riparian habitat and eliminating the natural buffer system to

filter runoff and enhance water quality. These impacts typically result in hydrologic changes by decreasing water storage capacity and increasing water flow velocity, which in turn leads to increases in the severity of peak discharges. These hydrologic changes can exacerbate flooding, erosion, scouring, sedimentation, and may ultimately lead to near-total loss of natural functions and values, resulting in the increased need for engineered solutions to reestablish the disrupted flow patterns. Many examples of such degradation exist in California and elsewhere. The Water Boards are mandated to prevent such degradation.

7-6 (cont.)

Beneficial Uses

Proposed Project components have the potential to involve alteration, dredging, filling, and/or excavating activities in waters of the State. The surface waters located within the vicinity of the Project site include Owens Lake and the Lower Owens Hydrologic Area (Hydrologic Unit 603.30), including minor surface waters and wetlands. Beneficial uses, either past, present, or future, associated with these waterbodies include municipal and domestic supply (MUN), agricultural supply (AGR), industrial service supply (IND), groundwater recharge (GWR), freshwater replenishment (FRSH), water contact recreation (REC-1), non-contact water recreation (REC-2), commercial and sport fishing (COMM), warm freshwater habitat (WARM), cold freshwater habitat (COLD), Inland Saline Water Habitat (SAL), wildlife habitat (WILD), Preservation of Biological Habitats of Special Significance (BIOL), Rare, Threatened, or Endangered Species (RARE), Spawning, Reproduction, and Development (SPWN), water quality enhancement (WQE), and flood peak attenuation/flood water storage (FLD). Realignment, channelization, lining, and/or infilling of surface waters may adversely affect these beneficial uses.

7-7

Chapter 3 of the Basin Plan describes State Board Resolution No. 68-16, which requires that "existing high quality waters shall be maintained until or unless it has been demonstrated to the State that any change in water quality will be consistent with the maximum benefit of the people of the State, and will not unreasonably affect present and probably future beneficial uses of such water." If the proposed groundwater quality analysis determined that water quality will be degraded as a result of this Project, a groundwater degradation analysis will be required pursuant to State Board Resolution No. 68-16.

Characterization of Impacts

Avoidance is the best strategy for managing potential water quality impacts. For unavoidable impacts, understanding how pollution pathways will operate is essential to managing them. Please consider the following:

- Specify the causes, natures, and magnitudes of all proposed impacts. Provide a level of analysis commensurate with the size and complexity of the Project and its potential water quality impacts;
- Quantify impacts as definitively as feasible, using appropriate modeling and adequate data. Modeling approaches should be documented, and data deficiencies or other factors affecting the reliability of the results should be identified and characterized; and
- Identify whether impacts will be temporary or permanent.

Hydrology

Appendix F, Hydrogeologic Evaluation, prepared by Richard C. Slade & Associates, LLC, evaluated the effects of pumping due to the proposed Project. However, the report did not evaluate increased runoff due to an increase in impervious surfaces. Because increased runoff from developed areas is a key variable driving a number of other adverse effects, attention to maintaining the pre-development hydrograph will prevent or minimize many problems and will limit the need for other analyses and mitigation. We request that the following be considered in the hydrological analysis for the Project.

7-9

- Evaluate alternatives and include avoidance and/or mitigation measures to maintain the pre-project hydrograph;
- Evaluate the Project's potential hydromodification impacts on upstream and downstream reaches; and
- Provide a meaningful analysis of potential cumulative impacts to watershed hydrology from existing and other planned development in the watershed or planning area.

CLOSING

Please note that obtaining a permit and conducting monitoring does not constitute adequate mitigation. Development and implementation of acceptable mitigation is required. The environmental document must specifically describe the BMPs and other mitigation measures used to mitigate Project impacts.

7-10

Thank you for the opportunity to comment on your Project. We look forwarding to reviewing the Final Environmental Impact Report when it becomes available for review. 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 (pcopeland@waterboards.ca.gov).

7-11

Sincerely.

Brianna Bergen

Engineering Geologist

cc: State Clearinghouse (SCH No. 2011091055)

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Letter No. 8

Department of Water and Power



the City of Los Angeles

ANTONIO R. VILLARAIGOSA

Commission
THOMAS S. SAYLES, President
ERIC HOLOMAN, Vice-President
RICHARD F. MOSS
CHRISTINA E. NOONAN
JONATHAN PARFREY
BARBARA E. MOSCHOS, Secretary

RONALD O. NICHOLS
General Manager

October 2, 2012

Ms. Tanda Gretz, Senior Planner Inyo County Planning Department P.O. Drawer L Independence, CA 93526

Dear Ms. Gretz:

Subject: Comments on the Draft Environmental Impact Report –
Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Facility Project

The Los Angeles Department of Water and Power (LADWP) has reviewed the Draft Environmental Impact Report for the Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Facility Project (EIR) (SCH No. 2011091055) and offers the following comments.

Section 4.B.1 - Air Quality

The Owens Lake Dust Mitigation Plan is listed as a related project on page 4.C-48 of the EIR. The EIR describes the plan stating,

"LADWP's Owens Lake Dust Mitigation Plan that has been implemented in conjunction with the Great Basin Air Pollution Control District to reduce fugitive dust generated by wind blowing across the dry lakebed by best available control measures, including shallow flooding and managed native vegetation. To date approximately 19 acres are being treated with approximately 11 more acres to be treated in the future."

These values are not correct. To date, approximately 40 square miles have been treated and with the completion of Phases 8 and 7A the total area treated will be approximately 45 square miles.

Since the Owens Lake region is designated as a non-attainment area by Great Basin Unified Air Pollution Control District (GBUAPCD) for particulates (PM₁₀) and LADWP invests substantial resources on reducing fugitive dust (Owens Lake Dust Mitigation Plan), LADWP requests that all feasible air quality mitigation measures be implemented to reduce impacts of the project described in this EIR as LADWP is required to do in meeting GBUAPCD (PM₁₀) standards. To achieve this, the following changes to the proposed mitigation measures listed on page 4.B.1-19 are suggested:

- AQ-1 and AQ-3: Specify the frequency of watering.
- AQ-4: Define "excessive amounts of dust" to provide a measurable performance standard.

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Ω_1



 AQ-5: All clearing, grading, earth moving or excavation activities that are generating dust should cease during periods of high winds or Stage 1 or 2 smog episodes rather than only when dust is visibly generated beyond the site boundaries.

8-2 (cont.)

• AQ-6: All material transported off-site should be securely covered to prevent dust.

In addition, the following mitigation measures are suggested:

- Apply non-toxic soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for ten days or more).
- Electricity shall be utilized from power supply sources rather than temporary gasoline or diesel power generators, as feasible.
- Heavy duty truck shall be prohibited from idling in excess of five minutes, both on and off site, except as follows:
 - When verifying that the vehicle is in safe operation condition, or
 - When the vehicle is positioning or providing a power source for equipment or operations, or
 - While operating defrosters, heaters, air conditioning or any other device to prevent a health or safety emergency.
- During project construction, all internal combustion engines/construction equipment operating on the project site shall meet EPA-Certified Tier 3 emissions standards, or higher, according to the following:
 - Through December 31, 2014: All off-road diesel-powered construction equipment greater than 50 horsepower shall meet Tier 3 off-road emissions standards. In addition, all construction equipment shall be outfitted with control technologies certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.
 - On or after January 1, 2015: All off-road diesel-powered construction equipment greater than 50 horsepower shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with control technologies certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.
 - A copy of each unit's certified tier specification, control technology documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.
- Install a pad of washed gravel maintained in clean condition, or a wheel shaker/wheel spreading device, or a wheel washer where vehicles enter and exit the construction site onto paved roads to prevent any soil to be carried onto adjacent public paved roads.

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> Sweep streets at the end of the day if visible soil is carried onto adjacent public paved roads.

8-3 (cont.)

Install fencing to prevent dust from blowing onto the adjacent habitat areas.

Section 4.C and Appendix C - Biological Resources

The Initial Study for this project concluded that all biological criteria evaluated during CEQA analysis could be potentially significantly impacted, resulting in the need to complete an EIR. The conclusions for biological resources presented in the EIR are based on a one day evaluation conducted on February 8, 2011 and a literature review. This one day field assessment is discussed on page 4.C-1 stating, "The scope of this assessment encompasses the documentation of existing biological resources in the study area; however, no focused surveys have been completed at this time." This is substantiated on page 4.C-26 of this document which states, "No surveys for sensitive plants were conducted" and on page 4.C-27 stating, "No surveys specifically for sensitive animals were conducted."

The result is an EIR that cannot evaluate if resources will be impacted but states a range of mitigation measures that could be implemented if impacts occur. The California Environmental Quality Act 2010, Statute and Guidelines (CEQA) Section 15125 Environmental Setting states:

"An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant."

CEQA further states in Section 15126.2 Consideration of Significant Environmental Impacts: "An EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time the environmental analysis is commenced."

These two requirements cannot be fulfilled because comprehensive biological surveys hadn't been completed prior to the analysis. The baseline physical conditions have not been documented; therefore, the EIR cannot focus on the significant effects of the proposed project with respect to biological resources.

CEQA Statutes and Guidelines Section 15151. Standards for Adequacy of an EIR states:

"An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences."

The EIR states in many sections that comprehensive surveys should be completed and even indicates the months that the surveys need to be implemented. These comprehensive surveys

Ms. Tanda Gretz Page 4 October 2, 2012

should have been completed prior to completing CEQA so that "a sufficient degree of analysis" could be presented in this EIR for decision makers.

8-4 (cont.)

Without the substantiation of the biological resources that are on site and could be impacted by the project, the analysis completed to date is inadequate. The reviewer cannot determine if an impact will occur or if the mitigation measures proposed are adequate to reduce the significance of the impact.

8-5

The EIR on pages 4.C-40 and 41 discusses impacts to listed native fish (Owens Tui Chub, Owens Pupfish, and Owens Speckled Dace) and provides mitigation through payments into an agency-approved off-site mitigation bank or agency-approved in-lieu fee agreement or off-site relocation. There is no discussion of the "endangered fish rearing pond" noted in Volume 2 page A-1 as being one of the components of the project or allowing California Department of Fish and Game to use the "on-site pond" as noted on page A-5 of Volume 2 or that one of the noted objectives of the project is "enhancement of native fish" as stated on page A-11 of Volume 2. Has this component/objective of the project been eliminated? If this "on-site pond" is a component of the project the potential impacts of the use of this pond should be evaluated. One of the issues associated with the pond is whether there is the potential for listed native fish species to leave the Cabin Bar Ranch property. Owens Pupfish is a fully protected species and if this fish entered the property of adjacent landowners it could impact the traditional uses of water resources.

8-6

In many locations in the document the removal of 2.88 acres of a 4.20 acre stand of red willow woodland, a sensitive natural community is discussed. This issue is also discussed in Volume 2 on page A-17 which discusses removing 281 trees over 12 inches in diameter that are predominantly willow. The mitigation measure for this impact is noted on page 4.C-43 of the EIR which states that prior to the issuance of a grading permit, a mitigation and monitoring plan shall be prepared. It is difficult to determine if the proposed mitigation options will reduce the impact to less than significant when the mitigation and monitoring plan is not presented in the document. In addition, the wildlife species that could be utilizing this habitat are noted but because no comprehensive surveys have been completed, the impact to species cannot be evaluated.

<u>Section 4.G – Hydrogeology and Surface Hydrology and Appendix F – Hydrogeologic Evaluation</u>

Volume 2, Appendix F presents the Hydrogeologic Evaluation of the project. The current water use by Crystal Geyser is 300 acre-feet of pumped groundwater per year (af/yr). The project described in the EIR is proposing 360 af/yr of additional groundwater pumping from the Cabin Bar Ranch site. The highest pumping will be seasonal and is estimated to be 500 gallon per minute (gpm). The hydrogeologic evaluation concludes on page 51 of Appendix F that 360 af/yr of groundwater pumping will decrease spring flow in the southwest lakeshore of Owens Lake by 17.6%.

8-7

In addition, the evaluation discusses the results of a model run pumping at the maximum rate of 500 gpm for a 90 day test period resulting in a 39% decrease in spring flow. The springs that could be impacted are not disclosed, therefore, it is impossible to know if they are located on Cabin Bar property and/or the property of adjacent land owners. There is no analysis of the potential impact of reduced spring flow on resources dependent upon flow from the springs. Spring flow monitoring is not discussed in this document. There may be sensitive biological resources present that are dependent on spring flow. These resources should be included in the analysis of project impacts.

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The hydrogeologic evaluation does not discuss the effect of project pumping on areas of the Owens Lakebed that are under dust mitigation or if the project pumping will cause emissivity on the lakebed. Both of these issues should be included in the evaluation.

8-8

In conclusion, modifications to presented mitigation measures and additional mitigation measures for air quality should be included in the EIR. Focused biological surveys should have been completed prior to this CEQA evaluation and without these surveys the document is inadequate. In addition, an analysis of the effects of reduced spring flow and an analysis of lakebed emissivity resulting from the project should have been included in the EIR. The EIR, as currently prepared, leaves out many essential components that are required by CEQA. More time and effort is needed by the project proponent in the development of the EIR before it is ready to move forward.

8-9

Sincerely,

James G. Yannotta Aqueduct Manager

A-4 Organizations

California Native Plant Society

Bristlecone Chapter P.O. Box 364 Bishop, CA 93515

October 1, 2012

Planning Department 168 North Edwards Street Post Office Drawer L Independence, CA 93526

Re: Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Facility Project--DEIR

On behalf of the Bristlecone Chapter of the California Native Plant Society, I would like to submit the following comments on the above referenced DEIR. CNPS has the following concerns that we feel must be addressed in the FEIR: (1) Lack of survey-information for rare plants and animals in the DEIR; (2) Potential impacts on wetland vegetation; and (3) Cumulative impacts on biological resources from implementation of the Owens Lake Master Plan.

9-1

1. Lack of survey-information for rare plants and animals in the DEIR

I've not reviewed a large number of DEIRs, but this one struck me as unique in failing to include any surveys for rare, sensitive, threatened, or endangered species of plants and animals. This is unfortunate because it now forces us to waste time and energy on *hypothetical* impacts and mitigations.

I noted that the California Department of Fish and Game (CaDFG) stated in their scoping letter, October 18, 2011, p. 2: "A complete assessment of the flora and fauna within and adjacent to the project area should be conducted, with particular emphasis upon identifying special status species including rare, threatened, and endangered species. This assessment should also address locally unique species, rare natural communities, and wetlands." And furthermore (p. 8): "Focused surveys should therefore be conducted prior to release of the DEIR."

9-2

Instead of such focused surveys, the DEIR contains only "Appendix A: Floral and Faunal Compendium," which lists 35 species of plants, based apparently on a single site visit on February 8, 2012. This list should in no way be interpreted as a flora for the site, nor should the absence of any sensitive species of plants on the list be interpreted as absence from the site.

Mary DeDecker, founder of the Bristlecone Chapter, made 62 plant collections from Cabin Bar Ranch in 1988-1989. These represent 41 species, 37 of which are not listed in Appendix A.

It is not clear when these "focused surveys" will be done, or if they will be restricted to the project site (as suggest on p. 4.C-29), or if they will they include all areas subject to groundwater table declines. Since most of the sensitive species of plants likely to occur in the area are found in groundwater-dependent ecosystems (GDEs), surveys should include the entire area that will be within the cone-of-depression created by production wells during the life of the project.

9-2 (cont.)

Are Sidalcea covillei (Owens Valley checkerbloom California Endangered, CRPR list 1B.1) and Plagiobothrys parishii (Parish's popcorn flower, CRPR 1B.1) present? This should have been determined for the DEIR. If they are, important considerations have to postponed to the FEIR, when there is less opportunity for critical comment and revision.

9-3

The DEIR states (p. 4.C-13) "CNDDB records show that in 1988 approximately 1,500 - 2,000 plants [of *S. covillei*] were found on the Cabin Bar Ranch property in one of the former pasture areas, which is approximately 1,300 feet to the south of the study area." Is this population still present? Does it occur within the area that will be affected by groundwater withdrawal? If it does, what are appropriate mitigation measures? *Hypothetical* mitigation measures mentioned are seeding and transplanting (p. 4.C-39), neither of which has a high probability of success (e.g., see CaDFG comments on transplanting).

9-4

Mary DeDecker's collections include two notable records. She identified a *Plagiobothrys* as *Plagiobothrys cusickii*. Speices of *Plagiobothrys* are rather difficult to identify and this specimen (at the Rancho Santa Ana Botanic Garden Herbarium) should be confirmed to make sure it is *P. cusickii* and not *P. parishii*. Mary also collected *Datisca glomerata* (Durango root). This plant has been collected from just two sites in the Eastern Sierra Nevada—Cabin Bar Ranch and near Symmes Creek. We would consider this to be a *locally unique species* (re: CaDFG) if it is still present at Cabin Bar Ranch.

9-5

2. Potential Impacts on Wetland Vegetation

The CNPS 1991 policy on wetlands states that CNPS "opposes projects that adversely affect wetlands of any type unless there is a demonstrated net gain, in-kind, of wetlands prior to project impacts;" The CaDFG has a very similar policy: "The EIR should demonstrate that the project will not result in a net loss of wetland values or acreage."

9-6

The proposed 360 AFY of groundwater extraction will come from the shallow aquifer; projected hydrological impacts include 17.6% decrease in spring flows and "slightly lower" groundwater levels (p. 4.G-25). Total extraction of groundwater for the new and existing facilities is estimated to be 38-43% of the shallow groundwater underflow (p. 4.G-27). It is not

clear how this level of groundwater extraction will affect wetlands supported by this spring flow and shallow groundwater.

There are just 8.6 acres of GDE on the project site (5.55 acres Mexican Rush Marsh and 3.08 acres of Salt Grass Flat), but potential impacts extend far off-site, depending on the amount of groundwater depletion.

9-6 (cont.)

The DEIR states (p. 4.C-44): "... the potential for impacts associated with the proposed project increase in extracting groundwater cannot be accurately determined based on the available information. Due to this uncertainty, a **Riparian and Wetland Monitoring and Adaptive Management Program (RWMAMP)** for vegetation associated with jurisdictional areas, is proposed as mitigation."

CNPS favors such a monitoring program, but we have two questions. Where will the monitoring occur? What constitutes the "jurisdictional areas"—just the (6.16 (5.97)) acres of Table 4.C-2 or all of the areas that will experience groundwater declines? How long will the monitoring occur? The DEIR states (p. 4.C-46): "Following year three (3) of monitoring, if no loss of riparian and wetland communities is detected due to the increased pumping, monitoring will take place at year six (6) following the onset of increased pumping. If, at the end of the entire 6-year monitoring program no significant loss of riparian and wetland communities is detected, the monitoring program will be terminated."

CNPS would recommend extending the monitoring to the existing limits of GDEs adjacent to the project site. Six years of monitoring would be adequate *only* if water tables reach a steady state in that time. Monitoring should continue until new steady-state hydrological conditions are met, both from direct project groundwater withdrawals and cumulative groundwater withdrawals.

County should adopt and strengthen Mitigation Measure HYDRO-1 (p. 4.G-29), which includes:

"During the initial phase-in period, with all three wells in operation, the actual effect of pumping on water levels shall be evaluated by conducting water-level monitoring in piezometers, springs and groundwater monitoring wells in the surrounding area."

CNPS would recommends (extending the piezometer network to the current limits of GDEs; extending the monitoring of groundwater levels through the life of the project; and sharing the data with the ICWD and the Owens Lake Master Plan Advisory Committee, assuming that a Master Plan is adopted and the AC is established.

3. Cumulative Impacts on Biological Resources ignores Owens Lake Master Plan

The DEIR states that (p. 4.C-48): "Second, the assessment considered past, present, and reasonably foreseeable projects within the next ten to fifteen years" The Owens Lake Master

Plan seems to CNPS to clearly fall in this description. Furthermore, the draft Master Plan does include a proposed section on using groundwater for dust control. While this section is still subject to modification, it seems clear that no analysis of cumulative impacts that ignores the Owens Lake Master Plan would have any validity.

Section 4.C on Biological Resources lists six "related projects" but does not include the Owens Lake Master Plan. Section 4.G on Hydrogeology & Surface Hydrology acknowledges the Owens Lake Master Plan in its list of related projects but incorrectly states (p. 4-G-32: "The Master Plan is not a water-intensive project but rather is a plan to promote water conservation and enhancement of resources on Owens Lake. When considered in conjunction with the proposed project, there would be no cumulatively considerable impact to hydrology."

9-8 (cont.)

The draft of the Owens Lake Master Plan was issued in December 2011 and was available to the writers of the DEIR for the Cabin Bar Ranch Project. It should be considered when evaluating potential cumulative impacts on both the biological resources and on the hydrogeology. LADWP's desire to extract approximately 10,000 AFY for dust control is known, and that they would extract this water from deeper aquifers. What is not known is where they will propose to pump, and what the effects on wetland vegetation on the lakebed will be. Therefore, such pumping should be considered a related project with potentially significant cumulative effects until proven otherwise.

Regards,

Steven P. McLaughlin

Steven P. McLaughlin California Native Plant Society Bristlecone Chapte

Letter No. 10



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September 25, 2012

Ms. Tanda Gretz, Senior Planner Inyo County Planning Department P.O. Drawer L Independence, California 93526

Subject:

Comments on Draft Environmental Impact Report

Proposed Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Facility

Inyo County, California

Taber Consultants has been retained by Cartago Mutual Water Company (CMWC) to provide comments on the proposed General Plan Amendment No. 2010-01, Zone Reclassification No. 2010-02 and Conditional Use Permit N > 2010-03 for the proposed Crystal Geyser Roxane Cabin Bar Ranch water bottling facility located south of Cartago, Inyo County, California.

Taber Consultants has reviewed docur rents provided by Cartago Mutual Water Company, including the August 2012 Draft Environmental Impact Report (EIR) which includes, as Appendix F, a Hydrogeologic Evaluation report prepared by Richard C. Slade & Associates LLC of Studio City, California and dated Jur e 2012. The EIR also includes a summary and discussion of Hydrogeology and Surface Hydrology in section 4.G. of the main report.

Taber Consultants has concerns with the potential impacts of the proposed additional pumping on the CMWC wells and the lack of proposed monitoring for these wells.

CMWC has two wells, designated as CMW-1 and CMW-2 on the EIR figures. The main production well, CMW-2, is a deeper well screened mainly in what has been identified as the deeper aquifer zone. CMW-1 is a backup well which originally extended to approximately 200 feet below grade, but has now lost some of its capacity due to sanding of the well.

The emphasis of the Hydrogeologic Evaluation report appears to focus on the effect pumping and use of water resources in surrouncing areas would have on the proposed Crystal Geyser facility and does not consider in any detail the effects of sustained production of 360 acre-feet per year, including more aggressive pumping during summer "peak demand" periods when groundwater levels are typically at their lowest, could have on surrounding water infrastructure other than a short comment that the CMWC main production well is "mostly" screened in the deeper aquifer zone and Crystal Geyser wells will be extracting groundwater from the shallow aquifer.

10-1

10-2



The Hydrogeological Evaluation report relies heavily on the existence of a aquitard that separates a shallow aquifer zone from a deeper aquifer zone. Based on geologic cross sections, the aquitard discussed in the report may not be as laterally extensive as assumed in the report. The driller's log for the current CMWC production well (CMW-2) indicates a 5-foot thick clay zone from 80-85 feet below grade. This is not the substantial aquitard inferred in the Hydrogeologic Evaluation report and demonstrates the lateral variability in lithologies that would be expected in sediments derived from an alluvial fan depositional environment, such as exist in this area. As shown on the geologic cross sections included in the EIR, individual lithologic units tend to pinch out laterally and even then tend to be inconsistent in their thickness and hydrogeological properties.

10-3 (cont.)

Another important point to be taken into consideration is that most aquitards are leaky to one degree or another. Geologic cross sections indicate that the aquitard separating the shallow aquifer from the deeper aquifer varies in thickness and, as a consequence, leakage flux should be taken into account. No data has been provided on leakage between aquifers, although Section 2.d.(2)(v) on page 4.G-26 of the EIR report anticipates these conditions and correctly recognizes that the shallow and deep equifer zones are not expected to hydrologically isolated from each other.

Pumping from existing Crystal Geyser wells has been known to substantially affect the flow from springs in the area as documented in the pumping tests conducted at the site and personal communications, so it is likely impacts from increased pumping will further impact these surface water resources. This also indicates the impact on the shallow aquifer from the existing pumping, which would be substantially increased under the proposed bottling facility operation.

10-4

Modeling conducted by Richard C. Slade & Associates LLC and others indicates that CMWC wells will not be impacted for several reasons, but there needs to be a monitoring plan in place to verify pumping rates and impacts to wells outside of the Crystal Geyser facility. The analysis to date has centered on the onsite wells with little consideration given to the private and CMWC wells to the north of the proposed project area. Every model has assumptions or built in generalizations by necessity, a fact that is recognized in Richard C. Slade & Associates' Hydrogeologic Evaluation report and on page 4.G-27 of the EIR. Modeling represents idealized or normalized conditions that are seldom realized in actual practice. Modelers try to account for this by being conservative in their estimates or building in safety factors, but the best way to account for these uncertainties is to calibrate the model with real data over time. This requires data collected from monitoring wells and/or piezometers to verify the predicted drawdowns and rad us of influence of the actual pumpir g operations.

10-5

While the EIR indicates the project area is presently in a hydrologically "wet" period and pumping test data appears to be predicated on this situation, there are indications we may be moving back into a dry or drought period — a situation that does not appear to have been anticipated by the hydrogeological evaluation. Reduced recharge from such a dry period could substantially affect water levels in the viells and the radius of influence and drawdown from the anticipated increased pumping by the expanded Crystal Geyser operation.



Water quality issues have also not received a detailed consideration in the Hydrogeologic Evaluation report with the assumption that the Spring Line fault will provide a hydrologic barrier to prevent the increased pumping from capturing and drawing in poorer quality water from the Owens Lake sediments. Based on the documents reviewed, no valid assessment has been made of the extent of potential transmission across this fault zone. Faults in unconsolidated sediments, such as the Spring Line fault, do not provide a sufficient hydrologic barrier to provide an aquifer bounding condition as is implied in the EIR. This is a significant concern in that once poor quality water starts getting drawn in the wells, it is very difficult, if not impossible, to restore the water quality to the aquifer. While the proposed monitoring program is designed to evaluate this possibility, the proposed remedy is to reduce pumping rates – something that is something that is unlikely to happen due to production schedules that require the highest level of pumping during the summer months.

10-7

We believe it is prudent to incorporate consideration of the CMWC wells into the overall hydrogeological analysis for this projec. While the monitoring plan outlined in the EIR is generally acceptable, it does not take into account collecting any data (either water level or water quality data) from CMWC wells and it does not allow for independent verification of the monitoring data collected.

10-8

Taber Consultants makes the following recommendations:

1. To provide verifiable pumping rates, drawdown data and other hydrogeologic data to determine impacts of the additic nal pumping proposed by Crystal Geyser on CMWC, an independent third party should be contracted to verify data from flow meters, pressure transducers/dataloggers installed in the monitoring wells/piezometers and drawdown data from CMWC wells.

10-9

2. Further evaluation of pumping cn water quality with respect to poor quality water from Owens Lake sediments and the extent to which the Spring Line fault provides a significant hydrologic barrier to groundwater flow.

10-10

- 3. Water quality data should also be collected from CMWC wells on a routine basis.
- 4. Well interference analysis taking into account dry season/low recharge hydrologic conditions using the maximum pumping rates proposed by Crystal Geyser.
- 5. Provisions for backup water sur ply for CMWC in case pumping by Crystal Geyser does create well interference to the degree that it affects CMWC's ability to meet customer water needs.

10-11

Should there be any questions concerning these comments, please do not hesitate to call us.

THOMAS E. BALLARD PAR OF CERTIFIED HYDROGEOLOGIST TO CERTIFIED CONTROL OF CALLED POR O

Very truly yours,
TABER CONSULTANTS

(day G / 181)

Thomas E. Ballard, PG #7299, CHG #961

Principal, Senior Hydrogeologist

Letter No. 11

The following comments have been put together by people at Common Sense and fiscal responsibility for Southern Inyo County......I have reviewed these comments and submit them To whom it may concern..Jeffrey Bohl The mitigation included In the DEIR is vague and it is not clear if it is suggested or mandatory. The grey area of possible mitigation needs more clarification.. This project has many significant effects and mitigation efforts are ambiguous. The EIR should contain specific language as to the exact mitigation that will be incorporated into this project. How many tree's will be planted for every tree cut down? Why didn't the DEIR try to avoid the tree's in the first place? Avoidance is the preferred alternative and needs to be discussed in more detail. Cutting down tree's for an Access Road that is unsafe is not reasonable. **15123. SUMMARY** (a) An EIR shall contain a brief summary of the proposed actions and its consequences. The language of the summary should be as clear and simple as reasonably practical. (b) The summary shall identify: (1) Each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect; (2) Areas of controversy known to the Lead Agency including issues raised by agencies and the public; and (3) Issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects. (c) The summary should normally not exceed 15 pages. Note: Authority cited: Section 21083, Public Resources Code; Reference: Section 21061, Public Resources Code. The Regional setting and zoning is not analyzed for effects. The surrounding parcels are zoned RR and OS 40. How will the project affect the surrounding parcels? The transportation study states that 60% of the employee's will live south of the facility. Where will they live? How does this project affect the ongoing Owens Lake Re-greening Project? How much more pollution will be coming off the lake assuming 4 bottling processes are running 24/7 as stated in the DEIR? Has the DWP commented on the significant impacts this project will have on their ability to satisfy the Long Term Water Agreement? As a real estate investor with a significant investment in the Town, I'm perplexed why the County Planning Commission would scrap years of planning for 1 business. You cannot create a general plan and then do a 180 every few years. It will make investors weary of investing in Inyo County real estate in the future if it hasn't already. Many properties on 395 was rezoned CBD in the past few years. If you are going to rezone parcels, it should be consistent with current and future plans. Rezoning 11-7 properties along the 395 to CBD was a great idea for the economic future of the communities. However, 50% of the properties owners resided in them and Inyo Planning created a variance so they could remain in the residences. Hopefully, the Inyo Planning Commission thinks this through carefully and does what is right for the entire community and sticks with the plan for the long term. 15125. ENVIRONMENTAL SETTING (a) An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of the preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether the impact is significant. The description of the environmental setting shall be no longer than is necessary to allow an understanding of the significant effects of the proposed project and its alternatives. 11-8 (b) When preparing an EIR for a plan for the reuse of a military base, lead agencies should refer to the special application of the principle of baseline conditions for determining significant impacts contained in Section 15229. (c) Knowledge of the regional setting is critical to the assessment of environmental impacts. Special emphasis should be placed on environmental resources that are rare or unique to that

region and would be affected by the project. The EIR must demonstrate that the significant environmental impacts of the proposed project were adequately investigated and discussed and

it must permit the significant effects of the project to be considered in the full environmental context.

