Appendix Q

LeConte's Thrasher CEQA Impact Analysis Memorandum

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MEMO

TO	Inyo County Planning Department
FROM	Environmental Resources Management, Inc. (ERM)
DATE	13 August 2026
REFERENCE	0756349
SUBJECT	LeConte's Thrasher CEQA Impact Analysis Memorandum

1. INTRODUCTION

This memorandum has been prepared for Hanwha Renewables, LLC (Hanwha) on behalf of Bonanza Peak Solar, LLC, to address the potential impacts to LeConte's thrasher (*Toxostoma lecontei*) associated with the Bonanza Peak Energy Project (Project) in Inyo County, California. The memorandum was prepared to support the California Environmental Quality Act (CEQA) review of the Project following the recent state listing of LeConte's thrasher, and it demonstrates that, with the implementation of proposed avoidance and minimization measures, Project impacts to the species would be less than significant.

1.1 PROJECT LOCATION

The Project would be located in the Charleston View Solar Energy Development Area (SEDA) in southeastern Inyo County, adjacent to the Nevada state line just north of Old Spanish Trail Highway (Attachment A, Figure 1 and Figure 2). The Project is primarily located in the California Department of Fish and Wildlife (CDFW) Region 6 – Inland Deserts Region. An approximately 9-mile-long, 230-kilovolt generation tie-in (gen-tie) line would extend from the Project Area and cross the Nevada border, where it would be located on land managed by the Bureau of Land Management (BLM) in Nye and Clark Counties, Nevada. The Project would connect to the existing GridLiance 230-kilovolt transmission line at the Trout Canyon substation in Clark County, Nevada.

The closest localities or towns to the Project Area include Charleston View, California, approximately 1 mile to the south; Tecopa, California, approximately 26 miles to the west; Pahrump, Nevada, approximately 25 miles to the north; and Mountain Springs, Nevada, approximately 25 miles to the east. The nearest large city to the Project Area is Las Vegas, Nevada, approximately 57 miles to the east.

Only the portion of the Project within California is included in this memorandum. Within California, the Project is located in the Calvada Springs, Stump Spring, and Mound Spring U.S. Geographical Survey (USGS) 7.5-minute quadrangles. The Project is located in Township 22 North, Range 10

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East, Sections 15, 16, 20, 21, 22, 23, 26, 27, 28. The gen-tie line is located in Township 22 South, Range 54 East, Sections 35 and 36; and Township 22 South, Range 55 East, Sections 02, 03, 10, 15, 16, 20, 21, 29, 31, 32. The Project's approximate center point occurs at 35.990525, -115.909402.

1.2 CDFW COORDINATION

ERM and Hanwha have discussed LeConte's thrasher, as it relates to the Project, with the CDFW on multiple occasions, as summarized below:

- 23 April 2026 – Site visit with representatives from ERM, Hanwha, and the CDFW, during which the presence of potentially suitable LeConte's thrasher habitat and potential Project impacts were discussed.
- 28 May 2026 – Emails between ERM and the CDFW discussing whether LeConte's thrasher should be added to the CDFW Incidental Take Permit (ITP).
- 9 June 2026 – Meeting between ERM, Hanwha, and the CDFW where Hanwha confirmed that LeConte's thrasher would be included in the ITP.
- 30 July 2026 – Meeting between ERM, Hanwha, and the CDFW where LeConte's thrasher mitigation measures were discussed.

2. PROJECT EXISTING CONDITIONS

The Project would be located on predominantly flat, arid, sparsely vegetated, open land in the southern portion of the Pahrump Valley. Elevations within the Project Area range from 2,500 to 2,600 feet above mean sea level (Stantec Consulting Services Inc. [Stantec] 2025). At the Pahrump National Oceanic and Atmospheric Administration weather station (approximately 25 miles north of the Project), average annual temperatures range from 16 to 111 degrees Fahrenheit and annual precipitation averages 4.81 inches (National Weather Service 2024). The Project Area is located within the Basin and Range geomorphic province, characterized by interior drainage to lakes and playas, with horst and graben structures (i.e., basins and ranges) (Stantec 2025). Near the Project, the two main geomorphic processes are fluvial erosion and deposition and eolian deflation and deposition (Ironwood Consulting, Inc. [Ironwood] 2021; Stantec 2025). Field observations of soils range from packed clay/silt to unconsolidated silt and gravel, with some consolidated, friable soils on the eastern side of the Project Area (Ironwood 2021; Stantec 2025). The site drains diagonally from relative high points along the northeast boundary, where the only washes on the site occur, to the low points in the middle of the site, where the direction of flow shifts to a northwest direction toward the nearest dry lakebed.

2.1 LECONTE'S THRASHER

2.1.1 HABITAT

In California, LeConte's thrasher is most closely associated with open desert landscapes containing extensive areas of bare ground and scattered shrubs. Preferred habitats include desert scrub,

alkali desert scrub, desert succulent shrub communities, desert washes, sandy flats, dunes, and areas dominated by saltbush (*Atriplex* spp.), creosote bush (*Larrea tridentata*), and cholla cactus (*Cylindropuntia* spp.). The species generally avoids steep terrain and dense vegetation, instead selecting broad, gently sloping or flat areas with sparse shrub cover that provide both nesting sites and open foraging habitat. Nests are commonly placed within dense thorny shrubs or cholla cactus, often in desert wash environments where vegetation structure provides protection from predators. Habitat loss, fragmentation, off-highway vehicle use, agricultural conversion, urban development, invasive species, altered wildfire regimes, and other anthropogenic stressors have contributed to population declines across portions of the species' range (Borgman et al. 2024). In recognition of these threats, LeConte's thrasher was historically designated as a California Species of Special Concern and, in 2026, was designated as a candidate species under the California Endangered Species Act (CESA), where it currently receives the same protections as a state-listed threatened or endangered species pending completion of the formal status review process.

2.1.2 LIFE HISTORY

LeConte’s thrasher mainly forages for prey on the ground, using their bills to clear litter and dig pits in the ground. The diet of LeConte’s thrasher consists primarily of invertebrates, but they will also consume small vertebrates such as lizards, the eggs of other birds, and some seeds. They rarely drink water and meet water needs via food consumption (CDFW 2026).

LeConte’s thrasher breeds annually and can begin breeding at 9 to 11.5 months of age. The breeding season typically begins in December or January. During the breeding season, males sing from shrubs and trees to establish breeding territories. Females will also occasionally sing. LeConte’s thrashers are typically monogamous and mate for life, with mates remaining together year-round. Both sexes incubate and raise chicks. Nesting typically occurs between February to mid-June, but exact timing varies yearly and geographically (as early as January). Generally, LeConte’s thrasher requires dense shrubs that can adequately support and protect nests, with shrub structure likely being more important than shrub species. Clutch sizes range from two to five eggs. The mean incubation period for eggs is 15.8 days (ranging from 14 to 19 days) (CDFW 2026).

2.1.3 KNOWN POPULATION TRENDS FOR LECONTE’S THRASHER

LeConte's thrasher is a desert specialist of the Mojave, Colorado, and Sonoran deserts, and its populations have experienced long-term declines across much of its range and are among the fastest-declining avian taxa in North America (Borgman et al 2024, Center for Biological Diversity 2025). In California, population declines have been particularly pronounced in the isolated San Joaquin Valley population (CDFW 2026). California wildlife agencies and conservation organizations have identified declining abundance and shrinking habitat availability as significant conservation concerns (Shuford and Gardali 2008). Partners in Flight identified the species as a Red Watch List species in 2016 because of its restricted geographic distribution and declining population. The organization estimates a global breeding population of 71,000 individuals, including 37,000 in California—which represents 53 percent of the global population and

82 percent of the U.S. population. Furthermore, reports indicate that the species has declined by approximately 67 percent since 1970, signaling a substantial long-term reduction in abundance (Partners in Flight 2026, Center for Biological Diversity 2025, CDFW 2026). In the 2025 U.S. State of the Birds report, LeConte's thrasher is listed as a Red Alert Tipping Point species, indicating that it has lost more than 50 percent of its population in the past 50 years, features a perilously low population, and displays steep declines (North American Bird Conservation Initiative 2025). The North American Breeding Bird Survey estimates that regional LeConte's thrasher numbers have declined by 2.8 percent per year between 1968 and 2023, resulting in a cumulative decline of 80 percent over that period globally and 67 percent within the U.S. (CDFW 2026, Cornell Lab of Ornithology 2026). While the North American Breeding Bird Survey does not provide state-level data, CDFW has estimated a decline of 2.8 percent per year in the state from 1966–2022, and a steeper decline of 3.6 percent per year in more recent years between 1993–2022 (CDFW 2026).

Recognition of these declining trends contributed to the California Fish and Game Commission's decision on 16 April 2026 to designate LeConte’s thrasher as a candidate species under the CESA. Candidate status temporarily affords a species the same protections as state-listed threatened and endangered species while the CDFW conducts a formal status review. The listing petition cited substantial population declines and ongoing habitat threats across the species' California range (CDFW 2026, Lemberg and Barho 2026).

2.1.4 KNOWN THREATS

The Center for Biological Diversity (2025) petition and CDFW's petition evaluation (2026) identify habitat loss, degradation, and fragmentation as the principal threats to LeConte's thrasher, with additional concerns related to direct mortality, invasive species, predation, and climate change. Utility-scale renewable energy development is discussed as one potential contributor to habitat loss and fragmentation in portions of the species' range. The Project's potential effects on these factors are evaluated below.

