

Appendix N
BLM Responses to Comments

BLM RESPONSES TO COMMENTS

Appendix N provides BLM responses to public comments on the Chevron Energy Solutions Lucerne Valley Solar DEIS. Complete comments and context can be viewed in the original letters, e-mails, and the transcript of DEIS Public Comment Meeting (Appendix M), which have been annotated to identify specific comments and assertions. All public comments received are included in Appendix M.

The procedure for locating a specific comment and response in Appendix N is as follows: As comment documents were received, each comment was assigned a three-digit document number. Comments in documents received in the form of a letter were assigned sequential numbers starting with 001; comment in documents received in the form of e-mail messages were assigned sequential numbers starting with 501; oral and written comments provided during the public comment meeting were assigned sequential numbers starting with 901. All comment documents received during the public comment period were cataloged in this manner and are being considered in preparing the Final EIS.

The responses to comments can be tracked in Table N-1 below.

Table N-1. Log of DEIS Comments Received

Unique Comment Numbers	Date Received	Agency, Organization, or Individual
Comment Letters		
001	3/5/2010	Mojave Desert Air Quality Management District
002-006	3/3/2010	CalTrans, District 8
007-014	5/20/2010	Defenders of Wildlife
015-020	5/13/10	San Bernardino County
021-147	5/20/10	Adams Broadwell Joseph & Cardozo, Attorneys at Law
148-178	5/27/10	Lucerne Valley Economic Development Association
179-182	5/18/10	Chevron Energy Solutions
183	5/20/10	Chevron Energy Solutions
184-241	5/20/2010	United States Environmental Protection Agency
242-252	5/13/10	Natural Resources Defense Council, Sierra Club, and The Wilderness Society
Emails		
501-502	2/13/2010	Edward Wood
503	4/11/2010	Douglas Metcalf
Public Meeting (Oral Comments)		
901-906	3/9/2010	Adams Broadwell Joseph & Cardozo, Attorneys at Law
907-913	3/9/2010	Bill Lembright
914-919	3/9/2010	Chuck Bell, Lucerne Valley Economic Development Association
920-925	3/9/2010	Dinah Shumway
Public Meeting (Written Comments)		
926	3/9/2010	Mike Hawkins
927-928	3/9/2010	Millie Rader

Comment responses in Appendix N are presented using the following format:

Comment Number 018

Comment

In terms of aesthetic impacts, this portion of State Route 247 is designated as a Scenic Route in the County General Plan. The Project utilizes an array configuration that is approximately six (6) feet high, and grading is minimized throughout, by keeping existing vegetation at a brush cut height under the solar arrays. This is lower in height than any habitable structure would be and would not block the views of mountains for drivers along State Route 247. Further, the maintenance, rather than complete elimination, of vegetation reduces the possibility of fugitive dust and softens the view of the Project. With these considerations, the Project is not inconsistent with the Scenic Route designation.

Response

Your comment is included in the public record and will be taken into account by the authorized officer when a Record of Decision for the project is implemented. We appreciate your input and participation in the public review process.

State Route 247's designation as a scenic route is noted on several pages of the DEIS, including ES-11, ES-12, ES-22, 3.10-5, 3.12-12, 4-10-1, 4.10-2, 4.12-10, and 4.18-3.

Comment Number 019

Comment

With regard to water usage, the County policy is to require a groundwater assessment report if a project anticipates using 10 acre feet per year (AFY) or more of groundwater. The project appears to fall below that threshold for both construction phases and for operations.

Response

Your comment is included in the public record and will be taken into account by the authorized officer when a Record of Decision for the project is implemented. We appreciate your input and participation in the public review process.

Comment Number 020

Comment

In terms of cumulative impacts, the County has received three (3) applications for solar photovoltaic projects in Lucerne Valley, since the BLM held Project scoping meetings in July 2009. A list of these projects and a map of their locations has been provided informally before and is also attached for your reference. We realize these projects were not included in the DEIS as the existing conditions baseline is generally established at the time of the Notice of Intent and scoping meetings.

Response

The proponents of the three proposed solar photovoltaic projects who have submitted applications to the San Bernardino County are those for Strawberry Peak, which is 13.5 miles from the project, Boulevard Associates Next Era, which is 11 miles from the project site, and Rabbit Springs Solar, which is 7.7 miles from the project site. Cumulative effects are evaluated in terms of the specific resource at the appropriate scale, so the boundaries of the Cumulative Effects Study Areas (CESAs) will vary by resource. For each resource, the BLM determined the extent to which the environmental effect could be reasonably measured and then used the appropriate geographic scale to include the effect on each resource. However, some project-related impacts affect a number of environmental resources across the same area, so in these instances, CESA boundaries were left identical for multiple resources where it seemed reasonable and prudent to do so. The boundaries of these CESAs have been set to ensure that all reasonably expected effects are identified and analyzed. Two of these projects were within the CESA boundaries and have been included in the cumulative effects analysis in Chapter 4 of the FEIS.

Comment Number 021

Comment

As explained more fully below, the DEIS does not comply with the requirements of NEPA, or the California Environmental Quality Act ("CEQA") for required discretionary approvals by California State

agencies. Therefore, the BLM may not approve the CDCA Plan amendment or ROW until an adequate joint DEIS/Environmental Impact Report (“EIR”) is prepared and circulated for public review and comment.

Response

The BLM’s DEIS and FEIS have been developed consistent with NEPA regulations promulgated by the Council on Environmental Quality for implementing the procedural provisions of the National Environmental Policy Act (NEPA, 40 CFR, 1500-1508), the Department of the Interior’s NEPA regulations (43 CFR, Part 46), the BLM NEPA Handbook (H-1790-1), Sections 201, 202, and 206 of the Federal Land Management Policy Act (FLPMA; 43 CFR, 1600), and the BLM Land Use Planning Handbook (H1601-1). For clarity, as Federal Agency, the BLM is required to comply with NEPA, and is not subject to CEQA requirements. This document is not a CEQA document. BLM acknowledges that a CEQA compliant document will be required for decision under state or local jurisdiction. CEQA does not apply to BLM actions.

Comment Number 022

Comment

The members of Local 477 build, maintain, and operate conventional and renewable energy power plants in San Bernardino County. Individual members of Local 477 work in areas affected by environmental degradation and public health and safety risks from industrial development. Members also live in and use areas that will suffer the impacts of projects related to power plant development, including noise and visual intrusion, water and soil pollution, and destruction of archaeological or wildlife areas. Environmental degradation jeopardizes future jobs by causing construction moratoriums, eliminating protected species and habitat, using limited fresh water and putting added stresses on the environmental carrying capacity of the State. This reduces future employment opportunities. In contrast, well designed projects that reduce environmental impacts of electrical generation improve long-term economic prospects. The EIS authors considered the types of impacts referenced in this comment.

Response

Section 4.0 of the DEIS, Environmental Consequences, is dedicated to assessing and analyzing the potential direct, indirect, cumulative, and residual effects on the human, physical, and natural environments that could result from implementing the Proposed Action and its alternatives.

Comment Number 023

Comment

The DEIS for this Project is wholly inadequate, because it fails to consider, among other impacts, the cumulative effects in the region that will cause environmental degradation. At least three of the proposed projects may be located within six miles of the Project, totaling 31,752 acres of land devoted to solar projects in a six-mile radius. The proposed Project will unavoidably tax the State of California’s limited air, water, land, biological and cultural resources and transmission capacity to a potentially significant cumulative extent. The final toll taken by this historic energy boom on California’s environment, public health and natural resource base may not be known for several years or longer, but currently available and substantial evidence shows that the effects will be severe. Based on these concerns, Local 477 and its members have a strong interest in ensuring that this Project complies with all applicable federal, State and local laws and regulations.