(d) The EIR shall discuss any inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans. Such regional plans include, but are not limited to, the applicable air quality attainment or maintenance plan or State Implementation Plan, area-wide waste treatment and water quality control plans, regional transportation plans, regional housing allocation plans, regional blueprint plans, plans for the reduction of greenhouse gas emissions, habitat conservation plans, natural community conservation plans and regional land use plans for the protection of the Coastal Zone, Lake Tahoe Basin, San Francisco Bay, and Santa Monica Mountains.

11-8 (cont.)

The DEIR should discuss in more depth the Non-Attainment status of the Air Quality in the region and how the project will affect ongoing attempts for conformity to the statewide STIP. The fugitive PM 10 dust that will have a significant effect during construction needs a detailed plan and an independent monitor to ensure the safety of the residents during the lengthy construction process. Other probable projects that will be going simultaneously needed to be analyzed for cumulative effects for PM 10 dust. One of the last big project in Inyo county was the Independence Four Lane project and it stated that it would follow all regulations regarding air quality and dust. There was a treatment in place and it was consistently violated on a daily basis for 9 months. The treatment stated that within the town of Independence hazardous waste was present and the construction crew would monitor the PM 10 dust hourly, cover the disturbed soil daily after work and water the disturbed soil so the hazardous would not become airborne. Inyo County did not enforce the treatment and exposed everyone in the area to dangerous and toxic hazardous waste as identified in the Independence Four Lane Studies. How will the Lead Agency prevent this from happening again?

The Olancha Four Lane Project identifies numerous hazardous waste sites within the town of Olancha. Were any of the identified sites part of this project? Are there any lead studies for this project? Were any soil samples taken and tested for this project? Are there any hazardous waste sites within the project area?

11-9

This project did not conform with the new rules...

(e) Where a proposed project is compared with an adopted plan, the analysis shall examine the existing physical conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced as well as the potential future conditions discussed in the plan.

Note: Authority cited: Sections 21083, 21083.05, Public Resources Code; Reference: Sections 21060.5, 21061, and 21100, Public Resources Code; *E.P.I.C. v. County of El Dorado* (1982) 131 Cal.App.3d 350; *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713; *Bloom v. McGurk* (1994) 26 Cal.App.4th 1307.

- (b) Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented. Describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.
- (b) Mitigation Measures Related to Impacts on Historical Resources.
- (1) Where maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation or reconstruction of the historical resource will be conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (1995), Weeks and Grimmer, the project's impact on the historical resource shall generally be considered mitigated below a level of significance and thus is not significant.
- (2) In some circumstances, documentation of an historical resource, by way of historic narrative, photographs or architectural drawings, as mitigation for the effects of demolition of the resource will not mitigate the effects to a point where clearly no significant effect on the environment would occur.
- (3) Public agencies should, whenever feasible, seek to avoid damaging effects on any historical resource of an archaeological nature. The following factors shall be considered and discussed in an EIR for a project involving such an archaeological site:

The destruction of Historical and Archaeological sites without the proper analysis to avoid these effects is not acceptable and a violation of numerous CEQA guidelines. Hopefully, Crystal Geyser will go back and incorporate these significant pieces of history into the project without destroying them.

- (A) Preservation in place is the preferred manner of mitigating impacts to archaeological sites. Preservation in place maintains the relationship between artifacts and the archaeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.
- (B) Preservation in place may be accomplished by, but is not limited to, the following:
- 1. Planning construction to avoid archaeological sites;
- 2. Incorporation of sites within parks, greenspace, or other open space;
- 3. Covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site.
- 4. Deeding the site into a permanent conservation easement.
- (C) When data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provisions for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center. Archeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 Health and Safety Code. If an artifact must be removed during project excavation or testing, curation may be an appropriate mitigation.
- (D) Data recovery shall not be required for an historical resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archaeological or historical resource, provided that the determination is documented in the EIR and that the studies are deposited with the California Historical Resources Regional Information Center.

11-10 (cont.)

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(c) Mitigation Measures Related to Greenhouse Gas Emissions.

Consistent with section 15126.4(a), lead agencies shall consider feasible means, supported by substantial evidence and subject to monitoring or reporting, of mitigating the significant effects of greenhouse gas emissions. Measures to mitigate the significant effects of greenhouse gas emissions may include, among others:

- (1) Measures in an existing plan or mitigation program for the reduction of emissions that are required as part of the lead agency's decision;
- (2) Reductions in emissions resulting from a project through implementation of project features, project design, or other measures, such as those described in Appendix F;(3) Off-site measures, including offsets that are not otherwise required, to mitigate a project's emissions;
- (4) Measures that sequester greenhouse gases;
- (5) In the case of the adoption of a plan, such as a general plan, long range development plan, or plans for the reduction of greenhouse gas emissions, mitigation may include the identification of specific measures that may be implemented on a project-by-project basis. Mitigation may also include the incorporation of specific measures or policies found in an adopted ordinance or regulation that reduces the cumulative effect of emissions.

 Note: Authority cited: Sections 21083, 21083.05, Public Resources Code. Reference: Sections 5020.5, 21002, 21003, 21083.05, 21100 and 21084.1, Public Resources Code; Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553; Laurel Heights Improvement Association v. Regents of the University of California (1988) 47 Cal.3d 376; Gentry v. City of Murrieta (1995) 36 Cal.App.4th 1359; Laurel Heights Improvement Association v. Regents of the University of California (1993) 6 Cal.4th 1112; Sacramento Old City Assn. v. City Council of Sacramento (1991) 229 Cal.App.3d 1011; San Franciscans Upholding the Downtown Plan v. City & Co. of San Francisco (2002) 102 Cal.App.4th 656; Ass'n of Irritated Residents v. County of Madera (2003) 107 Cal.App.4th 1383; Environmental Council of Sacramento v. City of Sacramento (2006) 147

The range of alternatives is missing from this DEIR. Crystal Geyser business ambitions should not be allowed to run over the environment in an effort to save money. There's lot's of land and numerous alternatives are possible and feasible because of this fact and need to be analyzed in more detail to lessen the significant impacts of this project.

15126.6. CONSIDERATION AND DISCUSSION OF ALTERNATIVES TO THE PROPOSED PROJECT.

(a) Alternatives to the Proposed Project. An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason. (Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553 and Laurel Heights Improvement Association v. Regents of the University of California (1988) 47 Cal.3d 376). (b) Purpose. Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

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- (c) Selection of a range of reasonable alternatives. The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Additional information explaining the choice of alternatives may be included in the administrative record. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are:(i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts. (d) Evaluation of alternatives. The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed. (County of Inyo v. City of Los Angeles (1981) 124 Cal.App.3d 1).
- (e) "No project" alternative.
- (1) The specific alternative of "no project" shall also be evaluated along with its impact. The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The no project alternative analysis is not the baseline for determining whether the proposed project's environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline (see Section 15125).

(f) Rule of reason. The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making.

(2) Alternative locations.

(B) None feasible. If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR. For example, in some cases there may be no feasible alternative locations for a geothermal plant or mining project which must be in close proximity to natural resources at a given location.

11-12 (cont.)

This project lacks a good faith effort at full disclosure which is very important in light of all the significant consequences from the project. More and proper mitigation is necessary if this project has any chanch of surviving the legal process.

15151. STANDARDS FOR ADEQUACY OF AN EIR

An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

11-13

15154. PROJECTS NEAR AIRPORTS

(a) When a lead agency prepares an EIR for a project within the boundaries of a comprehensive airport land use plan or, if a comprehensive airport land use plan has not been adopted for a project within two nautical miles of a public airport or public use airport, the agency shall utilize the Airport Land Use Planning Handbook published by Caltrans' Division of Aeronautics to assist in the preparation of the EIR relative to potential airport-related safety hazards and noise problems

11-12

15165. MULTIPLE AND PHASED PROJECTS

Where individual projects are, or a phased project is, to be undertaken and where the total undertaking comprises a project with significant environmental effect, the Lead Agency shall prepare a single program EIR for the ultimate project as described in Section 15168. Where an individual project is a necessary precedent for action on a larger project, or commits the Lead Agency to a larger project, with significant environmental effect, an EIR must address itself to the scope of the larger project. Where one project is one of several similar projects of a public agency, but is not deemed a part of a larger undertaking or a larger project, the agency may prepare one EIR for all projects, or one for each project, but shall in either case comment upon the cumulative effect. **Note:** Authority cited: Section 21083, Public Resources Code; Reference: Sections 21061, 21100, and 21151, Public Resources Code; Whitman v. Board of Supervisors, (1979) 88 Cal. App. 3d 397.

11-15

15168. PROGRAM EIR

(a) General. 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:

11-16

(1) Geographically,

- (2) A 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.
- (b) Advantages. Use of a program EIR can provide the following advantages. The program EIR can:
- (1) Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action,
- (2) Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis,
- (3) Avoid duplicative reconsideration of basic policy considerations,
- (4) Allow the Lead Agency to consider broad policy alternatives and programwide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts, and
- (5) Allow reduction in paperwork.
- (c) Use with Later Activities. 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.
- (1) If a later activity would have effects that were not examined in the program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration.
- (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.

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- (3) An agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into subsequent actions in the program.
- (4) Where the subsequent activities involve site specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program FIP.
- (5) A program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed analysis of the program, many subsequent activities could be found to be within the scope of the project described in the program EIR, and no further environmental documents would be required.
- (d) Use with Subsequent EIRs and Negative Declarations. A program EIR can be used to simplify the task of preparing environmental documents on later parts of the program. The program EIR can:
- (1) Provide the basis in an Initial Study for determining whether the later activity may have any significant effects.
- (2) Be incorporated by reference to deal with regional influences, secondary effects, cumulative impacts, broad alternatives, and other factors that apply to the program as a whole.
- (3) Focus an EIR on a subsequent project to permit discussion solely of new effects which had not been considered before.
- (e) Notice with Later Activities. When a law other than CEQA requires public notice when the agency later proposes to carry out or approve an activity within the program and to rely on the program EIR for CEQA compliance, the notice for the activity shall include a statement that:
- (1) This activity is within the scope of the program approved earlier, and
- (2) The program EIR adequately describes the activity for the purposes of CEQA.

Note: Authority cited: Section 21083, Public Resources Code; Reference: Section 21003, Public Resources Code; *County of Inyo v. Yorty*, (1973) 32 Cal. App. 3d 795.

15204. FOCUS OF REVIEW

(a) In reviewing draft EIRs, persons and public agencies should focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in

11-16 (cont.)

which the significant effects of the project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects. At the same time, reviewers should be aware that the adequacy of an EIR is determined in terms of what is reasonably feasible, in light of factors such as the magnitude of the project at issue, the severity of its likely environmental impacts, and the geographic scope of the project. CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commentors. When responding to comments, lead agencies Association of Environmental Professionals 2011 CEQA Guidelines

need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR.

- (b) In reviewing negative declarations, persons and public agencies should focus on the proposed finding that the project will not have a significant effect on the environment. If persons and public agencies believe that the project may have a significant effect, they should:
- (1) Identify the specific effect,
- (2) Explain why they believe the effect would occur, and
- (3) Explain why they believe the effect would be significant.
- (c) Reviewers should explain the basis for their comments, and should submit data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts in support of the comments. Pursuant to Section 15064, an effect shall not be considered significant in the absence of substantial evidence.
- (d) Reviewing agencies or organizations should include with their comments the name of a contact person who would be available for later consultation if necessary. Each responsible agency and trustee agency shall focus its comments on environmental information germane to that agency's statutory responsibility.
- (e) This section shall not be used to restrict the ability of reviewers to comment on the general adequacy of a document or of the lead agency to reject comments not focused as recommended by this section.
- (f) Prior to the close of the public review period for an EIR or mitigated negative declaration, a responsible or trustee agency which has identified significant effects on the environment may submit to the lead agency proposed mitigation measures which would address those significant effects. Any such measures shall be limited to impacts affecting those resources which are subject to the statutory authority of that agency. If mitigation measures are submitted, the responsible or trustee agency shall either submit to the lead agency complete and detailed performance objectives for the mitigation measures, or shall refer the lead agency to appropriate, readily available guidelines or reference documents which meet the same purpose. **Note:** Authority cited: Section 21083, Public Resources Code. Reference: Sections 21080, 21081.6, and 21080.4, 21104 and 21153, Public Resources Code, Formerly Section 15161; *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1996) 42 Cal.App.4th 608; and *Leonoff v. Monterey County Board of Supervisors* (1990) 222 Cal.App.3d 1337

(d) When an EIR or Negative Declaration is submitted to the State Clearinghouse for review, the review period set by the Lead Agency shall be at least as long as the period provided in the state review system operated by the State Clearinghouse. In the state review system, the normal review period is 45 days for EIRs and 30 days for Negative Declarations. In exceptional circumstances, the State Clearinghouse may set shorter review periods when requested by the Lead Agency.

11-17 (cont.)

9 years of operating a 106,500-square foot building with 2 bottling lines is not a net reduction of power consumption. The DEIR makes a big deal about the energy efficiency of the Solar Power installation during Phase 2. Is there a guarantee that Solar Power will be installed during Phase 2? It makes sense to install the Solar Power during Phase 1 in order to realize a net benefit from the beginning and a greater benefit for the long term. Installing the Solar Power in Phase 1 is an alternative that

should be discussed in the Final EIR. There are significant effects from this project and if Crystal Geyser want's to show they are true stewards of the land the Solar Power will be added to phase 1.

11-18 (cont.)

11-19

The traffic analysis is lacking in data. This DEIR cites Caltrans studies, but seems to disagree on the results. Caltrans has the current LOS at D and E by 2035. This would indicate an increase in traffic in the future, yet this DEIR incorporates a reduction of traffic in the future. It can't be both ways. This project needs a current study that would indicate a decrease in traffic as the DEIR assumes.

The DEIR is also lacking in statistical data as to how much traffic this project would create. I would like to see a current analysis of the existing Crystal Geyser incorporated into the EIR so we will know the true effects. The DEIR talks about traffic, yet it does not give a number as to how many

The numerical date for the Transportation section is flawed. After reading the study and using my Algebra skills, my math calculates

On page 4.1-11, (2) Project Impacts states the LOS after the project would not be below a C. The LOS or Level of Service for the 395 in the area is already a D and is projected to be an E by 2035 according to Caltrans study for the Olancha/Cartago Four-Lane project. This project will accelerate the LOS becoming an E on HWY 395 from the extra traffic the Bottling plant will create. The EIR should study and account for the assumed decrease in traffic from the study. The statistical data does not support the conclusions in the DEIR. How did the pre-project LOS of D become an after

project LOS of C with the project creating a significant amount of traffic by itself?

Caltrans Accident Information contained in the Olancha/Cartago Four-Lane project indicates fatalities and injuries from Traffic Accident in the area are $1\frac{1}{2}$ times the statewide average. This project will add a significant of risk to the people traveling the 395. Big Rigs entering a 2 lane highway without any traffic control will put the community of Olancha and the traveling public on HWY 395 in too much risk. The 395 in the area is already 50% more dangerous than the statewide average. The Access Road for this project is unsafe and needs to be re-analyzed to conform to CEQA requirements pertaining to the flawed data and this project should not be approved without fixing the unsafe situation the access road creates.

11-20

The necessary amendment to the General Plan to approve this project should also trigger a requirement to consider changes in zoning to the surrounding areas..The community must be given a chance to consider new options for landowners in southern Inyo if this project is approved...an example would be to consider zone changes for land along the existing corrider where conty planning has been slow to identify according to the highest and best use... community and could depress Failure to consider new zoning for surrounding areas could have a very detrimental economic affect on land values in Olancha and the surrounding area. Is the County planning on rezoning the surrounding parcels to create the continuity that's stressed in the current general plan? Is the County going to allow the surrounding parcels to rezone if they have springs and want to operate their own bottling plants? This situation could end up like Mammoth because the required general plan amendment decreases the development opportunities for the RR and OS zoned properties in the vicinity. This project will open up Inyo County

to unnecessary lawsuits if the property owners in the surrounding areas demand new and better zoning..

The people for common sense and fiscal responsibility are in support of this project if the county authorities show how the overall community can benefit from a revised general plan that finds true solutions to the impacts of the project. The communites have for too long approved projects that benefit big business and big government. The past, current and future projects within Inyo County are very important to the local communities and so this time, let's see if the county can find a more diversified solution.. Hopefully, Inyo County will create a plan that will benefit the people of the community... Too many big projects have failed in this way...

11-21 (cont.)

Mitigation in the form of enhancing the communities and creating a sustainable climate and improving the local economy is possible. Whatever the final outcome for this project, let's make sure we do it right and the people of Inyo County are the people who benefit!!

11-22

Citizens for Common Sense and Fiscal Responsibility for Southern Inyo County...



September 26, 2012, DEIR Comment Meeting

(held during the regularly scheduled September Planning Commission meeting)

Troy Patton –	_
 Water level should be monitored, in addition to quality Mr. Patton's well is offered as a monitoring well/site Water level should be monitored all around Cartago – not just on the south side 	12-1
 Trucks should use existing driveways – trucks should be contained on Cabin Bar site 	12-2
 Concerned that CGR will monitor the wells on-site, but are unable to see the level of the water. Wants to offer more wells for monitoring; specifically his wells on his property. Commissioner Stoll asked if there will be more than one well monitored. Ms. Gretz noted that the north well will be the primary well monitored for off-site changes along with 3 other on-site. Mr. Hart noted that the models ran show no off-site water impacts. 	12-3
 Route trucks to existing crystal geyser property to utilize the current entrance and exit from the highway. 	12-4

Mary Elton Jacob -

•	Monitoring should take place at south side of side/south adjacent properties	12-5
	What is the definition of "spring water"?	Ī
•	Certification as "spring water" hold true at pumping at 500/summer high-	
	level pumping?	12-6
•	When would certification take place for the new bottling plant?	

•	LADWP study will be out after DEIR comment period closes – so can DEIR comment period be extended so that the LADWP study can be reviewed con-currently	12-7
•	Shoulder use of U.S. Hwy. 395 OK?	12-8
•	Native American site on project site: small spring on site is significant/sacred to Native Americans. Can this still be respected by project?	12-9
•	Commented regarding the staff's recommendation of monitoring the northern well. She would like monitoring extended to the southern wells.	12-10
•	Ms. Jacob was unsure if the groundwater at Cabin Bar Ranch is certified natural spring water.	12-11
•	Ms. Jacob commented that the LADWP Groundwater study is to be released Oct 18 th and would like the comment period extended to the end of the month to allow for the public to review that document.	12-12
•	Ms. Jacob is concerned that trucks will use the highway shoulder between the properties to travel from one site to the other. Ms. Cram clarified that driving on the shoulder violates the vehicle and	12-13
•	Ms. Crom clarified that driving on the shoulder violates the vehicle code. Wanted to alert the archaeologist of the existence of a significant Native American site on the property that has a spiritual significance to the tribe. When her family owned the property, they would allow the Native Americans access to the property and they would congregate near a small spring on the property. She believed it was used when a member of the tribe	12-14
	passed away.	

Steve McLaughlin (California Native Plant Society [CNP]):

•	Lack of survey data: DEIR does not include focused surveys for sensitive plant species. Past collecting from '80s by private individual included flora not included within DEIR – some of which are very hard to identify, and have not been found at many other sites. Focused surveys should be done up front, included within DEIR.	12-15
•	Wetland impacts: impacts could happen off-site, as well, and should be tracked/monitored. CNPS opposes any loss of wetlands. Project does not at this point know the ultimate impact on wetlands. Where/what part	12-16

of the project site is covered under the wetland monitoring? Monitoring should continue past 6 years quoted in DEIR. CNPS recommends piezometer monitoring be extended to all of project area, for the life of the project, and be shared with all interested parties.

12-16 (cont.)

• Owens Lake Master Plan: should be referenced within the biological section of the DEIR, not just the hydrology section. Cumulatively, the Owens Lake Master Plan and impacts to biological resources should be in DEIR.

12-17

- There is a lack of survey information for rare plants and animals.
- The DEIR failed to include any surveys of rare/sensitive/threatened/endangered plant and animal species; noted that Department of Fish and Game (DF&G) in their commenting letter mentioned the same thing.

12-18

- Focused surveys should have been completed prior to the release of the DEIR; instead of completing focused surveys, the report referenced Appendix A which listed 35 species of plants found on the site.
- Noted that the area had not been extensively studied since 1988-89 in which a list of 62 plants (41 species); 37 of which were not in the DEIR.
- DEIR indicates that a focused survey will be completed on the project site; DF&G asks for an assessment of floral & fauna within and adjacent to the project site. CNPS urges the same thing.

12-19

impacts to spring flows or groundwater levels.
Plants that have been found in the area include: Owens Valley Checkerbloom (CA endangered species), Perisher's Popcorn Flower

(CNPS list-1 species meaning it is quite rare) and Datisca Glomerata (Durango Root) which is only found in two places within the Eastern

• Impacts to wetland plants are possible wherever there are significant

12-20

Potential impacts on wetland vegetation:

Sierras.

 CNPS adopted policy in 1991 opposing any project that adversely affects wetlands where there is a demonstrated net loss in wetland acreage.
 DF&G has a similar policy.

• Hydrologic study shows a 17% decrease in spring flow and some drop in groundwater level, but concludes that the potential for impacts associated with the proposed project cannot be accurately determined based on the available information.

• DEIR recommends a Riparian and Wetland Monitoring and Adaptive Management Program for vegetation associated with jurisdictional areas. Confused about jurisdictional areas. Whether that is referring to 6 acres on the site covered in table 4C2 or any adjacent wetland affected by groundwater withdrawal.

12-21 (cont.)

• Has a concern about the length of groundwater monitoring. The plan states that there will be three years of monitoring following start-up and then additional monitoring at the end of six years. If at the end of six years, no significant loss of riparian wetland communities is detected then monitoring will cease. CNPS would like to see monitoring continued unless water drawdowns remain in an equilibriums state. They recommend that groundwater monitoring be extended to the life of the project.

12-22

• The DEIR states in Mitigation Measure Hydro-1 that they will monitor the piezometers and springs of the water wells in the surrounding areas. He recommends they extend their monitoring to the current limit of existing wetland vegetation in the vicinity.

12-23

• Data shared with Inyo County Water District and Owens Lake Mater Plan (OLMP) Advisory Committee.

Cumulative impacts on biological resources related to the Owens Lake Master Plan (OLMP):

 DEIR lists the OLMP as a related project in the hydrology section, but not the biology section. The discussion in the hydrology section is not complete.

12-24

DWP would like to include groundwater pumping as part of the OLMP. They are pushing for groundwater withdrawal of 10,000 acre-feet per year. They don't where it is going to go or have models showing impacts. This should be acknowledged in the DEIR.

Other general comments made, and needing to be addressed within the FEIR:

• <u>Lighting</u>: "dark skies"/low impact lighting should be addressed within the site.

Employee Pay: does Crystal Geyser Roxane pay a wage that allows employees to live within the area?
 Landscaping at Existing Plant: the landscaping should be brought into compliance with plans shown the County.
 Traffic: a one entrance and one exit idea should be pursued if possible (ideally, one entrance and one exit for both the existing and new facility, combined).
 Demographics: Olancha used to be a farming community, but now demographics seem to be changing and it is becoming warehouses and factories.



September 24, 2012

Ms. Tanda Gretz Senior Planner Inyo County Planning Department P. O. Drawer L Independence CA 93526

Re: Crystal Geyser Roxane Cabin Bar Ranch Bottling Facility Project EIR

Dear Ms. Gretz,

Thank you for the opportunity to comment on the Draft EIR for the proposed project. I did not comment on the NOP as it appeared there was little potential for impact to our operations near Willow Dip north of about two miles north of the Cabin Bar Ranch Project.

After reviewing the D-EIR and the Hydrology report I am not sure of potential impacts to our operation, in particular to our water well located in the shallow aquifer on the Brailey Creek fan in the southern portion of parcel 29-180-26. This well provides high quality water for our operations today and will also be utilized in the future for our trona upgrade project.

The EIR shows our well location to be at the northern boundary of the area of the ground water model. After reviewing the hydrology section in the appendices, I was unable to find a predicted drawdown isobar map for the area. This would help us to determine if there will be a significant impact to our well.

The EIR indicated that our mining project was 248 acres. That may be referencing the land in the mining operation we own in fee, but we also have a mineral lease on Owens Lake of 15,700 acres. The EIR for the Trona Upgrade Project was finalized in 2004. We have never been contacted about the Cabin Bar Project other than informational mailings from the County.

Thank you for your consideration. The jobs and economic boost the Cabin Bar Project will create will be welcome to the area.

13-4

13-2

Sincerely.

Paul Lamos

Superintendent, Owens Lake Operations

Cc:

Brent Rush, RTM
Davis Gauntner, RTM

Adena Fansler, Inyo County Planning

Via Electronic Mail and U.S. Mail

Date: October 8, 2012

To: Ms. Tanda Gretz, Senior Planner

Inyo County Planning Department

P. O. Drawer L

Independence, CA 93526 Email: tgretz@inyocounty.us

From: Mark Bagley

Executive Director, Owens Valley Committee and Sierra Club Owens Valley MOU Representative

P.O. Box 1431 Bishop, CA 93515

Subject: Draft Environmental Impact Report (DEIR) for the Crystal Geyser Roxane Cabin Bar

Ranch Water Bottling Facility Project, Inyo County, California (SCH No. 2011091055)

These comments are being submitted on behalf of the Owens Valley Committee (OVC) and the Sierra Club regarding the Draft Environmental Impact Report (DEIR) for the Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Facility Project, Inyo County, California (SCH No. 2011091055).

14-1

The Crystal Geyser Roxane Cabin Bar Ranch Bottling Facility Plant project (the "project") is proposed for a 34-acre site within the larger 420-acre Cabin Bar Ranch property, which is immediately adjacent to the south side of the town of Cartago, on the east side of U.S. Highway 395 in Inyo County, CA. The project proposes, at full build-out, a 198,500-sq.ft. bottling plant building, along with a 40,000-sq.ft. warehouse building. Groundwater would be withdrawn from three existing on-site wells perforated in the shallow aquifer underlying the project area at a combined average rate of 170 gallons per minute (gpm) year-round and up to a combined rate of 500 gpm during summer months, for a total of approximately 360 acre-feet per year.

14-2

OVC and Sierra Club believe that the DEIR prepared for the project in inadequate and should be withdrawn. Additional studies and analysis discussed below should be conducted and only then should a DEIR for the project be released to the public.

14-3

1. The project description is not complete.

The proposed three production wells are not shown on any of the maps in Chapter 2–Project Description. I have only found their location shown on Figure 4.G-1. The proposed locations of water supply pipelines for both production water and domestic water are not disclosed in the DEIR (see Figure 2-4). Both the production and domestic supply wells occur outside of the areas shown as the "study area" on figures in the DEIR (see Figure 4.C-1) and therefore, at least portions of the water supply pipelines lie outside of the "study area" and were

not included in the impact analysis. Service roads to the production and domestic water supply wells should also be shown and included as part of the project area.

14-4 (cont.)

2. The study area for biological resources does not contain essential project areas of potential impact.

As noted above the production and domestic water supply wells, their service roads and the locations for proposed water supply pipelines are not included in the project description. They are also not part of the study area for the biological resources analysis described in Chapter 4.C. These areas need to be included in the analysis—the DEIR is incomplete without it.

14-5

Chapter 4.G–Hydrogeology has analyses that conclude that groundwater pumping for production and domestic water supply will not have significant effects to water resources. However, the analyses for spring flows (p. 4.G-25) and water level drawdown impacts (p. 4.G-27) indicate substantial decreases in flow to the Spring Line fault springs, up to 39% during the summer period and water level drawdowns in the vicinity of the production wells of 0.54 feet after only 30 days of pumping at a combined rate of 225 gpm and 0.87 feet after 360 days. No analysis of pumping at this rate for more than 360 days is presented, although the project envisions pumping continuously for many years. However, the 30 day and 360 day analyses are enough to make it clear that groundwater pumping could potentially impact the biological resources at the springs and in groundwater dependent vegetation areas affected by project pumping. No analysis of the potential effects of pumping on biological resources is included in the DEIR–the DEIR is incomplete without it.