2.2 LE CONTE’S THRASHER PROJECT AREA SURVEY RESULTS

Surveys for LeConte’s thrasher were conducted in the Project Area in May 2026, following the procedures outlined by the Desert Thrasher Working Group (2024). One survey was conducted during the recommended survey period; however, the full three-survey protocol was not completed (Stantec 2026). Although the survey effort did not include all recommended survey visits, Stantec confirmed the presence of suitable LeConte's thrasher habitat within the Project Area. Observations of individuals foraging within the Project Area were recorded during both the 2020 and 2024 desert tortoise survey efforts (Ironwood 2021, Stantec 2024). In addition, approximately 77 percent of the Project Area was determined to contain potentially suitable habitat for the species. The Project survey findings and potential suitable habitat are included in Attachment B.

3. PROPOSED MITIGATION MEASURES

The following avoidance, minimization, and mitigation measures are proposed to reduce potential impacts to LeConte's thrasher associated with Project construction and operation. In addition, the Applicant intends to obtain an ITP from the CDFW for LeConte's thrasher. Ongoing coordination with CDFW during the permit process will further inform avoidance, minimization, and compensatory mitigation requirements, and additional measures may be incorporated as required by CDFW.

3.1 PRE-CONSTRUCTION NESTING BIRD SURVEYS

If construction occurs during the nesting bird season (1 February through 31 August), a qualified biologist will conduct pre-construction nesting bird surveys within the work area and applicable buffer areas no more than 5 days prior to ground disturbance. If active nests are identified, species-appropriate avoidance buffers will be established and maintained until nesting activities are complete or the nest is otherwise determined to be inactive by a qualified biologist. Buffer distances may be adjusted based on site conditions, construction activities, and observed bird behavior.

3.2 WORKER ENVIRONMENTAL AWARENESS TRAINING

Prior to construction, all Project personnel will receive Worker Environmental Awareness Training from a qualified biologist. Training will cover LeConte's thrasher, other special-status species that may occur in the Project Area, applicable regulatory protections, and required avoidance and minimization measures. All personnel will be required to complete training before beginning work on the Project. A log will be maintained of all personnel who received training.

3.3 BIOLOGICAL MONITOR

A CDFW-approved biological monitor will be present during initial ground-disturbing activities and other construction activities that have potential to take LeConte’s thrasher. The biological monitor will ensure implementation of avoidance and minimization measures, monitor for special-status wildlife, document observations and compliance, and have authority to stop work if activities have the potential to affect LeConte's thrasher or other special-status species until appropriate measures are implemented.

3.4 AVIAN POWER LINE INTERACTION COMMITTEE GUIDELINES

Transmission lines and electrical components will be designed, installed, and maintained to reduce the likelihood of bird electrocutions and collisions and to comply with the Migratory Bird Treaty Act, Bald Eagle and Golden Eagle Protection Act, and CESA. Avian Power Line Interaction Committee guidelines will be considered and implemented as appropriate, such as line marking or other bird deterrents (spikes, reflectors, owl deterrents).

3.5 COMPENSATORY MITIGATION

The Applicant proposes to provide compensatory mitigation through habitat preservation at the Kingston View mitigation site, an approximately 1,859-acre property owned by the Applicant and located approximately 2 miles southeast of the Project Area. Habitat assessments determined that approximately 1,594.8 acres (86 percent) of the site consists of potentially suitable Le Conte's thrasher habitat (Stantec 2026).

Le Conte's thrasher surveys conducted at the mitigation site in May 2026 confirmed both occupancy and breeding activity. Surveyors documented two individuals and an active nest containing three eggs within suitable desert scrub habitat. These observations indicate that the mitigation site supports occupied LeConte's thrasher habitat and conservation values relevant to the species. Survey results are provided in Attachment B.

The final compensatory mitigation requirements for LeConte's thrasher will be determined through coordination with CDFW as part of the ITP process and may include additional mitigation measures beyond those currently proposed.

4. CONCLUSION

Based on the Project habitat assessment (Stantec 2026), the CDFW petition evaluation, and the California Fish and Game Commission's decision to designate LeConte's thrasher as a candidate species under CESA, the Project has the potential to affect Le Conte's thrasher through habitat loss, habitat fragmentation, construction disturbance, and other direct and indirect effects. Of the 2,666 acres surveyed within the Project Area, 2,051 acres (77 percent) were identified as potentially suitable habitat for LeConte's thrasher. Although Le Conte's thrasher was not detected during the May 2026 protocol surveys, the species has been documented within the Project Area during previous surveys and suitable habitat is widespread throughout the site, indicating that occupancy is possible.

The Project incorporates a comprehensive suite of avoidance and minimization measures, including biological monitoring, worker environmental awareness training, pre-construction nesting bird surveys, avian-safe facility design, and implementation of measures developed through consultation with CDFW. In addition, the Applicant intends to obtain an ITP from CDFW for LeConte's thrasher. The ITP process will provide an additional mechanism to avoid, minimize, and compensate for Project effects and will ensure that any permit-specific requirements identified by CDFW are implemented.

Compensatory mitigation is proposed through preservation of the Kingston View mitigation site, where habitat assessments identified approximately 1,595 acres (88 percent) of suitable Le Conte's thrasher habitat and field surveys documented occupancy and active breeding. The final compensatory mitigation requirements will be established through coordination with CDFW and may include additional mitigation measures beyond those currently proposed.

With implementation of the proposed avoidance, minimization, monitoring, and compensatory mitigation measures, and compliance with all requirements of the CDFW ITP, Project impacts to

LeConte's thrasher would be substantially reduced and conserved habitat would be provided to offset Project-related effects. Therefore, impacts to LeConte's thrasher are expected to be less than significant under CEQA.

5. REFERENCES

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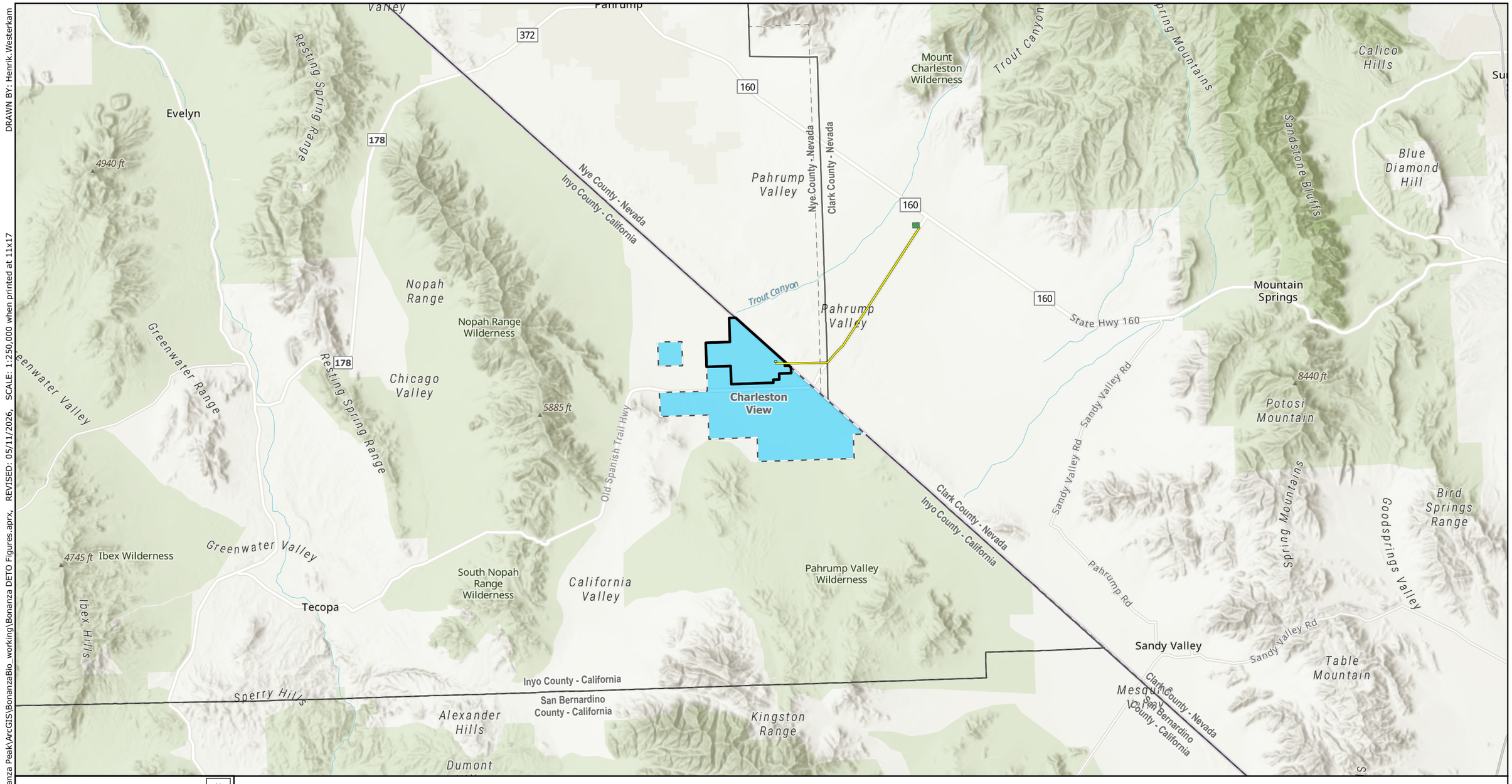
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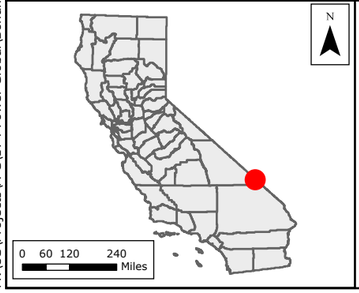
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ATTACHMENT A FIGURES





Legend

- Gen-tie Alignment
- Project Substation
- Trout Canyon Substation
- Project Area
- Charleston View Solar Energy Development Area

N

0 4 8

Miles

Figure 1
Project Vicinity
Bonanza Peak Energy Project
Bonanza Peak Solar, LLC
Calvada Springs, CA