Response

Section 3.18 of the document, Cumulative Projects, discusses past, present, and reasonably foreseeable projects within the region of influence that could contribute to cumulative effects of the proposed project.

Table 3.18-1 lists these potential cumulative projects, including their location, size, status, and resources potentially affected. This list includes the three solar energy projects referenced, totaling approximately 31,236 acres.

Each project is identified by a map number, keyed to Figure 3.18-1. This figure shows the proposed action site and indicates the location of the potential projects contributing to the cumulative effects scenario.

A detailed discussion of cumulative effects of the proposed action and alternatives is presented by resource in Section 4.0, Environmental Consequences of the DEIS. The FEIS addresses the resources mentioned in this comment. Applicable plans, policies, and regulations are considered, by resource, in the Affected Environment section (Chapter 3) of the FEIS.

Comment Number 024

Comment

As these comments will demonstrate, the DEIS is fatally deficient and must be substantially revised and recirculated for further public review and comment before it may be finalized. We have prepared these comments with the assistance of Dr. Oliver Seely (water use), Jim Cornett, M.S. (biological resources impacts), T'Shaka Toure, M.S. (hydrology impacts) and Matt Hagemann, P.G. (hazardous soils). Their comments and qualifications are appended hereto as Attachment A ("Seely Comments"), Attachment B ("Cornett Comments"), Attachment C ("Toure Comments") and Attachment D ("Hagemann Comments"). Please note that their comments supplement the issues addressed below and should be addressed and responded to separately.

Response

Responses to Comments in Attachments A through D are provided separately. The BLM's DEIS and FEIS have been developed consistent with NEPA regulations promulgated by the Council on Environmental Quality for implementing the procedural provisions of NEPA (40 CFR 1500-1508); the Department of the Interior's NEPA regulations (43 CFR Part 46); the BLM NEPA Handbook (H-1790-1); Sections 201, 202, and 206 of FLPMA (43 CFR 1600); and the BLM Land Use Planning Handbook H1601-1.

Comment Number 025

Comment

NEPA's Purpose and Goals:

NEPA has two basic requirements, neither of which the DEIS satisfies:

First, NEPA requires that agencies take a "hard look" at the environmental consequences of a proposed action. A hard look is defined as a "reasoned analysis containing quantitative or detailed qualitative information." The level of detail must be sufficient to support reasoned conclusions by comparing the amount and the degree of the impact caused by the proposed action and the alternatives.

Response

The DEIS takes a "hard look" at the environmental consequences of the Proposed Action. Section 4.0, Environmental Consequences, is solely dedicated to assessing and analyzing the potential direct, indirect, cumulative, and residual effects on the human, physical, and natural environments that could result from implementing the Proposed Action and its alternatives. In addition, Table 4.18-1 provides a comparison summary of effects of the proposed action and alternatives.

Comment Number 026

Comment

Second, NEPA review makes information on the environmental consequences of a proposed action available to the public, which may then offer its insight to assist the agency's decision-making

Response

The BLM has complied with the public review requirements, as described below.

- Section 5.0, Consultation and Coordination, of the DEIS describes the public participation process in the development of this DEIS;
- Sections 5.1.1, 5.1.2, and 5.1.3 summarize distribution of the Notice of Intent for the EIS, as well as the public scoping process and responses. Appendix A, Public Scoping Summary Report, of the DEIS includes details of the scoping activities that took place to provide information to the public, along with a summary of the public comments that were received;
- Sections 5.1.4 and 5.1.5 provide details on distribution of the DEIS, which was circulated for a 90-day public review period on February 12, 2010.

A public meeting to receive comments on the DEIS was held on March 9, 2010, in Lucerne Valley. Copies of the DEIS were made available on the BLM Web site, at the BLM Barstow field office, and the California Desert District office. Copies of the DEIS were also available at the Apple Valley and Lucerne Valley public libraries.

Comment Number 027

Comment

Lack of complete, accurate and consistent information in the DEIS precludes an informed comparison of the alternatives and an analysis of the Proposed Action.

Response

Your comment is included in the public record and will be taken into account by the authorized officer when a Record of Decision for the project is implemented. We appreciate your input and participation in the public review process.

Comment Number 028

Comment

The BLM failed to take a hard look at all of the Project's impacts.

Response

See response to Comment 025.

Comment Number 029

Comment

The BLM impermissibly limited its alternatives analysis by relying on an arbitrarily narrow purpose and need statement.

Response

The CEQ regulations direct that an EIS "...shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action" (40 CFR, 1502.13). In compliance with this regulation, Section 1.1 of the DEIS (pp. 1-1 and 1-2) describe the BLM's purpose and need for the Lucerne Valley Solar Project EIS. Specifically, the BLM's purpose and need is to respond to CES's application under Title V of FLPMA (43 USC, 1761) for a right-of-way grant to construct, operate, and decommission a solar generation facility and associated infrastructure in compliance with FLPMA, BLM ROW regulations, 43 CFR, Part 2800, and other applicable federal laws. This section also notes that the BLM will decide whether to approve, approve with modification, or deny issuance of a ROW grant to CES for the proposed solar project.

Comment Number 030

Comment

The BLM violated NEPA's integration requirement by not conducting joint review under both NEPA and CEQA.

Response

The CEQ regulations (40 CFR 1506.2[b]) encourage federal agencies to be joint leads with state and local agencies when two agencies have approximately equal components of a proposal being considered. Section 1.4 of the DEIS summarized the federal, state, and local policies, plans, and laws that apply to the Proposed Action and alternatives. In addition, Table 1-2 lists the major permits, approvals, and consultations that would be required before any of the action alternatives could proceed. The state and local agencies listed on Table 1-2 have approval authority over “limited portions of the Proposed Action and alternatives,” such as the California Department of Fish and Game’s consideration of the Section 1602 Stream Alteration Agreement or the Regional Water Quality Control Board’s consideration of the Section 401 Water Quality Certification. Therefore, preparation of a joint environmental document is not required. However, as shown in Section 5.2.1 of the DEIS, federal, state, and local agencies were consulted during preparation of the EIS.

The County of San Bernardino declined the CEQA lead role because they determined that the County did not have a decision to be made. California Department of Fish and Game also declined the CEQA lead role. BLM was unable to locate a CEQA lead agency in order to write a joint document.

Comment Number 031

Comment

The DEIS precludes a meaningful analysis of the Project, and the BLM must prepare and recirculate a joint DEIS/EIR before making a decision

Response

See Response to Comments 021 and 030.

Comment Number 032

Comment

The DEIS contains incomplete, inconsistent and inaccurate information that precludes a meaningful comparison of the alternatives and understanding of the Proposed Action. This violates the basic requirements of NEPA. The BLM must revise the DEIS to provide a reasonable, good faith and objective presentation of the affected environment and environmental consequences of the Proposed Action and its alternatives.

Response

The DEIS provides complete, consistent, and accurate information about the Proposed Action and alternatives, the affected environment, as well as the direct, indirect, cumulative, and residual effects of the Proposed Action and alternatives.

Comment Number 033

Comment

The DEIS completely fails to disclose BLM’s required consultation under the Endangered Species Act (“ESA”) with the United States Fish & Wildlife Service (“USFWS”) for the federally and State threatened desert tortoise.

Response

The BLM’s requirement to consult with the USFWS is detailed throughout the DEIS.

Section 1.4 of the DEIS summarizes the federal, state, and local policies, plans, and laws that apply to the EIS and includes the Endangered Species Act.

Table 1-2, Major Permits, Approvals, and Consultations, presents a list of the major permits, approvals, and consultations required, including those required by USFWS and CDFG. It specifically notes the Section 7 consultation and Biological Opinion required under the Endangered Species Act. The mitigation measures in Section 3.6 of the FEIS fully incorporate all terms and conditions of the Biological Opinion which was issued on June 10, 2010. This Biological Opinion is included in the Appendix to the FEIS.