14-6

3. Biological field surveys were conducted only on one day in February 2012 at a time when many potential sensitive plant and animal species are not observable. This does not provide the information required in an EIR.

The DEIR states that the only field survey of the study area was a "general biological investigation" conducted on February 8, 2012 (p. 4.C-7) and that "no focused surveys have been conducted at this time" (p. 4.C-1). Many potential sensitive plant and animal species are not observable in a one-day field survey conducted in February. Focused surveys should be conducted for the DEIR at times when sensitive plant and animal species are observable. For plants that would be when they are actively growing and preferably flowering, not in February when they are dormant.

14-7

In Chapter 4.C, in the analysis of project impacts to sensitive species (p. 4.C-28) it is stated that focused surveys should be conducted during the appropriate seasons. On p. 4.C-38, and following, under "Measures to Mitigate Potentially Significant Impacts to Sensitive Species" the DEIR states, "Should focused surveys determine the presence of. . ." then in different section is mentions various sensitive plants and animals. The document is also less than clear about requiring preconstruction focused surveys for sensitive species. The DEIR defers the analysis of significant environmental effects and potentially the design of mitigation measures to a time after the EIR is certified and the project is approved. This is not permitted under CEQA. The DEIR does not adequately describe the environmental baseline.

4. Mitigation measures proposed for impacts to sensitive species are speculative at best and are not supported by substantial evidence as adequate mitigation.

"Measures to Mitigate Potentially Significant Impacts to Sensitive Species" (p. 4.C-38, and following) do not provide substantial evidence to support the viability of the mitigation measures. The DEIR lack fundamental information needed to evaluate the likelihood that any of the proposed sensitive species mitigation measures would be effective.

The measure first rely on avoiding impacts or minimizing impacts "to the maximum extent practicable." Without a definition of what "maximum extent practicable" means, there can be no evaluation of the effectiveness of this measure.

Transplantation of sensitive plant species typically fails. There is no basis presented in the DEIR on which to conclude that the potential sensitive plant species that might be transplanted will grow and prosper and therefore whether that is a viable or adequate mitigation. Monitoring does not ensure the plants survive. There is no evaluation of the potential to use sites on the Cabin Bar Ranch or off-site as suggested in mitigation measure BIO-1a.

The mitigation measures for sensitive species also include the possibility of payment to off-site mitigation banks or off-site purchase and set aside and enhancement of land. But there is no evidence to support the viability of these ideas. Do off-site mitigation banks exist for the species in question? Are there suitable off-site areas available for purchase?

Other measures call for on- or off-site creation and/or restoration of riparian woodland habitat or off-site relocation of native fish. There is no evidence in the DEIR that allows an evaluation of the viability of these proposals.

5. Hydrological mitigation measures only propose monitoring. Monitoring is not mitigation.

The DEIR states that mitigation measures HYDRO-1, -2 and -3 are not required by are included to minimize potential impacts. But, monitoring without it triggering any actions, as proposed here, is not mitigation and will not mimimize potential impacts. To be effective the monitoring should be combined with an adaptive management program with triggers to take actions if the effects of pumping are more extensive than expected from the modeling studies.

Respectfully Submitted,

Mark Bagley

for the Sierra Club and Owens Valley Committee

14-8

A-5 Individuals



October 8, 2012

BY EMAIL [Original – Regular Mail]

Inyo County Planning Department Attn: Tanda Gretz, Senior Planner P.O. Drawer L 168 N. Edwards Street Independence, CA 93526

Re: CGR EIR at Cabin Bar Ranch

Dear Ms. Gretz:

The Elton Family has owned property in, and been proud residents of Inyo County for over 40 years, and in particular has and currently owns the property adjacent to the southern boundary of the Cabin Bar Ranch. As owners of both property and water rights adjacent to the subject Crystal Geyser Roxane's (CGR) proposed Cabin Bar Ranch development and the related Environmental Impact Report (EIR), as well as the lessors to CGR for their current production facility on Elton property where all of their existing production wells are located, the Elton Family respectfully requests that our comments be included as part of the required mitigation associated with the review and approval process of the Cabin Bar Ranch's EIR.

15-1

We appreciate the County's recognition of the importance of monitoring the hydrology of the surrounding area to assure that no future impact occurs and that the rights of all owners are respected. It is clearly stated as part of the Summary of Impacts and Mitigation Efforts (Table ES-1), and in particular ES-39, Groundwater Supplies and Recharge – Operation, that a weekly testing regimen will be required on both the Cabin Bar Ranch property (CBR-8, CBR-9, andCBR-10), as well as concurrent testing on wells located on Elton owned property where the current CGR production facility and wells are located, (CGR-2, CGR-7, CGR-3, and CGR-4). That is critical given the belief of the Elton Family, as supported by all data reviewed to date, that the water "under" Cabin Bar Ranch is the same water as is below the Elton Family property, and/or that use of the former will impact the Elton Family property and water.



As noted throughout the EIR including the mitigation section, the shallow aguifers hydraulic connections between the two above mentioned properties have been well documented. The Elton Family believes that your prudent mitigation requirement to require testing is essential in maintaining a balanced system within the area and in respecting the rights and fair interests of adjacent property owners. It is not that the Elton Family seeks to interfere or impair the rights of adjacent property owners - but only that, in the process, the rights of the Elton Family receive fair and appropriate respect, and protection, as well while CGR seeks to develop Cabin Bar Ranch.

15-2 (cont.)

The Elton Family, owners of the property where CGR's current production wells are located, request that all testing and associated analysis of wells associated with either Cabin Bar Ranch and/or Elton properties be made available to the Elton Family as part of the mitigation requirement stipulated within the EIR, as well as reserve the right to request additional testing be performed per the guidance of our Hydrogeologist. It is clear that our property could be affected and could suffer a devastating impact without the information and monitoring that the County is already requiring by the mandatory mitigation requirement stated in ES-39.

Regards.

Patricia Elton, Trustee, Elton Family Trust

ricia Elfon, Trustee.

Smilja Blackmon Smilja Blackmon, Trustee, Elton Family Trust

10-8-12 Letter No. 16 JO: INYO COUNTY PLANNING DEPT,

I DANIEL J. HARDWICK LIVE IN CARTAGO, CA, AT 302 WILAKE ST. APPROX. YYMI, N.W. OF THE CRYSTAL BEYSER PLANT. I BOUGHT MY PROPERTY THERE IN 1967 WHERE I STILL LIVE. I DRILLED A WATER WELLTHE SAME YEAR 157 FT. DEEP THE STATIC WATER TABLE WAS 68 FT. SINCE CRYSTAL GEYSER MOUED IN THEIR PLANT MY WATER TABLE HAS DROPPED DOWN TO GOFT. 16-1 I HAUE LOWERED MY WATER PUMP (SUBHERSABLE) TWO TIMES, NOT ONLY MINE BUT MY NEIGHBORS WELLS HAVE LOWER WATER TABLES. I ALSO HAUDE PROPERTY AT AWY, 395 & LAKE ST. WHICH IS SUPPLIED BY CARTAGO MUTUAL WATER WHICH WILL ALSO BE EFECTED BY MCREASED PUMPING. I WILL BE MONTTORING MY WELL AND

NIEGHBORS AND BUALITY WATER SAMPLES

FI IT APPEARS TO ME THAT CRYSTAL GEYSER AND PLANNING DEPT, ARE NOT TESTING OR CHECKING OUR AREA NOR KNOW THE DAMAGE INCREASED PUMPING WILL DO TO OUR AQUIFER AND THE FUTURE.

2 CRYSTAL GEYSER AND THE PLANNING DEPT. ARE MORE INTERESTED IN MONEY THAN THE ENVIORMENT, JUST LIKE THE D.W.P

RECEIVED OCT ZIIIZ

BY: RANIE4 J. HARDWICK Lande Moraleur P.O. BOX - 205 OLANCHA, CA, 93549

16-2

Tanda Gretz

From: Sent: To: Subject:

okievern@dslextreme.com <okievern@dslextreme.com>

Thursday, September 20, 2012 4:24 PM

Tanda Gretz
Second Comment to General Plan Amendment 20100-01 / Zone Reclass 2010-02/

Conditional Use Permit #2010-03 / Crystal Geyser Roxane Cabin Bar Ranch Water Bottling

Facility Project

Dear Ms. Gretz:

I protest the new plant Crystal Geyser wants to build on the Cabin Bar Ranch for the following reasons:

17-1

1. In the Townsite of Cartago, it is home to hundreds of Valley Quail. The Cabin Bar Ranch is also home to thousands of these quail plus hundreds of other wildlife and plant species. The construction of the bottling plant will surely upset the balance and have a serious negative impact on the local flora and fauna.

17-2

2. With all the truck traffic in and out of this plant for approximately 10 hours each day, the noise and air pollution will not only affect all wildlife, but will also have a detrimental impact on the peaceful, quiet enjoyment of our homes which are within 500 to 600 feet of the Cabin Bar Ranch.

17-5

17-4

3. Crystal Geyser owns other property within a 5-mile radius of the Cabin Bar. It would seem that the use of this property would have less impact on the natural resources and the peace and quiet we currently enjoy.

17-5

Please reply to confirm receipt of this email.

Kind regards,

Vernon L. Lawson P. O. Box 77 Olancha, CA 93549 <u>okievern@dslextreme.com</u> 661.746.2359

Vernon W. Lawson

P. O. Box 77 Olancha, CA 93549

401 E. Yaney St. Bishop, CA 93514 smanning@telis.org

October 8, 2012

via email with signed hardcopy to follow

Ms. Tanda Gretz, Senior Planner Inyo County Planning Department P. O. Drawer L Independence, CA 93526

Dear Ms. Gretz:

Subject: Comments on Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Facility Project DEIR

This Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Facility Project will hurt Owens Valley and Inyo County because of the history of water exports from the valley during the past century. The amount of water to be pumped is relatively large considering the size of the project footprint, and spring flows and water tables in the vicinity permanently will be lowered, on average. The resulting hydrologic changes will directly and indirectly affect biological resources, many of which occur near the southern limits of their distribution and many of which are regarded as rare and endangered due to nearly 100 years of dewatering of Owens Valley.

The DEIR is inadequate; in fact, it should have been rejected prior to public release, because it fails to provide basic relevant information. Sufficient surveys have not been performed.

The DEIR attempts to present arbitrary assertions about significance thresholds that have no basis in biology or context within existing state or local ordinances or policies. Cumulative impacts were not adequately analyzed. Nothing can replace fresh water, so true mitigation (on site, in-kind) is not possible.

This DEIR was released with a 45 day comment period (then extended one week) and no formal presentation to the public. The interested public finds an extremely long set of documents that really provide very little information. There are many comments one could write about the inadequacy of the DEIR, but why go to the trouble of commenting on something that should be re-done? Below I present a few comments, but I respectfully suggest either (a) the project be abandoned or (b) Inyo County Planning Department demand the DEIR be rewritten and circulated after all the missing, necessary information is obtained.

Specific Comments

This is not an EIR

How did this DEIR clear the Administrative Draft phase? It is not ready to be released to the public, because normal pre-project activities, such as research and field surveys, were not performed. With regard to the Biological Resources, the preparers of this DEIR did not perform the work necessary to complete and submit to the client or lead agency a reasonable or complete "DEIR." Where are the real surveys for actual sensitive plants? In Owens Valley, one cannot perform a one-day survey in winter and think this will suffice. Where is the review of previous work? This DEIR fails to disclose easily-obtained information. The DEIR should have been sent back to the client by Inyo County Planning Department for statements that suggest that performing what is usually the necessary preproject work is, in this project, considered mitigation! For example, the DEIR repeats phrases such as,

18-1

18-2

18-3

18-4

"mitigation, which includes focused surveys..." (p. 5-3). All surveys, including "focused" surveys, need to be done prior to implementing the project, especially if information shows sensitive species are likely to be present.

18-5 (cont.)

The entire section on Mitigation Measures, beginning on p. 4.C-38 appears to be mostly work that should already have been done. As presented, the ideas it includes are unacceptable because they allow too much loss of valuable water resources, species, and habitat.

18-6

The section(s) on Cumulative Impacts does not consider the nearly 100 years of water export from Owens Valley by Los Angeles. The reason some of the species and habitat at Cabin Bar Ranch are so rare now is because of dewatering of Owens Valley by Los Angeles. In the view of some people, such as myself, losing more is not an option. Threatening rare species at an extreme (in this case about the southern extent) of their range should not be permitted.

8-7

18-8

Lack of Credibility

Despite its bulk, this DEIR discredits itself. One need only skim some pages to observe that the preparers insult the interested public by not taking the subject seriously and not being professional. Some examples include:

- Frequently referring to Owens Valley as "Owen's Valley" and using the possessive in common names, e.g. "Owen's pupfish";
- Briefly mentioning a previous DEIR, but then not using it;

• Referring to a 1993 DEIR for Cabin Bar Ranch, suggesting it was prepared by Montgomery Watson in "1993," later referring to "Montgomery Watson 1996," and not citing the 1993 document in the bibliography;

- Failing to disclose data from previous inventories and assessments performed at Cabin Bar Ranch;
- Failing to perform comprehensive pre-project field surveys;
- Poorly- or mis-identifying sources used in this current DEIR.

To elaborate on the last bullet item, the DEIR on pages 4.C-13, 4.C-29, and 8-4, attributes information to "Sally Manning, president of the local Bristlecone Chapter of the CNPS." I am Sally Manning and I am not nor have I ever been president of the Bristlecone Chapter of CNPS. In April 2012, I received an email that had been forwarded to me, asking about information regarding *Sidalcea covillei*. A copy of our correspondence is pasted here.

Note: email from Sally Manning to Bob Huttar. Sally's response in blue italic.

My answers are inserted below.

On 4/11/2012 3:29 PM, Daniel Pritchett wrote: Sally:

18-9

You can help answer his questions better than I. cheers, Daniel

Hello Yvonne and Daniel,

I am a consultant (and an active member of the Orange County CNPS) and am analyzing

the potential impact to the Owen's Valley checkerbloom (*Sidalcea covillei*) in Cartago. I am hoping you can answer some questions or can direct me to someone who can help. You probably know our client, Crystal Geyser, and may also be familiar with the Cabin Bar Ranch, which they own and are considering developing.

There are only 3 CNDDB occurrences of the plant near Cartago, and one is on the site (EO12707, 1988, 1,500-2,000 individuals). Yikes. My questions are:

1. Does it occur elsewhere on the old lakeshore? It is found in alkali meadow/marsh and there is quite a bit of that in the area.

18-9 (cont.)

Probably not. I knew it was at Cabin Bar, but I can't recall how they would record them as 3 so-called occurrences. All known occurrences should be in the CNDDB, so you probably have the known information.

2. Has anyone tried collecting seeds and <u>had success</u> growing them? If so where?

Yes, Anne Halford, former BLM (Bishop) Botanist. She grew seeds in pots and I think some were planted (or seeded) among plants in a known population along Diaz Creek in the Alabama Hills. In places I monitored, I've seen seedlings, typically beneath parent plants.

3. Educated local opinions about the impact to the species should the project go forward.

Dewatering is what decimates populations. Populations also seem to like a good overland flow (flood) every once in a while (e.g. every couple of decades or so). These types of events tend to cease once people start "managing" the landscape. Being the current known southern extent of SICO, I would hate to see anything upset the Cabin Bar plants.

Thank you in advance,

Bob Huttar

Associate Biologist

In reading the EIR, it appears the above is the sum total of work that was done to verify the presence of *Sidalcea covillei* (SICO) in the project area. This is an outrage! According to this DEIR, field surveys for SICO were not performed during the time when the plant might be seen. Although I did no take the time to look it up myself when this email was forwarded to me, I recall (from experience about 20 years ago) that SICO was known from the Cabin Bar Ranch. Records this old should be in the CNDDB, so I assumed the consultant had the information. When I responded to the email, I remember thinking these were very odd questions; however, I now see how my first two responses were manipulated and my third response about impacts was completely ignored!

18-10

Just as humans have learned that altering the global temperature a seemingly slight amount results in all sorts of adverse environmental changes, permanently lowering the water table beneath vegetation that has established itself based on a particular hydrologic regime *will* result in changes in plant cover and/or species composition. This has been documented in Owens Valley, but current staff of Inyo County Water Department either do not understand this and/or fail to disclose relevant information. The preparers of the EIR need to perform a literature search and, if necessary, find and work with persons knowledgeable about pumping impacts, such as myself.

My qualifications: I hold a Ph.D. in Botany from UC Davis and my dissertation research was

carried out in Owens Valley. I have studied the effects of groundwater pumping on Owens Valley vegetation for over 20 years and wrote many reports and articles while employed by Inyo County Water Department from 1985 through 2008. Since retiring at the end of 2008, I have remained engaged in groundwater pumping and other Owens Valley issues, and I've authored or coauthored articles that have been published in the ecological literature. I am certified as a Senior Ecologist by the Ecological Society of America.

18-11 (cont.)

<u>Inconsistency in Inyo County Groundwater Ordinance</u>

In previous inquiries, I was told by more than one Inyo County employee that the county's "groundwater ordinance" (#1004) does not apply to this project. The Crystal Geyser Cabin Bar project anticipates exporting up to 360 acre-feet per year from the Cabin Bar Ranch. Section 18.77.010.B.3 of the ordinance, Exemptions, exempts:

"a transfer or transport of water in the form of manufactured or processed goods or products, agricultural products, or in bottles or any other portable containers including tanker trucks, provided the total transfer or transport via tanker truck or trucks does not exceed one acre foot during a one year period."

County employees interpret this sentence to mean that if water or water-based products are transferred in "tanker truck or trucks" only then does the greater than one acre-foot limit apply. There is questionable grammatical logic and no environmental logic to the county employees' interpretation of this exemption. However, county employees justify the exemption by saying, "This exemption has routinely been used in the past for the existing Crystal Geyser plant in Olancha." (email from T. Gretz to S. Manning, October 11, 2011).

The county's groundwater ordinance should apply to all projects in which a large amount of groundwater is being transferred out of a basin. The environmental consequences do not differ if the water leaves in small bottles versus large containers. The purpose of the groundwater ordinance was to ensure that questions of groundwater export receive appropriate public scrutiny, not only because Inyo County is arid, but also because of excessive water exports from Owens Valley by the City of Los Angeles. The Inyo County Water Commission should be allowed to hold public meetings and make findings on any CEQA document on a project involving large amounts of water being transferred.

I hope you will reject this DEIR. Thank you for considering my comments.

Sincerely,

Sara J. "Sally" Manning, Ph.D.

Anne Doehne

From: InyoPlanning <inyoplanning@inyocounty.us>

Sent: Tuesday, October 09, 2012 1:18 PM

To: Tanda Gretz

Subject: FW: comments on CG Roxanne Cabin Bar DEIR

Importance: High

From: scott palamar [mailto:palamar@gmail.com]

Sent: Mon 10/8/2012 11:35 AM

To: InyoPlanning

Subject: comments on CG Roxanne Cabin Bar DEIR

October 8, 2012

Dear Inyo County Planning,

As a resident and significant landowner in Cartago, I have numerous concerns about this project:

19-1

A re-zoning from residential to light industrial has been proposed. It is well know that Inyo County has little residential zoned property, particularly that which is undeveloped and viable (flat with road and utility access), so any loss of R-zones land has negative connotations for the future development of Inyo County and its dearth of housing. I see no proposed mitigation for the proposed zoning change, such as the re-designation of other OS-zoned land to R-zone. Inyo cannot afford to lose more viable residential land if it will ever have a future with a self-sustaining economy. How is this matter being factored into the proposed project?

19-2

The proposed industrial development will be situated at the north end of the CG Roxane holdings, which puts it very close to the residential zone of Cartago (and probably partially on currently R-zoned land). Why has this area been chosen and not one closer to the existing industrial buildings, further away from the homes in Cartago and which has already been environmentally compromised? I feel strongly that every measure should be taken to locate the new plant as close as possible to the existing development.

19-3

It is my understanding that the current operations at CG Roxane are not restricted with regard to the amount of groundwater that can be continuously drawn. The DEIR states that static groundwater levels will be monitored, but does not appear to state remedial action should drop in static levels occur. It is stated that at peak times, the new project might draw up to 500 gpm. A calculated drawdown based on continuous pumping of less than half that rate is estimated at .87 feet. This is not an insignificant impact to the community of Cartago. For example, my well at 410 N. Mojave has a static water level of approximately 3 feet, which allows me to irrigate my property with photovoltaic –powered low voltage pumps, which can handle shallow head demands. Every inch of additional head these pumps must contend with reduces their efficiency which results in additional cost. Have any mitigation measures been proposed for a granting of so much additional groundwater pumping, and what mechanism is in place to protect the access to groundwater by Cartago residents should the proposed CG Roxane project lower static water level or reduce the continuous supply of groundwater currently available on residential property in Cartago? Finally, regarding aesthetics, the existing CG Roxane operation is a blight on the landscape. Little effort has been made to 'beautify' the view of their industrial buildings with fading paint, the chain link-barbed wire perimeter fence, the asphalt roadways and parking lots, and the water treatment development. Regardless of how much the new project would be set back from the highway, any parts of it that are visible will further detract from the natural

19-4

quality of the area prized by residents and visitors. It is my strong opinion that CG Roxane should not only be required to plants tress that will eventually guarantee invisibility of the new project from the highway, the community of Cartago, and from sightlines to the east, but that similar remedial landscaping should be required at the existing operation.

19-5 (cont.)

Thank you and regards,

Scott Palamar 310-361-6867

PAITTON'S PLACE P.O. Box 157 Olancha, CA 93549

Ms. Tanda Gretz, Senior Planner Inyo County Planning Department P.O. Drawer ! Independence, CA 93526

RE: CRYSTAL GEYSER /ROXANE CABIN BAR RANCH EXPANSION

We reside at 295 W. Lake St. in Cartago. Dur property is 46 acres just north of the project on the west side of Highway 395. We have horses and pack mules on our property. In reviewing the DEIR section on Hydrology we are concerned that the recommendation is for "qualified groundwater professionals to evaluate water quality". Why are they not also recommending that groundwater levels be monitored by these professionals? I realize they talk at out static water levels, but not about outside professionals doing the evaluations.

Our major concern is to be sure that <u>all of the 8 private off-site wells</u> on the west side of the highway as well as <u>the community well</u> for Cartago residents on the east side of the highway are included in the monitoring process. Sine these are areas of significant concern, they need to be monitored by outside consultants for both water quality and for water levels.

20-1

We are concerned that they only intend to monitor one on-site well and use that as an indicator of change. Do they have scientific evidence to show that the monitoring of this one well will be indicative of changes to our off-site private wells? Dur properties will be worth nothing if our wells become depleted. What if a significant change to our private wells does occur? Will Crystal Geyser provide us with water?

On another subject: How does the entrance to this new expansion impact the proposed changes and widening of Highway 395? I see on the site plan that they are going to be required to put in acceleration lanes for the trucks. We wonder why not use the original entrance until the highway is done and keep the trucks on their own property. We also wonder what will happen to Cartago Creek. Will it disappear? I certainly hope not as it adds to our wonderful environment in Cartago.

20-2

20-3

We feel these are important questions that need to be answered before this project moves forward and these questions should be addressed in the DEIR.

Troy and Susan Patton

Ms.	Tanda	Gretz.	Senior	Planner
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Inyo County Planning Department

P.O. Drawer L

Independence, Ca 93526

Subject:

Comments on DEIR Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Facility Project

Thank you for the extension of the comment period and the opportunity to comment.

21-1

1.) I wish to praise the relocation of the stormwater retention basin from a sensitive area to an area next to the large building.

21-2

2.) I also am pleased that the 8.3 acre solar array will not be built in the wetland location Building it elsewhere at a future date is encouraged as it brings renewable energy to the plant. Possible sites might be the rooftop or disturbed land on the property.

21-3

3.) I have concerns for the loss of significant red willow plant community acres. This complex habitat should be restored connected to existing red willow habitat. I would like to see a 2 for 1 restoration for acres lost. In this habitat the diverse structure of re willow with different serial stages, wild rose and other understory species should be planed for. If appropriate, velvet ash should also be included due to the value of enhancing this uncommon species of tree in the Owens Valley.

21-4

4.) I support Inyo County helping draft and approve a cooperative long-term groundwate monitoring plan that seeks to protect vegetation and spring snail populations. Annual reports of the monitoring would be available to the public upon request. The suggested "Riparian and Wetland Monitoring and Adaptive Management Program is an excellent one.

21-5

5.) There should be no flow reductions to the CA Dept. of Fish and Game artesian well that supplies critical water to the Cartago Springs Wildlife Area. This area is in the process of drafting a management plan for the property which would include restoration and interpretation/education. The DFG property is also being considered a

21-6

an initial contact point for visitors to the Owens Valley by providing interpretation, trails and information kiosks. Minimizing noise, light and visual esthetics impacts to the Cartago Springs Wildlife Area should occur.

21-6 (cont.)

6.) The habitat of the Crystal Geyser Roxane property is rich in wildlife, especially birds A process for access for groups such as Audubon to observe wildlife would have greavalue. I would be happy to help explore this possibility.

21-7

7.) I support focused surveys for sensitive plant and animal species.

21-8

Sincerely,

Michael Prather

Drawer D

Lone Pine, CA 93545

Shawn Gaver

Subject:

FW: New comment letter #22 from Miek Prather

From: Michael Prather [mailto:mprather@lonepinetv.com]

Sent: Wednesday, September 19, 2012 5:29 AM

To: Tanda Gretz

Subject: Extension request

Dear Tanda,

I respectfully request a four week extension of for the comment period for the Cabin Bar Ranch DEIR. The document itself is extremely large and complex. A possible public field trip 22-1 to the site the week of Sept. 24 is right up against the comment deadline.

Sincerely, Mike Prather Lone Pine

Tanda Gretz

Letter No. 23

From: Sent:

Bill Schwartz <macbills@gmail.com> Monday, August 20, 2012 2:13 PM

To:

Tanda Gretz

Subject:

Re: Notice of Availability: Cabin Bar Draft EIR

Tanda Gretz:

My only comment on the draft is why can't Crystal Geyser use what they currently have? Getting too big and using more water is probably not good for the local and surrounding areas.

23-1

Bill Schwartz

On 8/20/12, Tanda Gretz < tgretz@inyocounty.us > wrote:

- > Attached please find a Notice of Availability for the Draft
- > Environmental Impact Report (EIR) for the Crystal Geyser Cabin Bar
- > Ranch Water Bottling Project.

> >

>

> - Inyo Co. Planning Department

> >

TO: Inyo County Planning Department From: Earl Wilson, Lone Pine, CA

Attn: Tanda Gretz, Senior Planner

Letter No. 24

Comments for "Crystal Geyser Roxane Cabin bar Ranch Water Bottling Facility Project Draft Environmental Impact Report - August 2012

Vol #1

Table ES-1:

ES-7, Environmental Impacts, "Light and Glare", Operations.
Surprisingly there is no mention here about any mitigation as set forth in other parts of the document.

ES-8, Mitigation measures, Par-2

Stage 2 "Smog episodes" needs clarification. Do you mean "Dust episodes".

ES-8, Mitigation measures, "Pupfish"

"Payment into an agency approved "mitigation bank" ---or--- "In-leiu Fees"! Any monies into a banked system or in-lieu fees should include that the monies be restricted to use in the local area where the impacts were realized. In this case it would be used only in the general Cartago/Olancha area of Inyo Co. This would apply to ALL references as above in the document for mitigation measures.

"Off-site relocation". Pupfish relocation can be problematic due to sensitivity to water conditions and have failed in the past.

ES-21 Environmental Impacts, Par-2 (re. Spring flows).

In the hydrological discussion and elsewhere, the summer pumping rate will decrease spring flows by as much as 38%. Also spring snails have been identified on the project area. This reduction in flows to the springs is way to low for healthy spring snail habitat.

ES-25, Mitigation measures, Par-1

A monitoring program should be established that goes beyond the 6 year time frame, such as every 5 years to evaluate the health of ALL types of vegetation.

ES-32, Historical Resources, Mitigation measures, Par-3

Residence 2 will be demolished but there is mention deconstruction of a "square cut timber wall" It is possible to "reconstruct" this part of the building and restore it at the Eastern Calif. Museum. We have lost a lot of our historical buildings in recent years and this is an important part of our local history!!

3.0 General Description of Environmental Setting:

Aesthetics and Environmental Impacts: "Light and Glare" Various locations in the discussion.

LEED compliance is mentioned in several locations in relation to night lighting mitigations. Although commendable LEED is not the lighting standard for "Dark Sky" impacts as outlined by IDA. The Illuminating Engineering Society of North America (IESNA) has developed specifications for night friendly fixtures that do meet IDA compliance.

24-3

24-4

24-5

24-6

24-7

Additionally I noticed the lack of any reference to the extant light from the project proponents existing bottling plant S'ly and nearly adjacent to the CBR property. Using ones night lighting shortcomings as a baseline for an additional project is not acceptable and I find this somewhat disingenuous.

The conditions at the current plant has a dome of light over it that is readily visible all the way to Keeler with the naked eye and the wall packs on the S'ly building shine directly into on coming traffic causing "Glare". Additionally the lights for the parking area are not set on the horizontal and the flags are lit with what I would describe as a 3 ft. dia. "searchlight" which needs a diffuser mounted over the lens.

24-7 (cont.)