ERM

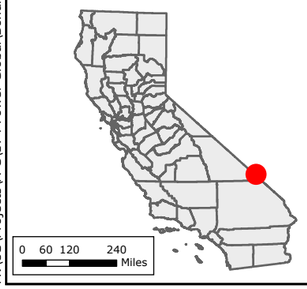
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Wall St
Ann Rd
Silver St
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2665 ft
Superior Ln
E Bismuth Ave
16
Nye County - Nevada
Inyo County - California
PrairieFire Rd
Nye County - Nevada
Clark County - Nevada
3031 ft
Pahrump Valley
E Weepah Ave
E Tungsten Blvd
E Tungsten Blvd
2921 ft
3078 ft
Tecopa Springs
3028 ft
Old Spanish Trail Hwy



Legend

- Site Access Route
- Gen-tie Alignment
- Project Area
- Project Substation
- Trout Canyon Substation
- O&M Building
- Solar Array
- Perimeter Fencing
- Retention Basins
- Internal Access Roads

N

0 1 2

Miles

Figure 2

Project Components

Bonanza Peak Energy Project

Bonanza Peak Solar, LLC

Calvada Springs, CA

ERM

ATTACHMENT B LECONTE'S THRASHER SURVEY RESULTS

LeConte's Thrasher Preliminary Habitat Assessment and Survey Report

For the proposed Bonanza Peak Solar Project Site and Kingston View Mitigation Site

Prepared for:
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July 2, 2026

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Disclaimer

The conclusions in the Report titled **LeConte's Thrasher Preliminary Habitat Assessment Report** are Stantec Consulting Inc.'s (Stantec) professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in this Report are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the Bonanza Peak Solar Project (Project) for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the Project, or for any other Project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

Stantec has assumed all information received from **Bonanza Peak Solar, LLC** and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

This Report is intended solely for use by Bonanza Peak Solar, LLC in accordance with Stantec's contract with the 174 Power Global. While the Report may be provided to applicable authorities having jurisdiction and others for whom Bonanza Peak Solar, LLC is responsible, Stantec does not warrant the services to any third party. The report may not be relied upon by any other party without the express written consent of Stantec, which may be withheld at Stantec's discretion.

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Dannique Aalbu

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Reviewed by: 

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Nick Eide, Senior Biologist

Approved by: 

Signature

Michelle Tovar

Michelle Tovar, Principal in Charge

Table of Contents

List of Appendices

Executive Summary ..... **i**
Acronyms / Abbreviations ..... **ii**
1 Introduction **1**
1.1 Purpose and Need 1
1.2 LeConte's Thrasher at a Glance 1
1.2.1 Range 1
1.2.2 Identification 1
1.2.3 Habitat 2
1.2.4 Behavior 2
1.2.5 Breeding 2
1.3 Project Site 3
1.4 Mitigation Site 3
2 Methods **5**
2.1 Desktop Review 5
2.2 Evaluation of Potential Suitable Habitat 5
2.3 Field Survey 6
3 Results **7**
3.1 Occurrence Data 7
3.2 Potential Suitable Habitat 7
3.3 Field Survey Data 8
4 Discussion **9**
5 References **10**

List of Figures

Figure 1: Project Site and Mitigation Site Location
Figure 2: LeConte's Thrasher Potential Suitable Habitat at the Project Site
Figure 3: LeConte's Thrasher Potential Suitable Habitat at the Mitigation Site
Figure 4: LeConte's Thrasher Observations at Project Site
Figure 5: LeConte's Thrasher Observations at Mitigation Site

List of Tables

Table 1: Vegetation Communities at Project Site Considered to be Potential Habitat for LeConte's Thrasher
Table 2: Vegetation Communities at Mitigation Site Considered to be Potential Habitat for LeConte's Thrasher
Table 3: Survey Details
Table 4: Wildlife Species Observed in the Survey Area

Executive Summary

Stantec Consulting Services Inc. (Stantec) completed a preliminary habitat assessment and single-pass presence / absence survey for LeConte's thrasher *(Toxostoma lecontei)* at the proposed Bonanza Peak Solar project site (project site) and proposed Kingston View mitigation site (mitigation site) for the Bonanza Peak Solar Project (Project). This species is currently proposed as a candidate for listing under the California Endangered Species Act (CESA) and is further protected under the federal Migratory Bird Treaty Act. The objective of the survey was to assess habitat potential and document individuals at the time of habitat assessment and evidence of nesting or use.

Prior to the field survey, Stantec completed a desktop review, which included a review of occurrence records and an evaluation of potential suitable habitat at the project site and mitigation site, using information gathered from both aquatic resource and botanical surveys previously conducted at both the project site and the mitigation site. A field survey was conducted in May 2026. The survey confirmed the presence of suitable nesting habitat on the mitigation site, with several individuals observed and one active nest detected. No individuals or signs were observed on the project site during the survey; however, the presence of preferred habitat features and previous observations made during biological surveys suggest suitable habitat is likely present.

Based on these findings, the mitigation site contains suitable nesting habitat for LeConte's thrasher and the project site contains potential suitable habitat for LeConte's thrasher. Further consultation with the California Department of Fish and Wildlife (CDFW) is recommended regarding the report findings, additional survey needs, and mitigation site requirements.

Acronyms / Abbreviations

CWHR	California Wildlife Habitat Relationship
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
mitigation site	Proposed Kingston View Mitigation Site for Bonanza Peak Solar Project
Project	Bonanza Peak Solar Project
project site	Proposed Bonanza Peak Solar Project Site
Stantec	Stantec Consulting Services Inc.
USGS	United States Geological Survey

1 Introduction

1.1 Purpose and Need

The Bonanza Peak Solar Project (Project) proposes to construct a 500-megawatt solar photovoltaic power plant within a 2,666.5-acre area that would be located on private lands in eastern Inyo County, California, approximately 16 miles south of the town of Pahrump, Nevada (project site, Figure 1, Appendix A). The Project has the potential to have adverse impacts on regionally occurring special-status species (e.g., state and federally listed species); therefore, Bonanza Peak Solar, LLC, in collaboration with state and federal regulatory agencies, has proposed the acquisition of the Kingston View Mitigation Site (mitigation site) for project impacts on special-status species (Figure 1, Appendix A).

On April 16, 2026, the LeConte's thrasher (*Toxostoma lecontei*) was advanced to candidacy for state listing status under the California Endangered Species Act (CESA) (CDFW 2026); as a candidate species (similar to burrowing owl [*Athene cunicularia*]), LeConte's thrasher receives temporary protections equivalent to state listed species, and any Project activities that could result in take of the species may require an Incidental Take Permit from the California Department of Fish and Wildlife (CDFW). To determine if the species may utilize the project site and mitigation site, Stantec biologists conducted field surveys, including a preliminary habitat assessment and presence / absence surveys using a method derived from guidance published by the Desert Thrasher Working Group (DTWG 2018) and the University of California River Center for Conservation Biology (CCB 2013). The results of the survey efforts are intended to help inform the potential for adverse Project impacts, including "take" as defined under CESA, and the suitability of the mitigation site for the species.

1.2 LeConte's Thrasher at a Glance

1.2.1 Range

The LeConte's thrasher is an uncommon permanent resident of the deserts of the southwestern United States and northern Mexico (Sheppard 2020, Heindel 2023). It was first recorded in Inyo County on January 21, 1891, when E. Wilson recorded a pair at Bennetts Well at the edge of Badwater Basin in Death Valley National Park. It was also documented in all the Lower Sonoran valleys east of the Sierra Nevada during the Death Valley Expedition (Heindel 2023).

1.2.2 Identification

Thrashers are medium sized songbirds distinguishable from other passerines by their long, nearly black tails, distinctly decurved black bills, plain grayish or sandy colored bodies lacking wingbars or spots, and short and rounded wings (Hargrove 2019). The LeConte's thrasher is distinguished from other desert thrashers by its unspotted breast in all ages, deep buff crissum, dark eye lacking distinct superciliary stripe, and dark tail contrasting with its pale body. Its sandy coloration helps it blend in with the muted colors of desert vegetation and the pale ground (Hargrove 2019).

1.2.3 Habitat

Habitat (which is also breeding habitat) for the LeConte's thrasher includes sparsely vegetated desert flats, dunes, alluvial fans, or gently rolling hills having at least one species of saltbush or shadscale (*Atriplex* spp.) and/or cholla cactus (*Cylindropuntia* spp.), though it can also include other desert habitats with similar structural profiles, but lacking saltbush / shadscale or cholla cactus (Sheppard 2020). Though nests have been documented in creosote bush (*Larrea tridentata*), habitats rarely consist entirely of creosote (CNDDB 2026, Sheppard 2020, Hargrove 2019). Within habitat, shrubs are well distributed with contiguous or closed cover usually less than 15 m in any direction, even along sides of arroyos (Sheppard 2020).

LeConte's thrasher is known as a xerophile, known for drinking little water and inhabiting harsh desert environments where water may be present for only a few days each year (Sheppard 2020). Ground is typically bare or with sparse patches of grasses and annuals as low ground cover, and ground dominated by invasive annuals is typically avoided as it reduces openness (Hargrove 2019). Substrates are typically sandy, and ground requires accumulated leaf litter (detritus) under most plants or sandy substrate as diurnal cover for most arthropod prey (Sheppard 2020). Surface water rarely exists anywhere within several kilometers of most territories, except temporarily following infrequent rains (Sheppard 2020).

1.2.4 Behavior

Similar to the greater roadrunner (*Geococcyx californianus*), the LeConte's thrasher runs on the ground between shrubs and digs for arthropods in soft sand with its sickle-shaped bill (Hargrove 2019, Sheppard 2020); therefore, areas of dense vegetation cover are typically avoided as they inhibit the species' specialized foraging, which requires ample runways of open sand (Sheppard 2020).