Page 4.6-16 of the document states “The Applicant has completed consultation with the USFWS and a Biological Opinion has been released by USFWS. All terms and conditions associated with these consultations would be implemented.” Consultation under the California Endangered Species Act has not been concluded between the Applicant and California Department of Fish and Game as of the writing of this FEIS. However, as indicated in the Section titled: *Effect BIO-8: Loss of desert tortoise or loss of habitat for desert tortoise* all terms and conditions associated with this consultation shall be implemented.

Section 5.2.1 also notes that the BLM consulted with the USFWS and CDFG during preparation of the EIS. The Biological Assessment is located in Appendix C. The Biological Opinion is located in Appendix K.

Comment Number 034

Comment

The DEIS also completely fails to analyze the USFWS’s potential issuance of a biological opinion and incidental take permit under Section 7 of the ESA.

Response

The need for a Biological Opinion and consultation under Section 7 of the Endangered Species Act is described in Section 1.4.1, Relationship to Federal Policies, Plans, and Programs, of the DEIS and on Table 1-2, Major Permits, Approvals, and Consultations, of the DEIS. In addition, consultation with the USFWS and CDFG is described on page 4.6-16 of the DEIS, which indicates that a Biological Opinion has been released by USFWS and that all terms and conditions associated with these consultations would be implemented.

The BLM initiated consultation with the US Fish and Wildlife Service, in accordance with Section 7 of the Endangered Species Act, 16 USC, § 1536(a) (2), on February 8, 2010. The Biological Opinion for the Lucerne Valley Chevron Solar Project, San Bernardino, California (3031 [P] CA-680.33) (8-8-10-F-6) has been completed and is included as Appendix K of the Final EIS. All terms and conditions associated with this Biological Opinion have been integrated into the avoidance and minimization measures found in Section 4.6 of the FEIS.

Comment Number 035

Comment

There is no indication in the DEIS or its appendices that the BLM has initiated consultation under Section 7 of the ESA, or that the DEIS reviews the environmental effects of the USFWS’s issuance of a Biological Opinion and incidental take permit. The Biological Opinion concludes with a “no jeopardy” determination for the Proposed Project – the USFWS concludes that the project in the preferred alternative would not jeopardize the continued existence of desert tortoise.

Response

See response to Comment 034.

Comment Number 036

Comment

Because desert tortoises have been found on the site, and the Project will clearly impact the species, the BLM must undertake Section 7 consultation.

Response

See response to Comment 034.

Comment Number 037

Comment

The DEIS states that the Applicant has completed consultation with the USFWS and the California Department of Fish & Game (“CDFG”) and that all terms and conditions associated with these

consultations would be implemented. However, the DEIS and its appendices provide no evidence to support this statement, and no evidence that the BLM has consulted with the USFWS.

Response

See response to Comment 034. CES is in direct consultation with California Department of Fish and Game. Consultation under the California Endangered Species Act has not been concluded between the Applicant and California Department of Fish and Game as of the writing of this FEIS. However, as indicated in the Section titled: *Effect BIO-8: Loss of desert tortoise or loss of habitat for desert tortoise* all terms and conditions associated with this consultation shall be implemented.

Comment Number 038

Comment

The DEIS fails to disclose any of the terms and conditions the USFWS and CDFG require the Applicant to implement.

Response

The Biological Opinion is included in Appendix K of the Final EIS. Mitigation measures BIO-1 through BIO-13 were designed in coordination with the USFWS and CDFG. The Biological Opinion concludes a no jeopardy determination for desert tortoise and reaffirms the mitigation measures presented in the DEIS. All terms and conditions as well as all conservation measures outlined in the Biological Opinion have been fully integrated into the FEIS mitigation measures.

Comment Number 039

Comment

Because the terms and conditions seem to include moving tortoises from the site, the DEIS must include a Translocation Plan with specific information including, but not limited to, the location of the translocation area, how the tortoises will be moved, when they will be moved and who will monitor their relocation.

Response

Measure MM BIO-11 in the DEIS presents desert tortoise protective measures. In addition, Section 2.5.1 of the Biological Assessment for the Chevron Solar Project Site Lucerne Valley, contained in Appendix C of the DEIS, provides additional details on the tortoise clearance surveys and relocation efforts. This section specifically notes that BLM- and USFWS-authorized biologists and desert tortoise monitors will conduct the clearance surveys. If tortoises were detected during the survey, an authorized biologist would relocate the tortoise outside the project ROW fence. Any tortoises that may be directly impacted would be relocated off site in conformance with the Biological Opinion. Since only short distance relocations would be necessary, a Translocation Plan is not required. Translocation Plans are only needed if long distance translocation is proposed. This proposed project does not include long distance translocation.

MM BIO-11 has been modified to reflect this additional detail.

Comment Number 040

Comment

The DEIS must disclose the status of BLM consultation with the USFWS, the terms and conditions imposed by the USFWS and the Translocation Plan. Without this information, it is impossible for the public to meaningfully assess the environmental effects and mitigation for impacts to the desert tortoise. Furthermore, without full public disclosure and opportunity for comment, USFWS will be required to conduct further environmental review under NEPA.

Response

See Response to Comments 034 and 39.

Comment Number 041

Comment

The BLM must accurately describe the amount of water the Proposed Action and alternatives will need during operation. The DEIS does not contain any evidence, discussion, or information to support the determination that the Proposed Action would only require, at most, 45,000 gallons of water per year during operation. The BLM must revise the DEIS to support its findings for both construction and operational water use, or acknowledge that the Project will likely require much more than 45,000 gallons of water per year during operation.

Response

During operation and maintenance, water would be used primarily for panel washing. The Applicant estimates that the panels would require washing once per year, during the summer when power prices and, correspondingly, power production, are highest. Panel washing would require between approximately 10,050 to 20,100 for Phase I and 12,470 to 25,140 gallons for Phase II, or, correspondingly, 22,520 to 45,240 gallons per year once the entire 45-MW field is built (Fotowatio Renewable Ventures 2010). Water for panel washing would be provided through a contract with one of the local large industrial companies or municipal water companies that have high capacity wells and water systems. No new water sources would need to be developed. See section 4.5.2.3 of the FEIS.

The amount of water used could vary from project to project, and is based on the specific conditions at the site and the technology that is used for the project. The estimated water use provided in the FEIS and stated above are for this specific location and utilizing the specific project technology.

Comment Number 042

Comment

Because the Project's solar panels will likely need cleaning at least twice per year, Dr. Oliver Seely estimated that the Proposed Action would require approximately 270,000 gallons per year for maintenance. Dr. Seely's estimated water use is six times more than what the BLM determined the Project would require in the DEIS.

Response

See Response to Comment 041.

Comment Number 043

Comment

Dr. Seely's estimate is further supported by the estimated water use for other PV solar projects in the region. For example, the Mitigated Negative Declaration for the Boulevard Associates Kramer Junction Project states that the 20-MW PV solar facility "shall consume a 'minimal amount' of water for the occasional cleaning of panels as they become dusty throughout the year." This "minimal amount" is approximately 150,000 gallons of water per year.

Response

See Response to Comment 041. It should also be noted that the solar technology proposed at the project site is different than the technology used at the Kramer Junction site. The comparison of water use between the two projects is not accurate.

Comment Number 044

Comment

Stephanie Tavares, an environmental reporter for the Las Vegas Sun, compared the proposed operational water use for various PV solar projects.³⁹ She determined that 16,689 gallons of water per MW was required yearly to clean PV solar plants. Based on this assumption, the proposed Project would need approximately 751,005 gallons of water per year for maintenance.

Response

See Response to Comment 041.