In reference to the current project: Light should be limited to the current plant and adjacent loading and maintenance facilities and there should be no light spill at ground level beyond the chain link fence line. If there are street light i.e. tall pole lighting anywhere at CBR they should have "FLAT" lens covers and mounted on the horizontal. This would include the access road.

I notice no mention of motion detectors or just plain "turning off the lights" when not needed in the document.

Hydrological;

I have just found the current "estimated" water use at the current facility which I has requested at several times. New project total use will be equal to or exceed the current plants water volume. This would be 720 af/year total at final build out.

24-8

Who did not require meters on the wells when CGR expanded last time ?? As I recall I did send in written comments on that project.

Biological: Vol#2 - Appendices, Appendix C: Biological Resources.

My copy of the document only contains (Sub) Appendix A: Which comprises 3 pages of Floral and Faunal as a compendium and several Wetland determination forms noted as "USACE" data sheets and not identified from any source or documented as to the quality or experience of the data collectors.

The 3 pages of the "Floral and Faunal Compendium" is totally inadequate and does not include invertebrates, reptiles and only notes one mammal – Gophers. I personally have in recent years (~ 4) seen Bobcats, Coyotes, Raccoons, and recently a Mountain Lion, all crossing Hwy. 395 onto the CBR property. This area is a travel way for many larger predators and is one of the remaining areas from the Aqueduct (S'ly) to Willow Dip (N'ly) where these animals can access the Owens Lake playa to hunt with out encountering human habitations or other barriers.

24-9

Tree removal: Even some of these trees are not of high quality heat production it would be nice if CGR would buck up the large trees, stack the wood to dry and donate some or all of it to IMACCA for the elderly and disadvantaged citizens of Inyo Co.

24-10

Thank you for the opportunity to make comments and also for extending the comment period,

Earl Wilson POB 830, Lone Pine, CA



United States Department of the Interior

FISH AND WILDLIFE SERVICE Ventura Fish and Wildlife Office 2493 Portola Road, Suite B Ventura, California 93003



IN REPLY REFER TO: 08EVEN00-2013-TA-0026

November 2, 2012

Page Beykpour Executive Vice President and Corporate Council CG Roxane LLC 55 Francisco Street, Suite 410 San Francisco, California 94133

Subject:

Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Facility Project, Inyo

County, California (SCH No. 2011091055)

Dear Mr. Beykpour:

This letter is in response to our conference call, on October 17, 2012, to discuss the Crystal Geyser Roxane Cabin Bar Ranch water bottling facility project and its potential effects on the federally endangered least Bell's vireo (Vireo bellii pusillus) and southwestern willow flycatcher (Empidonax traillii extimus). On September 28, 2012, we received an electronic mail from you indicating that a draft Environmental Impact Report (DEIR) on the subject project was available for comment. Unfortunately, we were unable to respond before the comment period closed on October 8, 2012. Based on discussions with the California Department of Fish Game (CDFG), Crystal Geyser Roxane (CG Roxane) has decided to assume that the least Bell's vireo and southwestern willow flycatcher are present in the project area. Consequently, CG Roxane is seeking an incidental take permit from CDFG. During our conference call we discussed the proposed project and the process CG Roxane wand need to go through to ensure compliance with the Endangered Species Act of 1973, as amended (Act). This letter summarizes the topics we discussed during the conference call.

The proposed project is located east of U.S. 395 and south of the unincorporated town of Cartago in Inyo County, California. Construction of the proposed project would involve the development of a spring-water bottling facility, warehouse, and ancillary structures and other uses. The new facility would use spring water from four existing wells; three of these would be used for bottling and one would be used for domestic potable water. Ancillary structures and uses would include a rooftop solar array, fire suppression building, stormwater detention basin, leach mound, fire access road, and parking and truck staging area. The project area is approximately 35 acres in size; development would occur on approximately 15 acres with the remaining acreage left undeveloped. Development of the proposed project would occur in phases over a span of 10 to 15 years.

25-1

25-2

The U.S. Fish and Wildlife Service's (Service) responsibilities include administering the Act, as amended, including sections 7, 9, and 10. Section 9 of the Act prohibits the taking of any federally listed endangered or threatened species. Section 3(19) of the Act defines take to mean to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Service regulations (50 CFR 17.3) define harm to include significant habitat modification or degradation which actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. Harassment is defined by the Service as an intentional or negligent action that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. The Act provides for civil and criminal penalties for the unlawful taking of listed species.

Exemptions to the prohibitions against take may be obtained in one of two ways: through coordination with the Service through interagency consultation for projects with Federal involvement pursuant to section 7; or through the issuance of an incidental take permit under section 10(a)(1)(B) of the Act. If the proposed project is to be funded, authorized, or carried out by a Federal agency and may affect a listed species, the Federal agency must consult with the Service, pursuant to section 7(a)(2) of the Act. If a proposed project does not involve a Federal agency but may result in the take of a listed animal species, the project proponent should apply for an incidental take permit, pursuant to section 10(a)(1)(B) of the Act. Once you have determined if the proposed project will have a lead Federal agency, we can provide you with more detailed information regarding the section 7 or 10(a)(1)(B) permitting process. If the proposed project does not involve a Federal agency and would not result in the take of a listed animal species, then the project can proceed or CG Roxane may request the Service's concurrence that the project would not result in take.

As described above, the Service defines take to include harm, and harm includes significant habitat modification or degradation. Therefore, we recommend that CG Roxane not only consider the direct effects the proposed project would have on native vegetation (e.g., removal) but also the indirect effects associated with increased groundwater pumping. Additionally, because groundwater pumping could affect native vegetation beyond the boundaries of the project area, we recommend CG Roxane consider the extent of any potential effects associated with increased groundwater pumping. Finally, as stated in the DEIR (p. 4.G-24), during the summer months pumping could result in the withdrawal of up to 200 acre-feet of groundwater over a 90-day period. The withdrawal of this amount of groundwater could result in up to a 38 percent decrease in flows along the Spring Line fault (p. 4.G-25). Although this amount of groundwater pumping would occur over a short period of time, we are concerned what potential effect this increased amount of groundwater pumping could have on native vegetation. Because conditions are hot and dry during this time of year, vegetation may already be water-stressed. Also, we were unable to find any information in the DEIR that indicates if the two wells currently operated by CG Roxane would also be operated during the summer months. If CG Roxane plans on operating all of their wells during the summer months, then we recommend CG Roxane consider the potential effects the total amount of groundwater withdrawn may have on native vegetation.

25-3

25-4

25-5

Finally, because the project area has the potential to support nesting raptors and songbirds, CG Roxane should also consider potential effects to migratory birds. As a reminder, the Migratory Bird Treaty Act (MBTA; 16 U.S.C. 703-712) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Department of the Interior. However, at this time, the MBTA has no provision for allowing take. Therefore, we recommend CG Roxane implement reasonable measures to avoid effects to migratory birds, such as removing vegetation outside of the nesting and breeding season or, if nests are present, establishing buffers around each nest tree and avoiding construction work in these buffers. The Service's Division of Law Enforcement carries out its mission to protect migratory birds not only through investigations and enforcement, but also through fostering relationships with individuals and industries that actively seek to eliminate their impacts on migratory birds. Although individuals or companies cannot be absolved from liability under the MBTA if they follow these recommended guidelines, the Division of Law Enforcement and Department of Justice have used enforcement and prosecutorial discretion in the past regarding individuals or companies who have made good faith efforts to avoid the take of migratory birds.

If you have any questions regarding this letter, please call Erin Nordin of my staff at (760) 872-5020.

Sincerely,

Carl T. Benz

Assistant Field Supervisor

cc:

Debra Hawk, California Department of Fish and Game Tanda Gretz, Inyo County Planning Department

Appendix B: Focused Plant Surveys, October 2012

Updated Wetland Delineation Data Forms, PCR, February 2012

Wetland Delineation Data Forms, Garcia & Associates (GANDA), November 2012

Sensitive Plant Survey Report for the CGR Cabin Bar Ranch, Resource Concepts, Inc. June 2012

Cabin Bar Ranch Water Bottling Facility Project – Special-status Plant Survey Report, Garcia & Associates (GANDA), October 2012



Project/Site: Calon Bar Rauch		CitulCountry C-	Than I State: CA Sampling Date: 2/8	
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Arid West -- Version 2.0

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WETLAND DETERMINATION DATA FORM – Arid West Region Cabin Bar Ranch City/County: Cartago / Inyo Sampling Date: 2/8/12 Applicant/Owner Crystal Greyser Roxane Water Company State: CA Sampling Point: SPZ Investigator(s): Amir Morales, Zeke Cooley Section, Township, Range: Unincorporated Tryo County Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): _______.Slope (%): ______ Subregion (LRR): ______ Lat: 36.317872. Long: -118.020444 Datum: WAS 84 Soil Map Unit Name: 332 Typic Psammaquents; 0-7 percent stopes NW classification: PEMA Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _______ No ____ Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes:_X__ No__ is the Sampled Area Hydric Soil Present? Yes ____ No __ Welland Hydrology Present? within a Wetland? __ No Remarks: VEGETATION – Use scientific names of plants. Absolute Dominant Indicator Tree Stratum (Plot size: _____) Dominance Test worksheet: % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species _____ = Total Cover Sapling/Shrub Stratum (Plot size: 20') That Are OBL, FACW, or FAC: 67 1. Ecuanoria neuscosa 10 Y UPL Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species ____x1≂___ FACW species ____ x2=__ FAC species ___ x 3 = __ ______ = Total Cover Herb Stratum (Plot size: 201) FACU species _ ____ ×4=__ 1. Scitons microtarpus UPL species ___ ×5=__ _OBL 2. Juneus mexicanus Column Totals: _ _ (A) _____ (B) _EALW 3. Polypana monspetiensis - Edlw Prevalence Index = B/A = Hydrophytic Vegetation Indicators: _ FACW _____Dominance Test is >50% Prevalence Index is ≤3.01 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) _140 = Total Cover Woody Vine Stratum (Plot size: _____) 1 Indicators of hydric soil and welland hydrology must be present, unless disturbed or problematic. Hydrophytic % Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _ Vegetation Present? Remarks:

Profile Description							Sampling	Point: <u>SPZ</u>
Profile Description: (D	escribe to the d	epth needed to docu	ment the i	ndicator	or confi	rm the absence	of indicators.)	
(inches) Color (n	WIRDIX	Color (moist)	ox Features	3		_ •		
0-3 54R3			%	Type'	_Loc ²	Texture	Rema	arks
3-5 104841		2.5 42 3/6				Sandy lower		<u> </u>
			15		PL	Surly Clay low	Molles Shoulet,	Fre. Defre
		Glay 1 Yioy	_15	<u>D</u>	M	Clay boam	Mother Howare	Reduction
10-15 1048 5/3	<u> </u>	254R316				Surly Loan	Abrida Lede	ton
¹ Type: C=Concentration, Hydric Soil Indicators:	D=Depletion, RN (Applicable to al	ILKKS, unless other	wise noted	or Coated	I Sand G		ation; PL=Pore Linin	g, M=Matrix.
Histosol (A1) Histic Epipedon (A2)		Sandy Redo	x (S5)				luck (A9) (LRR C)	
Black Histic (A3)		Stripped Ma	trix (S6)			2 cm M	uck (A10) (LRR B)	
Hydrogen Sulfide (A4))	Loamy Much	ky Mineral ((F1)		Reduce	ed Vertic (F18)	
Stratified Layers (A5)	(LRR C)	Depleted Ma	eu mann (r dox (F3)	-2)		Red Pa	rent Material (TF2)	
1 cm Muck (A9) (LRR	D)	⊀ Redox Dark	Surface (F6	5)		Other (I	Explain in Remarks)	
Depleted Below Dark : Thick Dark Surface (A	12)	Depleted Da Redox Depre	rk Surface	(F7)		311+4		
Sandy Mucky Mineral	(S1)	Vernal Pools	(F9)	7		indicators of	f hydrophytic vegetal	ion and
Sandy Gleyed Matrix (S4)		• /			wellang m uniess dis	ydrology must be pre turbed or problematic	sent,
estrictive Layer (if prese	ent):					0111000 011	torbed or problemant	·- <u> </u>
Type:								
Parada da a a a								
Depth (inches):					-	Hydric Soil P	resent? Yes <u>X</u>	No
emarks:						Hydric Soil P	resent? Yes <u>X</u>	No
emarks:						Hydric Soil P	resent? Yes <u>X</u>	No
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Applicant/Owner: Crustal Go	user Rava		y/County:	rtago/Ingo	Sampling Date: 2/8/1:
Applicant/Owner: Crystal Gellinvestigator(s): Amy Morales	Z.k.	and a contract	ompany.	State: <u>(,4 _</u>	_ Sampling Point: _ SP3_
Investigator(s): Amir Morales andform (hillslope, terrace, etc.): Bubregion (LRR):	, \	Se Se	ction, Township	p, Range: Unix corpore	ted Ingo County
Subregion (LRR):		L0	cal relief (conc	ave, convex, noле):	Slope (%):
		Lal \\\ \\ \	51 1×11	1 april - 1150 (a th a ch	
<u> </u>		11/14/ACC . Do / c.			
and a his distribution of the state of the s	the site typical	for this time of year?	Yes X 3	No (If no, explain in	Remarks.)
re Vegetation, Soil, or	r Hydrology	significantly dist	urbed?	Are "Normal Circumstances"	present? Yes X No
re Vegetation, Soil, or	Hydrology Attach site n	naturally problem nap showing sa	πatic? ((If needed, explain any answ	ere in Damarka)
Hudoophylia Vanatalian D			mpang poa	nt locations, transect	s, important features, et
Hydrophytic Vegetation Present? Hydric Soil Present?	YesX_	_ No	Is the Samp	oled Area	•
Wetland Hydrology Present?		No	within a We		No <u>X</u>
Remarks:	163		<u></u>		no _/ <u>`</u>
GETATION - Use scientific	names of p	lants.	······································		
ree Stratum (Plot size:		Absolute Do	ninant Indicate	Dominance Test work	chants
		% Cover Spe	cies? Status	Number of Dominant S	
				That Are OBL, FACW,	or FAC: (A)
	"			Total Number of Domin.	
				Species Across All Stra	ta: <u>3</u> (B)
				Percent of Dominant Sp	
apling/Shrub Stratum (Plot size:		= To		That Are OBL, FACW, o	or FAC: 47 (A/B)
Ericamenia Mauseosa		<u> </u>	UPL	Prevalence Index work	sheet.
				Total % Cover of:	
	<u> </u>				x 1 =
				FACW species	x 2 =
				FAC species	x 3 =
rb Stratum (Plot size:	1	= Tot	al Cover	FACU species	x4=
Suneus Mexicanus		90 Y	FILW	UPL species	x5≈
Distriction spicate		- 57	FALW	Column Totals:	(A) (B)
Bassic Lyssupplate		30	FAC	Prevalence Index =	
Polypogon Monspelieus	15	2-	FACW	Hydrophytic Vegetation	
<u> </u>				Dominance Test is >	muicators:
				Prevalence Index is s	
					ations ¹ (Provide supporting
				data in Remarks o	r on a separate sheet)
dulia- Ota-ta- and		172 = Tota	Cover	Problematic Hydrophy	ytic Vegetation ¹ (Explain)
ody Vine Stratum (Plot size:			•]	
				Indicators of hydric soil ar	nd welfand hydrology must
		- 	 .	be present, unless disturbe	ed or problematic.
		= Total		Hydrophytic	
are Ground in Herb Stratum	% Cove	r of Biotic Crust		Vegetation Present? Yes	X No
arke. I				, , , ,	
TO THE APPEAR TO BE !	man Mangu	~ o+ wetter	حمد لمبيط	tours. In an I.	
	. کی		/ Jan. 0	TIME OF THE AND	econt Upland
bubitots.	3	, , ,	7240. 0	772-31712 20 201	FRANT Upland

	inpuon: (Describe	to the dep	th needed to docum	ent the indicator	r or confirm	he absence	Sampling Point: >
Depth (inches)	Matrix_ Color (moist)		Redox	Features			c or marcawis.)
0-6	7		Color (maist)	%Type¹	Loc2	Texture	Remarks
	<u> </u>	_90_			3	only born	
6-10	54R 4/4	100	<u> </u>			151	<u> </u>
10-16	5 YR 3/3	60				1 1	Servy/Grand, no mother
	54R 54	40			· —— >	esty/ours	
16-20					·		
	70 IN 13				[i	samy Sad	Granelly, No Mo Hes, Son
Type: C=Con	centration, D=Depl	etion, RM=F	Reduced Matrix, CS=	Covered or Coate	d Sand Grain	s. ² Loc	cation: PL=Pore Lining, M=Matr
_ Histosol (A	to philos	IDIE TO All L	nns, uniess otherw	ise noted.)			for Problematic Hydric Soils3
Histic Epip			Sandy Redox	(S5)		1 cm M	luck (A9) (LRR C)
Black Histl	c (A3)		Stripped Matrix	k (S6)		2 cm M	luck (A10) (LRR B)
_ Hydrogen :	Sulfide (A4)		Loamy Mucky Loamy Gleyed	Mineral (F1)		Reduce	ed Vertic (F18)
_ Stratified L	ayers (A5) (LRR C))	Depleted Matri	Matrix (F2)		RedPa	rent Material (TF2)
_ 1 cm Muck	(A9) (LRR D)		Redox Dark St	rtace (EE)		Other (i	Explain in Remarks)
_ Depleted B	elow Dark Surface	(A11)	Depleted Dark	Surface (F7)			
_ Thick Dark	Surface (A12)		Redox Depress	sions (F8)	:	Indicators o	of building to the
Sandy Muc	ky Mineral (S1)		Vernal Pools (F	9)		wetland h	of hydrophytic vegetation and ydrology must be present,
Strictive Law	ed Matrix (S4) er (if present):					unless dis	sturbed or problematic.
Type:	er (a brezette):						- movieriaus,
Depth (inches			-		1		
Ochol (IIICHE	ST:						
marks:					н	dric Soil P	resent? Yes No _
marks:					H	ydric Soil P	resent? Yes No_
marks: DROLOGY				· .	Н	ydric Soil P	resent? Yes No_
marks: DROLOGY Uland Hydrolo	ogy Indicators:			· .	Н	ydric Soil P	resent? Yes No_
DROLOGY Uland Hydrolo Dary Indicator	ogy Indicators: s (minimum of one	required; ch	eck all that apply)	·	H		
DROLOGY tland Hydrolo pary Indicator Surface Water	ogy Indicators: s (minimum of one er (A1)	required; ch			H	Seconda	ary Indicators (2 or more required
DROLOGY tland Hydrolo nary Indicator Surface Wate High Water T	ogy Indicators: s (minimum of one er (A1) able (A2)	required; ch	Salt Crust (B11) 2)	H	Seconda Wate	ary Indicators (2 or more required er Marks (B1) (Riverine)
DROLOGY tland Hydrolo nary Indicator Surface Water T Saturation (A	ogy Indicators: s (minimum of one er (A1) able (A2) 3)		Salt Crust (B11 Biotic Crust (B1	2)	H	Seconda Wate Sedi	ary Indicators (2 or more required er Marks (B1) (Riverine) iment Deposils (B2) (Riverine)
DROLOGY tland Hydrolo nary Indicator Surface Wate High Water T Saturation (A: Water Marks	ogy Indicators: s (minimum of one er (A1) able (A2) 3) (B1) (Nonriverine)		Salt Crust (B11 Biolic Crust (B1 Aquatic Invertet Hydrogen Sulfid	2) prates (B13) lè Odor (C1)		Seconda Wat Sedi	ary Indicators (2 or more required er Marks (B1) (Riverine) iment Deposits (B2) (Riverine) Deposits (B3) (Riverine)
DROLOGY tland Hydrolo nary Indicator Surface Water High Water T Saturation (A: Water Marks Sediment Dep	ogy Indicators: s (minimum of one er (A1) able (A2) 3) (B1) (Nonriverine) posits (B2) (Nonrive	erine)	Salt Crust (B11 Biotic Crust (B1 Aquatic Invertet Hydrogen Sulfid Oxidized Rhizos	2) prates (B13) le Odor (C1) pheres along Livi		Seconda Wate Sedi Drift Drain	ary Indicators (2 or more required er Marks (B1) (Riverine) iment Deposils (B2) (Riverine) Deposils (B3) (Riverine) nage Pattems (B10)
DROLOGY Itland Hydrolo Dary Indicator Surface Water High Water T Saturation (A) Water Marks Sediment Deposits	ogy Indicators: s (minimum of one er (A1) able (A2) 3) (B1) (Nonriverine) posits (B2) (Nonriverine)	erīne)	Salt Crust (B11 Biotic Crust (B1 Aquatic Invertet Hydrogen Sulfid Oxidized Rhizos Presence of Rèc	2) prates (B13) le Odor (C1) pheres along Livi duced Iron (C4)	ing Roots (C3	Seconda Wate Sedi Drift Drain) Dry-	ary Indicators (2 gr more required er Marks (B1) (Riverine) iment Deposils (B2) (Riverine) Deposils (B3) (Riverine) nage Patterns (B10) Season Water Table (C2)
DROLOGY tland Hydrolo pary Indicator Surface Water High Water T Saturation (A Water Marks Sediment Dep Drift Deposits Surface Soil O	ogy Indicators: s (minimum of one er (A1) able (A2) 3) (B1) (Nonriverine) posits (B2) (Nonriverine) (B3) (Nonriverine)	erine)	Salt Crust (B11 Biotic Crust (B1 Aquatic Invertet Hydrogen Sulfid Oxidized Rhizos Presence of Rec	2) prates (B13) le Odor (C1) pheres along Livi duced Iron (C4) fuction in Tilled Se	ing Roots (C3	Seconda Wate Sedi Drift Drain) Dry-\(ary Indicators (2 or more required er Marks (B1) (Riverine) iment Deposils (B2) (Riverine) Deposils (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8)
DROLOGY tland Hydrolo pary Indicator Surface Water High Water T Saturation (A Water Marks Sediment Dep Drift Deposits Surface Soil C Inundation Vis	ogy Indicators: s (minimum of one ex (A1) able (A2) 3) (B1) (Nonriverine) cosits (B2) (Nonriverine) (B3) (Nonriverine) cracks (B6)	erine)	Salt Crust (B11 Biotic Crust (B1 Aquatic Invertet Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Red Thin Muck Surfa	2) prates (B13) le Odor (C1) spheres along Livi duced Iron (C4) fuction in Tilled Sc ce (C7)	ing Roots (C3	Seconda Wate Sedi Drift Drait Cray Cray	ery Indicators (2 or more required er Marks (B1) (Riverine) iment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8)
DROLOGY Itland Hydrolo Dary Indicator Surface Water High Water T Saturation (A Water Marks Sediment Deposits Surface Soil C Inundation Vis Water-Stained	Dgy Indicators: s (minimum of one ex (A1) able (A2) 3) (B1) (Nonriverine) posits (B2) (Nonriverine) (B3) (Nonriverine) cracks (B6) ible on Aerial Imag	erine)	Salt Crust (B11 Biotic Crust (B1 Aquatic Invertet Hydrogen Sulfid Oxidized Rhizos Presence of Rec	2) prates (B13) le Odor (C1) spheres along Livi duced Iron (C4) fuction in Tilled Sc ce (C7)	ing Roots (C3	Seconda Wati Sedi Drift Drait Cray Cray Satur Shali	ery Indicators (2 or more required er Marks (B1) (Riverine) iment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery ow Aquifard (D3)
DROLOGY Island Hydrolo Dary Indicator Surface Water High Water T Saturation (A Water Marks Sediment Deposits Surface Soil C Inundation Vis Water-Stained Observation	Dgy Indicators: s (minimum of one ex (A1) able (A2) 3) (B1) (Nonriverine) posits (B2) (Nonriverine) cracks (B6) sible on Aerial Imag I Leaves (B9)	erine)) ery (B7)	Salt Crust (B11 Biotic Crust (B1 Aquatic Invertet Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Red Thin Muck Surfa Other (Explain in	2) prates (B13) le Odor (C1) spheres along Lividuced Iron (C4) fuction in Tilled Sc ce (C7) n Remarks)	ing Roots (C3	Seconda Wati Sedi Drift Drait Cray Cray Satur Shali	ery Indicators (2 or more required er Marks (B1) (Riverine) iment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8)
DROLOGY Iland Hydrolo nary Indicator Surface Water High Water T Saturation (A Water Marks Sediment Deposits Surface Soil C Inundation Vis Water-Stained Observation Ce Water Pre	ogy Indicators: s (minimum of one ex (A1) able (A2) (B1) (Nonriverine) posits (B2) (Nonriverine) pracks (B6) sible on Aerial Imag I Leaves (B9) ss: sent? Yes	erine)) ery (B7) No _;	Salt Crust (B11 Biotic Crust (B11 Aquatic Invertet Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Red Thin Muck Surfa Other (Explain ir	2) prates (B13) le Odor (C1) spheres along Livi duced Iron (C4) fuction in Tilled Sc ce (C7) n Remarks)	ing Roots (C3	Seconda Wati Sedi Drift Drait Cray Cray Satur Shali	ery Indicators (2 or more required er Marks (B1) (Riverine) iment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery ow Aquifard (D3)
DROLOGY tland Hydrolo nary Indicator Surface Water High Water T Saturation (A: Water Marks Sediment Deposits Surface Soil C Inundation Vise Water-Stained Observation ice Water Prese	ogy Indicators: s (minimum of one er (A1) able (A2) 3) (B1) (Nonriverine) cosits (B2) (Nonriverine) cracks (B6) sible on Aerial Imag I Leaves (B9) is: sent? Yes nt? Yes	erine)) ery (B7) No _} No _}	Salt Crust (B11 Biotic Crust (B11 Aquatic Invertet Hydrogen Suffid Oxidized Rhizos Presence of Rec Recent Iron Red Thin Muck Surfa Other (Explain ir	2) prates (B13) le Odor (C1) spheres along Lividuced Iron (C4) fuction in Tilled Sc ce (C7) Remarks)	ing Roots (C3	Seconda Wati Sedi Drift Drait Cray Cray Satur Shali	ery Indicators (2 or more required er Marks (B1) (Riverine) iment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery ow Aquifard (D3)
DROLOGY tland Hydroic nary Indicator Surface Wate High Water T Saturation (A Water Marks Sediment Deposits Surface Soil C Inundation Vis Water-Stained Observation Ince Water Preser Table Preser des capillary f	ogy Indicators: s (minimum of one er (A1) able (A2) 3) (B1) (Nonriverine) cosits (B2) (Nonriverine) cracks (B6) sible on Aerial Imag I Leaves (B9) is: sent? Yes_ nt? Yes_ frince)	erine) ery (B7) No _; No _;	Salt Crust (B11 Biotic Crust (B11 Aquatic Invertet Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Red Thin Muck Surfa Other (Explain ir Depth (inches): Depth (inches):	2) prates (B13) le Odor (C1) spheres along Livi duced Iron (C4) fuction in Tilled Sc ce (C7) I Remarks)	ing Roots (Ca pils (C6)	Seconda Wate Sedi Drift Drain Cray Satur Shall FAC-	ery Indicators (2 or more required er Marks (B1) (Riverine) iment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery ow Aquitard (D3) Neutral Test (D5)
DROLOGY tland Hydroic nary Indicator Surface Wate High Water T Saturation (A Water Marks Sediment Deposits Surface Soil C Inundation Vis Water-Stained Observation Ince Water Preser Table Preser des capillary f	ogy Indicators: s (minimum of one er (A1) able (A2) 3) (B1) (Nonriverine) cosits (B2) (Nonriverine) cracks (B6) sible on Aerial Imag I Leaves (B9) is: sent? Yes_ nt? Yes_ frince)	erine) ery (B7) No _; No _;	Salt Crust (B11 Biotic Crust (B11 Aquatic Invertet Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Red Thin Muck Surfa Other (Explain ir Depth (inches): Depth (inches):	2) prates (B13) le Odor (C1) spheres along Livi duced Iron (C4) fuction in Tilled Sc ce (C7) I Remarks)	ing Roots (Ca pils (C6)	Seconda Wate Sedi Drift Drain Cray Satur Shall FAC-	ery Indicators (2 or more required er Marks (B1) (Riverine) iment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery ow Aquifard (D3)
DROLOGY Iland Hydrolo nary Indicator Surface Water High Water T Saturation (A Water Marks Sediment Deposits Surface Soil C Inundation Vis Water-Stained Observation Ice Water Preser Table Preser Table Preser ation Present des capillary fribe Recorded	ogy Indicators: s (minimum of one er (A1) able (A2) 3) (B1) (Nonriverine) cosits (B2) (Nonriverine) cracks (B6) sible on Aerial Imag I Leaves (B9) is: sent? Yes_ nt? Yes_ frince)	erine) ery (B7) No _; No _;	Salt Crust (B11 Biotic Crust (B11 Aquatic Invertet Hydrogen Suffid Oxidized Rhizos Presence of Rec Recent Iron Red Thin Muck Surfa Other (Explain ir	2) prates (B13) le Odor (C1) spheres along Livi duced Iron (C4) fuction in Tilled Sc ce (C7) I Remarks)	ing Roots (Ca pils (C6)	Seconda Wate Sedi Drift Drain Cray Satur Shall FAC-	ery Indicators (2 or more required er Marks (B1) (Riverine) iment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery ow Aquitard (D3) Neutral Test (D5)
DROLOGY tland Hydroic nary Indicator Surface Wate High Water T Saturation (A Water Marks Sediment Deposits Surface Soil C Inundation Vis Water-Stained Observation Ince Water Preser Table Preser des capillary f	ogy Indicators: s (minimum of one er (A1) able (A2) 3) (B1) (Nonriverine) cosits (B2) (Nonriverine) cracks (B6) sible on Aerial Imag I Leaves (B9) is: sent? Yes_ nt? Yes_ frince)	erine) ery (B7) No _; No _;	Salt Crust (B11 Biotic Crust (B11 Aquatic Invertet Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Red Thin Muck Surfa Other (Explain ir Depth (inches): Depth (inches):	2) prates (B13) le Odor (C1) spheres along Livi duced Iron (C4) fuction in Tilled Sc ce (C7) I Remarks)	ing Roots (Ca pils (C6)	Seconda Wate Sedi Drift Drain Cray Satur Shall FAC-	ery Indicators (2 or more required er Marks (B1) (Riverine) iment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery ow Aquitard (D3) Neutral Test (D5)