1.2.5 Breeding

Singing starts in the early fall and peaks in December and January, with egg-laying beginning in February and extending though early June (Sheppard 2020, DTWG 2018, CCB 2013). LeConte's thrasher is known to double brood or even triple brood, and records from Heindel et al. (2023) suggest this occurs in Inyo County. In the Mojave Desert, most first clutches hatch the last week of February and the first week of March. The typical nesting cycle lasts around 40 days (Sheppard 2020).

LeConte's thrasher prefers to nest in thick, dense, and often thorny desert shrubs or cholla cactus (*Cylindropuntia* spp.), where shade from the overhanging branches and roots can help shelter the nest from direct sun (Sheppard 2020). Nest height is typically between 2 ft and 8 ft above the ground (Sheppard 2020). Clutch size is usually two to five eggs, with midseason clutches having the most eggs (Sheppard 2020).

While nesting, adult activity including singing and territorial defense are greatly reduced (Sheppard 2020). Males feed females on nest during the day starting on the first day of incubation and both sexes alternate incubation nearly continuously during the day, but the majority of incubation is done by the female (Sheppard 2020). Hatching is asynchronous and young typically fledge between 12 days and 20 days after birth (Sheppard 2020).

The survey area includes the project site and the mitigation site. Descriptions of each site and physical characteristics unique to each of them are as follows:

1.3 Project Site

The project site is located within a 2,666.5-acre area in southeastern Inyo County, adjacent to the Nevada state line just north of California State Route 178 (Figure 1, Appendix A). It is bordered by the Pahrump Valley to the northeast; the town of Charleston View, California, 1 mile to the south; the Nopah Range to the west and southwest; and the town of Pahrump, Nevada, 25 miles to the north. It is located within the US Geological Survey (USGS) *Calvada Springs*, *Mound Spring,* and *Stump Spring, California* 7.5-minute topographic quadrangles on predominantly flat, arid, sparsely vegetated, open land in the southern portion of the Pahrump Valley.

East-to-west elevations range from about 2,690 ft to 2,560 ft above mean sea level. The topography is gentle to level. The eastern side is at a marginally higher elevation than the western side overall, but both areas lack any drastic topographical change. The project area is located within the Basin and Range Geomorphic Province, characterized by interior drainage to lakes and playas, with horst and graben structures (i.e., basins and ranges) (Stantec 2025c). Field observations of soils include unconsolidated clay, silt, sand and gravel; unconsolidated to slightly consolidated clay, silt, sand, and gravel, and unconsolidated to slightly consolidated windblown sands (Stantec 2025c).

Vegetation within the study area is predominantly *Larrea tridentata–Ambrosia dumosa* shrubland alliance (creosote bush–white bursage scrub) on the eastern third and a mixture of *Atriplex confertifolia* shrubland alliance (shadscale scrub) and *Atriplex polycarpa* shrubland alliance (allscale scrub) on the western two-thirds. The western two-thirds of the study area is also interspersed with areas of low vegetative cover dominated by noxious weeds such as cheatgrass (*Bromus tectorum*) and saltlover (*Halogeton glomeratus*) (Stantec 2025c).

The project area is undeveloped, except for a grid of dirt roads. Evidence of anthropogenic disturbance including off-highway vehicle tracks, trails, trash, residences and outbuildings, and historic cattle grazing has been documented during previous surveys (Stantec 2025c, Stantec 2025e).

1.4 Mitigation Site

The mitigation site is located within an 1,859.1-acre area about 1.5 miles southeast of the project site (Figure 1, Appendix A). The town of Charleston View is located north and west of the mitigation site. It is located within the USGS *Calvada Springs* and *Stump Spring*, *California* 7.5-minute topographic quadrangles, and similar to the project site, it is located on predominantly flat, arid, and open land in the southern portion of the Pahrump Valley.

Southeast-to-northwest elevations range from about 2,640 ft to 2,760 ft above mean sea level. The overall topography is extremely low-gradient, with a gentle west-oriented slope. Like the project site, the mitigation site is located within the Basin and Range Geomorphic Province, characterized by interior drainage to lakes and playas, with horst and graben structures (i.e., basins and ranges). Within the mitigation site, soils are sandy to gravelly sandy loam (Stantec 2025d).

The vegetation is predominantly creosote bush, with a mixture of other shrubs such as white bursage (*Ambrosia dumosa*) and shadscale (*Atriplex confertifolia*). In addition, several mature individuals and seedlings of invasive tamarisk (*Tamarix* sp.) and two other noxious weed species, saltlover (*Halogeton glomeratum*) and Russian thistle (*Salsola tragus*), are also present, generally in smaller numbers and less widely dispersed than at the project site (Sawyer et al. 2009, Stantec 2025d). Overall, the mitigation site contains more shrub cover than the project site, which is further discussed below in relation to potential LeConte's thrasher habitat.

The mitigation site, like the project site, is undeveloped except for a grid of unimproved dirt roads; while some of the roads are passable, many are partially vegetated and in poor driving condition. Additional anthropogenic disturbances were observed, including off-highway vehicle tracks, single track trails, and windblown trash.

2 Methods

2.1 Desktop Review

Stantec reviewed internal data as well as public domain information of known LeConte's thrasher habitat and observations in and near the project site and mitigation site, including the following resources:

- Observations from previous wildlife surveys conducted within the survey area (Ironwood 2021, Stantec 2024, Stantec 2025a, Stantec 2025e, Stantec 2025f).
- Vegetation alliance information captured during the 2025 botanical survey at the project site and the 2026 botanical survey at the mitigation site (Stantec 2025b, Stantec 2026).
- Soil and substrate information captured during the 2025 aquatic resource delineations at both the project site and mitigation site (Stantec 2025c, Stantec 2025d).
- CDFW California Natural Diversity Database (CNDDB) records search of known occurrences of LeConte's thrasher within a five-mile buffer of the survey area within California (CNDDB 2026). Equivalent records were not available for a five-mile buffer of the survey area within Nevada.
- eBird online database occurrences of LeConte's thrasher within five miles of the survey area (Cornell 2026).
- Records published in Birds of Inyo County, California, Including Death Valley National Park (Heindel 2023).

2.2 Evaluation of Potential Suitable Habitat

As described in the Introduction section above, LeConte's thrashers are associated with open desert wash, desert scrub, alkali desert scrub, desert succulent shrub, and Joshua tree (*Yucca brevifolia*) habitat where shrubs are scattered; they are consistently described as using sparsely vegetated, flat to gently rolling desert landscapes with open sandy or alkaline ground and scattered shrubs or cacti (CDFW 2005, CNDDB 2026, Sheppard 2020, DTWG 2018). They commonly nest in dense, spiny shrubs or densely branched cactus, usually 2-8 ft above ground (CNDDB 2026).

Areas of potential suitable habitat can be further broken by core elements such as vegetation cover and community type, topography, soils / substrate, foraging microhabitat, and nesting substrate (DTWG 2018, Hargrove 2019, CCB 2013). Therefore, information captured by Stantec biologists during aquatic delineation and botanical survey efforts on topography, soils / substrate, and vegetation alliance / association were used to filter out areas that do not provide potential suitable habitat for LeConte's thrasher. The filtering criteria used for areas to be considered potential suitable habitat are as follows:

Topography

Habitat includes flat to gently rolling terrain with alluvial fans, washes, flats, sinks, and dune margins common (Sheppard 2020, Hargrove 2019, CCB 2013). Therefore, the low-gradient and gently sloped topography characteristic of the entire survey area can be considered potential suitable habitat.

Soil / Substrate

Habitat includes open sandy or alkaline terrain, soft sand, and soils that permit digging and support open desert scrub. It is described as being rare in habitats with large proportions of rock and deep silty clays, and as using soft sand for arthropod foraging (Hargrove 2019, CDFW 2005, CCB 2013). Therefore, the sand to gravelly sandy loam soils characteristic of the entire survey area can be considered potential suitable habitat.

Vegetation

Habitat includes vegetation community types containing at least one species of saltbush or shadscale (*Atriplex* spp.) and/or cholla cactus (*Cylindropuntia* spp.), though it can also include other desert habitats with similar structural profiles, but lacking saltbush / shadscale or cholla cactus (Sheppard 2020). It may also include vegetation communities containing creosote but having at least one other shrub species present (CNDDB 2026, Sheppard 2020, Hargrove 2019). Habitat does not include areas dominated by invasive annuals (Hargrove 2019).

2.3 Field Survey

Data gathered from the evaluation of potential suitable habitat within the project site and mitigation site were used to filter for potential suitable habitat, and thus, define a survey area. A single-pass presence / absence survey was conducted during the LeConte's thrasher breeding and nesting season (i.e., February to mid-May) between May 12 and May 14, 2026 by Stantec biologist Dannique Aalbu (Table 2, Appendix A) within the survey area. The survey was conducted by walking parallel transects roughly 50 m apart, accounting for topography and sighting distance. The surveyor listened for calls and scanned for activity or sign such as feathers or whitewash. Photographs detailing suitable habitat and documenting notable observations were taken during the field survey (Appendix B). All incidental wildlife species observed during the surveys were recorded (Appendix A and Appendix B).

3 Results

3.1 Occurrence Data

The desktop review included evaluation of both occurrence records and potential suitable habitat within the survey area, gathered from surveys conducted within both the project site and mitigation site. Results of the desktop review included the following information:

- Observations of individuals foraging within the project site were recorded during both the 2020 and 2024 desert tortoise survey efforts (Ironwood 2021, Stantec 2024). No georeferenced data was captured during the 2020 desert tortoise survey, but the 2024 data is shown on Figure 4.
- No CNDDB occurrences were found within a five-mile buffer of the survey area within California. All CNDDB occurrences for Inyo Country were historic (1993 or prior) and the closest observation was located in the Badwater Basin in Death Valley National Park in 1891, approximately 54 miles northwest of the survey area (CDFW 2026).
- No eBird online database occurrences exist within five miles of the survey area. The closest eBird online database occurrences were documented at Beck Spring (in a canyon on the northwestern side of Kingston Peak, approximately 13 miles south of the survey area) in 2006 and Horse Thief Springs (near Tecopa Pass, approximately 14 miles south of the survey area) in 2013 (Cornell 2026).