Comment Number 045

Comment

As Dr. Seely's analysis in Attachment A and additional factual data indicate, the BLM likely underestimated the Project's proposed operational water use. Because the BLM underestimated the operational water use, the BLM may have also underestimated the Project's construction water use. The BLM must either support its initial determinations with factual evidence, or recalculate the Proposed Action's water use, as well as the water use necessary for each of the alternatives. Only then will the BLM's analysis of the environmental impacts become meaningful.

Response

See Response to Comment 041.

Comment Number 046

Comment

The DEIS's description of the Project's water source is incomplete. The specific source of construction and maintenance water for the Project is not disclosed in the DEIS. The DEIS states that water may be provided through a contract with one of the local large industrial or municipal water companies, from new or existing onsite wells, or the Mojave Water Agency. The Project's environmental consequences will vary depending on the water source. Thus, the BLM must provide a complete and consistent description of the Project's water source so that the public may meaningfully assess the Project's impacts.

Response

Water for construction and operation would not be supplied from new or existing on-site wells. Section 3.5.2.3 has been corrected in the Final EIS.

Water would not be provided from the Mojave Water District. Instead, Section 3.5.1 of the DEIS states the Applicant may confer with the Mojave Water District to "ensure protection of groundwater resources and compliance with any established groundwater management plans and, if necessary, to secure permits needed for encroachment on water district easements."

As noted in Section 4.5, Water Resources/Hydrology, "The water obtained for both construction and operations would be from a permitted off-site source; therefore, it would not decrease the water supply in the Proposed Action area."

Several different sources of water may be used throughout the 30 year life of the project. Water used for this project would be from an existing permitted source and the water used for this project, combined with other source uses, would not exceed the permitted source's authorized level of use.

Comment Number 047

Comment

At this point, the BLM has completely failed to inform the public about the source of water and the environmental and public health effects from using such water for the Project. Water from an offsite source may require new infrastructure, modifications to existing infrastructure and/or additional federal, State and local approvals. The closest water company to the Project site is the Jubilee Mutual Water Company located approximately five miles away. The Golden State Water Company also provides water to the Lucerne Valley area and is located approximately 20 miles away. If the Jubilee Mutual Water Company and the Golden State Water Company do not have sufficient capacity to serve the Project, water may be provided from another water company in the desert area.

Response

Section 2.2.3.5, Operations and Maintenance, states the following on page 2-22:

"Water for panel washing would be provided through a contract with one of the local large industrial companies or municipal water companies that have high capacity wells and water systems. No new water sources would need to be developed."

Water for panel washing would be trucked to the site, and no additional federal, state, or local approvals would be required. No additional environmental effects that have not been identified in the DEIS would occur. The impacts of trucking water to the site are addressed in Section 4.13.2.3 of the DEIS. No public health effects from panel washing were identified.

See response to Comment 046.

Comment Number 048

Comment

Using water from any of these sources raises a myriad of potentially significant effects and legal issues that have not yet been addressed, including impacts on groundwater from increased extraction, impacts on State water from California's State Water Project, impacts on biological resources, land use, and air quality from construction of pipelines, availability and reliability of water supplies, legal entitlements, need for further right-of-ways, effects from trucking water to the site and others.

Response

See Response to Comment 047.

Comment Number 049

Comment

If the Project will receive water from new or existing onsite wells, the location of the wells, how the water will be pumped from the wells, when the water will be pumped from the wells, the effects of pumping water from the wells and the required federal, State and local approvals must be disclosed to the public.

Response

See Response to Comment 046.

Comment Number 050

Comment

The Project's need for large amounts of construction and operational water would likely exacerbate overdraft conditions and cause an overall decline in water levels in the region.

Response

Refer to Response to Comment 046.

Comment Number 051

Comment

Clearly, the BLM has not even begun to describe the Project's proposed water supply and the Project's affects on water resources. The BLM must provide a complete and consistent description of the Project's water source with an assessment of the Project's impacts on that source and disclose it to the public.

Response

Refer to Response to Comment 041 and 046.

Comment Number 052

Comment

The DEIS's description of the Project's impacts to drainage systems is incomplete and inconsistent The BLM must revise these inconsistencies and provide a complete description of the Proposed Action's impacts to natural drainage systems.

Response

The proposed modifications to on-site drainage systems for all action alternatives are presented in Sections 2.2.3, 2.2.4, and 2.2.5 of the DEIS. Project-related impacts on the drainage system for all project alternatives are described in Sections 4.5.2.3, 4.5.2.4, and 4.5.2.5 of the DEIS. The BLM DEIS found that impacts on the drainage system vary by alternative.

The Hydrology Study for the Lucerne Solar Project (January 2010), prepared by Westwood Professional Service, Inc., has been submitted to BLM and is included in Appendix O of the Final EIS. The study identifies the project-specific modifications and associated impacts on both on- and off-site drainage systems and presents drainage calculations, best management practices, and long-term maintenance recommendations. The findings and recommendations of the study have been added to Section 4.5 of the Final EIS.

A Stormwater Pollution Prevention Plan is included as Appendix I.

Comment Number 053

Comment

Specifically, if drainage systems will be modified, the DEIS must disclose what modification will occur, which drainages will be impacted and to what extent the drainages will be modified.

Response

See Response to Comment 052.

Comment Number 054

Comment

This is fundamental information that is required to provide the public an opportunity to meaningfully compare the Proposed Action with the alternatives. For example, to compare alternatives, the public must know whether the Proposed Action would modify the same drainages as Alternative 4. In addition, there may be an alternate site design that will impact drainages less.

Response

See Response to Comment 052.

Comment Number 055

Comment

The DEIS must also describe what fill material the Applicant will use to modify the drainages. If cement is used for bank stabilization and protection for transition and curve segments, the Project will significantly impact the ability of wildlife to utilize the surrounding area. If the Applicant will use natural substrate (i.e. compacted earthen [sic] material along with rip rap), however, impacts to biological resources may be reduced.

Response

The hydrology study identifies the project-specific modifications and associated impacts on both on- and off-site drainage systems and presents drainage calculations, best management practices, and long-term maintenance recommendations. The findings and recommendations of the study have been added to Section 4.5 of the Final EIS.

A Stormwater Pollution Prevention Plan is included as Appendix I.

Comment Number 056

Comment

The BLM's failure to provide even basic information on impacts to drainages precludes meaningful public input on the Proposed Action's affect on drainages and on alternatives to the Proposed Action. The BLM must provide this information so that it can take a hard look at impacts to the drainages and provide mitigation where feasible.

Response

See Response to Comment 052.

Comment Number 057

Comment

The BLM failed to describe whether storm water will be drained from the site through newly constructed drainages or through natural onsite drainages. This information is necessary for a complete analysis. For example, if the Applicant will construct designated storm drains, additional grading will be necessary. If natural onsite drainages are used, the DEIS should discuss their carrying capacity and the possibility of overflow. The BLM must provide this information so that all of the Project's impacts can be assessed.

Response

See Response to Comment 052.

Comment Number 058

Comment

The BLM must prepare a Hydrology Report and finalize the Storm Water Pollution Prevention Plan. The BLM must provide the public with a complete and final Hydrology Report and Storm Water Pollution Prevention Plan (SWPPP) before approving the Project.

Information normally contained in these reports helps the public understand and assess the water table, the natural flow pattern onsite and offsite and the Applicant's measures to address flooding.

Response

See Response to Comment 052.

The Hydrology Study for the Lucerne Solar Project (January 2010), prepared by Westwood Professional Service Inc., has been submitted to BLM and is included in Appendix O of the Final EIS.

A draft SWPPP is included as Appendix I. The SWPPP will not be final until adopted and certified by the construction contractor(s) responsible for its implementation and the State Water Board has issued the Waste Discharge Identification Number (WDID No.).