WETLAND DETERMINATION DATA FORM - Arid West Region Project/Site: ChSin Bur Panch City/County: Cartego/Tingo Sampling Date: 2/8//2 Applicant/Owner: Crystal Geyser Roxanc Water Company State: CA Sampling Point: 5P4 Investigator(s): Amer Morales, Zeke Cooley Section, Township, Range: Unincorporated Tingo County Landform (hillslope, terraco, etc.): ______ Local retief (concave, convex, none): _____ Subregion (LRR): Lat 36.315668 Long: -118.02054 Datum: WGS 84 Soil Map Unit Name: 332 Typic Promonaguents, 0-7 percent Slages NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No_____ (If no, explain in Remarks.) Are Vegetation _____. Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ______ No _____ Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes X No_ _ No_X is the Sampled Area Hydric Soil Present? Wetland Hydrology Present? within a Wetland? No. Remarks: VEGETATION – Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: _____ % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species Sapling/Shrub Stratum (Plot size: _____) That Are OBL, FACW, or FAC: 100 (A/B) Prevalence Index worksheet: Total % Cover of: ____ ×1= FACW species ____ x 2 = _ FAC species _____ x 3 = ____ ____ = Total Cover FACU species _____ x 4 = ____ Herb Stratum (Plot size: ____ UPL species ____ 1. Junius Mexidanus ____x5 = ___ 50 Y FACW Column Totals: ______ (A) _____ (B) 2. Distichles spicato 40 Y FACUL 3. Scirpus microgarpus Prevalence Index = 8/A = 4. Xanthum strumanum Hydrophytic Vegetation Indicators: ✓ Dominance Test is >50% Prevalence Index is ≤3.01 ___ Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) _____ = Total Cover Woody Vine Stratum (Plot size: ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. _ = Total Cover Hydrophytic Vegetation % Bare Ground in Herb Stratum ______ % Cover of Biotic Crust _ Present? Remarks:

Profile Description: (Describe Depth Matrix	. to the te	pm needed to doc	ument the	indicato	r or confi	rm the absenc	Sampling Point: SP
(inches) Color (moist)	<u>%</u>	Ke	dox Feature	es		_	
0-3 51/2 3/2	100	Color (moist)	%	_Type1	Loc²	Texture	Remarks Remarks
3-6 54R 3/2	90	25 18 3/6				Soly low	
6-20 1088 4/3	100	45 16 16		<u> </u>	72_	- Serly llag	
			-	- 			
						· 	
Type: C=Concentration, D=Deplydric Soil Indicators: (Applic	etion, RM=	Reduced Matrix, C	S=Covered	or Coate			
- tablato	ible to ali	CIVICS, MINESS OFFIS	rwise note	≥d.)	ound G		zation: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
Histosol (A1) Histic Epipedon (A2)		Sandy Red	lox (S5)				fluck (A9) (LRR C)
Black Histic (A3)		Stripped M	atrix (S6)			2 cm N	luck (A10) (LRR B)
_ Hydrogen Sulfide (A4)		Loamy Muc	Xy Mineral ∪od Moteic	(F1)		Reduc	ed Vertic (F18)
Stratified Layers (A5) (LRR C)	Depleted M	yeu matrix (lafrix (F੨)	(FZ)		Red Pa	rent Material (TF2)
_ 1 cm Muck (A9) (LRR D)		. Redox Dark	C Surface (F	F6)		Other {	Explain in Remarks)
_ Depleted Below Dark Surface	(A11)	Depleted Da	ark Surface	(F7)			
Thick Dark Surface (A12)		Redox Depr	ressions (Fa	8)		antesind ⁶	of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)		Vernal Pool	s (F9)			wettand h	ydrology must be present,
UICYCU WAUK (34)						unless dis	sturbed or problematic.
strictive Laver (if present)-							
strictive Layer (if present):							prostorings.
Type:							p. o-zemeno.
	FRIN	 GE				Hydric Soil F	
Type:	required; c	heck all that apply) Salt Crust (E Biolic Crust Aquatic Inve	311) (B12) rtebrates (E ilfide Odor	(C1)		Hydric Soil F Seconds Wat Sed Drift Drai	resent? Yes NoX ary Indicators (2 or more required) or Marks (B1) (Riverine) iment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Pattems (B10)
Type:	required; c	heck all that apply) Salt Crust (E Biotic Crust Aquatic Inve	311) (B12) rtebrates (E ulfide Odor izospheres	(C1) along Livi	ing Roots	Seconda Seconda Wat Sed Drift Drait (C3) Dry-	Ary Indicators (2 or more required) or Marks (B1) (Riverine) iment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Pattems (B10) Season Water Table (C2)
Type:	required; c	theck all that apply) Salt Crust (E Biotic Crust Aquatic Inve Hydrogen So Oxidized Rhi	811) (B12) rtebrates (E Ilfide Odor izospheres Reduced In	(C1) along Livi on (C4)		Seconda Seconda Wat Sed Drift Drait (C3) Cray	resent? Yes _ NoX ary Indicators (2 or more required) or Marks (B1) (Riverine) iment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Pattems (B10) Season Water Table (C2) fish Burrows (C8)
Type:	required; c	theck all that apply) Salt Crust (E Biotic Crust Aquatic Inve Hydrogen So Oxidized Rhi Presence of Recent Iron I	311) (B12) rtebrates (E ilfide Odor izospheres Reduced In Reduction in	(C1) along Livi on (C4) n Tilled Sc		Seconda Seconda Wat Sed Drift Drait (C3) Cray Satu	Ary Indicators (2 or more required) or Marks (B1) (Riverine) iment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Pattems (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9)
Type:	required; c	heck all that apply) Salt Crust (E Biotic Crust Aquatic Inve Hydrogen Sc Oxidized Rhi Presence of Recent Iron I	811) (B12) rtebrates (B ilfide Odor izospheres Reduced In Reduction in	(C1) along Livi on (C4) n Tilled So		Seconda Seconda Wat Sed Drift Drait (C3) Cray Satu Shall	Present? Yes NoX Present? YesX Present. YesX Present. YesX Present. YesX Present. YesX Present. YesX Present. YesX Presen
Type:	required; c	theck all that apply) Salt Crust (E Biotic Crust Aquatic Inve Hydrogen So Oxidized Rhi Presence of Recent Iron I	811) (B12) rtebrates (B ilfide Odor izospheres Reduced In Reduction in	(C1) along Livi on (C4) n Tilled So		Seconda Seconda Wat Sed Drift Drait (C3) Cray Satu Shall	Ary Indicators (2 or more required) or Marks (B1) (Riverine) iment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Pattems (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9)
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Type:	reguired; c erine)) ery (B7)	heck all that apply) Salt Crust (E Biotic Crust Aquatic Inve Hydrogen St Oxidized Rhi Presence of Recent Iron I Thin Muck St Other (Explain	811) (B12) (B12) (B16) ((C1) along Livi on (C4) n Tilled So iks)		Seconda Seconda Wat Sed Drift Drait (C3) Cray Satu Shall	Present? Yes NoX Present? YesX Present. YesX Present. YesX Present. YesX Present. YesX Present. YesX Present. YesX Presen
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Landform (hillslope, terrace, etc.):		<u> </u>	Local relief (concav	State: Sampling Point: SP 5 Range: Tay 0
Subregion (LRR):		Lat: <u>3(</u>	. 315176	Long: -118. 07.5207 Datum: WG
wie chimates managie conditious of	i the site typical fo	or this time of ve	ar? Yes ⊁′ No	Of the complete to the control of the
Are vegetation, Soir,	or Hydrology	significantly	disturbed? Ar	re "Normal Circumetanone" emanue a la l
	i i iyolology	naturally pro	blematic? (If	needed, explain any answers in Remarks)
SUMMARY OF FINDINGS - A	Attach site m	ap showing	sampling point	t locations, transects, important features,
Hydrophytic Vegetation Present?	ν κ	No		mportant readures,
Hydric Soli Present?	Yes	No	is the Sample	ed Area
Wetland Hydrology Present?	Yes x	. No	Within a Wet	land? YesNoX
Remarks:			·	
/PAPPA MAN				
EGETATION - Use scientific	names of pl	ants.		
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
1. Salix berigata		٠ 64	ا تعدد ا	I MULLIDER OF DOMINANT Species
2. Fraxinus Velutina		15	Y FACE	That Are OBL, FACW, or FAC: 4
3			1300	Total Number of Dominant
l				. Species Across Ali Strata: (E
				Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:				That Are OBL, FACW, or FAC: 668 (A
- Salix exigua			Y FACW	
Salix laevigata			Y FACW	
				OBL species x 1 =
·				FACW species x 2 =
·		=		FAC species x 3 =
erb Stratum (Plot size:	_ ر	•		FACU species x 4 =
Ambrosia dumosa			Y FACU	UPL species x 5 =
- Inlacha tragas			Y FAC VI	Column Totals: (A) (E
				Prevalence Index = B/A =
	· <u> </u>	- 		Hydrophytic Vegetation Indicators:
		- ;		∠ Dominance Test is >50%
		- 	 i	Prevalence Index is ≤3.01
				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				Problematic Hydrophytic Vegetation (Explain)
oody Vine Stratum (Plot size:		<u>13</u> = 7	otal Cover	
······································			į	¹ indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
		= T		Hydrophytic
Bare Ground in Herb Stratum	% Cover	F of Biotic Crust		Vegetation
marks:		51050 0105(Present? Yes X No No

Arid West - Version 2.0

Profile Description: (Describe to the dep	th needed to dominate the	- <u>-</u> -	Sampling Point: SP
Depth Matrix	an neeved to document the indicate	or confirm the absence	of indicators.)
(inches) Color (moist) %	Redox Features Color (moist) % Type	<u> </u>	
	Color (moist) % Type	Loc ² Texture	Remarks
			<u> </u>
Q5-1 7.5 YR 3/8 100		lane C. I	Some Juyen
1-3 5YR 4/4 100			Some Juyen
3-6 254 25/1 100		- loany Sund	Cor Strature
1-14 1/251		- — <u>- </u>	Debrit Inger, little Des
6-18 104R 5/2 100		- <u></u> -	Organie Jayer
Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, CS=Covered or Coal	ed Sand Grains 21	
Hydric Soil Indicators: (Applicable to all I	RRs, unless otherwise noted.)	indicators	ation: PL=Pore Lining, M=Matrix.
Histosol (A1)	Sandy Redox (S5)		or Problematic Hydric Soils ³ :
Histic Epipedon (A2)	Stripped Matrix (S6)	1 cm M	uck (A9) (LRR C)
Black Histic (A3)	Loamy Mucky Mineral (F1)	2 cm Mi	uck (A10) (LRR B)
Hydrogen Sulfide (A4)	Loarny Gleyed Matrix (F2)	reduce	d Vertic (F18) rent Material (TF2)
_ Stratified Layers (A5) (LRR C)	 Depleted Matrix (F3) 	Other (ent matenar (1F2) Explain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)	>== (E	Apiani in Nemarks)
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)		
Thick Dark Surface (A12) Sandy Mucky Mineral (S1)	Redox Depressions (F8)	³ Indicators of	hydrophytic vegetation and
_ Sandy Mucky Mineral (S1) _ Sandy Gleyed Matrix (S4)	Vernal Pools (F9)	wetland h	drology must be present,
estrictive Layer (if present):		unless dist	urbed or problematic.
Type:	· .		
		1	
		· 1	
Depth (inches):emarks:		Hydric Soil P	resent? Yes No X
		Hydric Soil P	resent? Yes No X
emarks:		Hydric Soil P	resent? Yes No X
DROLOGY		Hydric Soil P	resent? Yes No X
PROLOGY etiand Hydrology Indicators:			
PROLOGY etfand Hydrology Indicators: mary Indicators (minimum of one required; c	heck all that apply)	Seconda	ry Indicators (2 or more required)
PROLOGY etfand Hydrology Indicators: mary Indicators (minimum of one required; c Surface Water (A1)	heck all that apply) Salt Crust (B11)	Seconda .& Wate	ry Indicators (2 or more required) er Marks (B1) (Riverine)
PROLOGY Etland Hydrology Indicators: mary Indicators (minimum of one required; c Surface Water (A1) High Water Table (A2)	heck all that apply) Salt Crust (B11) Biolic Crust (B12)	Seconda & Wate & Sedi	ry indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine)
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PROLOGY Itland Hydrology Indicators: mary Indicators (minimum of one required: c Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine)	heck all that apply) Salt Crust (B11) Biolic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4)	Seconda .X. Wate X. Sedil X. Drift F. Drain ving Roots (C3) Dry-S	ry Indicators (2 or more required) er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Pattems (B10) Season Water Table (C2)
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Wetland Delineation Data Forms, Garcia & Associates (GANDA), November 2012

/ Project	City/Co	unty:Cartago,	Inyo	Sai	mpling Date	:11/07/20	112	
Applicant/Owner: Crystal Geyser Roxane						State: CA Sampling Point: 001		
	Section	n, Township, Ra	inge:Section 1, T1	9S, R34I	Ξ			
	Local r	elief (concave,	convex, none):flat		S	lope (%):()		
Lat:36.3	313023		Long:-118.02475	55	 Da	tum:WGS	84	
tified sub	stratum	n, 0-5% slopes	s NWI cla	assification	n:n/a			
				n in Rema	ırks.)			
significantly	disturbe	ed? Are	"Normal Circumstan	ces" prese	ent? Yes	No	\bigcirc	
			eeded. explain anv a	nswers in	Remarks.)			
						eatures	etc	
	Jamp	mig point it		, , , , , , , , , , , , , , , , , , , ,	Portaint	- Catal Co,		
lo 🔘								
\sim		_						
		within a Wetla	nd? Yes	0	No 💿			
Absolute			Dominance Test	workshe	et:			
% Cover	Specie	es? Status				1	(A)	
			-	·	٦٠.	1	(//)	
		 -				1	(B)	
			-			1	(-)	
er: %						00.0 %	(A/B)	
			Bravalance Indo	, worksh				
- ——			_			ply by:		
- ——					x 1 =		-	
			1		x 2 =	160		
			FAC species		x 3 =	0		
r: %		<u> </u>	FACU species		x 4 =	0		
			UPL species	10	x 5 =	50		
		FACW	Column Totals:	100	(A)	220	(B)	
			Prevalence	Index = E	3/A =	2.20		
	No	OBL				2.20		
								
- ——			× Prevalence Ir	ndex is ≤3	.0 ¹			
							ng	
-		<u></u>			•	,		
r: 100%			- Problematic F	Hyaropnyt	ic vegetatio	n (Expiain	1)	
			¹ Indicators of hyd	ric soil ar	nd wetland I	ovdrology r	must	
			be present.	110 3011 a1	ia wellana i	lydrology i	iiust	
r: %			Hydrophytic					
r of Biotic C	Crust	0 %		Yes 🕡) No	\circ		
				0	,			
	Lat:36.3 stified substified subst	Section Local I Local	Section, Township, Ra Local relief (concave, Lat:36.313023 Itified substratum, 0-5% slopes s time of year? Yes No (significantly disturbed? Are naturally problematic? (If no showing sampling point letter within a Wetland hydrology. Absolute	Section, Township, Range: Section 1, T19 Local relief (concave, convex, none): flat Lat: 36.313023 Long: -118.02475 tified substratum, 0-5% slopes NWI class time of year? Yes No (If no, explain significantly disturbed? Are "Normal Circumstant naturally problematic? (If needed, explain any a showing sampling point locations, transe of the image of	State:CA Sar Section, Township, Range:Section 1, T19S, R34F Local relief (concave, convex, none):flat Lat:36.313023 Long:-118.024755 tiffied substratum, 0-5% slopes NWI classification is time of year? Yes No (If no, explain in Remaisignificantly disturbed? Are "Normal Circumstances" presentaturally problematic? (If needed, explain any answers in showing sampling point locations, transects, important landicator showing sampling point locations, transects, important landicator showing sampling point locations, transects, important landicator showing sampling point locations, transects, important showing showing sampling point locations, transects, important showing showing sampling point locations, transects, important showing showin	State:CA Sampling Point Section, Township, Range:Section 1, T19S, R34E Local relief (concave, convex, none): flat S Lat:36.313023 Long:-118.024755 Da tiffied substratum, 0-5% slopes NWI classification:n/a stime of year? Yes No (If no, explain in Remarks.) significantly disturbed? Are "Normal Circumstances" present? Yes (inaturally problematic? (If needed, explain any answers in Remarks.) showing sampling point locations, transects, important for inaturally problematic? (If needed, explain any answers in Remarks.) showing sampling point locations, transects, important for inaturally problematic? (If needed, explain any answers in Remarks.) showing sampling point locations, transects, important for inaturally problematic? (If needed, explain any answers in Remarks.) showing sampling point locations, transects, important for inaturally problematic? (If needed, explain any answers in Remarks.) showing sampling point locations, transects, important for inaturally problematic species. That Are OBL, FACW, or FAC: Total Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species That Are OBL, FACW, or FAC: Total % Cover of: Prevalence Index worksheet: Total % Cover of: Multi OBL species 10 x 1 = FACW species x 3 = FAC species x 3 = FAC species x 4 = UPL species 10 x 5 = Column Totals: 100 (A) Prevalence Index is ≤3.0¹ Morphological Adaptations¹ (Provic data in Remarks or on a separa problematic Hydrophytic Vegetation Indicators of hydric soil and wetland the present. Hydrophytic Vegetation Indicators of hydric soil and wetland the present.	State:CA Sampling Point()()() Section, Township, Range:Section 1, T19S, R34E Local relief (concave, convex, none):flat Slope (%):0) Lat:36.313023 Long:-118.024755 Datum: WGS diffied substratum, 0-5% slopes NWI classification; A stime of year? Yes No (Iff no, explain in Remarks.) significantly disturbed? Are "Normal Circumstances" present? Yes No naturally problematic? (Iff needed, explain any answers in Remarks.) showing sampling point locations, transects, important features, in the sampled Area within a Wetland? Yes No (•) Absolute Dominant Indicator % Cover Species? Status Absolute Dominant Indicator % Cover Species	

SOIL Sampling Point: 001

	cription: (Describe	to the depth			or confirm	n the absence of	indicators.)
Depth	Matrix (maint)	0/		K Features	1002	Toyturo 3	Domarka
(inches)	Color (moist)	%	Color (moist)	%Type ¹	Loc ²	Texture ³	Remarks
0-1	-						part. decomposed thatch
1-12	7.5YR 3/2	100				Sandy loam	coarse, gravelly
-	-						
							-
							_
1	Concentration, D=Dep			² Location: PL=Pore	-		
					, Clay Loa		m, Silt Loam, Silt, Loamy Sand, Sand.
Hydric Soil	Indicators: (Applicabl	e to all LKKs	, unless otherwise Sandy Redo	•			Problematic Hydric Soils: ck (A9) (LRR C)
	pipedon (A2)		Stripped Ma	,			ck (A10) (LRR B)
	listic (A3)			ky Mineral (F1)			Vertic (F18)
	en Sulfide (A4)			red Matrix (F2)			ent Material (TF2)
Stratifie	ed Layers (A5) (LRR (>)	Depleted M	atrix (F3)		Other (E)	rplain in Remarks)
	uck (A9) (LRR D)		Redox Dark	Surface (F6)			
	ed Below Dark Surface	e (A11)		ark Surface (F7)			
	Park Surface (A12)			ressions (F8)		41 1' 1 6	budos aboth consiste the const
	Mucky Mineral (S1) Gleyed Matrix (S4)		Vernal Pool	s (F9)			hydrophytic vegetation and drology must be present.
	Layer (if present):					Wettariding	raiology must be present.
Type:	Layer (ii present).						
Depth (ir	ochos):					Hydric Soil Pr	resent? Yes No 💿
Remarks:						Tiyunc 30ii Ti	esent: res (NO (
rtomano.							
HYDROLO)GY						
Wetland Hy	drology Indicators:					Seconda	ary Indicators (2 or more required)
Primary Indi	icators (any one indic	ator is sufficie	ent)			☐ Wat	er Marks (B1) (Riverine)
	Water (A1)		Salt Crust	(B11)		— □ Sed	iment Deposits (B2) (Riverine)
High W	ater Table (A2)		Biotic Crus	'			Deposits (B3) (Riverine)
	ion (A3)			vertebrates (B13)			nage Patterns (B10)
Water N	Marks (B1) (Nonriver i	ne)	Hydrogen	Sulfide Odor (C1)		Dry-	Season Water Table (C2)
Sedime	ent Deposits (B2) (Noi	nriverine)	Oxidized F	Rhizospheres along I	Living Ro	ots (C3) Thir	Muck Surface (C7)
Drift De	posits (B3) (Nonriver	rine)	Presence	of Reduced Iron (C4	.)	Cray	yfish Burrows (C8)
Surface	Soil Cracks (B6)		Recent Iro	n Reduction in Plow	ed Soils (C6) Satu	uration Visible on Aerial Imagery (C9)
Inundat	ion Visible on Aerial I	magery (B7)	Other (Exp	olain in Remarks)		Sha	llow Aquitard (D3)
Water-S	Stained Leaves (B9)					FAC	C-Neutral Test (D5)
Field Obse	rvations:						
Surface Wa	ter Present? Y	es O No	Depth (in	ches):			
Water Table	Present? Y	es No	Depth (in	ches):			
Saturation F	Present? Y	es No	Depth (in	ches):			
	pillary fringe)					land Hydrology F	Present? Yes O No No
Describe Re	ecorded Data (stream	gauge, moni	toring well, aerial	onotos, previous insp	pections),	ır available:	
Remarks:N	o indicators of wetl	and hydrolo	ogy were observ	ed.			
US Army Corp	os of Engineers						

Project/Site: Cabin Bar Ranch - Water Bottling Fa	acility Pr	oject	City/Coun	ty:Cartago,	Inyo	Sar	mpling Date:	11/07/20	12
Applicant/Owner: Crystal Geyser Roxane					State:CA	Sar	npling Point:	002	
Investigator(s): M. Bibbo, E. Shepard			Section,	Γownship, Ra	ange:Section 1, T19	S, R34E	E		
Landform (hillslope, terrace, etc.): valley bottom			Local reli	ef (concave,	convex, none):flat		SI	ope (%):0	
Subregion (LRR):D - Interior Deserts	L	at:36.3	313246		Long:-118.02496	8	 Dat	um:WGS	84
Soil Map Unit Name: m.u. 145, Cajon Loamy sand	d, stratifie	ed sub	stratum, (0-5% slope	s NWI cla	ssification	n:n/a		
Are climatic / hydrologic conditions on the site typical	-					in Rema	rks.)		
Are Vegetation Soil or Hydrology			disturbed		"Normal Circumstanc	es" prese	ent? Yes	No	\circ
Are Vegetation Soil or Hydrology	•	•	oblematic?		eeded, explain any ar	•	-	/	
SUMMARY OF FINDINGS - Attach site n								naturos	oto
SOMMAN OF THADINGS - Attach site i	nap sno	wing	Sampin	ng point i	ocations, transe	———	portant it		eic.
Hydrophytic Vegetation Present? Yes	No (
Hydric Soil Present? Yes	No (the Sample		_			
Wetland Hydrology Present? Yes Remarks: Upland point taken to test for hydric	No (wi	thin a Wetla	nd? Yes	<u>O</u>	No 💿		
	301131								
VEGETATION									
VEGETATION	Abs	solute	Dominan	t Indicator	Dominance Test v	workshe	et:		
Tree Stratum (Use scientific names.) 1.		Cover	Species		Number of Domina That Are OBL, FAC	ant Specie	es	1	(A)
2. 3.				_	Total Number of Description Species Across All			1	(B)
4.					- '			1	,
	l Cover:	%			Percent of Domina That Are OBL, FAC			00.0 %	(A/B)
Sapling/Shrub Stratum 1.Ericameria naseosa		1	No	UPL	Prevalence Index	workshe	et.		
2.		1	110	- OFL	Total % Cover			oly by:	
3.			-		OBL species	95	x 1 =	95	
4.					FACW species	4	x 2 =	8	
5.					FAC species		x 3 =	0	
	Cover:	1 %			FACU species		x 4 =	0	
Herb Stratum		o =	* 7		UPL species	1	x 5 =	5	
1. Juncus balticus		95	Yes	OBL	Column Totals:	100	(A)	108	(B)
² ·Distichlis spicata 3.		4	No	FACW	Prevalence In	ndex = B	/A =	1.08	
4.					Hydrophytic Vege	etation In	dicators:	1.00	
5.					➤ Dominance Te	est is >50	%		
6.					× Prevalence Inc	dex is ≤3.	.0 ¹		
7.			-		Morphological				ng
8.			-				on a separat	,	`
	Cover:	99 %			Problematic H	ydrophyti	c Vegetation	ı' (Explain)
Woody Vine Stratum					¹ Indicators of hydr	ic soil an	d wetland h	vdrology r	nuet
1				_	be present.	ic soil all	u wellanu n	yurology i	iiusi
2	Cover:	%		_	Hydrophytic				
					Vegetation			_	
	Cover of I			<u>%</u>	Present?	Yes			
Remarks: Baltic rush meadow. Presence of hy	drophytic	c veg 1	may be a	relict of wl	nen the area was flo	od irrig	ated for ca	ttle pastu	re.