3.2 Potential Suitable Habitat

Using the evaluation criteria described in *Section 2.2* above, the Manual of California Vegetation Alliance and Association data collected during prior botanical survey efforts cross-walked with the California Wildlife Habitat Relationship (CWHR) Type and Average Shrub Cover were used to filter for areas of potential suitable habitat within the project site and mitigation site (Stantec 2025b, Stantec 2026). In Appendix A**,** Table 1 and Figure 2 depict the vegetation communities considered to be potential habitat for LeConte's thrasher at the project site and Table 2 and Figure 3 depict the vegetation communities considered to be potential habitat for LeConte's thrasher at the mitigation site.

Project Site

Table 1 and Figure 2 can be used to understand the location and amount of potential suitable habitat within the project site. LeConte' thrasher habitat is present within several types of CWHR desert scrub and alkali desert scrub habitat, including the *Ambrosia salsola – Atriplex confertifolia* association within the *Ambrosia salsola – Bebbia juncea* Shrubland Alliance, the *Atriplex canescens* Shrubland Alliance, the *Atriplex confertifolia* Shrubland Alliance, the *Ephedra nevadensis – Lycium andersonii – Grayia spinosa* Shrubland Alliance, the *Larrea tridentata – Atriplex confertifolia* association within the *Larrea tridentata* Shrubland Alliance, and the *Larrea tridentata – Ambrosia dumosa* Shrubland Alliance, which taken together account for 2,051.4 acres of habitat. Potential suitable habitat is present within approximately 77% of the 2,666.5-acre project site. Average shrub cover, estimated using point data collected during the botanical survey, ranges from 4% to 30%.

Mitigation Site

Similarly, Table 2 and Figure 3 can be used to understand the location and amount of potential suitable habitat within the mitigation site. LeConte thrasher habitat is present within several types of CWHR desert scrub habitat, including the *Ephedra nevadensis – Lycium andersonii – Grayia spinosa Shrubland Alliance,* the *Larrea tridentata – Atriplex polycarpa* association within the *Larrea tridentata* Shrubland Alliance, and the *Larrea tridentata – Ambrosia dumosa* Shrubland Alliance, which taken together account for 1,594.8 acres of habitat. Potential suitable habitat is present within approximately 86% of the 1,859-acre mitigation site. Average shrub cover, estimated using point data collected during the botanical survey, ranges from 13% to 41%.

3.3 Field Survey Data

Project Site

No individuals or signs were observed on the project site during the survey, however, the presence of preferred habitat features (Table 1 and Figure 2), and individual observations made during previous biological surveys, described above in *Section 3.1*, suggest suitable habitat is present (Figure 4, Ironwood 2021, Stantec 2024).

Mitigation Site

The field survey confirmed the presence of suitable nesting habitat on the mitigation site, with two individuals observed (calling within 50 ft of the surveyor) and one active nest detected with three eggs in spiny hopsage *(Grayia spinosa)*, within the *Larrea tridentata – Ambrosia dumosa* / Cryptogamic crust habitat (Figure 5 and Appendix B).

Further details on LeConte's thrasher observations are included in Table 3. Throughout the survey area, both arthropods (beetles) and reptiles, considered prey for the LeConte's thrasher, were observed foraging in the detritus present under the desert shrubs. For additional information on wildlife species observed during the habitat assessment, see Appendix A.

4 Discussion

Both sites within the survey area (i.e., the project site and mitigation site) contain potential habitat for LeConte's thrasher, and individuals have been detected at both sites. Occupancy can be confirmed for the mitigation site by the observation of an active nest and inferred for the project site by the observation of an individual within the last year.

To better understand species distribution and use of both the project site and mitigation site, additional surveys during the winter / spring of 2027 are recommended. Based on the confirmed presence of suitable habitat and observation of LeConte's thrasher individuals within the survey area, additional surveys would focus on further quantifying the potential for "take" at the project site by further detailing distribution and breeding within the areas of potential suitable habitat. According to the published guidance from the Desert Thrasher Working Group, three surveys between February and mid-May are ideal to estimate distribution and identify habitat preferences (DTWG 2018). Furthermore, if additional surveys are completed, a buffer on the project footprint is recommended as the species uses larger open areas and responds to landscape openness, continuity, and disturbance rather than only fine-scale vegetation at a single point, and CDFW has noted their use of washes and flats with large areas of open terrain (CDFW 2010).

With the recent listing of LeConte's thrasher as a candidate species under the California Endangered Species Act, Stantec recommends that Bonanza Peak Solar, LLC consult the CDFW regarding the report findings, additional survey needs, and requirements for establishing the mitigation site.

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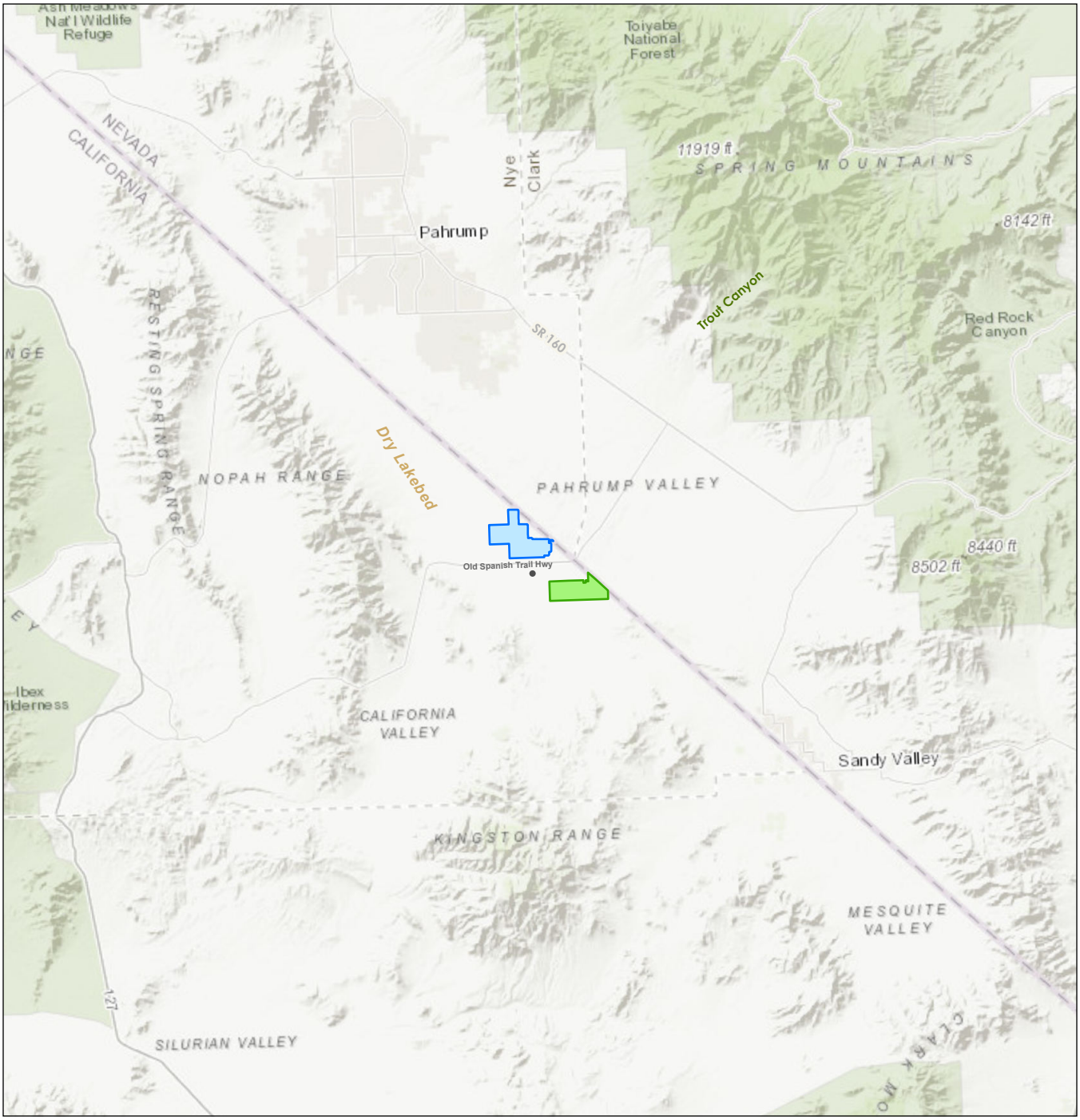
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Appendix A Figures and Tables

Figure 1: Project Site and Mitigation Site Location





Notes
1. Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet
2. Background: World Topographic Map: Esri, HERE, Garmin, FAO, NOAA, USGS, EPA
World Topographic Map: Esri, HERE, Garmin, FAO, USGS, NGA, EPA, NPS

Proposed Bonanza Peak Solar Project (project site): 2,666.5 acres

Proposed Kingston View Mitigation Site (mitigation site): 1,859.1 acres

• Charleston View

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Stantec

Project Location
Inyo County, CA

Prepared by PG on 2026-06-23
Technical Review by DA on 2026-06-23

Client/Project
Bonanza Peak, LLC
Bonanza Peak Solar Project and
Proposed Kingston View Mitigation Site