Comment Number 059

Comment

The DEIS's description of the Project's Restoration Plan is incomplete. The BLM must provide a complete and consistent description of the Project's Restoration Plan before it issues a decision. The Biological Assessment references "an approved" Restoration Plan. However, the DEIS and its appendices contains no Restoration Plan to enable the public to meaningfully review the Project's effects.

Response

The restoration plan is not complete at this point in time. A general restoration plan will be approved prior to the Record of Decision being issued. A detailed restoration plan, which would be subject to NEPA compliance, would be written many years in the future. It is anticipated that restoration techniques will change greatly over the next thirty years. Writing a detailed plan that would not be implemented for thirty years and would be rewritten prior to implementation is not necessary.

Comment Number 060

Comment

The BLM must disclose the Applicant's Restoration Plan so that decision makers and the public will understand all of the Proposed Action's impacts. For example, if restoration of the site requires revegetation, the Project may impact native vegetative communities. Project sites in California are often revegetated with creosote bushes from Texas. Creosote bushes from Texas, however, are biologically different from California creosote bushes, and may overtake the native species. Information about what plants will be used for revegetation, how drainages will be restored, whether wildlife will be reintroduced and what other restoration activities will be implemented, is necessary for a meaningful impacts analysis.

Response

See Response to Comment 059.

Comment Number 061

Comment

The DEIS inconsistently describes the Project site as both occupied and vacant.

The DEIS inconsistently describes the Project area as both occupied and vacant and fails to clearly identify the location of structures. The DEIS states that “[t]here are several occupied buildings of unknown origin that are likely not permitted and graded dirt access roads, indicating there are residents living on the property illegally.” The DEIS also states, however, that “[t]he site is undeveloped and vacant and has never been officially used for any commercial, agricultural, or industrial purposes.”

If there are occupied buildings on the Project site, the BLM must disclose where the buildings are, what hazardous materials the buildings contain and whether the occupants of the buildings will leave the Project site before construction.

Response

DEIS page 3.9-2 states “The site is almost entirely vacant and undeveloped; however, there are several occupied buildings of unknown origin that likely not permitted, as well as graded dirt access roads, indicating there are residents living on the property illegally.” This statement was removed from the FEIS. At the time the DEIS was written there were residential related structures on BLM managed land. These structures included a mobile home. There were no hazardous materials. The structures were placed on BLM managed land by mistake. The owner of the structures purchased a piece on property nearby and accidentally placed his home on the wrong parcel of land. This was a trespass on federal land. The owner has since moved his structures onto his own property. No remaining material, including hazardous material, is located on the project site due to this trespass.

Comment Number 062

Comment

For example, if there are existing structures south of Zircon Road, development of Alternative 5 would not require the destruction and removal of these structures. However, if the buildings are located north of Zircon Road, destruction of the buildings would be necessary under every action alternative, and workers may be exposed to asbestos, lead paint and other hazardous materials. In addition, if residents of the buildings will remain on the Project site during construction and/or operation, the DEIS should assess visual and noise impacts to onsite sensitive receptors. Depending on the location of the occupied buildings, Alternative 4 may reduce visual impacts to these onsite sensitive receptors.

Response

See Response to Comment 061.

Comment Number 063

Comment

The BLM must provide a consistent description of the Project site, so that a meaningful comparison of the alternatives and an assessment of the Proposed Action’s environmental consequences are possible. The DEIS’s description of the site as both occupied and vacant precludes a meaningful analysis. In addition, the DEIS’s failure to describe the location of buildings precludes a meaningful analysis. The BLM must revise the DEIS to provide a consistent description that adequately compares the alternatives and evaluates the environmental impacts.

Response

See Response to Comment 061.

Comment Number 064

Comment

The DEIS’s description of the Project site as mining land and an area with little or no mining activity is inconsistent. The DEIS states that “[t]he Proposed Action would be located approximately eight miles east

of the junction of Barstow Road and Old Woman Springs Road on partially disturbed mining land.” The DEIS also states, however, that “[t]he Proposed Action is located in an area with little or no mining activity, and no minerals are found on the site.”

Response

The Proposed Action is in a region with active mining operations. DEIS Table 3.17-1 lists 23 energy and mineral resource sites within five miles of the project area; there are no active mining operations or mining claims within the project site itself. The DEIS concludes that due to the lack of known mineral resources at the site, no effect on mineral or energy resources would occur. The actual project site is disturbed from past mining operations. There are shallow pits remaining on the site due to past mining activity.

Comment Number 065

Comment

The inconsistent description of the area as mining land with little or no mining activity is misleading to the public and affects the BLM’s analysis of environmental consequences. The DEIS recognizes that Lucerne Valley has a rich mining history and that it is possible that mining claims occur within the Project area. The BLM’s description of the site as having “little or no mining activity” is clearly inconsistent and misleading.

Response

See Response to Comment 064.

Comment Number 066

Comment

Furthermore, the BLM relies on this misleading statement to support its own conclusion that the Project would not restrict access to mineral resources and result in an irreversible and irretrievable commitment of mineral resources. The misleading statement, therefore, precludes informed decision-making. The description of mineral resources on the site needs to be adequately determined and consistently described so that all of the impacts will be disclosed to the public and decision makers.

Response

There are no active mining operations or mining claims within the Proposed Action site. The DEIS concludes that, due to the lack of known mineral resources at the site, no effect on mineral or energy resources would occur. However, if mining resources were to be located on site, this project would not be an irretrievable or irreversible commitment of resources. Once the project is complete and the land is reclaimed, this land could again be available for mining activities.

Comment Number 067

Comment

The DEIS’s description of impacts to Joshua trees is inaccurate
The DEIS mischaracterizes the Project’s significant impacts to Joshua trees. The DEIS states that no long-term direct impacts to Joshua trees are anticipated because these plants would be flagged for salvage and removed. However, the DEIS provides no support for this statement.

Response

The Applicant would work with San Bernardino County to develop a salvage plan that would address the long-term survival of yucca plant species. Specific plants would be flagged for salvage and removed. In addition, no long-term adverse indirect effects on the remaining yucca plants (e.g., due to noise, vibration, dust) are anticipated because construction and maintenance would be short term. Section 4.6.2.2 of the FEIS discussed affects to Joshua trees. It is acknowledged that some plants would be loss, and some transplanted plants would not survive.

Comment Number 068

Comment

Jim Cornett found that Joshua trees experience high rates of mortality during salvaging. Mortality typically exceeds 50% and sometimes reaches 100%.⁷⁶ As set forth in Attachment B, the BLM must reassess the long-term significant impacts to Joshua trees.

Response

See Response to Comment 067.

Comment Number 069

Comment

The DEIS's description of impacts resulting from cutting and grubbing site vegetation is incomplete and inaccurate

It is unclear from the DEIS what "activity" will affect vegetation long-term, and why the BLM could not conclude that the impact would be significant.

Response

The Applicant has modified the site treatment to eliminate brushing and mowing portions of the site. As a result of detailed engineering, the Applicant has concluded that cutting vegetation at four inches above the ground would not be practical for construction and operation of the solar facility. Vegetation would be removed, and the entire site would be rough graded. This description will be modified in the Final EIS.

Section 4.6.2.2 of the DEIS acknowledges that even brushing and mowing vegetation on the site would "result in the loss of all vegetation on the developed portion of the site." Mitigation measures MM BIO-1 through MM BIO-5 and MM BIO-13 were identified to reduce adverse effects associated with habitat loss.

Comment Number 070

Comment

The DEIS must contain a complete description of what activity will affect vegetation in the long-term. If the effects depend on the scale and intensity of mowing activities, impacts should be easy to assess.

According to the DEIS, mowing will occur on 420 acres and will reduce vegetation to between six and twelve inches in height.⁷⁸ Because the scale and intensity of mowing activities is clearly defined, a biologist should be able to determine the long-term impacts to vegetation easily.