SOIL Sampling Point: 002

Depth	Matrix	0/		Redox Features		Taveterna 3	Describe
inches)	Color (moist)	%	Color (moist) % <u>Ty</u>	/pe ¹ Loc ²	Texture ³	Remarks
0-1							part. decomposed thatch
1-16	7.5YR 3/2					sandy loam	coarse, gravelley
oil Texture rdric Soil I Histoso Histic E Black H Hydroge Stratifie 1 cm M Deplete Thick D Sandy I	Indicators: (Applicab	Sandy Clay le to all LR	, Loam, Sandy Rs, unless other Sandy Strippe Loamy Loamy Deplet Redox Deplet Redox	Clay Loam, Sandy	Loam, Clay Lo	Indicators for 1 cm M 2 cm M Reduce Red Pa Other (el, M=Matrix. pam, Silt Loam, Silt, Loamy Sand, Sa por Problematic Hydric Soils: luck (A9) (LRR C) luck (A10) (LRR B) ed Vertic (F18) arent Material (TF2) Explain in Remarks) of hydrophytic vegetation and hydrology must be present.
estrictive	Layer (if present):						
estrictive Type:	Layer (if present):					Hada o "	Dunnanta Var C
Type: Depth (in	Layer (if present):			-		Hydric Soil	Present? Yes No 📵
rimary Indi Surface High Water M Sedime Drift De Surface	DGY rdrology Indicators: icators (any one indicators and indicators) Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriversity Deposits (B2) (Nonriversity Deposits (B3) (Nonriversity Deposits (B3) (Nonriversity Deposits (B6))	ine) nriverine) rine)	Salt C Biotic Aqua Hydro Oxidi: Prese Rece	Crust (B11) c Crust (B12) tic Invertebrates (Bogen Sulfide Odor (context) and the context of Reduced Iron to Reduction in	C1) along Living R on (C4) n Plowed Soils	Secon W Se Se Se Se Se Se Se	dary Indicators (2 or more required) (ater Marks (B1) (Riverine) (ediment Deposits (B2) (Riverine) (rift Deposits (B3) (Riverine) (rainage Patterns (B10) (ry-Season Water Table (C2) (nin Muck Surface (C7) (rayfish Burrows (C8) (aturation Visible on Aerial Imagery (C
rimary Indi Surface High W Saturati Water M Sedime Drift De Surface Inundat	DGY Inches): OGY Inches): OGY Inches): OGY Inches): Inches	ine) nriverine) rine)	Salt C Biotic Aqua Hydro Oxidi: Prese Rece	c Crust (B12) tic Invertebrates (Bogen Sulfide Odor (Careed Rhizospheres and Careed Ironal Communication (B12)	C1) along Living R on (C4) n Plowed Soils	Secon W Secon Di Di Di Otts (C3) Th C1 C1 C6 Secon St St St	dary Indicators (2 or more required) fater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) nin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (Canallow Aquitard (D3)
rimary Indi Surface High W Saturati Water M Surface Inundat Water-S	DGY Inches): I	ine) nriverine) rine)	Salt C Biotic Aqua Hydro Oxidi: Prese Rece	Crust (B12) tic Invertebrates (Bogen Sulfide Odor (context) sed Rhizospheres are the of Reduced Iron Reduction in	C1) along Living R on (C4) n Plowed Soils	Secon W Secon Di Di Di Otts (C3) Th C1 C1 C6 Secon St St St	dary Indicators (2 or more required) (ater Marks (B1) (Riverine) (ediment Deposits (B2) (Riverine) (rift Deposits (B3) (Riverine) (rainage Patterns (B10) (ry-Season Water Table (C2) (nin Muck Surface (C7) (rayfish Burrows (C8) (aturation Visible on Aerial Imagery (C
rimary Indi Saturati Water M Surface High W Saturati Water M Surface Inundat Water-S eld Obser	Aches): OGY Adrology Indicators: icators (any one indicators): Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonrivers): Ant Deposits (B2) (Nonrivers): Soil Cracks (B6) Acion Visible on Aerial Instained Leaves (B9) Invations:	ine) nriverine) rine) magery (B	Salt C Biotic Aqua Hydro Oxidi: Prese Rece Other	tic Invertebrates (Bit Invertebr	C1) along Living R on (C4) n Plowed Soils	Secon W Secon Di Di Di Otts (C3) Th C1 C1 C6 Secon St St St	dary Indicators (2 or more required) fater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) rin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (Catallow Aquitard (D3)
rimary Indi Saturati Water N Sedime Drift De Surface Inundat Water-S eld Obser	Aches): OGY Inches): OGY Inches): OGY Inches): In	ine) nriverine) rine) magery (B	Salt C Biotic Aqua Hydro Oxidi: Prese Rece Other	tic Invertebrates (Bogen Sulfide Odor (Control of Sulfide Odor (Control of Sulfide Odor (Control of Sulfide Odor (Control of Sulfide Odor of S	C1) along Living R on (C4) n Plowed Soils	Secon W Secon Di Di Di Otts (C3) Th C1 C1 C6 Secon St St St	dary Indicators (2 or more required) fater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) nin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (Capallow Aquitard (D3)
rimary Indi Saturati Water N Sedime Drift De Surface Inundat Water-S Geld Observator Table Saturation Fincludes ca	Aches): OGY Inches): OGY Inches): OGY Inches): OGY Inches): Inches)	ine) nriverine) rine) magery (B es es es es	Salt C Biotic Aqua Hydro Oxidi: Prese Rece Other No Dept No Dept No Dept	c Crust (B12) tic Invertebrates (Bit of the Invertebrates (Bit of	C1) along Living Rion (C4) n Plowed Soils ks) We	Secon W Secon Decorate C3 The cools C6 Secon The cools C6 Secon Secon F/	dary Indicators (2 or more required) later Marks (B1) (Riverine) lediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) laturation Visible on Aerial Imagery (Ca) hallow Aquitard (D3) AC-Neutral Test (D5)
Pestrictive Type: Depth (in Remarks: YDROLC Vetland Hy Primary Indi Surface High W. Saturati Water N Sedime Drift De Surface Inundat Water-S Field Obset Surface Water Table Saturation Fincludes ca	DGY Inches): I	ine) nriverine) rine) magery (B es es es es	Salt C Biotic Aqua Hydro Oxidi: Prese Rece Other No Dept No Dept No Dept	c Crust (B12) tic Invertebrates (Bit of the Invertebrates (Bit of	C1) along Living Rion (C4) n Plowed Soils ks)	Secon W Secon Decorate C3 The cools C6 Secon The cools C6 Secon Secon F/	dary Indicators (2 or more required) later Marks (B1) (Riverine) lediment Deposits (B2) (Riverine) lediment Deposits (B3) (Riverine) lediment Deposits (B10) lediment Deposits (B2) (Riverine) lediment Deposits (B2) (Riverin

roject/Site: Cabin Bar Ranch -Water Bottling Facility	Project	City/Ct	Cartago,	Inyo	Sai	npling Date	11/0//20	12
pplicant/Owner: Crystal Geyser Roxane				State: CA	Sar	npling Point	::003	
nvestigator(s):M. Bibbo, E. Shepard		Section	n, Township, Ra	ange:Section 1, T1	9S, R34I	Ξ		
andform (hillslope, terrace, etc.): valley bottom		Local	relief (concave,	convex, none):flat		S	lope (%):()	
ubregion (LRR):D - Interior Deserts	Lat:36.3	313603	3	Long:-118.02524	46	Da	tum:WGS	34
oil Map Unit Name: m.u. 145, Cajon Loamy sand, stra	ified sub	stratun	n, 0-5% slope	s NWI cl	assificatio	n:n/a		
re climatic / hydrologic conditions on the site typical for this	time of ye	ear? Ye	es (•) No ((If no, explai	n in Rema	rks.)		
re Vegetation Soil or Hydrology s	ignificantly	disturb	ed? Are	"Normal Circumstan	ces" prese	ent? Yes	No (\circ
	aturally pro			eeded, explain any a	answers in	Remarks.)		
SUMMARY OF FINDINGS - Attach site map s							eatures,	etc
Hydrophytic Vegetation Present? Yes 🕟 No	o ()							
, , , ,	o		Is the Sample	d Area				
Wetland Hydrology Present? Yes No	o		within a Wetla			No 💿		
Remarks:Point taken to test for hydric soils.								
/EGETATION								
	Absolute		nant Indicator	Dominance Test	workshe	et:		
Tree Stratum (Use scientific names.) 1.	% Cover	Speci	es? Status	Number of Domin			2 ((A)
2				Total Number of I	Dominant			
3				Species Across A	II Strata:		2 (B)
4				Percent of Domin	ant Specie	es		
Sapling/Shrub Stratum Total Cover	r: %			That Are OBL, FA	ACW, or FA	AC: 10	00.0 %	A/B)
1.				Prevalence Inde	x workshe	eet:		
2.		11		Total % Cove	er of:	Multi	ply by:	
3.		"		OBL species	80	x 1 =	80	
4.				FACW species	20	x 2 =	40	
5				FAC species		x 3 =	0	
Total Cover Herb Stratum	: %			FACU species		x 4 =	0	
1. Juncus balticus	80	Yes	OBL	UPL species		x 5 =	0	(5)
2.Distichlis spicata	$\frac{80}{20}$	Yes	FACW	_ Column Totals:	100	(A)	120	(B)
3.		103		Prevalence	Index = E	/A =	1.20	
4.		-		Hydrophytic Veg	getation Ir	dicators:		
5.				X Dominance T	Test is >50	%		
6.		11		× Prevalence II	ndex is ≤3	.0 ¹		
7.	-			Morphologica		ons¹ (Provid on a separa		ıg
8.		"		- Problematic I		'	,	,
Total Cover	100%			- I Toblematic	Пушорпус	c vegetatio	ii (Explaiii)	
Woody Vine Stratum 1.				¹ Indicators of hyd	dric soil ar	d wetland h	nvdrology m	nust
1				be present.			., a. c. c g ,	
	: %			Hydrophytic				
Total Cover	. /0			Vegetation			_	
Total Cover % Bare Ground in Herb Stratum 0 % % Cover	of Biotic C		0 %	Present?	Yes (No (

SOIL Sampling Point: 003

Depth	Matrix		Redo	x Features			ndicators.)
(inches)	Color (moist)	%	Color (moist)	% Type ¹	Loc ²	Texture ³	Remarks
0-1							part. decomposed thatch
1-16	7.5 YR 3/2	100				sandy loam, coarse	many, fine roots through-out
							profile.
	- ·						prome.
	-						
	<u> </u>						
¹ Type: C=C	Concentration, D=Dep	letion, RM=R	teduced Matrix.	² Location: PL=Pore	 e Lining, R	C=Root Channel, I	M=Matrix.
³ Soil Textur	es: Clay, Silty Clay, S	Sandy Clay, L	₋oam, Sandy Clay	Loam, Sandy Loam	n, Clay Loa	nm, Silty Clay Loan	n, Silt Loam, Silt, Loamy Sand, Sand.
	Indicators: (Applicab	le to all LRRs	, unless otherwise	e noted.)			Problematic Hydric Soils:
Histoso	` '		Sandy Redo	` '			(A9) (LRR C)
	Epipedon (A2)		Stripped M	, ,			(A10) (LRR B)
	Histic (A3)			cky Mineral (F1)			Vertic (F18)
	jen Sulfide (A4) ed Layers (A5) (LRR (•1	Depleted M	yed Matrix (F2)			nt Material (TF2) Dlain in Remarks)
	luck (A9) (LRR D)	•)		k Surface (F6)		Other (Ex	olani in Remarks)
	ed Below Dark Surfac	e (A11)		Park Surface (F7)			
	Dark Surface (A12)	,	1 1 '	ressions (F8)			
	Mucky Mineral (S1)		Vernal Poo			⁴ Indicators of h	ydrophytic vegetation and
Sandy	Gleyed Matrix (S4)					wetland hyd	drology must be present.
Restrictive	Layer (if present):						
Type:							
Depth (ir	nches):					Hydric Soil Pre	esent? Yes No (•)
Remarks:						_	
	2CV						
Wetland Hy	ydrology Indicators:						y Indicators (2 or more required)
Wetland Hy		ator is sufficie	ent)				y Indicators (2 or more required) r Marks (B1) (Riverine)
Wetland Hy Primary Ind Surface	ydrology Indicators: licators (any one indic e Water (A1)	ator is sufficie	Salt Crust			Wate	r Marks (B1) (Riverine) ment Deposits (B2) (Riverine)
Wetland Hy Primary Ind Surface High W	ydrology Indicators: licators (any one indic e Water (A1) /ater Table (A2)	ator is sufficie	Salt Crust	st (B12)		Wate	r Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine)
Wetland Hy Primary Ind Surface High W	ydrology Indicators: licators (any one indic e Water (A1)	ator is sufficie	Salt Crust Biotic Cru Aquatic Ir	st (B12) overtebrates (B13)		Wate	r Marks (B1) (Riverine) ment Deposits (B2) (Riverine)
Wetland Hy Primary Ind Surface High W Saturat	ydrology Indicators: licators (any one indic e Water (A1) /ater Table (A2)		Salt Crust Biotic Cru Aquatic Ir Hydrogen	st (B12) evertebrates (B13) Sulfide Odor (C1)		Wate Sedir Drift Drain Dry-S	r Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Season Water Table (C2)
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Sensitive Plant Survey Report for the CGR Cabin Bar Ranch, Resource Concepts, Inc. June 2012

Sensitive Plant Survey Report for the

CGR Cabin Bar Ranch

Inyo County, California

June 2012



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1.0 INTRODUCTION

The purpose of this Sensitive Plant Survey Report is to review the proposed project area to determine if any plant species listed by the US Fish and Wildlife Service or the State of California as endangered or threatened, any state-listed sensitive plant species, and any vegetation communities of concern to the California Department of Fish and Game are present within the proposed project area.

This Sensitive Plant Report has been prepared by JoAnne Robben, RCI qualified biologist/botanist, as a baseline study to support the Environmental Impact Report and address the biological components of the California Environmental Quality Act (CEQA) requirements.

2.0 PROPOSED ACTION

The proposed action is to obtain approval from Inyo County for construction of a new Crystal Geyser water bottling facility as shown in Figure 1. The proposed project is consistent with the existing zoning as light industrial (Inyo County General Plan).

3.0 PROJECT AREA LOCATION AND DESCRIPTION

The proposed project area is located on Cabin Bar Ranch, which is located adjacent to Highway 395 and immediately south of Cartago, in Inyo County California as shown in Figure 2. Cabin Bar Ranch is a 420-acre parcel. The proposed development and survey area are located on approximately 15 acres in the northern half. The project area is within T19S, R36E NE ¼, NE ¼, Section 1 on parcel APN 33-020-11. The project will require the construction of one new access road (Figure 2). The existing Cabin Bar Ranch Road will be abandoned.

Historically the site was grazed, and seven small, concrete lined ponds previously used for watering cattle are scattered throughout the development area. There is one house located in the northwest corner that will remain.

The proposed project area lies at the south end of the Owens Valley at an elevation of approximately 3,600 feet (1,100 meters) above sea level. Mean annual precipitation is four to six inches. The spring of 2012 received less than average precipitation, with a total of 0.25 inches of rainfall recorded in Haiwee, CA (located approximately 13 miles south) during February through April (WRCC, 2012), compared to the historic average of 2.5 inches for the same site and duration.

There is one intermittent drainage identified as Cartago Creek that conveys snowmelt and surface flow originating in the Sierra Mountains west of Hwy 395 to Owens Lake Playa. No perennial streams, springs, or surface water are present within the project area.



Figure 1. Proposed CGR Cabin Bar Ranch Water Bottling Facility Project, Inyo County, California.

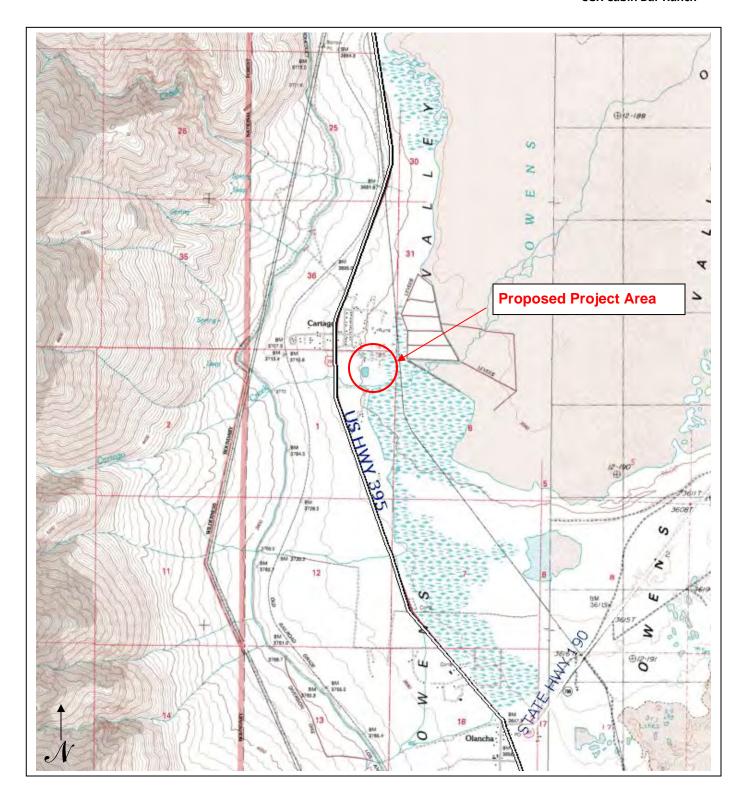


Figure 2. Proposed Project Location.

Soils. The proposed project area is characterized by Typic Psammaquents soils, 0 to 2 percent slopes. This soil consists of alluvium derived from mixed sources and lacustrine deposits. It is classified as very poorly drained with a depth to water table at about 6 to 24 inches. Flooding frequency is occasional. This soil type is correlated with the wet sodic bottom ecological site.

The new proposed access road which extends southwest from the project area toward Highway 395 crosses through Cajon loam sand stratified substratum, 0 to 5 percent slopes and Cajon gravelly loamy sand, 0 to 5 percent slopes. These soils are alluvium derived from granite and are somewhat excessively drained with a depth to water table greater than 80 inches. Flooding frequency is rare to none. These soils are correlated with the gravelly sand 5-7" precipitation zone ecological site.

Vegetation. The survey area is characterized by two predominant vegetation types: rubber rabbitbrush (*Ericameria nauseosus*), occurring on the north two-thirds of the parcel, and red willow (*Salix laevigata*) in the southern third.

Within the northern-most portion of the rubber rabbitbrush community, the shrubs are dense with very few other shrub or herbaceous species present. The center of the project area has greater disturbance and the rabbitbrush is dominates with widely spaced red willow, small stands of coyote willow (*Salix exigua*), and Wood's rose (*Rosa woodsii*) intermixed. Other associated species included saltgrass (*Distichlis spicata*), heliotrope (*Heliotropium curassavicum*), yerba mansa, and buckwheat (*Eriogonum* sp.).

The red willow stands located in the southern portion of the project area are relatively uniform in canopy composition with occasional Fremont cottonwood (*Populus fremontii* spp. *fremontii*) and velvet ash on the edges (*Fraxinus velutina*). The understory herbaceous layer consists predominantly of blue wildrye (*Elymus glaucus*), saltgrass, and foxtail barley (*Hordeum jubatum*).

The proposed access road crosses an upland field dominated by non-native invasive species, including halogeton (*Halogeton glomeratus*) and tumbleweed (*Salsola* sp.)

Due to the below average precipitation during the spring of 2012, very few annual species were observed throughout all community types during the survey.

A complete list of species observed within the project area is included in Appendix B.

4.0 METHODOLOGY

RCI was given a list of special status plant species to survey for by C.G. Roxane's environmental consultants PCR Services Corporation. PCR developed the survey plant list through review of the California Natural Diversity Database and California Native Plant Society *Inventory of Rare and Endangered Plants* for observations of species considered sensitive with a California Rare Plant Rank of 2 or less in the vicinity of the study area (PCR Services Corporation, 2012).

Prior to the field survey, aerial photos and soil survey maps were reviewed to determine the potential habitat types.

Sensitive Plant Survey Report for the CGR Cabin Bar Ranch

On May 29, 2012 a systematic survey of the proposed project piologist/botanist. The entire project area was walked. All plar sufficient to determine if it was a species of concern.	t area was performed by a qualified nt species were identified to a level

Table 1. Special status plant species listed in the California Natural Diversity Database that are known to occur within proximity of the proposed CGR Cabin Bar Ranch Water Bottling Facility Project Area.

Scientific Name	Common Name	Listing Status
Boechera tularensis	Tulare rockcress	CRPR 1B.3
Botrychium ascendens	Upset moonwort	CRPR 2.3
Botrychium crenulatum	Scalloped moonwort	CRPR 2.2
Botrychium manganese	Mingan moonwort	CRPR 2.2
Cordylanthus eremicus	Kern Plateau bird's beak	CRPR 1B.3
Cympoterus ripley var. saniculoides	Sanicle cymopterus	CRPR 1B.2
Erigeron multiceps	Kern River fleabane	CRPR 1B.2
Ivesia campestris	Field ivesia	CRPR 1B.2
Mentzelia tridentata	Creamy blazing star	CRPR 1B.3
Phacelia nashiana	Charlotte's Phacelia	CRPR 1B.2
Plagiobothrys parishii	Parish's popcorn flower	CRPR 1B.1
Sarcobatus baileyii	Bailey's greasewood	CRPR 2.3
Sidalcea covillei	Owen's Valley checkerbloom	SE, CRPR 1B.1
Sidalcea multifida	Cut-leaf checkerbloom	CRPR 2.3
Triglochin palustris	Marsh arrow-grass	CRPR 2.3
Viola pinetorum ssp. grissea	Grey-leaved violet	CRPR 1B.3
Astragalus lentiginosus var. piscinensis	Fish Slough milk-vetch	FT, CRPR List 1B.1
Calochortus excavatus	Inyo County mariposa lily	CRPR List 1B.1
Astragalus argophyllus	Silverleaf milk-vetch	CRPR List 2.2
Ivesia kingii var. kingii	Alkali ivesia	CRPR List 2.2
Phacelia inyoensis	Inyo phacelia	CRPR List 1B.2

Source: PCR 2012.

CNPS 1B2 = rare, threatened, or endangered in California and elsewhere, fairly threatened in California; CNPS 1B3 = rare, threatened, or endangered in California and elsewhere, not very threatened in California;

¹ List complied from the California Natural Diversity Database for the Bartlett, Cirque Peak, Haiwee Pass, Haiwee Reservoirs, Monache Mountain, Olancha, Owens Lake, Templeton, and Vermillion Canyon USGS 7.5' quadrangles.

² California Department of Fish and Game (CDFG) SSC = Species of Special Concern; California Native Plant Society (CNPS) 1B1 = rare, threatened or endangered in California and elsewhere, seriously threatened in California;

5.0 Summary of Findings and Recommended Mitigation Measures

No threatened, endangered or sensitive plant species listed in Table 2 were observed within the project area. The proposed project area does not provide critical habitat for any of the federally listed or state listed threatened or endangered species. The proposed project is not likely to affect any federal or state-listed threatened or endangered species.

There are approximately four (4) acres of red willow thicket community within the project area. The California Department of Fish and Game considers red willow thicket communities as imperiled and designates it as an S3 (S1-S3 are considered to be imperiled, with S1 being the most at risk and S3 the least). Construction of the access road and the bottling facility will impact individual trees within this community. The following measures are recommended to reduce impacts this sensitive community:

- Final location of the access road and bottling facility should be field fit to avoid red willows where practicable and minimize the number of willows impacted; and
- Protective fencing should be placed around the limits of construction to keep construction vehicles from impacting adjacent willows located outside of work limits.

6.0 LITERATURE CITED

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Appendix A Project Area Photographs



Photo 1. Overview to the east of the proposed loading and delivery area dominated by rubber rabbitbrush.



Photo 2. Overview to the north of the proposed loading and delivery area dominated by rubber rabbitbrush. Large cottonwood trees are visible along the property line and will not be removed.



Photo 3. Overview to the south of the proposed bottling plant area dominated by rubber rabbitbrush. Red willow stands are located along the western and southern perimeter.



Photo 4. View to the north of the proposed bottling plant area dominated by rubber rabbitbrush.



Photo 5. View to the north of the proposed access road location. Upland field dominated by common weed species: tumbleweed (*Salsola tragus*) and halogeton (*Halogeton glomeratus*), with occasional scattered rubber rabbitbrush.

Appendix B

Appendix B – Plant List

ANGIOSPERMS (DICOTYLEDONS)		
Scientific Name	Common Name	
Asclepiadaceae	Milkweed Family	
Asclepias fascicularis	narrow –leaf milkweed	
Asteraceae	Sunflower Family	
Ambrosia acanthiacarpa	annual bur-sage	
Ambrosia dumosa	burro weed	
Artemisia tridentata	big sagebrush	
Ericameria nauseosa	rubber rabbitbrush	
Xanthium strumarium	cocklebur	
Boraginaceae	Borage Family	
Heliotropium curassavicum	heliotrope	
Brassicacea	Mustard Family	
Descurainia pinnata	western tansy-mustard	
Descurainia pirinata	western tansy-mustaru	
Chenopodiaceae	Goosefoot Family	
Atriplex canescens	four-wing saltbrush	
Atriplex polycarpa	allscale	
Halogeton glomeratus	saltlover	
Salsola tragus	Russian thistle	
Fabaceae	Legume Family	
Gleditsia triacanthos	honeylocust	
Melilotus sp.	sweetclover	
Geraniacea	Geranium Family	
Erodium cicutarium	red-stemmed filaree	
Oleaceae	Olive Femily	
Fraxinus velutina	Olive Family velvet ash	
riaxinus veiulina	vervet asii	
Polgyonaceae	Buckwheat Family	
Eriogonum sp.	native buckwheat	
Rumex sp.	dock	
Rosaceae	Rose Family	
Rosa woodsii	wild rose	
Salicaceae	Willow Family	
Populus fremontii ssp. fremontii	Freemont's cottonwood	
Salix exigua	sandbar willow	
Salix laevigata	red willow	
Saururanaa	Lizard's Tail Family	
Saururaceae Anomonois colifornica	Lizard's-Tail Family	
Anemopsis californica	yerba mansa	

ANGIOSPERMS (MONOCOTYLEDONS	<u> </u>	
Scientific Name	Common Name	
Ocientine Name	Common Name	
Cyperaceae	Sedge Family	
Scirpus microcarpus	small-fruited bulrush	
·		
Juncaceae	Rush Family	
Juncus mexicanus	Mexican rush	
Poaceae	Grass Family	
Bromus madritensis ssp. rubens	red brome	
Distichlis spicata	saltgrass	
Elymus elymoides	squirreltail	
Elymus glaucus	blue wildrye	
Hordeum jubatum	foxtail barley	

Cabin Bar Ranch Water Bottling Facility Project – Special-status Plant Survey Report, Garcia & Associates (GANDA), October 2012

Cabin Bar Ranch Water Bottling Facility Project Special-status Plant Survey Report

Prepared for:

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October 2012



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1.0 Introduction

This report describes the methods and results of a focused botanical survey for special-status plant species on the Crystal Geyser Roxane (CGR) Cabin Bar Ranch Water Bottling Facility Project (Project). The purpose of the special-status plant survey was to identify occurrences of special-status plants that could be disturbed as a result of proposed project activities including the creation of a new bottling facility. The special status survey was conducted to provide supplemental information in the preparation of the Draft Environmental Impact Report (EIR).

This report combines information gathered from Section 4.C-1 "Biological Resources" of the *Crystal Geyser Roxane Cabin Bar Ranch Water Bottling Facility Project Draft Environmental Impact Report* (Inyo County Planning Department 2012) as well as the *Cabin Bar Ranch Water Bottling Facility Project Sensitive Plant Survey Report* prepared for CGR by Resource Concepts, Inc. in July 2012 (Resource Concepts, Inc. 2012).

1.1 Project Description

The Project proposes a spring water bottling facility and ancillary uses. The water bottling facility would include an approximately 198,500-square foot bottling plant and an approximately 40,000 square-foot storage warehouse. Ancillary uses to the bottling facility would include a fire suppression building, stormwater retention basin, leach mound, fire access road, and parking and truck staging area. To provide adequate access form US highway 395 to the bottling facility, the project would remove the existing access road (i.e. Cabin Bar Ranch Road) and construct a new permanent access road approximately 2,500 feet to the south. The bottling facility would use spring water from three existing production wells located in the central portion of the 420-acre ranch. The proposed project would also draw from a fourth existing well to provide domestic potable water to the water bottling facility.

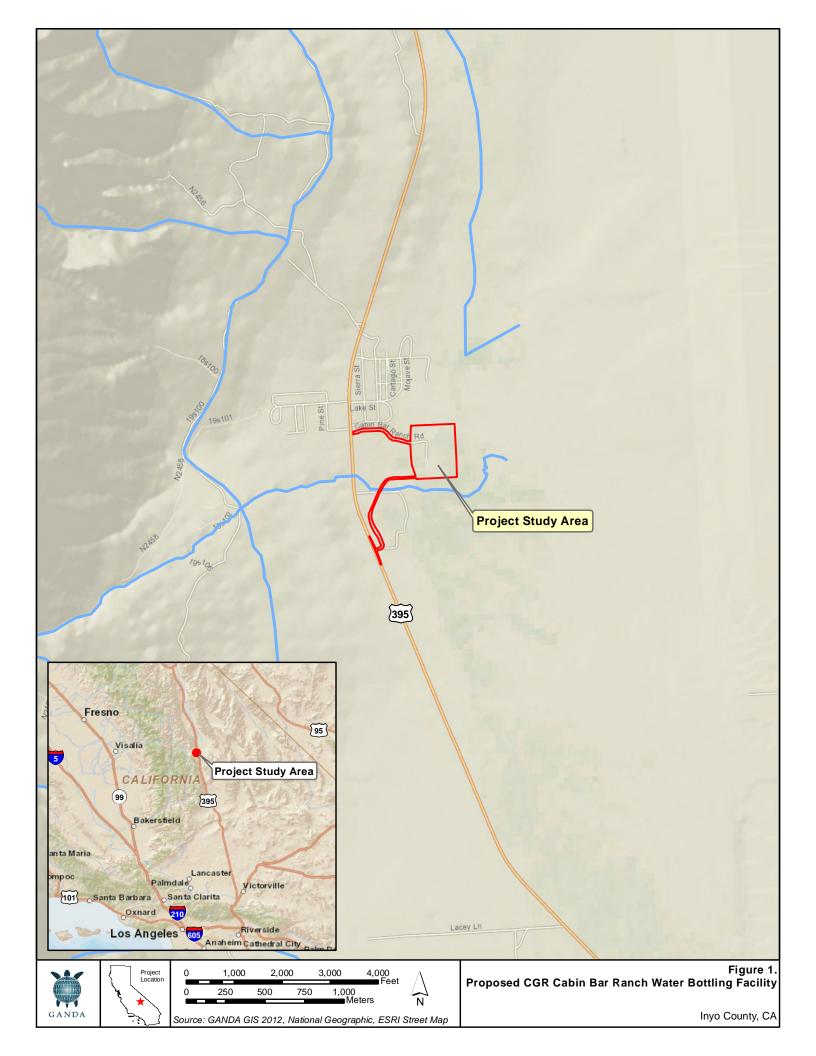
Cabin Bar Ranch, on which the proposed Project would be located is a 420-acre property adjacent to US Highway 395, immediately south of the unincorporated town of Cartago, Inyo County, California (Figure 1). Approximately 28.1 acres of the 420-acre ranch property constitutes the proposed Project site. Of the 28.1 acre Project site, approximately 14.6 acres would be subject to ground disturbance and improvements associated with development of the proposed project. The remainder of the Project site (13.5 acres) would not be developed. For the purposes of this report, the 28.1 acre Project site is referred to as the Project "study area". The 14.6-acre portion of the study area is referred to as the "impact area". These boundaries are shown on Figure 2.