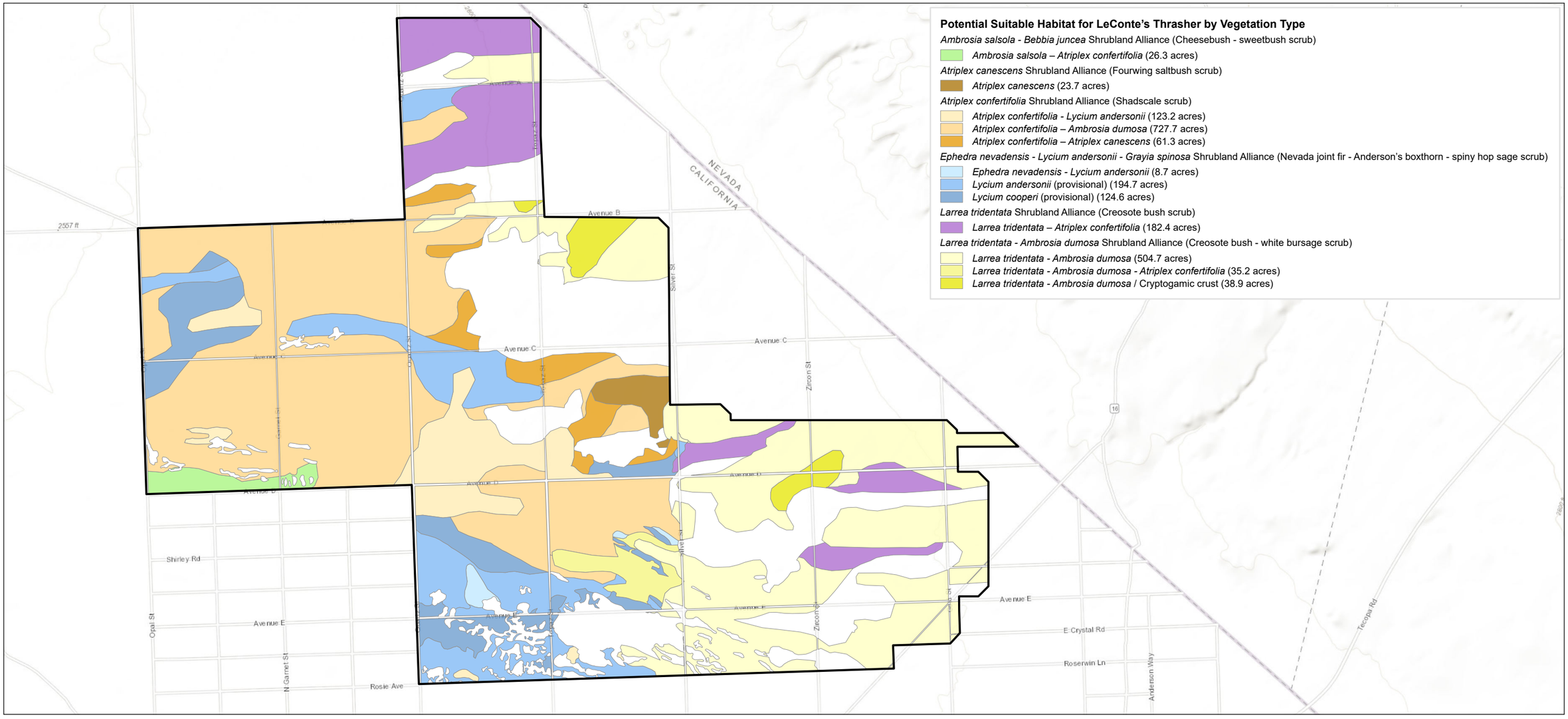
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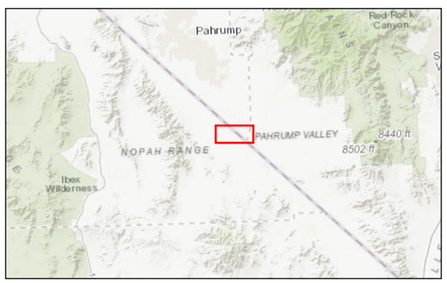
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Project Site and Mitigation Site Location

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Figure 2: LeConte's Thrasher Potential Suitable Habitat at the Project Site





Project Site Survey Area

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Project Location
185706575
Inyo County, CA

Prepared by PG on 2026-06-23
Technical Review by DA on 2026-06-23

Client/Project
Bonanza Peak, LLC
Bonanza Peak Solar Project

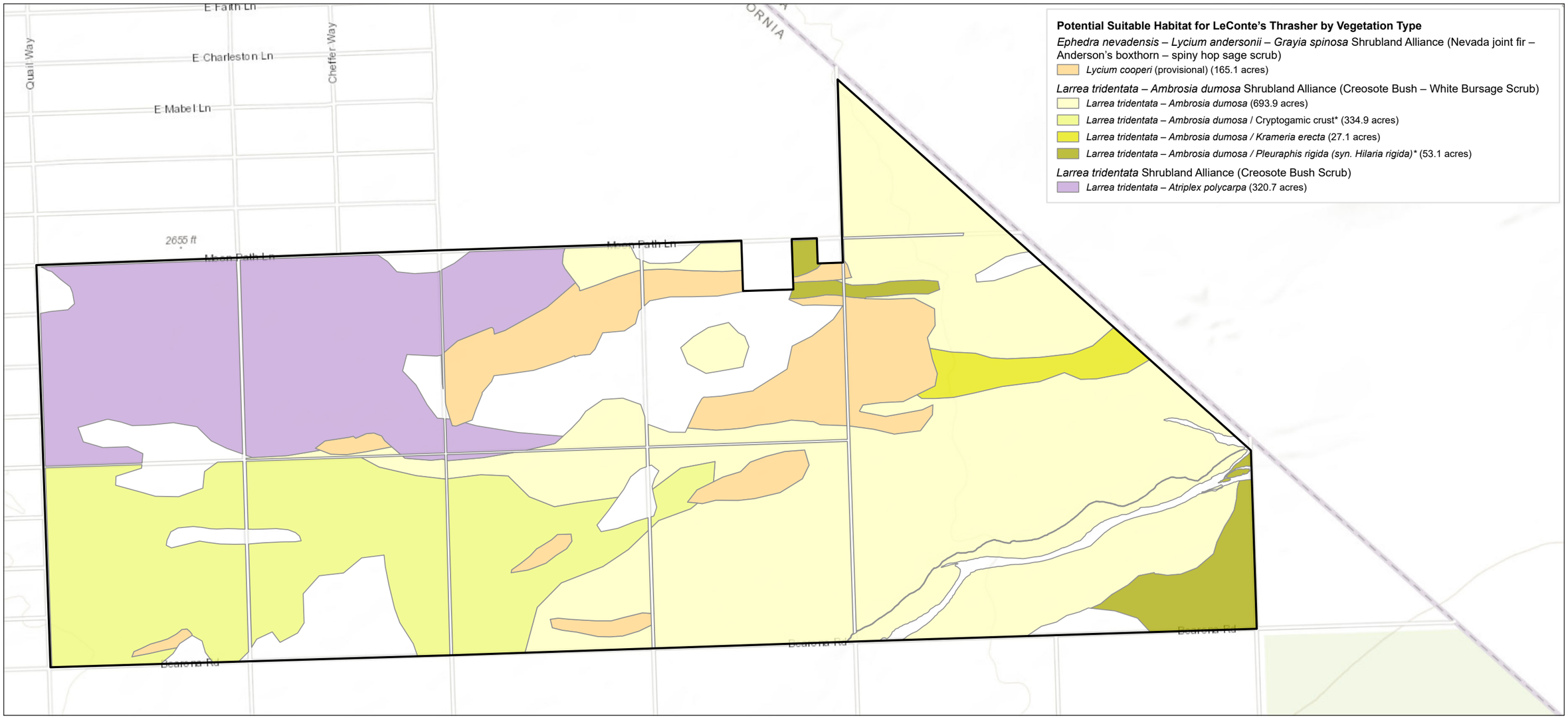
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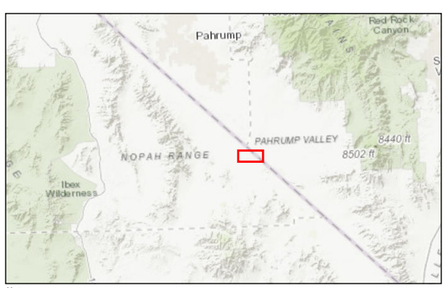
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LeConte's Thrasher Potential Suitable Habitat at the Project Site

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Figure 3: LeConte's Thrasher Potential Suitable Habitat at the Mitigation Site





Mitigation Site Survey Area

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Project Location
Inyo County, CA

185706575

Prepared by PG on 2026-06-18
Technical Review by DA on 2026-06-18

Client/Project
Bonanza Peak, LLC
Bonanza Peak Solar Project
Proposed Kingston View Mitigation Site