Response

See Response to Comment 069.

Comment Number 071

Comment

Mr. Cornett found that long-term impacts will be significant. Desert perennials concentrate leaves, buds, blossoms, fruits and seeds in their outer branches.⁷⁹ Mowing and grubbing activities destroy those portions of the plants.⁸⁰ Grubbing also has a greater impact than grading because there is a potential for deeper penetration of the soil by the teeth of the plow. The BLM must accurately describe the significant long-term effects to vegetation from mowing and grubbing.

Response

See Response to Comment 069.

Comment Number 072

Comment

In sum, information in the DEIS is incomplete, inconsistent and inaccurate. Courts have held that "[w]here the information in the initial EIS was so incomplete or misleading that the decisionmaker and the public could not make an informed comparison of the alternatives, revision of an EIS [was] necessary to provide a reasonable, good faith, and objective presentation of the subjects required by NEPA." The BLM must revise the DEIS to provide a reasonable, good faith and objective presentation of the affected environment and environmental consequences of the Proposed Action and its alternatives.

Response

The DEIS presents a reasonable, good faith, and objective presentation of the Proposed Action and its alternatives. Revisions have been made throughout the FEIS to clarify and provide information as requested through these comments.

Comment Number 073

Comment

The DEIS does not contain a hard look at the project's impacts.

The discussion of impacts must include both "direct and indirect effects (secondary impacts) of a proposed project." The impacts analysis must include a discussion of the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and any irreversible or irretrievable commitments of resources which would be involved in the proposal should it be implemented. An agency need not speculate about all conceivable impacts, but it must evaluate the reasonably foreseeable significant effects of the proposed action. Reasonable foreseeability means that "the impact is sufficiently likely to occur that a person of ordinary prudence would take it into account in reaching a decision."

Response

Direct, indirect, cumulative, and residual effects for all environmental resources are contained in Chapter 4 of the DEIS, Environmental Consequences.

The "Relationship Between Short-Term Uses and Long-Term Productivity of the Environment" is addressed in Section 4.18.2 of the FEIS. Irreversible or irretrievable commitments of resources are discussed in Section 4.18.1 of the FEIS.

Comment Number 074

Comment

The DEIS does not consider all of the Project's significant and foreseeable environmental impacts to biological resources, water resources, transmission and communication systems, mineral resources, noise, hazards and cultural resources. The BLM's failure to take a hard look at the Project's impacts violates the basic requirements of NEPA. The BLM must revise its impacts analysis and issue a supplemental EIS for public review and comment.

Response

The DEIS takes a "hard look" at the environmental consequences of the alternatives. Section 4.0, Environmental Consequences, of the document is dedicated to assessing and analyzing the direct and indirect, cumulative, and residual effects on the human, physical, and natural environments that could result from implementing the Proposed Action and its alternatives. The FEIS is also available for public review.

Comment Number 075

Comment

The BLM did not consider all of the Project's impacts to biological resources. Jim Cornett, a certified wildlife biologist, reviewed the DEIS's analysis of impacts on biological resources and special status species. Mr. Cornett determined that the BLM failed to take a hard look at all of the Project's impacts. Therefore, the BLM must revise its analysis of the Project's impacts to biological resources.

Response

Section 4.6 of the DEIS considers the direct, indirect, cumulative, and residential impacts on biological resources associated with the Applicant's proposal and all project alternatives. Detailed information about potential impacts on biological resources is provided in Appendix C, Biological Assessment, and Appendix D, Comprehensive Biological Resources Assessment.

Comment Number 076

Comment

The BLM must evaluate the Project's cumulative impacts to the Desert Tortoise.

The DEIS recognizes that desert tortoises are present on the Project site and that construction and operation activities may impact the species.⁸⁹ Desert tortoises are listed as a threatened species under both the ESA and the California Endangered Species Act ("CESA"). Despite the protected status of desert tortoises, the BLM failed to take a hard look at the cumulative impacts caused by the Proposed Action and the action alternatives. The BLM must adequately evaluate the Project's cumulative effects on the desert tortoise.

Response

The project's cumulative effects on the desert tortoise is evaluated in Section 4.6.4.3 of the DEIS. This analysis includes potential impacts associated with a number of projects proposed on BLM managed land, in addition to other past, present, and reasonably anticipated future projects within the cumulative effects study area. The DEIS found that:

"For desert tortoise, no critical habitat is present within the CESA, and thus, there would be no cumulative loss of that habitat. Desert tortoise would, however, be permanently excluded from the entire 516 acre site as a result of the installation of the perimeter fence (per MM BIO-10). Therefore, the construction of the solar facility would represent a loss of 516 acres of suitable desert tortoise habitat. It is unlikely that there would be a cumulative effect from avoidance behavior due to distances between projects and varied construction schedules. Animals can move within open spaces surrounding and between these projects. Reduced overall habitat in the general area may cause increased competition. These effects would be adverse and long-term and could alter special status species population abundances, but are not expected to cause an actionable cumulative effect, such as potential extirpation or change in status."

The primary discussion of cumulative effects focuses on the Proposed Action. In addition cumulative effects from the alternatives are identified below the main discussion. A comparative analysis of potential cumulative effects for all alternatives considered in detail, including Alternative 5, is included in Section 4.6.4.3.

Also, see Response to Comment 075.

Comment Number 077

Comment

The DEIS concludes that there would be no cumulative effect, such as extirpation or change in status to desert tortoises, because they could move within the open spaces surrounding the various projects in the region.

However, desert tortoises have site-restricted populations. The inability for desert tortoises to utilize the site where they typically feed, find shelter, or breed may cause stress and territorial battles and is most likely to result in death.

Response

See Response to Comment 076. The Biological Opinion concluded with a "no jeopardy" determination for the proposed project. Also, since this project does not impact designated critical habitat for the desert tortoise, the Biological Opinion concludes that the proposed project would not adversely modify critical habitat.

Comment Number 078

Comment

Three solar project ROWs are proposed within six miles of the Project, totaling 31,752 acres of land devoted to solar projects in a six-mile radius. The BLM must analyze what impact the loss of 31,752 acres of land within a six-mile radius will have on the long-term success of the species.

The BLM must also rigorously compare the Proposed Action's cumulative effects with the reduced cumulative effects of Alternative 5 and the use of alternate sites.

Response

See Response to Comments 076 and 077. The Biological Opinion considers cumulative effects when making a jeopardy and adverse modification determination.

Comment Number 079

Comment

The BLM must evaluate the Project's impacts to the California threatened Mojave ground squirrel. Construction and operation activities could significantly impact Mohave ground squirrels. The BLM must determine whether the Project may impact Mohave ground squirrels in order to mitigate impacts and comply with the CESA fully.

Response

A Mohave ground squirrel assessment was conducted in May 2009 (Chambers Group 2009), but no Mohave ground squirrels were observed on the site. The DEIS found that the Mohave ground squirrel was considered to have a low potential to occur on-site based on a lack of recorded historical occurrences within five miles of the site.

The site is outside the published range of the Mohave ground squirrel, and live trappings performed nearby during other projects did not reveal their presence; therefore, trapping studies were not conducted. The nearest known occurrence of Mohave ground squirrel is over five miles west of the project site, two miles east of the junction of SR 247 and SR 18.

Impacts on Mohave ground squirrel associated with the Proposed Action are addressed in Section 4.6.4.2 of the DEIS, which stated that the Mohave ground squirrel was not observed within the Proposed Action area during field surveys. It also stated that the Proposed Action (and all action alternatives) would remove potential habitat for this species, and that Mohave ground squirrels would be adversely affected. The DEIS also found that with implementation measures MM BIO-2 through MM BIO-7 and consultation with state agencies (MM BIO-9), adverse effects on special status wildlife would be avoided.