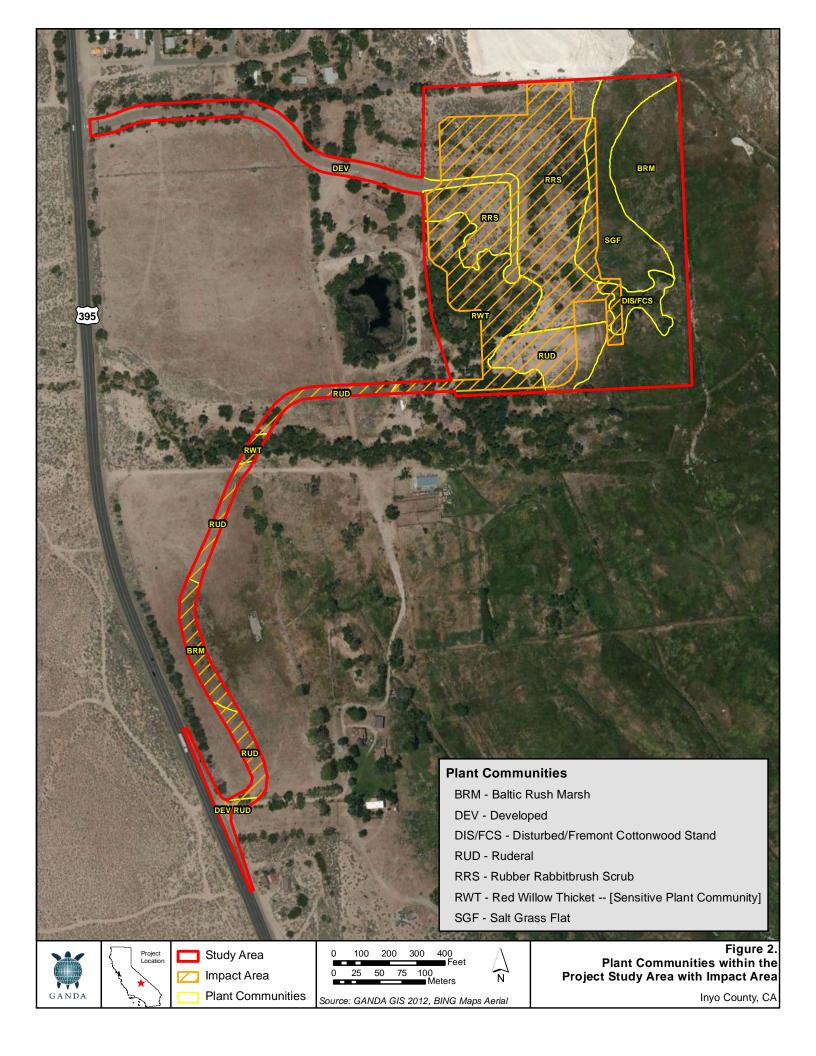
1.2 Regional Setting and Climate

The proposed Project study area lies at the south end of the Owens Valley at an elevation of approximately 3,600 feet (1,100 meters) above sea level. Mean annual precipitation is four to six inches. According to the National Weather Service's (NWS) *California Nevada River Forecast Center Monthly Precipitation Summary*, the 2012 water year (October 1, 2011 to September 30, 2012) received less than

average precipitation, with a total of 3.05 inches of rainfall recorded in Haiwee, CA (located approximately 13 miles south), which is 41% of average annual precipitation for that location (NWS 2012).

Cartago Creek, an intermittent creek fed by winter snowmelt and summer storm events, flows west from the base of the Sierra Nevada Mountains across the Cabin Bar ranch, approximately 1,000 feet south of the northern property line. Nine known springs are located on the ranch, their locations indicated by the presence of a former irrigation ditch that runs parallel to US 395 south of Cartago Creek.





2.0 Methods

2.1 Pre-field Research and Literature Review

Prior to initiating the botanical survey, research was conducted to identify special-status plant species with potential to occur within the study area. For each potentially occurring species, information was compiled on conservation status, distribution, habitat characteristics, blooming time, presence in the vicinity of the Project study area, and characteristics used in field identification.

A plant was considered to be of special-status if it met one or more of the following criteria:

- Federally or state-listed, proposed, or candidate for listing, as rare, threatened or endangered (USFWS 1996a, 2006, 2012; CDFG 2012, CNPS 2012); or
- Special Plant as defined by the California Natural Diversity Database (CNDDB 2012a); or
- Designated by the California Native Plant Society (CNPS) in its online Inventory of Rare and Endangered Plants of California (CNPS 2012).

A species was determined to have potential to occur within the Project study area if its known or expected geographic range includes the Project study area or the vicinity, and if its known or expected habitat is found within or near the Project study area. For this project, the Project vicinity includes the Owens Lake Basin, and the "East of the Sierra Nevada Region" of the Great Basin Province as defined by the geographic subdivision classification scheme utilized by The Jepson Manual 2nd Ed. (Baldwin et. al. 2012).

A preliminary list of potentially occurring special-status plants was derived from several sources. Quadrangle-based searches of the CNPS Inventory (2012) and the CNDDB database (2012b) were used to identify potentially occurring special-status plants. The 7.5' USGS quadrangles containing the Project study area (Olancha), and 9 additional surrounding USGS 7.5' quadrangles (Olancha, Haiwee Pass, Monache Mountain, Owens Lake, Vermillion Canyon, Haiwee Reservoirs, Bartlett, Cirque Peak, Templeton Mountain) were included in the searches. The CNDDB GIS data was queried to identify records of the special-status plants occurring in the vicinity of the study area. Figure 3 shows the CNDDB plant occurrences occurring within five miles of the study area.

Species whose known distribution, habitat, or elevation range precluded their possible occurrence in the vicinity of the Project were not considered further. The thirty-four species that fall into this category can be found in a table in Appendix A with more information on their habitat and elevation range. Table 1 summarizes information on the ten remaining special-status plants determined to have the potential to occur with the Project study area. The table includes information on flowering time, conservation status, habitat preferences, elevation, and known locations in the vicinity of the study area.

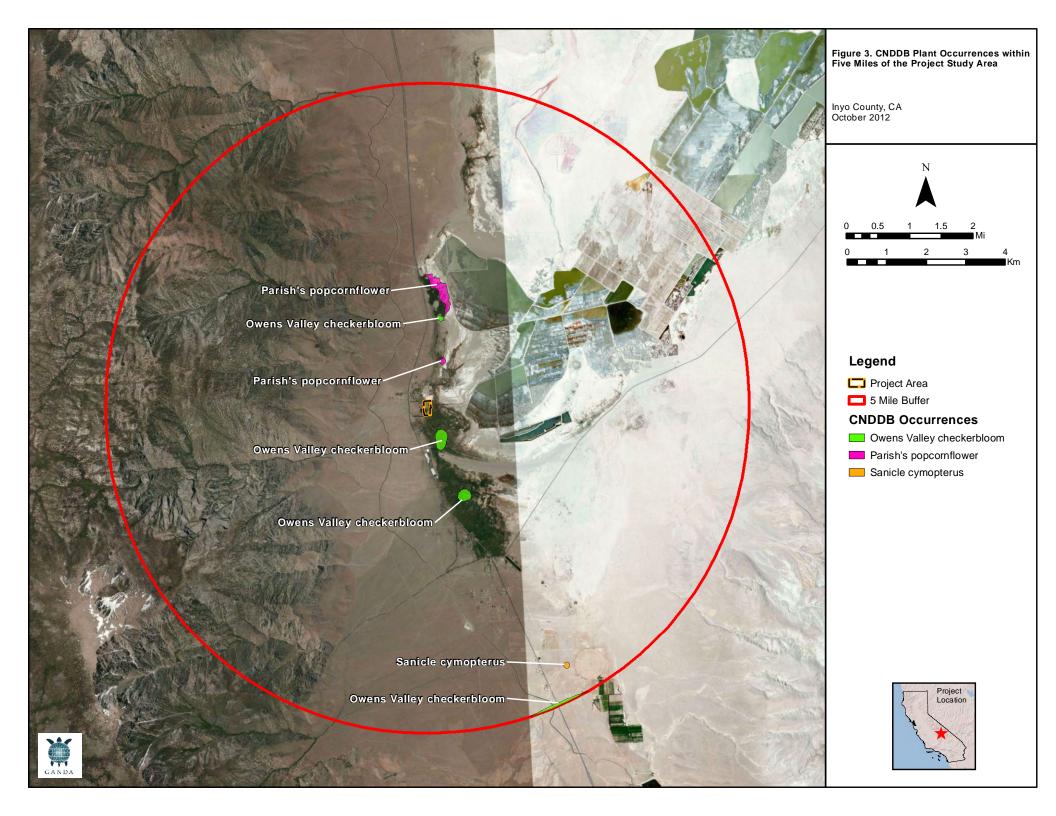


Table 1: Special-status plant species with potential to occur within the CGR Cabin Bar Ranch study area.

Scientific Name	Common Name	Status ¹ (Federal, State, CRPR)	Blooming Period Life Form	Communities	Elevation (ft)	Potential ² to Occur in the Study Area
Astragalus argophyllus	silverleaf milk- vetch	//2.2	May-July Perennial herb	Alkaline and saline meadows and seeps; Playas	4000-7800	Moderate: species can be found with Sidalcea covillei, known to occur in the alkaline meadows just south of the study area; may occur in alkaline meadow habitat within the study area but is unlikely to occur within the impact area.
Calochortus excavatus	Inyo County mariposa lily	//1.1	April-July Perennial bulb	Alkaline soils, mesic sites in Chenopod scrub; Meadows and seeps	3700-6600	Moderate: species can be found with Sidalcea covillei, known to occur in the alkaline meadows just south of the study area; may occur in alkaline meadow habitat within the study area but is unlikely to occur within the impact area.
Deinandra mohavensis	Mojave tarplant	SE//1B.3	May-January Annual herb	Riparian scrub and chaparral.	2112-5280	Low: Species may occur on sand bars within Cartago creek or in salt grass flats within the study area but is unlikely to occur within the impact area.

Scientific Name	Common Name	Status ¹ (Federal, State, CRPR)	Blooming Period Life Form	Communities	Elevation (ft)	Potential ² to Occur in the Study Area
Ivesia kingii var. kingii	Alkali ivesia	//2.3	May-August Perennial herb	Mesic, alkaline clay soils microhabitats within Great Basin scrub; Meadows and seeps; Playas	3900-7029	Moderate: species can be found with Sidalcea covillei, known to occur in the alkaline meadows just south of the study area; may occur in alkaline meadow habitat within the study area but is unlikely to occur within the impact area.
Mentzelia tridentata	creamy blazing star	//1B.3	March-May Annual herb	Rocky, gravelly, sandy substrates in Mojavean desert scrub	2310-3828	Low : desert scrub habitat located within the impact area is highly disturbed.
Oryctes nevadensis	Nevada oryctes	//2.1	April-June annual herb	Sandy soils in Chenopod scrub and Mohavean desert scrub	3300-7500	Low : desert scrub habitat located within the impact area is highly disturbed.
Phacelia inyoensis	Inyo phacelia	//1B.2	April-August Annual herb	Alkaline meadows and seeps	3000- 10,560	Moderate: species can be found with Sidalcea covillei, known to occur in the alkaline meadows just south of the study area; may occur in alkaline meadow habitat within the study area but is unlikely to occur within the impact area.

Scientific Name	Common Name	Status ¹ (Federal, State, CRPR)	Blooming Period Life Form	Communities	Elevation (ft)	Potential ² to Occur in the Study Area
Plagiobothrys parishii	Parish's popcorn- flower	//1B.1	March-June Annual herb	Alkaline, mesic sites in Great Basin scrub and Joshua tree woodland	2475-4620	Moderate: species is known to occur in alkaline meadows approximately one half mile north of the study area; may occur in alkaline meadow habitat within the study area but is unlikely to occur within the impact area.
Sidalcea covillei	Owens Valley checkerbloom	/SE/1B.1	April-June Perennial herb	Alkaline meadows and seeps; mesic sites in Chenopod scrub	3000- 4670	Moderate: Species is known to occur in alkaline meadows just to the south of the study area; may occur in alkaline meadow habitat within the study area but is unlikely to occur within the impact area.
CNPS List 4 species						
Clarkia xantiana ssp. parviflora	Kern Canyon clarkia	//4.3	May-June annual herb	Sandy, sometimes rocky, slopes, (occasionally roadsides) in Chaparral, Cismontane woodland, Great Basin scrub, and Valley and foothill grassland	2100- 10,000	Low : upland scrub habitat located within the impact area is highly disturbed.

Scientific Name	Common Name	Status ¹	Blooming	Communities	Elevation	Potential ² to Occur in the Study
		(Federal,	Period		(ft)	Area
		State, CRPR)	Life Form			

Notes:

U.S. Fish and Wildlife Service designations:

- FE Endangered: Any species in danger of extinction throughout all or a significant portion of its range.
- FT Threatened: Any species likely to become endangered within the foreseeable future.

California Department of Fish and Game designations:

- SE Endangered: Any species in danger of extinction throughout all or a significant portion of its range.
- SR Rare: Any species not currently threatened with extinction, but in such small numbers throughout its range that it may become endangered if its present environment worsens.
- ST Threatened: Any species likely to become endangered within the foreseeable future.

California Rare Plant Rank (CRPR) designations:

- 1A Species presumed extinct in California
- 1B Plants rare, threatened or endangered in California and elsewhere.
- 2 Plants rare, threatened or endangered in California, but more common elsewhere.
- 3 Plants About Which We Need More Information A Review List
- 4 Plants of Limited Distribution A Watch List

California Rare Plant Rank (CRPR) threat categories:

- .1 Seriously endangered in California.
- .2 Fairly endangered in California.
- .3 Not very endangered in California.

Low: Habitat within the study area and/or project vicinity satisfies very few of the species' requirements and/or the range of the species overlaps with the vicinity of the study area, but not with the study area itself. The species' presence within the study area is unlikely.

Moderate: Habitat within the study area and/or study area vicinity meets some of the species' requirements, and known locations for the species are found in the vicinity of the study area. Presence of the species within the study area is moderately likely.

High: Habitat within the study area and/or study area vicinity meets most or all of the species' requirements, and known locations for the species are found within proximity to the study area. Presence of the species within the study area is highly likely.

¹ Conservation status definitions are as follows:

² The likelihood of occurrence (low, moderate, high) is based on habitat requirements (such as, substrate, hydrology, vegetation community, and disturbance factors) and range, applied by using the following general guidelines:

2.2 Reference site visit

A reference site visit was conducted on October 10, 2012 by GANDA botanists, Mark Bibbo and Eliza Shepard to a known CNDDB occurrence of Owen's Valley checkerbloom located on the Cabin Bar Ranch. This occurrence (CNDDB Occ.#37) was first identified by Mary DeDecker in 1988 and studied extensively in 1988 and 1989 as part of field studies in support the Draft Environmental Impact Report for the Anheuser-Busch Companies Los Angeles Brewery Water Supply Study (LADWP 1993). Between 1500 and 2000 plants were observed during that time period in a Baltic rush (*Juncus balticus*) and salt grass (*Distichlis spicata*) dominated meadow identified as "Pasture B" encompassing a 30-acre area approximately 500 yards south of the Project study area. Although the reference site visit was conducted outside of the blooming period for Owen's Valley checkerbloom (April-June), it was anticipated that fruiting stalks of the checkerbloom would still be emergent and identifiable. No checkerbloom fruiting stalks were observed in at this reference population. However, microhabitat conditions required by Owens Valley checkerbloom were observed and recorded and this information was then utilized by the botanists in their subsequent survey of the Project study area and impact area.

2.3 Botanical survey

Following the reference site visit on October 10, 2012, GANDA botanists, Mark Bibbo and Eliza Shepard conducted a botanical survey of the Project study area. The GANDA botanists met with CGR employee, Juan Gutierrez, in the field and were given an on the ground orientation to the Project impact area and study area. The botanical survey followed the guidelines of the California Department of Fish and Game (CDFG 2009), the USFWS (1996b), and the CNPS (2001). The primary survey limitation was that the survey was conducted outside the blooming period of the special-status plant species with potential to occur. Given this fact, special emphasis was given to evaluating habitat condition within the study area to assess potential for occurrence. The entire study area was surveyed on foot with special attention given to the impact area (as depicted in Figure 2). The survey was floristic in scope, meaning that all plants found in identifiable condition were identified to the level necessary to determine their rarity or listing status.

Additional surveys conducted on the site evaluating vegetation and special-status plant occurrence included a general biological investigation of the study area conducted on February 8, 2012, during which plant communities were mapped and described, and a rare plant survey conducted on May 29, 2012, conducted by Resources Concept, Inc.

A list of all plant species observed in the study area was compiled for the Project site during the survey. This list was combined with the plant species lists generated during the previous surveys and is included as Appendix B. Nomenclature for scientific names follows The Jepson Manual 2nd Edition (Baldwin 2012).

2.4 Survey limitations

An additional survey limitation was imposed by the fact that 2012 was a poor rain year and many annual and herbaceous perennial species were observed to be present in lower numbers than have been observed in previous years. Some annual species, such as Mojave tarplant (*Deinandra mohavensis*)

simply failed to germinate in 2012. A known occurrence of Mojave tarplant located in the Cottonwood Creek drainage approximately 70 miles due south of the study area on the east side of the Sierra Nevada at 3800 feet elevation was visited by the report author in August of 2012. Flowering stalks of the plant from 2011 were evident amid the absence of any plants having germinated in 2012. The poor growing conditions in 2012 may have made it difficult to detect certain special-status species with the potential to occur in the Project study area.

3.0 Results

3.1 Plant communities

Six natural plant communities occur within the study area. Locations of plant communities are depicted in Figure 3 (as well as areas mapped as "Developed", where vegetation is largely absent and replaced by pavement, gravel or landscaping). Descriptions of the plant communities are summarized from the DEIR and supplemented by the field survey conducted in October 2012.

The classification of natural plant communities used in this report is based on *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986). The Holland types have been modified to more accurately describe the study area's natural vegetation. Equivalents from the alliance-based system in *A Manual of California Vegetation* 2nd ed. (Sawyer, et. al. 2009) are given (in parentheses following the common name). The six plant communities types found within the study area include:

Natural Vegetation: Upland Types

• Rubber Rabbitbrush scrub (*Ericameria nauseosa* Shrubland Alliance)

Natural Vegetation: Wetland and Riparian Types

- Red Willow thicket (Salix laevigata Woodland Alliance)
- Baltic Rush marsh [Juncus arcticus (var. balticus, mexicanus) Herbaceous Alliance]
- Salt Grass flat (Distichlis spicata Herbaceous Alliance)

Other Vegetation

- Disturbed/Fremont Cottonwood stand (*Populus fremontii* Forest Alliance)
- Ruderal vegetation

Rubber rabbitbrush scrub

Rubber rabbitbrush scrub (*Ericameria nauseosa* Shrubland Alliance) occupies the northwestern portion of the study area on both sides of the paved road ending in a cul-de-sac. The community is found most frequently in disturbed settings where soils are comprised of well-drained sands and gravels. The

disturbances are often characterized by activities such as grazing and clearing for roads, both of which have occurred within the study area. In 1982, the northern central portion of the study area was subdivided into 16 lots and zoned Rural Residential for the planned construction of single family residential homes. Although only one model home, a single road, and a series of eight concrete-lined decorative ponds were constructed, it is likely that much of the pre-existing vegetation was cleared and some ground was leveled for the construction of these features. Present shrub vegetation is regrowth subsequent to those activities. This existing rabbitbrush scrub vegetation is dominated by rubber rabbitbrush in association with a variety of shrubs species, such as Mojave buckwheat (*Eriogonum mohavensis*) and burro weed (*Artemisia dumosa*), with extensive cover of Russian thistle in between the shrubs. Other native plants species found within this community include blue wild rye (*Elymus glaucus*), narrow-leaf milkweed (*Asclepias fascicularis*), and wild rose (*Rosa woodsii* var. *ultramontana*). Nonnative plant species observed included curly dock (*Rumex* sp.), Russian thistle, and beard grass (*Polypogon monspeliensis*).

Red willow thicket

Red willow thicket (*Salix laevigata* Woodland Alliance) a riparian natural community, occupies the southern half of the study area and along Cartago Creek. The red willow thicket observed on-site is dominated by red willow. Other representative species found within this community include Fremont cottonwood (*Populus fremontii* ssp. *fremontii*), velvet ash (*Fraxinus velutina*), rubber rabbitbrush (*Ericameria nauseosa*), four-wing saltbush (*Atriplex canescens*), and salt grass (*Distichlis spicata*). Nonnative Russian thistle (*Salsola tragus*) is common within this community, as well as a variety of common ornamental trees and shrubs, including several ornamental sycamores (*Platanus* sp.) which were located on the western side of the study area. The area mapped as red willow thicket has been highly manipulated in the ranch's history, primarily by thinning and clearing of trees to increase forage for grazing cattle (LADWP 1993).

Baltic rush marsh

Baltic rush (*Juncus balticus*) dominated meadows comprise the western and southern edges of the study area [*Juncus arcticus* (var. *balticus, mexicanus*) Herbaceous Alliance]. This plant community encompasses the low lying areas on the eastern side of the study area, and extends off-site toward the former lake shore. Baltic rush is the dominant plant species found in this plant community where it occurs in the study area. On the eastern side of the study area within the larger portions of the marsh community, a variety of native plants typically found in wetter conditions occur, including small-flowered bulrush (*Scirpus microcarpus*), yerba mansa (*Anemopsis californica*), alkali pink (*Nitrophila occidentalis*), salt grass, and blue wild rye. Several non-native wetland species occur, including five-hook

1

¹ Baltic rush marsh is the equivalent of Mexican rush marsh, the name that is given to this plant community in the DEIR. Mexican rush (*Juncus mexicanus*) and Baltic rush (*Juncus balticus*) are two closely related species that are often treated as subspecies of each other. Based on diagnostic characters used for differentiation of the two species in the Jepson manual 2nd Ed. (Baldwin 2012), GANDA botanists determined that the dominate species on the property is actually Baltic rush. This is in line with the determination made by Mary DeDecker during her 1988 studies of the flora of Cabin Bar Ranch for the Anheuser-Busch DEIR (LADWP 1993).

bassia (Bassia hyssopifolia), beard grass (Polypogon monspeliensis), and red-stem filaree (Erodium cicutarium).

Salt grass flats

Salt grass flats (*Distichlis spicata* Herbaceous Alliance) occur within the study area as a transitional community bordering the wet rush marsh on the east and the dry rubber rabbitbrush scrub on the west. Salt grass flats are found in many alkaline or saline environments in California and occur in coastal, desert, and montane areas. Soils are often deep, alkaline, or saline and often have an impermeable layer causing them to be poorly drained. When the soil is dry, the surface usually has salt accumulations.

In this plant community, salt grass is dominant or co-dominant with other species of salt-tolerant herbaceous plant species, depending on the location. Two common examples found within the study area are yerba mansa and Baltic rush. Additionally, this natural community sometimes has emergent shrubs, and in the study area, salt grass flats occur in proximity to rubber rabbitbrush scrub where the two communities meet and intergraded with one another. Other plants found in this community within the study area include squirreltail (*Elymus elymoides*), desert alyssum (*Lepidium fremontil*), and cocklebur.

Disturbed/Fremont Cottonwood stand

A few sparse, isolated cottonwoods are found in a small area near the eastern boundary of the study area. The area is slightly more elevated than the marsh to the east and north, and the soil is dry enough to support the cottonwood trees. Except for the presence of the cottonwood trees, the description of the plant community would approach that of ruderal areas. There is no shrub component and the mix of species is most similar to those found in the adjacent former pasture, such as red brome (*Bromus rubens*) and salt grass. In a Fremont cottonwood forest (*Populus fremontii* Forest Alliance) natural community, over half the relative tree cover is Fremont cottonwood and one or several other native woody or shrub types are also co-dominant. The lack of any other tree or shrub species as defined in the *Manual of California Vegetation* as co-dominating members of the Fremont cottonwood forest confirms this area does not match the characteristics of that natural community.

Ruderal

Ruderal areas are dominated by weedy plant species, which are characteristically the first to colonize disturbed lands. The soil is generally compacted and the sparse vegetation consists of herbaceous annual grasses and forbs with occasional shrubs. Ruderal areas were found in the western portion of the study area along US Highway 395 within an area formerly used as a pasture for grazing, and in the southern-central portion of the study area formerly a corral for livestock. Common weeds dominating the ruderal areas within the study area include Russian thistle, red-stem filaree (*Erodium cicutarium*), and red brome.

3.2 Special-status plants

Fifty-nine taxa of vascular plants were observed within the botanical survey area. A complete list of these taxa is presented in Appendix B of this report.

No special-status species were observed within the study area. The surveys were conducted outside of the blooming period for the ten species evaluated for potential to occur on the site based on the prefield review. The upland rabbitbrush scrub and ruderal habitats within the study area, which largely comprise the impact area, were found to be disturbed and therefore lacking the habitat requirements for the three special-status species that occur in upland habitats; creamy blazing star (*Mentzelia tridentata*), Nevada oryctes (*Oryctes nevadensis*), and Kern Canyon clarkia (*Clarkia xantiana* ssp. parviflora). This determination is based on the level of disturbance as described in the rubber rabbitbrush scrub plant community account in Section 3.1. Much of this portion of the study area was previously cleared for preparation of a planned residential community. A secondary disturbance resulting from this previous land use is invasion by non-native weed species, primarily Russian thistle, five-hooked bassia, and red brome.

The remaining seven species, including Owen's Valley checkerbloom have potential to occur within the eastern portion of the study area that is mapped as Baltic rush marsh and salt grass flat. These species were not observed during the survey conducted in October, but this survey was conducted outside the blooming period for Owens Valley checkerbloom and the other five alkaline meadow species. The survey was conducted during the appropriate blooming period for Mojave tarplant, but due to the inadequate rainfall in 2012, this species could possibly have not germinated due to the inadequate precipitation (see survey limitations in Section 2.1.4). These species are discussed in more depth below. Owens Valley checkerbloom is discussed first and at greater length due to the fact it is known to occur on the Cabin Bar Ranch.

Owens Valley checkerbloom (Sidalcea covillei)

Owens Valley checkerbloom is a pink-lavender-flowered perennial herb in the mallow family. Its many, ascending stems stand 20 to 60 cm tall and are topped from April to June with 2-3 cm wide flowers (Baldwin 2012). The species is state-listed Endangered, has no Federal listing status, and is included on CRPR List 1B.1, indicating that it is rare, threatened or endangered in California and elsewhere, and seriously endangered in California (CNPS 2012).

Owens Valley checkerbloom was first collected in 1891 in an extensive alkaline meadow known as Haiwee Meadows, Inyo County, and was not collected again until 1952, when it was found north of Lone Pine in Inyo County. The species was extirpated from its type locality when the Haiwee Reservoir was formed, and by 1978, local botanist Mary DeDecker considered it to be on the brink of extinction (DeDecker 1978). Since that time the species has been recorded at 42 occurrences in alkaline meadow and spring communities scattered along about 75 miles of the Owens River drainage from north of Bishop to just south of the study area(CNDDB 2012).

Owens Valley checkerbloom grows in moist alkaline meadows and seeps at elevations of 3,600 to 4,642 feet (CNPS 2012). Almost all occurrences grow in fine, sandy loam with alkaline crusts, but one occurrence is known to grow in stony, calcareous soil (CNNDB 2012). Associated native graminoids include saltgrass (*Distichlis spicata*), alkali sacaton (*Sporobolus airoides*), basin wildrye (*Leymus cinereus*), Baltic rush (*Juncus balticus*), and clustered field sedge (*Carex praegracilis*). Associated shrubs at some sites include rubber rabbitbrush (*Chrysothamnus nauseosus*) and basin big sagebrush (*Artemisia tridentata* ssp. *tridentata*). Other special-status species that co-occur with Owens Valley checkerbloom include Inyo County star-tulip, Inyo phacelia, Alkali ivesia, and silverleaf milk-vetch (CNDDB 2012).

In May, 1988, biologists conducting surveys in support of the DEIR for a proposed project by Anheuser-Busch (LADWP 1993) discovered several thousand plants of Owens Valley checkerbloom in a meadow on Cabin Bar Ranch just south of the Project study area (CNDDB Occurrences #37). The Cabin Bar Ranch populations were observed and studied for two years. The species appear to have a narrow soil moisture requirement and are found on the margins of slight mounds consisting of moderately coarse sand deposits, topped with a narrow layer of fine silt and organic debris. The mounds appear to be relict wind dunes from the historic or ancient shoreline of Owens Lake. The central portions of many sand mounds ringed with checkerbloom are subsided and contain plant species of drier or disturbed alkaline sites (e.g. sedges, Russian thistle, etc.). Transplantation studies conducted over the course of the 1989 growing season demonstrated that the species was most sensitive to dry soil conditions, grazing or substrate disturbance during the brief season of vegetative growth and flowering in the spring and early summer (LADWP 1993).

GANDA botanists searched for the Cabin Bar Ranch occurrence of Owens Valley checkerbloom during the October 2012 survey. Although this search was conducted well past the flowering period for the species when it would have been most evident, surveys were attempting to detect fruiting stalks, which if they were still erect would have allowed the botanists to make a positive identification of the species. No checkerbloom species were encountered. Given the low rainfall this year, flowering stems may have been less robust this year, and likely had already dropped their seed and bent over to the ground, thus being obscured.

A cooperative project was initiated in 1994 by the BLM, the California Department of Fish and Game, and The Nature Conservancy to test the long-term survivorship of reintroduced Owens Valley checkerbloom (BLM 1994). Seeds were collected from several populations, subjected to several experimental treatments, and sown at a local nursery, and the seedlings (136 in total) were reintroduced back into sites from which the seed was collected. All plants had a minimum of a 30-centimeter (12-inch) root system when planted in October 1994, and survivorships of 50% and 85% were reported from the two sites afterwards (BLM 1994). The success of this project demonstrates that the species can be successfully propagated and transplanted, allowing some flexibility in the response of management activities to suitable habitat areas disturbed by grazing or other surface disturbing threats.

Areas mapped as Baltic rush marsh and salt grass flats in the northeastern portion of the property have potentially suitable habitat for Owens Valley checkerbloom. Suitable habitat for this species is located

outside the impact area and Owens Valley checkerbloom species is unlikely to be directly adversely impacted by the implementation of the project.