Figure No.
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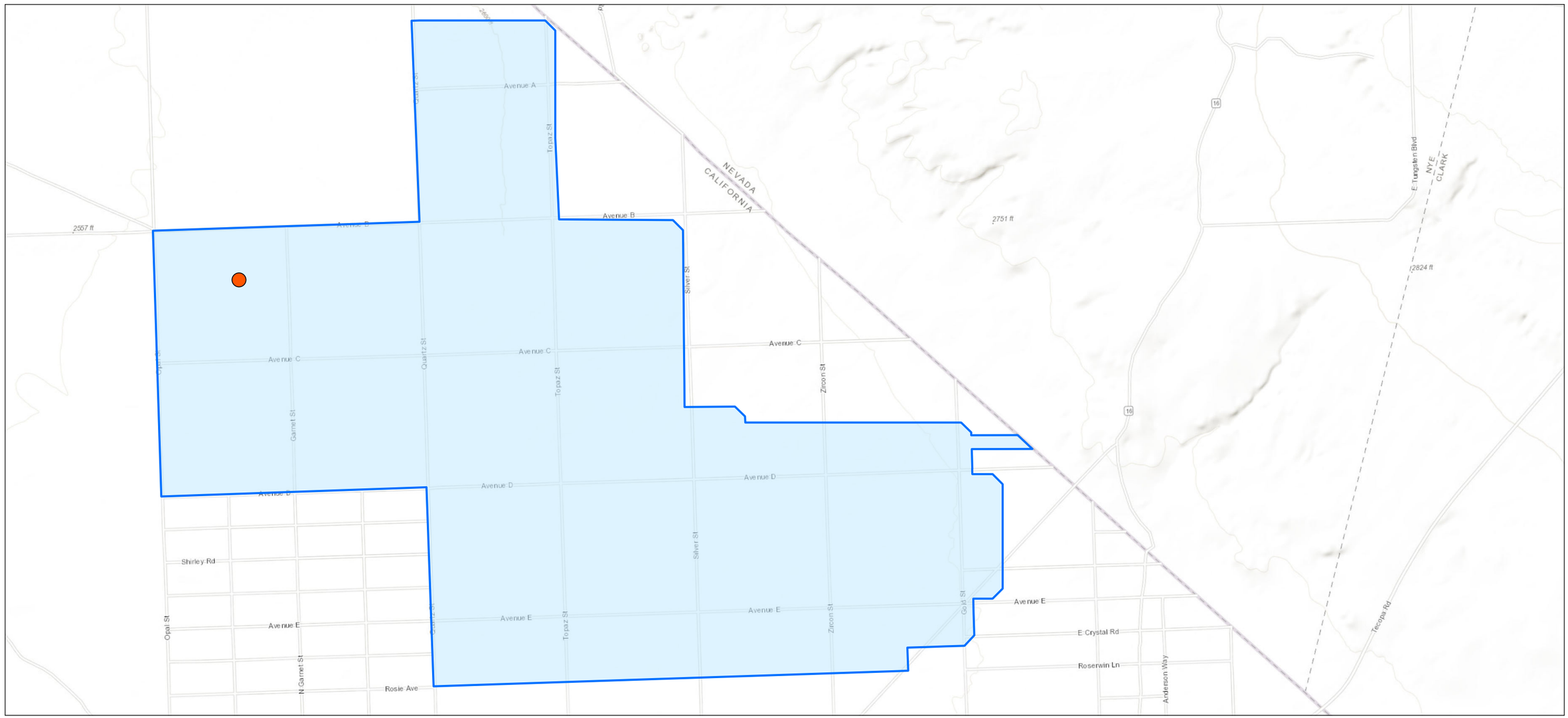
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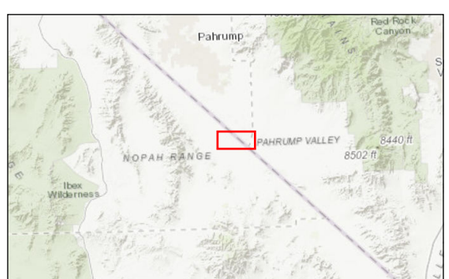
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Figure 4: LeConte's Thrasher Observations at Project Site





Notes
1. Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet
2. Background: World Topographic Map: Esri, HERE, Garmin, FAO, USGS, NGA, EPA, NPS
World Topographic Map: Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, NGA, EPA, USDA

Project Site Survey Area

LeConte's thrasher observation (October 2024)

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Project Location
185706575
Inyo County, CA

Prepared by PG on 2026-06-23
Technical Review by DA on 2026-06-23

Client/Project

Bonanza Peak, LLC
Bonanza Peak Solar Project

Figure No.
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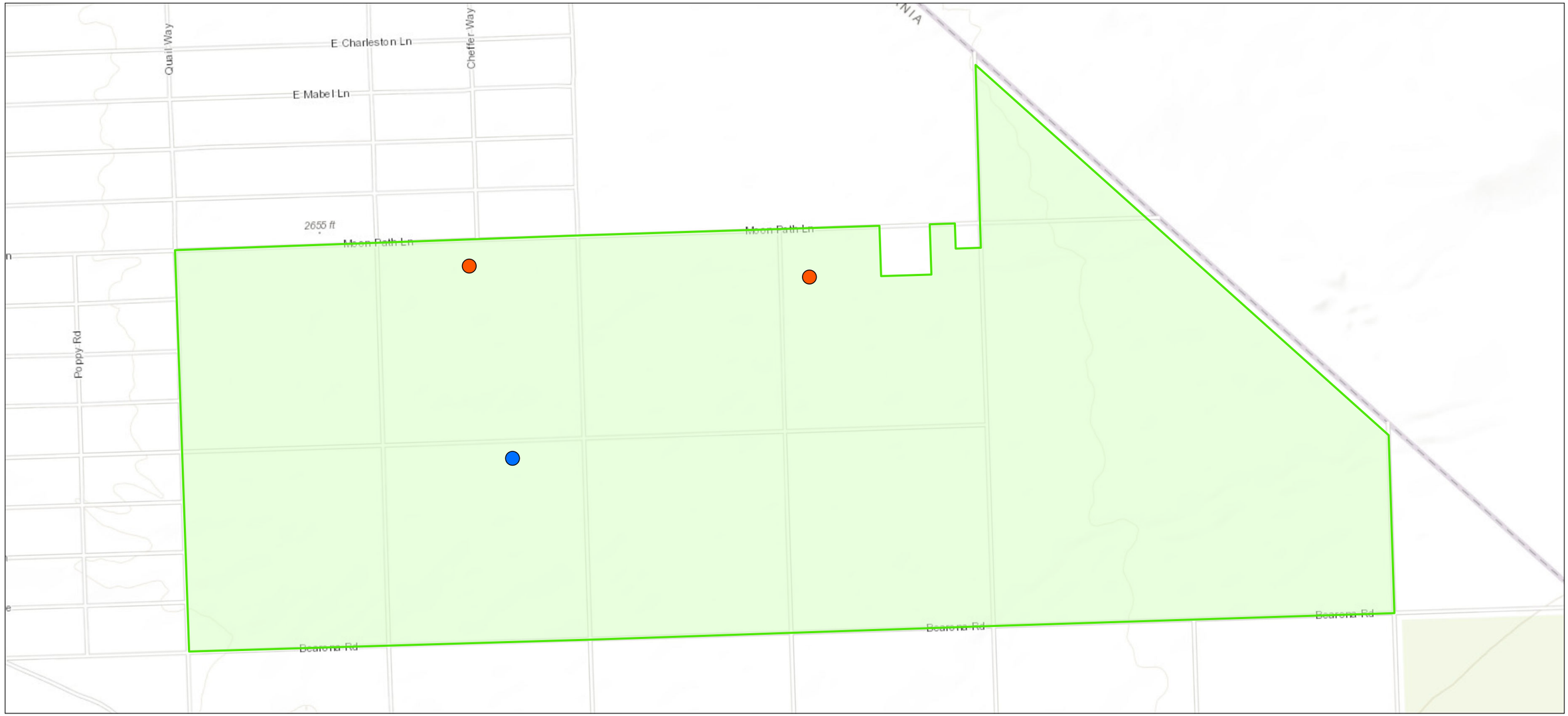
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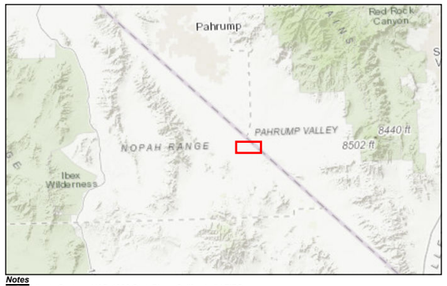
LeConte's Thrasher Observations at Project Site

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Figure 5: LeConte's Thrasher Observations at Mitigation Site





Notes
1. Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet
2. Background: World Topographic Map: Esri, HERE, Garmin, FAO, USGS, NGA, EPA, NPS
World Topographic Map: Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA

- Mitigation Site Survey Area
- LeConte's thrasher observation (May 2026)
- LeConte's thrasher active nest observation (May 2026)

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Stantec

Project Location
Inyo County, CA

185706575

Prepared by PG on 2026-06-18
Technical Review by DA on 2026-06-18

Client/Project
Bonanza Peak, LLC
Bonanza Peak Solar Project
Proposed Kingston View Mitigation Site

Figure No.
5

Title
LeConte's Thrasher Observations at Mitigation Site

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Table 1: Vegetation Communities at Project Site Considered to be Potential Habitat for LeConte's Thrasher

	Manual of CA Vegetation	CA Wildlife Habitat Relationship Type	Potential LeConte's Thrasher Habitat	Average Shrub Cover		
Code	**Alliance** Association(s)				**Acres**	**Acres of Habitat**
	Herbaceous					
22.310.00	***Chorizanthe rigida – Geraea canescens* Desert Pavement Sparsely Vegetated Alliance (Rigid Spineflower – Hairy Desert Sunflower)**	**Barren, Desert Scrub**		**1%**	**65**	
33.380.01	*Chorizanthe rigida – Geraea canescens* Desert Pavement	Barren, Desert Scrub		1%	65	
N/A	***Halogeton glomeratus* Sparsely Vegetated Clay Flat (Saltlover Flat)[1]**	**Barren, Desert Scrub**		**1%**	**17.4**	
41.100.00	***Sphaeralcea ambigua* Herbaceous Alliance** **(Desert Globemallow Herbaceous Scrub)**	**Desert scrub**			**195.7**	
41.100.01	*Sphaeralcea ambigua*	Desert scrub		20%	195.7	
	Shrub					
33.200.00	***Ambrosia salsola – Bebbia juncea* Shrubland Alliance** **(Cheesebush – Sweetbush Scrub)**	**Desert scrub**			**27.9**	
33.200.04	*Ambrosia salsola – Atriplex confertifolia*	Desert scrub	y	26%	26.3	26.3
33.200.08	*Senna armata – Ambrosia salsola*	Desert scrub		7%	1.6	
33.060.00	***Atriplex canescens Shrubland* Alliance (Fourwing Saltbush Scrub)**	**Alkali desert scrub**	**Y**	**4%**	**23.7**	23.7