CES is engaged in further discussions with the California Department of Fish and Game concerning the Mohave ground squirrel.

Comment Number 080

Comment

The Project may impact Mohave ground squirrels and trigger the "incidental take" provisions of the CESA. CDFG guidelines specify that surveys for Mohave ground squirrels be conducted on proposed project sites that support desert scrub vegetation and are within or adjacent to the Mohave ground squirrel geographic range.¹⁰⁰ The protocol mandates an initial visual survey of a project site.

Response

See Response to Comment 079.

Comment Number 081

Comment

The Project site is within the Mohave ground squirrel's range, and the species has been observed within four miles of the Project site. The Applicant conducted only one visual survey in May 2009, but failed to conduct any trapping studies on the Project site.

Response

See Response to Comment 079.

Comment Number 082

Comment

The Applicant did report that a Round-tailed ground squirrel was observed. However, Round-tailed ground squirrels are impossible to distinguish from Mohave ground squirrels during visual field surveys. Thus, the biologist conducting the visual survey may have actually observed a Mohave ground squirrel.

Response

See Response to Comment 079. Experienced biologists are able to distinguish the difference between squirrel species.

Comment Number 083

Comment

Nevertheless, according to CDFG guidelines, because no Mohave ground squirrels were definitively identified during the visual survey, the Applicant should have conducted a trapping study. However, the Applicant failed to do so. The failure to conduct trapping studies is inconsistent with CDFG guidelines.

Response

See Response to Comment 079.

Comment Number 084

Comment

Because the site provides suitable habitat for State protected Mohave ground squirrels, this species may be present on the site and significantly impacted by construction and operation activities. These activities could result in an unauthorized take under the CESA. The BLM must require the Applicant to conduct trapping surveys on the Project site so that it may adequately assess the Project's impacts and ensure compliance with the CESA.

Response

See Response to Comment 079.

Comment Number 085

Comment

In addition, the USFWS is considering listing the Mohave ground squirrel as an endangered species under the ESA. On April 27, 2010, the USFWS issued a 90 day finding on a petition to list the Mohave ground squirrel as endangered with critical habitat. If the species is listed as endangered, BLM would need to consult with USFWS and request a biological opinion and incidental take permit before conducting any activity that may harm the species. Therefore, the BLM should consult with the USFWS regarding the Project's likely take of the species in order to ensure compliance with the federal ESA.

Response

Section 3.6 of the DEIS will be updated to note the USFWS's issuance of the 90-day finding. However, the finding does not mean that the USFWS has decided to list the Mohave ground squirrel; instead, they will now conduct an in-depth review—called a 12-month finding—of all the biological information available on the species to determine whether the Mohave ground squirrel warrants listing as a threatened or endangered species under the ESA. A formal consultation is not required at this time.

Comment Number 086

Comment

The BLM must evaluate the Project's impacts to the Western Burrowing Owl
Because of BLM's failure to assume the presence of the burrowing owl on the site and the failure of the biologists to conduct a sufficient survey, the DEIS does not contain an adequate assessment of impacts to the Western burrowing owl.

Response

Three protocol-level surveys for burrowing owl were conducted for the Proposed Action, in conjunction with desert tortoise surveys, on March 24 to March 27, March 31 to April 3, and April 7 to April 10, 2009.

However, not all of the burrowing owl surveys were conducted concurrently with the desert tortoise surveys. At the request of the BLM, a protocol-level focused burrowing owl survey was conducted in June 26, 2009, at six locations that exhibited burrowing owl sign from the March/April surveys. No new sign of burrowing owls was identified during this survey.

As noted in Section 4.6.4.2 of the DEIS, although this species was not observed within the project area, all action alternatives would remove potential burrowing owl habitat. Measures MM BIO-2 through MM BIO-7 and consultation with state agencies (MM BIO 9) would avoid potential adverse impacts to burrowing owls. Mitigation measures are proposed which are consistent with those that would be required if the site were occupied by burrowing owls.

Comment Number 087

Comment

The DEIS acknowledges that suitable habitat exists on the site and that the species was observed in the area in the past. During the burrowing owl survey, excrement and regurgitated pellets were observed on and near the site that were estimated to be about two to three years old. However, no Western burrowing owls were actually observed during the surveys. Therefore, the DEIS does not contain any specific mitigation measures to ensure the protection of this species.

Response

See Comment Response 086.

Comment Number 088

Comment

Although no burrowing owls were observed during the surveys, the species may still be present on the site. According to the CDFG, a site should be assumed occupied if at least one burrowing owl has been observed occupying a burrow within the last three years. The DEIS does not state when the species was observed on the Project site in the past. However, excrement and regurgitated pellets are evidence that the species may have occupied the site within the last three years. Thus, the BLM should assume that the site is occupied by the Western burrowing owl.

Response

See Response to Comment 086.

Comment Number 089

Comment

The biologists may have also missed observing a burrowing owl because the surveys were deficient. According to Mr. Cornett, owl surveys are frequently conducted with binoculars and involve looking upward to identify flushed owls and listening for owl calls.¹¹⁴ The burrowing owl surveys conducted for the Project, however, seem to have been conducted in conjunction with desert tortoise surveys. If the surveys were in fact conducted at the same time, it is likely that biologists may have missed observing the burrowing owl because they were looking down. Tortoise surveys do not require the biologist to look upward towards flushing owls, listen for calls or use binoculars.

Response

See Response to Comment 086. It is common for desert tortoise and burrowing owl surveys to be conducted together. Both surveys require detecting borrows and evaluating borrows for occupancy by owls or tortoise. Looking for borrows does not preclude a surveyor from "looking up" or listening for call.

Comment Number 090

Comment

It is important that the BLM specifically determine whether the Western burrowing owl is present on the site in order to mitigate potentially significant impacts. The BLM must assume that the Western burrowing owl is present on the site, or require the Applicant to redo the survey using proper methods.

Response

See Response to Comment 086.

Comment Number 091

Comment

The BLM must evaluate the Project's impacts to the Golden eagle. The Golden eagle is protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Act. The DEIS recognizes that Golden eagles are common in the Mojave Desert. However, because no Golden eagles were identified during the avian point-count survey, the DEIS does not contain an impact analysis or mitigation measures.

Response

Golden eagle surveys, developed in consultation with USFWS, have been conducted for the Lucerne Valley Solar Project and are included as Appendix M of the Final EIS. The Final EIS has been revised to include the survey findings and impact analysis. Potential effects on Golden Eagle has been analyzed in the section: *Effects BIO-9: Effects on bird species protected by the Migratory Bird Treaty Act, the Bald and Golden Eagle Act, and California Fish and Game.*

Comment Number 092

Comment

The USFWS is currently developing protocol for Golden eagle surveys. Because nesting sites are within ten miles of the Project site and typical prey species occur on the Project site, Mr. Cornett expects that the Project site lies within the hunting territory of the Golden eagle. The BLM should consult with the USFWS and conduct a focused survey for this species.

Response

See Response to Comment 091.

Comment Number 093

Comment

The BLM must evaluate the Project's impacts to rare plants. The DEIS does not provide a full and fair discussion of impacts to rare plants because none of the twelve special-status plants were found during the deficient onsite survey. According to Mr. Cornett, the surveys were conducted only two days apart in a year when precipitation was far below average.¹²⁰ The BLM must require the Applicant to conduct an adequate plant survey so that impacts to rare plants are identified and mitigated.

Response

Impacts on rare plants are addressed in Section 4.6.4.2 of the DEIS. No federal or state-listed as threatened or endangered or otherwise sensitive species were observed on site, so no impacts were identified. After conducting the reconnaissance survey and determining that suitable habitats were present on-site, 12 of the 31 special status species were considered to have a potential to occur there. Protocol-level plant surveys were in accordance with the Botanical Survey Guidelines of the California Native Plant Society. Protocols were developed in consultation with the BLM, and the BLM approved the protocols that were implemented. The survey was completed in May 2009, when these species were in bloom and would be both evident and identifiable at the time of the survey. The protocol level focused plant survey for the 12 species was negative. No federal or state-listed as threatened or endangered or otherwise sensitive species were observed on-site. Many of the special status plant species with a potential to occur on-site require specific soil types that are not characteristic of the project site.