Silverleaf milk-vetch (Astragalus argophyllus)

Silverleaf milk-vetch is a prostrate, tufted perennial herb in the pea family. It has pink-purple flowers blooming from April to August (Baldwin 2012). Silverleaf milk-vetch grows in heavy alkaline or saline soils in meadows and seeps. The species has a disjunct distribution growing in Inyo, Lassen and Mono counties (CCH 2012). Silverleaf milk-vetch is included on CRPR List 2.2, indicating that it is rare, threatened or endangered in California but more common elsewhere, and fairly endangered in California (CNPS 2012).

The closest known location of Silverleaf milk-vetch is at the north end of the Owens Valley near the town of Laws. Although this location is a great distance away (approximately 75 miles north), it does grow with Owens valley checkerbloom in salt grass and Baltic rush-dominated alkaline meadows (CNDDB 2012). While the study area does contain suitable habitat for this species, it is located outside the impact area and Silverleaf milk-vetch species is unlikely to be directly adversely impacted by the implementation of the project.

Inyo County mariposa lily (Calochortus excavatus)

Inyo County mariposa lily is a perennial bulb in the Lily family. Its' 10-30 cm tall stems are topped with white flowers in April to July (Baldwin 2012). Inyo County mariposa lily grows in grassy meadows in shadscale scrub and alkaline meadows. The species is included on CRPR List 1B.1, indicating that it is rare, threatened or endangered in California and elsewhere, and seriously endangered in California (CNPS 2012).

The closest known locations of Inyo County mariposa lily to the study area are about 20 miles to the north around the town of Lone Pine where the species co-occurs frequently in grassy, alkaline meadows with Owens Valley checkerbloom (CNDDB 2012). Suitable habitat for Inyo County mariposa lily is present in the Project study area in similar microhabitat conditions that could support Owen's Valley checkerbloom and the other alkaline soil loving species. Suitable habitat for this species is located outside the impact area and the species is unlikely to be directly adversely impacted by the implementation of the project.

Alkali ivesia (Ivesia kingii var. kingii)

Alkali ivesia is a perennial herb in the Rose family. The plant grows in a basal rosette with 15-40 cm tall ascending stems. Its' white flowers bloom in May to August (Baldwin 2012). Alkali ivesia grows in alkaline meadows within the Owens Valley in Inyo and Mono counties, but is also found outside of California throughout the Great Basin to Utah. The species is included on CRPR List 2.3, indicating that it is rare, threatened or endangered in California but more common elsewhere, and not very endangered in California (CNPS 2012).

The closest known locations of Alkali ivesia to the study area are about 75 miles along the Owens River near the town of Laws where it grows with silverleaf milk-vetch and Owens Valley checkerbloom (CNDDB 2012). Suitable habitat for Alkali ivesia is present in the Project study area in similar microhabitat conditions that could support Owen's Valley checkerbloom and the other alkaline soil loving species. Suitable habitat for this species is located outside the impact area and the species is unlikely to be directly adversely impacted by the implementation of the project.

Inyo phacelia (Phacelia inyoensis)

Inyo phacelia is an annual herb in Borage family. It has decumbent to erect 3-10 cm tall stems with small 2-3 mm wide pale yellow flowers that bloom April to August (Baldwin 2012). Inyo phacelia grows in alkaline meadow margins and seeps in desert scrub, east of Sierra Nevada in Mono and Inyo counties (CNPS 2012). The species is included on CRPR List 1B.2, indicating that it is rare, threatened or endangered in California and elsewhere, and fairly endangered in California (CNPS 2012).

The closest known locations of Inyo phacelia to the study area are about 20 miles to the north around the town of Lone Pine where the species co-occurs frequently in grassy, alkaline meadows with Owens Valley checkerbloom and Inyo county star lily (CNDDB 2012). Suitable habitat for Inyo phacelia is present in the Project study area in similar microhabitat conditions that could support Owen's Valley checkerbloom and the other alkaline soil loving species. Suitable habitat for this species is located outside the impact area and the species is unlikely to be directly adversely impacted by the implementation of the project.

Parish's popcorn-flower (Plagiobothrys parishii)

Parish's popcorn-flower is a white-flowered annual herb in the borage family. It's short prostrate to ascending stems reach from 5 to 30 cm. and small (0.3-0.7 cm wide), white flowers along the stem blooming from March to June (Baldwin 2012). Parish's popcorn-flower grows in wet, alkaline soil around desert springs and mud flats east of the Sierra Nevada from Mono Lake to Owen's Lake and in the Mojave desert (CCH 2012). Parish's popcorn-flower is included on CRPR List 1B.1, indicating that it is rare, threatened or endangered in California and elsewhere, and seriously endangered in California (CNPS 2012).

The closest known location of Parish's popcorn-flower to the study area is about 0.5 mile to the north of the study area where it is found growing on the margins of small pools in alkaline meadows and growing with Baltic rush, salt grass, and sedges (CNDDB 2012). Suitable habitat for Parish's popcorn-flower is present in the Project study area in similar microhabitat conditions that could support Owen's Valley checkerbloom and the other alkaline soil loving species. Suitable habitat for this species is located outside the impact area and Parish's popcorn-flower species is unlikely to be directly adversely impacted by the implementation of the project.

Mojave tarplant (Deinandra mohavensis)

Mojave tarplant is a yellow-flowered annual herb in the sunflower family. It may reach almost five feet in height and has sessile clusters of small yellow flowers (Baldwin 2012). It flowers from June to October (CNPS 2012). Mojave tarplant grows in chaparral, coastal scrub, and riparian scrub communities, in washes or around springs at elevations from 2,100 to 5,250 feet (CNPS 2012). Mojave tarplant is Statelisted Endangered, has no Federal listing status, and is included on CRPR List 1B.3, indicating that it is rare, threatened or endangered in California and elsewhere, and not very endangered in California (CNPS 2012).

Mojave tarplant is endemic to California, where it is known from Kern, San Bernardino, Riverside, and San Diego counties (CNPS 2012). The closest known location of Mojave tarplant to the study area is about 6 miles to the south where it is found in a grassy swale near a spring (CNDDB 2012). Suitable habitat for Mojave tarplant is present in the Project study area along Cartago Creek and in the salt grass flats in the north-eastern portion of the study area. This is located outside the impact area and this species is unlikely to be directly adversely impacted by the implementation of the project.

4.0 Conclusion

Construction of the proposed bottling facility will remove 7.1 acres of rubber rabbitbrush and 2.9 acres of red willow thicket. Given the level of disturbance discussed previously these areas do not represent suitable habitat for the special-status plant species evaluated in this report. Therefore, direct impacts to special-status species are highly unlikely to occur as a result of project implementation.

Only 7 of the target rare plant species were considered to have potential to occur in the project study area. However, based on our professional opinion, we strongly believe that none of these target rare plant species occur in the project impact area. Our opinion is based on the following critical factors: (1) previous independent survey efforts conducted in 2012 (Feb 8 and May 28, 2012), (2) extensive surveys conducted in 1987, 1988 and 1989 for the Anheuser-Busch Companies Los Angeles Brewery Water Supply Study (LADWP 1993), (3) this referenced field investigation and botanical survey on October 10, 2012 (4) the California Department of Fish & Game opinion dated October 8, 2012 that further botanical surveys are not needed, (5) the current degraded and disturbed habitat conditions as a result of cattle and horse grazing and ground clearing for a residential housing development.

We acknowledge that the survey efforts did not conform to CDFG protocols for rare plant surveys; however, the extensive surveys performed in 1987, 1988 and 1989 failed to document any rare plants within this portion of the Cabin Bar Ranch property². During this Study, the Cabin Bar Ranch site was visited by biologist and consultants almost every month of the year. Vegetation surveys were conducted under optimal conditions for botanical investigations and identifications, encompassing the entire

² Mary DeDecker, California Native Plant Society (CNPS) botanist and preeminent authority on the vegetation of the eastern Sierra, was retained as field collector and consultant for all vegetation surveys on the Cabin Bar Ranch site.

vegetation growth and flowering seasons of plant species on the property. Because that survey effort included multiple visits over multiple years during the blooming period for all the target rare plants identified in this report, if rare plants were present in the vicinity of the proposed bottling facility, they would have almost certainly been detected. It bears considerable note that since that time the project impact area has experienced significant degrading and disturbance due to extensive cattle and horse grazing operations.

5.0 References

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Appendix A: Special-status plant species that occur within a nine-quad radius of the project area, but are not likely to occur within the study area.	

Scientific Name	Common Name	Status ¹ (Federal, State, CNPS)	Blooming Period Life Form	Communities	Elevation (ft)	Rationale for "Not Likely to Occur" Determination
Abronia alpina	Ramshaw Meadows abronia	-/-/1B.2	July – August Perennial herb	Granitic, gravelly margins of meadows and seeps	7920-8900	Grows in elevation range and habitat types that are outside of the study area. Known from only one extant, extended occurrence at Ramshaw Meadows and Templeton Meadows.
Astragalus lentiginosus var. kernensis	Kern Plateau milk- vetch	-/-/1B.2	June-July Perennial herb	Sandy substrates in meadows and seeps and subalpine coniferous forest	7390-9075	Grows in elevation range and habitat types that are outside of the study area.
Astragalus lentiginosus var. piscinensis	Fish Slough milk- vetch	FT//1B.1	June-July Perennial herb	Alkaline playas	3300-4300	Known from fewer than 5 occurrences all located to the north of the study area. Alkaline playa habitat does not occur within the study area.
Boechera tularensis	Tulare rockcress	//1.3	June-July Perennial herb	Rocky slopes; Subalpine coniferous forest; Upper montane coniferous forest.	6020-11,055	Grows in elevation range and habitat types that are outside of the study area.
Botrychium ascendens	upswept moonwort	//2.3	July-August Perennial herb	Mesic; Lower montane coniferous forest; Meadows and seeps.	4950-8580	Grows in elevation range and habitat types that are outside of the study area.

Scientific Name	Common Name	Status ¹ (Federal, State, CNPS)	Blooming Period Life Form	Communities	Elevation (ft)	Rationale for "Not Likely to Occur" Determination
Botrychium crenulatum	scalloped moonwort	//2.2	June-Sept Perennial herb	Bogs and fens; Lower montane coniferous forest; Meadows and seeps; Marshes and swamps (freshwater); Upper montane coniferous forest	4185-10,825	Grows in elevation range and habitat types that are outside of the study area.
Botrychium minganense	Mingan moonwort	//2.2	July-Sept Perennial herb	Mesic; Bogs and fens; Lower montane coniferous forest; Upper montane coniferous forest	4800-6950	Grows in elevation range and habitat types that are outside of the study area.
Botrychium lunaria	common moonwort	//2.3	August Perennial herb	Meadows and seeps; Subalpine coniferous forest; Upper montane coniferous forest	6534-11,220	Grows in elevation range and habitat types that are outside of the study area.
Calyptridium pygmaeum	pygmy pussypaws	//1.2	June-August Annual herb	sandy or gravelly substrates, Subalpine coniferous forest; Upper montane coniferous forest	6534-10,263	Grows in elevation range and habitat types that are outside of the study area.
Cordylanthus eremicus ssp. kernensis	Kern Plateau bird's-beak	//1.3	July-Sept Annual herb	Great Basin scrub; Joshua tree woodland; Pinyon and juniper woodland; Upper montane coniferous forest.	5520-9900	Grows in elevation range and habitat types that are outside of the study area.
Cryptantha circumscissa var. rosulata	rosette cushion cryptantha	//1.2	July-August Annual herb	Course gravelly, granitic substrates in Alpine boulder and rock field; Subalpine coniferous forest	9735-12,078	Grows in elevation range and habitat types that are outside of the study area.

Scientific Name	Common Name	Status ¹ (Federal, State, CNPS)	Blooming Period Life Form	Communities	Elevation (ft)	Rationale for "Not Likely to Occur" Determination
Cymopterus ripleyi var. saniculoides	sanicle cymopterus	//1.2	April-June Perennial herb	Creosote Bush Scrub, Joshua Tree Woodland	3300-5478	Grows in habitat types that do not occur within the study area.
Erigeron multiceps	Kern River daisy	//1.2	June-Sept Perennial herb	Meadow openings in Joshua Tree Woodland; Red Fir Forest; meadows.	4950-8250	Grows in elevation range and habitat types that are outside of the study area.
Eriogonum wrightii var. olanchense	Olancha Peak buckwheat	//1.3	July-Sept Perennial subshrub	Alpine boulder and rock field; gravelly or rocky substrates in subalpine coniferous forest	10,075- 11,670	Grows in elevation range and habitat types that are outside of the study area. Known from only two occurrences on Olancha Pk.
Ivesia campestris	field ivesia	//1.2	June-August Perennial herb	Meadows and seeps (edges); Subalpine coniferous forest; Upper montane coniferous forest	6517-11,055	Grows in elevation range and habitat types that are outside of the study area.
Hackelia sharsmithii	Sharsmith's stickseed	//2.3	July-Sept Perennial herb	Granitic, rocky sites in Alpine boulder and rock field; Subalpine coniferous forest	9900-12,210	Grows in elevation range and habitat types that are outside of the study area.
Horkelia tularensis	Kern Plateau horkelia	//1.3	July-August Perennial herb	Upper montane coniferous forest	7590-9488	Grows in elevation range and habitat types that are outside of the study area.

Scientific Name	Common Name	Status ¹ (Federal, State, CNPS)	Blooming Period Life Form	Communities	Elevation (ft)	Rationale for "Not Likely to Occur" Determination
Lupinus padre-crowleyi	Father Crowley's lupine	//1.2	July-August Perennial herb	Decomposed granitic substrates in Great Basin scrub; Riparian forest; Riparian scrub; Upper montane coniferous forest	7260-13,200	Grows in elevation range and habitat types that are outside of the study area.
Minuartia stricta	bog sandwort	//2.3	July-Sept Perennial herb	Alpine boulder and rock field; Alpine dwarf scrub; Meadows and seeps	8052-13,068	Grows in elevation range and habitat types that are outside of the study area.
Monardella beneolens	sweet-smelling monardella	//1.3	July-Sept Perennial rhizomatous herb	Granitic soils in Alpine boulder and rock field; Subalpine coniferous forest; Upper montane coniferous forest	8250-11,550	Grows in elevation range and habitat types that are outside of the study area.
Phacelia nashiana	Charlotte's phacelia	//1B.2	March-June Annual herb	Granitic, sandy soils in Joshua tree woodland, Mojavean desert scrub, Pinyon and juniper woodland.	1980-7260	Grows in habitat types that do not occur with the study area.
Poa lettermanii	Letterman's blue grass	//2.3	July-August Perennial herb	Alpine boulder and rock field	11,550- 14,075	Grows in elevation range and habitat types that are outside of the study area
Pohlia tundrae	tundra thread moss	//2.3	No blooming time moss	Gravelly, damp soils in alpine boulder and rock field	8910-9900	Grows in elevation range and habitat types that are outside of the study area.
Sarcobatus baileyi	Bailey's greasewood	//2.3	April-July Deciduous Shrub	Alkaline, dry lakes, washes, roadsides, Chenopod scrub	4950-5280	Grows in habitat types that do not occur with the study area.

Scientific Name	Common Name	Status ¹ (Federal, State, CNPS)	Blooming Period Life Form	Communities	Elevation (ft)	Rationale for "Not Likely to Occur" Determination
Sidalcea multifida	cut-leaf checkerbloom	//2.3	May-Sept Perennial herb	Great Basin scrub; Lower montane coniferous forest; Meadows and seeps; Pinyon and juniper woodland	5775-9240	Grows in elevation range and habitat types that are outside of the study area.
Trifolium dedeckerae	DeDecker's clover	//1B.3	May-July Perennial herb	Granitic, rocky sites in Lower montane coniferous forest; Pinyon and juniper woodland; Subalpine coniferous forest; Upper montane coniferous forest	6930-11,550	Grows in elevation range and habitat types that are outside of the study area.
Triglochin palustris	marsh arrow- grass	//2.3	July – August perennial rhizomatous herb	Mesic; Meadows and seeps; Marshes and swamps (freshwater); Subalpine coniferous forest	7400 – 12,200	Grows in elevation range and habitat types that are outside of the study area. Known in CA from fewer than ten occurrences.
Viola pinetorum var. grisea	grey-leaved violet	//1B.3	April-July Perennial herb	Lodgepole Forest; Subalpine Forest; Red Fir Forest	4950-11,220	Grows in elevation range and habitat types that are outside of the study area.
CNPS List 4 species						
Antennaria pulchella	beautiful pussy- toes	//4.3	June-Sept perennial stoloniferous herb	Stream margins in alpine boulder and rock fields; Meadows and seeps	9240-12,210	Grows in elevation range and habitat types that are outside of the study area.

Scientific Name	Common Name	Status ¹ (Federal, State, CNPS)	Blooming Period Life Form	Communities	Elevation (ft)	Rationale for "Not Likely to Occur" Determination
Arabis repanda var. greenei	Greene's rockcress	//4.3	July-August Perennial herb	Granitic, talus, rocky or sandy substrates in subalpine coniferous forest; Upper montane coniferous forest	7738-11,880	Grows in elevation range and habitat types that are outside of the study area.
Astragalus subvestitus	Kern County milk- vetch	//4.3	June-July Perennial herb	gravelly or sandy soils in Great Basin scrub; Meadows and seeps; Pinyon and juniper woodland	7920-9075	Grows in elevation range and habitat types that are outside of the study area.
Boechera pygmaea	Tulare County rockcress	//4.3	June-July Perennial herb	Volcanic or granitic, gravelly or sandy soils on edges of meadows and seeps; Subalpine coniferous forest	7640-11,220	Grows in elevation range and habitat types that are outside of the study area.
Canbya candida	white pygmy- poppy	//4.2	March-June annual herb	gravelly, sandy, granitic, Joshua tree woodland, Mojavean desert scrub, Pinyon and juniper woodland.	1800-4500	Grows in habitat types that do not occur with the study area.
Eriogonum spergulinum var. pratense	mountain meadow wild buckwheat	//4.3	July-August Annual herb	Often edges, usually sandy or gravelly soils in alpine boulder and rock field (along meadows and creeks); Meadows and seeps	6039-11369	Grows in elevation range and habitat types that are outside of the study area.

Scientific Name C	Common Name	Status ¹ (Federal, State, CNPS)	Blooming Period Life Form	Communities	Elevation (ft)	Rationale for "Not Likely to Occur" Determination
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Notes:

U.S. Fish and Wildlife Service designations:

- FE Endangered: Any species in danger of extinction throughout all or a significant portion of its range.
- FT Threatened: Any species likely to become endangered within the foreseeable future.

California Department of Fish and Game designations:

- SE Endangered: Any species in danger of extinction throughout all or a significant portion of its range.
- SR Rare: Any species not currently threatened with extinction, but in such small numbers throughout its range that it may become endangered if its present environment worsens.
- ST Threatened: Any species likely to become endangered within the foreseeable future.

California Native Plant Society designations:

- 1A Species presumed extinct in California
- 1B Plants rare, threatened or endangered in California and elsewhere.
- 2 Plants rare, threatened or endangered in California, but more common elsewhere.
- 3 Plants About Which We Need More Information A Review List
- 4 Plants of Limited Distribution A Watch List

California Native Plant Society threat categories:

- .1 Seriously endangered in California.
- .2 Fairly endangered in California.
- .3 Not very endangered in California.

¹ Conservation status definitions are as follows:

Appendix B: Vascular Plant Species Observed within the Project Study Area

Scientific Name	Common Name
Amaranthaceae	Amaranth Family
Nitrophila occidentalis	borax weed
Asclepiadaceae	Milkweed Family
Asclepias fascicularis	narrow –leaf milkweed
Asteraceae	Sunflower Family
Acamptopappus sphaerocephalus var. hirtellus	rayless goldenhead
Ambrosia acanthiacarpa	annual bur-sage
Ambrosia dumosa	burro weed
Ambrosia salsola	cheeseweed
Artemisia tridentata	big sagebrush
Conyza canadensis	Canadian horseweed
Encelia farinosa	brittlebush
Ericameria nauseosa	rubber rabbitbrush
Ericameria teretifolia	green rabbitbrush
Gutierrezia microcephala	threadleaf snakeweed
Helianthus annus	common sunflower
Lactuca serriola	prickly lettuce
Pyrrocoma racemosa	clustered goldenweed
Xanthium strumarium	cocklebur
Boraginaceae	Borage Family
Heliotropium curassavicum	heliotrope
Brassicaceae	Mustard Family
Descurainia pinnata	western tansy-mustard
Lepidium fremontii	desert alyssum
Chenopodiaceae	Goosefoot Family
Atriplex canescens	four-wing saltbrush
Atriplex polycarpa	allscale
Atriplex prostrata	fat hen
Chenopodium album	lambsquarters

Halogeton glomeratus	saltlover
Salsola tragus	Russian thistle
Solidago velutina ssp. californica	goldenrod
Fabaceae	Legume Family
Gleditsia triacanthos	honeylocust
Lotus corniculatus	birdsfoot trefoil
Medicago polymorpha	burclover
Melilotus sp.	sweetclover
Trifolium fragiferum	strawberry clover
Geraniaceae	Geranium Family
Erodium cicutarium	red-stemmed filaree
Oleaceae	Olive Family
Fraxinus velutina	velvet ash
	1000000
Polgyonaceae	Buckwheat Family
Eriogonum mohavensis	Mojave buckwheat
Persicaria lapathifolia	water smartweed
Rumex crispus	dock
Rosaceae	Rose Family
Potentilla gracilis	slender cinquefoil
Rosa woodsii	wild rose
Salicaceae	Willow Family
Populus fremontii ssp. fremontii	Freemont's cottonwood
Salix exigua	sandbar willow
Salix laevigata	red willow
-	
Saururaceae	Lizard's-Tail Family
Anemopsis californica	yerba mansa

ANGIOSPERMS (MONOCOTYLEDONS)					
Scientific Name	Common Name				
Cyperaceae	Sedge Family				
Carex nebrascensis	Nebraska sedge				
Carex praegracilis	slender sedge				
Schoenoplectus americanus	American bulrush				
Scirpus microcarpus	small-fruited bulrush				
Juncaceae	Rush Family				
Juncus balticus	Baltic rush				
Poaceae	Grass Family				
Bromus diandrus	ripgut brome				
Bromus madritensis ssp. rubens	red brome				
Bromus tectorum	cheat grass				
Distichlis spicata	saltgrass				
Elymus cinereus	Great Basin wild rye				
Elymus elymoides	squirreltail				
Elymus glaucus	blue wildrye				
Festuca arundinacea	tall fescue				
Hordeum jubatum	foxtail barley				
Polypogon monspeliensis	rabbitsfoot grass				
Schismus arabicus	Schismus				

Appendix C: Representative Photographs						



Photo 1: Rubber Rabbitbrush scrub in the central portion of the study area. Photo is looking north into the impact area from the southern edge.



Photo 2: View across the subdivision road in the central portion of the impact area. Photo is looking north towards the location of the proposed bottling facility.



Photo 3: Red Willow thicket in the southwestern portion of the study area—with velvet ash and rubber rabbitbrush understory. Much of this plant community is outside of the impact area.



Photo 4: Corral in the southern-central section the study area. This photograph is representative of areas mapped as ruderal – vegetation is dominated by Russian thistle, halogeton, and other non-native invasive weeds.



Photo 5. Salt grass flat in the north eastern portion of the study area and outside of the impact area.



Photo 6: Baltic Rush Marsh in the southeastern portion of the study area. Baltic rush is dominant forming a dense mat. This view is looking to the south beyond the study area where this plant community is extensive and where Owens Valley checkerbloom is known to occur.

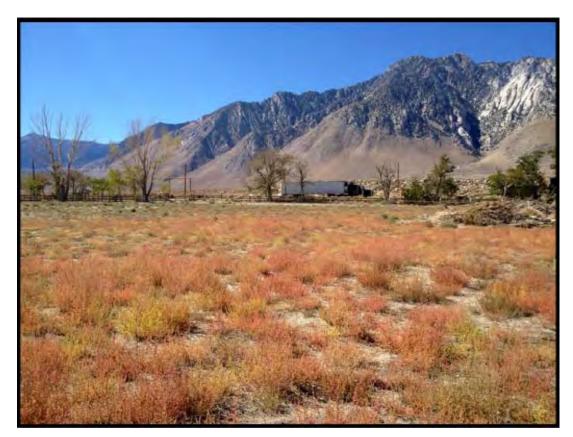


Photo 7: View towards US395 across the location of the proposed access road. This ruderal field is dominated by Russian thistle.

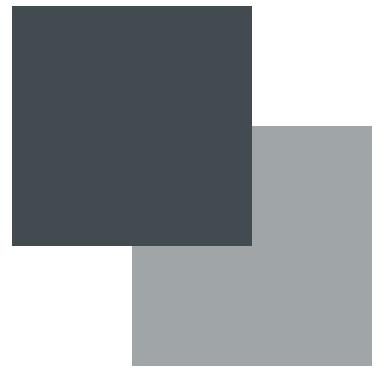
Appendix C: Updated LOS Output for the Project Driveway/Frontage Road (AM & PM Peaks)

	TV	VO-WAY STOR	CONTR	OL SUMI	MARY			
General Information			Site I	Site Information				
Analyst Agency/Co. Date Performed Analysis Time Period	LGS LSC 10/22/201 2031 AM	2	Interse Jurisd Analys			395 Fron Driveway 2031	tage Rd/Si	ite
Project Description Cry	vetal Gyeor CBR I	Dlant						
East/West Street: Site D		-jani	North/9	South Stree	t: 395 Fro	ntage Rd		
Intersection Orientation:		·		Period (hrs)		mago ma		
Vehicle Volumes an	d Adjustment	s						
Major Street		Northbound				Southbo	und	
Movement	1	2	3		4	5		6
	L	Т	R		L	Т		R
Volume (veh/h)	0	30	0		0	14	25.	0
Peak-Hour Factor, PHF								
Hourly Flow Rate, HFR (veh/h)	0	33	0		0	15		0
Percent Heavy Vehicles	0				0			
Median Type				Undivide	d			
RT Channelized			0					0
Lanes	0	1	0		0	. 1		0
Configuration	LTR				LTR			
Upstream Signal		0				0		
Minor Street		Eastbound				Westbou	ınd	
Movement	7	8	9		10	11		12
	L	T	R		L	Т		R
Volume (veh/h)	0	13	0		0	26		0
Peak-Hour Factor, PHF Hourly Flow Rate, HFR		14						
(veh/h)	0	14	0		0	28		0
Percent Heavy Vehicles	0	60	0		0	100		0
Percent Grade (%)		0				0		
Flared Approach		N				N		
Storage	ı	0				0		
RT Channelized			0					0
Lanes	0	1	0		0	1		0
Configuration		LTR				LTR		
Delay, Queue Length, a	nd Level of Serv	ice						
Approach	Northbound	Southbound		Westbound			Eastbound	
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
v (veh/h)	0	0		28			14	
C (m) (veh/h)	1616	1592		687			743	
v/c	0.00	0.00		0.04			0.02	
95% queue length	0.00	0.00		0.13			0.06	
Control Delay (s/veh)	7.2	7.3		10.5			9.9	
LOS	A	A		B			A A	
Approach Delay (s/veh)				10.5	<u> </u>		9.9	
	. ***							
Approach LOS				В		<u></u>	A	

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	TV	VO-WAY STOP	CONTR	OL SUM	VARY	-		-
General Information			Site Information					
Analyst Agency/Co. Date Performed Analysis Time Period	LGS LSC 10/22/201 2031 PM	2	Intersection Jurisdiction Analysis Year		395 Frontage Rd/Site Driveway 2031		e	
Project Description Cry	stal Gyser CBR I	Plant						
East/West Street: Site D				South Stree		ntage Rd		
Intersection Orientation:	North-South		Study F	Period (hrs)	: 0.25			
Vehicle Volumes an	d Adjustment	ts				and synd		
Major Street		Northbound			Southbound			
Movement	111	2	3		4	5		6
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	L	T	R		L	T		R
Volume (veh/h) Peak-Hour Factor, PHF	0	50	0		0	45		0
Hourly Flow Rate, HFR (veh/h)	0	55	0		0	50		0
Percent Heavy Vehicles	0				0			
Median Type			-	Undivide	d .	J,		
RT Channelized			0					0
Lanes	0	1	0		0	1		0
Configuration	LTR				LTR			
Upstream Signal		0				0		
Minor Street		Eastbound				Westbou	ınd	
Movement	7	8	9		10	11		12
	L	Т	R		L	и Т		R
Volume (veh/h)	0	9	0		0	11		0
Peak-Hour Factor, PHF				54				
Hourly Flow Rate, HFR (veh/h)	0	10	0		0	12		0
Percent Heavy Vehicles	0	60	0		0	100		0
Percent Grade (%)		0	,			0		
Flared Approach		N				N		
Storage		0				0		
RT Channelized			0					0 14
Lanes	0	1	0		0	1		0
Configuration		LTR	<u></u>			LTR		
Delay, Queue Length, a								
Approach	Northbound	Southbound		Westbound	1		Eastbound	
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
v (veh/h)	0	0		12			10	
C (m) (veh/h)	1570	1563		634			688	
v/c	0.00	0.00		0.02			0.01	
95% queue length	0.00	0.00		0.06			0.04	
Control Delay (s/veh)	7.3	7.3		10.8			10.3	
LOS	Α	A		В			В	
Approach Delay (s/veh)				10.8	1		10.3	1
Approach LOS				B			B	
Approach LOO				- · ·			D	

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