	Manual of CA Vegetation	CA Wildlife Habitat Relationship Type	Potential LeConte's Thrasher Habitat	Average Shrub Cover		
33.060.02	*Atriplex canescens*	Alkali desert scrub	y	4%	23.7	
36.320.00	***Atriplex confertifolia* Shrubland Alliance (Shadscale Scrub)**	**Alkali desert scrub**	**Y**		**912.2**	912.2
36.320.03	*Atriplex confertifolia – Ambrosia dumosa*	Alkali desert scrub	y	11%	727.7	
36.320.06	*Atriplex confertifolia – Atriplex canescens*	Alkali desert scrub	y	5%	61.3	
36.320.07	*Atriplex confertifolia – Lycium andersonii*	Alkali desert scrub	y	15%	123.2	
36.310.00	***Ambrosia dumosa* Shrubland Alliance (White Bursage Scrub)**	**Desert scrub**		**30%**	**24.5**	
36.310.01	*Ambrosia dumosa* Association	Desert scrub		30%	24.5	
33.185.00	***Ephedra nevadensis – Lycium andersonii – Grayia spinosa* Shrubland Alliance (Nevada Joint Fir – Anderson's Boxthorn – Spiny Hop Sage Scrub)**	**Desert scrub**	**Y**		**328**	328
33.360.02	*Lycium andersonii* (provisional)	Desert scrub	y	27%	194.7	
33.185.01	*Lycium cooperi* (provisional)	Desert scrub	y	17%	124.6	
33.280.04	*Ephedra nevadensis – Lycium andersonii*	Desert scrub	y	18%	8.7	
33.010.00	***Larrea tridentata* Shrubland Alliance (Creosote Bush Scrub)**	**Desert scrub**			**419.9**	
33.140.04	*Larrea tridentata*	Desert scrub		33%	223.4	
33.010.17	*Larrea tridentata – Atriplex confertifolia*	Desert scrub	Y	17%	182.4	182.4
33.010.19	*Larrea tridentata* / Cryptogamic crust	Desert scrub		18%	14.1	

	Manual of CA Vegetation	CA Wildlife Habitat Relationship Type	Potential LeConte's Thrasher Habitat	Average Shrub Cover		
33.140.00	***Larrea tridentata – Ambrosia dumosa* Shrubland Alliance (Creosote Bush – White Bursage Scrub)**	**Desert scrub**	**Y**		**578.8**	578.8
33.140.42	*Larrea tridentata – Ambrosia dumosa*	Desert scrub	y	15%	504.7	
33.140.39	*Larrea tridentata – Ambrosia dumosa - Atriplex confertifolia*	Desert scrub	y	11%	35.2	
33.140.35	*Larrea tridentata – Ambrosia dumosa* / Cryptogamic crust	Desert scrub	y	30%	38.9	
	Other					
	Unpaved Road				69.3	
	Rural				4.2	
Total					**2,666.5**	**2,051.4**

Table 2: Vegetation Communities at Mitigation Site Considered to be Potential Habitat for LeConte's Thrasher

Code	Manual of CA Vegetation Alliance Association(s)	CA Wildlife Habitat Relationship Type	Potential LeConte's Thrasher Habitat	Average Shrub Cover	Acres	Acres of Habitat
	Shurb					
33.185.00	***Ephedra nevadensis – Lycium andersonii – Grayia spinosa* Shrubland Alliance** **(Nevada Joint Fir – Anderson's Boxthorn – Spiny Hop Sage Scrub)**	**Desert scrub**	**Y**	**26%**	**165.1**	**165.1**
33.185.01	*Lycium cooperi* (provisional)	Desert scrub	y	26%	165.1	
33.010.00	***Larrea tridentata* Shrubland Alliance (Creosote Bush Scrub)**	**Desert scrub**			**529.6**	
33.140.04	*Larrea tridentata*	Desert scrub		11%	200.9	
33.010.12	*Larrea tridentata – Atriplex polycarpa*	Desert scrub	y	13%	320.7	**320.7**
33.010.13	*Larrea tridentata – Pleuraphis rigida* (syn. *Hilaria rigida*)	Desert scrub		5%	8	
33.140.00	***Larrea tridentata – Ambrosia dumosa* Shrubland Alliance (Creosote Bush – White Bursage Scrub)**	**Desert scrub**	**Y**		**1,109**	**1109**
33.140.42	*Larrea tridentata – Ambrosia dumosa*	Desert scrub	y	31%	693.9	
33.140.55	*Larrea tridentata – Ambrosia dumosa* / *Krameria erecta*	Desert scrub	y	35%	27.1	
33.140.55	*Larrea tridentata – Ambrosia dumosa* / *Pleuraphis rigida* (syn. *Hilaria rigida*)	Desert scrub	y	41%	53.1	
33.140.35	*Larrea tridentata – Ambrosia dumosa* / Cryptogamic crust	Desert scrub	y	30%	334.9	

	Manual of CA Vegetation	CA Wildlife Habitat Relationship Type	Potential LeConte's Thrasher Habitat	Average Shrub Cover		
63.810.00	***Tamarix* spp. Shrubland Semi-Natural Alliance (Tamarisk Thickets)**	**Desert riparian**			**4.5**	
63.810.01	*Tamarix* spp.	Desert scrub		25%	4.5	
	Other					
N/A	**Unpaved Road**			N/A	**34.1**	
N/A	**Unvegetated Wash System**	**Desert wash**		**N/A**	**16.7**	
Total					**1,859.00**	**1594.8**

Table 3: Survey Details

Date	Surveyors*	Time	Beginning Conditions	Ending Conditions	Observation Details
5/12/2026	Dannique Aalbu*	0715 - 1045	66 °F, wind <5 mph	92 °F, wind <5 mph	LeConte's thrasher Individual (LCTH) heard calling within 50 feet of surveyor at the mitigation site. Individual seen briefly in flight.
		1730 - 2030	95 °F, wind 5-10 mph	81 °F, wind 10-15 mph	LCTH flushed from nest by burrowing owl surveyor at the mitigation site. Three eggs being incubated, presumably by female (**Photo 8**).
5/13/2026		0600 - 1030	64 °F, wind 5-10 mph	88 °F, wind 5-10 mph	LCTH active nest check. Egg incubation continuing at the mitigation site (**Photo 9**).
		1800 - 2015	84 °F, wind 5-10 mph	75 °F, wind 5-10 mph	LeConte's thrasher individual heard calling within 100 feet of surveyor at the mitigation site. No individual located.
5/14/2026		0600 – 1030	64 °F, wind <5 mph	86 °F, wind 5-10 mph	LeConte's thrasher active nest check at the mitigation site. Egg incubation continuing.

°F = degrees Fahrenheit; mph = miles per hour
***Surveyor Qualifications**: Dannique Aalbu is a senior environmental scientist with over 16 years of experience in the field. She has spent 1000+ hours surveying and monitoring for nesting birds, including 200+ hours in LeConte's thrasher habitat. She also has extensive experience (1000+ hours) performing desert tortoise surveys and monitoring, rare plant and general vegetation surveys, baseline biological surveys, burrowing owl surveys and monitoring, and aquatic resource delineations in the Mojave desert. She has a B.S. in Hydrology with a minor in Ecology from UC Merced and a M.S. in Environmental Science and Management with a concentration in conservation planning from UC Santa Barbara.

Table 4: Wildlife Species Observed in the Survey Area

Genus	Common Name
Birds	
Amphispiza bilineata	Black-throated sparrow
Athene cunicularia	Burrowing owl
Cardellina pusilla	Wilson's warbler
Cathartes aura	Turkey vulture
Chordeiles acutipennis	Lesser nighthawk
Corvus corax	Common raven
Eremophila alpestris	Horned lark
Lanius ludovicianus	Loggerhead shrike
Mammals	
Ammospermophilus leucurus	Antelope ground squirrel
Lepus californicus	Black-tailed jackrabbit
Vulpes macrotis	Desert kit fox*
Reptiles	
Aspidoscelis tigris	Western whiptail lizard
Callisaurus draconoides	Zebra-tailed lizard
Gopherus agassizii	Desert tortoise
Phrynosoma platyrhinos	Desert horned lizard
Uta stansburiana	Side-blotched lizard

*sign only

Appendix B Photographs



Photo 1: Representative photo of LCTH habitat at the project site



Photo 2: Representative photo of sparsely vegetated area of the project site, considered non-habitat for LCTH thrasher



Photo 3: Representative photo of LCTH habitat at the mitigation site, looking toward a mesquite dune feature



Photo 4: Large ephemeral wash located within mitigation site. Wash is considered non-habitat for LCTH, but habitat does exist in adjacent uplands



Photo 5: Desert tortoise observed during surveys at the mitigation site, within LCTH habitat



Photo 6: A second desert tortoise observed during surveys at the mitigation site, within LCTH habitat



Photo 7: Representative photo of LCTH habitat at the mitigation site, with the active LCTH nest pictured at center in spiny hopsage (Grayia spinosa)



Photo 8: Active LTCH nest in spiny hopsage (Grayia spinosa) with 3 eggs present



Photo 9: Active LTCH nest in spiny hopsage (Grayia spinosa) viewed through scope. Individual incubating eggs, with only tail observable.



Photo 10: Representative photo of creosote-only vegetation community at the mitigation site, considered non-habitat for LCTH thrasher



Photo 11: Lesser nighthawks observed during surveys at the mitigation site

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