Comment Number 094

Comment

The BLM must evaluate the Project's impacts to mesquite plants. The DEIS does not include any discussion about the Project's impacts to mesquite plants. Using large amounts of well water may cause overdraft conditions, which may impact mesquite plants.¹²¹ Mesquite plants are vitally important to the region as a source of food and shelter to wildlife.¹²² Thus, direct impacts to mesquite plants may indirectly

impact wildlife and sensitive species. The BLM must take a hard look at impacts to mesquite plants in order to adequately assess indirect impacts to biological resources.

Response

Mesquite was included in the rare plant surveys. Overdraft conditions are not a part of this project. See Response to Comment 093.

Comment Number 095

Comment

The Project must evaluate impacts to creosote rings

The DEIS does not include any discussion about the Project's impacts to creosote rings.

The Plant Protection and Management Ordinance in the San Bernardino County Development Code regulates the removal of plants.¹²⁴ The Code states that creosote scrubs may not be removed from a project site if they form a ring ten feet or greater in diameter.¹²⁵ The DEIS states that the Project site is comprised of creosote scrub vegetation that may be impacted by mowing and grubbing activities.¹²⁶ Impacting creosote scrubs that form a ring ten feet or greater in diameter would conflict with the County Development Code.

The BLM must take a hard look at whether the Project will impact creosote rings and, thereby, conflict with the Development Code.

Response

While the San Bernardino County Plant Protection and Management Ordinance (Chapter 88.01 of the San Bernardino County Development Code) requires the protection of creosote rings, Section 88.01.030 (b) specifically notes that the provisions of Chapter 88.01 shall not apply to removal from lands owned by the United States, the State of California, or local governmental entity, excluding special districts (i.e., special districts shall be subject to the provisions). Therefore, the project site is not subject to San Bernardino County's Plan Protection and Management Ordinance.

The federal, state, and local permits and approvals that would be required before construction and operation of any of the action alternatives addressed in the DEIS are presented in Table 1-2 of the DEIS, page 1-13. Creosote rings are not discussed in the FEIS.

Comment Number 096

Comment

The BLM must evaluate the impacts of herbicide use.

The DEIS recognizes that the Project would directly affect native vegetation by allowing the increase of invasive weeds, such as Sahara mustard, to spread in the disturbed areas. The Weed Control Plan submitted by the Applicant and the DEIS both note that herbicides would be used to control the weeds.

Response

Impacts associated with herbicide use on BLM land have already been addressed in a previous EIS. The BLM has prepared a Programmatic Environmental Impact Statement (PEIS) for 17 western states that describes vegetation treatment use and herbicides for weed control. The selected alternative for the PEIS identifies the active herbicidal ingredients approved for use on BLM land. Appendix B of the PEIS, Herbicide Treatment Standard Operating Procedures, specifies management of weeds and application of pesticides on BLM land. Table B-1, Prevention Measures, specifies avoidance measures to limit weed infestation, and Table B-2, Standard Operating Procedures for Applying Herbicides, provides details on herbicide application. The procedures listed in this appendix and tables are incorporated as requirements of the Weed Control Plan for the Lucerne Valley Solar Project. The Weed Management Plan and Weed Management Mitigation Measure also disclose the acceptable herbicides to use on the project site.

Comment Number 097

Comment

The BLM must not approve use of these herbicides until specific studies have been conducted indicating that they are harmless. According to Mr. Cornett, herbicides that may be approved can still cause a cancer outbreak in humans and/or serious mutations in wildlife. The BLM must identify which herbicides will be used and disclose any studies that prove the herbicides are harmless, or take a hard look at the Project's impacts to human health and biological resources.

Response

See Response to Comment 096.

Comment Number 098

Comment

The BLM must evaluate the tortoise-proof fence's impacts to species' foraging patterns. The DEIS recognizes that construction of the exterior fence could increase the presence of natural predators and adversely affect desert tortoise breeding migrations. However, the DEIS fails to recognize the fence's significant impacts to desert tortoise foraging. In a desert environment, where resources are in short supply, forcing desert tortoises to travel farther to locate food may cause significant stress on the species and mortality.

Response

Impacts on desert tortoise associated with loss of habitat from clearing and fencing the site are addressed in the DEIS as Effect BIO-8: Loss of desert tortoise or loss of habitat for desert tortoise.

Comment Number 099

Comment

In conclusion, the BLM clearly did not consider every reasonably foreseeable significant impact of the Project. The BLM's failure to take a hard look at biological resources precludes a meaningful analysis by the public and violates NEPA. A revised supplemental DEIS/EIR must be prepared and recirculated by the BLM prior to Project approval.

Response

See Response to Comment 024.

Comment Number 100

Comment

The BLM did not consider all of the Project's impacts to water resources. T'Shaka Toure, an expert hydrologist, reviewed the DEIS with respect to significant impacts on water resources. Mr. Toure determined that the BLM failed to take a hard look at all of the Project's impacts. The BLM must revise its analysis of the Project's impacts to water resources.

Response

The analysis of impacts to water resources was revised in Section 4.5 of the FEIS.

Comment Number 101

Comment

The BLM did not discuss impacts associated with an increased operational water use.

As discussed above, it is likely that the BLM underestimated the amount of water the Applicant would need to clean the solar panels. The DEIS, therefore, contains no discussion of what impact using at least 270,000 gallons of water per year would have on the environment. The BLM must reassess the impacts associated with increased operational water use.

Response

Section 2.2.3.5, Operations and Maintenance, states the following on page 2-22:

“Water for panel washing would be provided through a contract with one of the local large industrial companies or municipal water companies that have high capacity wells and water systems. No new water sources would need to be developed.”

Water for panel washing would be trucked to the site, and no additional federal, state, or local approvals would be required. No additional environmental effects, other than those identified in the DEIS, would occur. The impacts of trucking water to the site are addressed in Section 4.13.2.3 of the DEIS. No public health effects from panel washing were identified.

Comment Number 102

Comment

The first impact the BLM must reassess is whether the Project will cause an irreversible and irretrievable commitment of water resources. While the DEIS concludes that the Project will not cause an irreversible and irretrievable commitment of water resources to the point where they would not be available for other users, that conclusion was based on an arbitrarily low and unsupported water use estimate. A more reliable estimate is that the Project will use at least six times more water than what was disclosed in the DEIS. Therefore, it is likely that the Project may contribute to a significant overdraft of the aquifer and cause an irreversible and irretrievable commitment of water resources. The BLM must take a hard look at this significant impact.

Response

See Response to Comment 100. Additionally, the water resources would be approximately 45,240 gallons per year.

Comment Number 103

Comment

The second impact that the BLM must reassess is whether the large amount of operational water will cause artificial flood events to occur on the Project site. It is unclear whether this water will permeate into the soil and whether onsite drainages have the capacity to convey large amounts of water offsite. Runoff water may create ephemeral ponding locations and/or flooding events. The BLM did not evaluate measures for containing large amounts of sheet flow and runoff water from this activity in the DEIS.

Response

DEIS Sections 4.5.2.3 through 4.5.2.5 analyze flooding potential, runoff, and drainage. The DEIS concludes that because the primary drainage channels within the site would be left intact and sheet flow would still occur through the remainder of the site, this type of flow pattern alteration would not alter overall flow pattern for the area or cause floods.

Comment Number 104

Comment

To mitigate impacts associated with runoff water, the BLM should require the Applicant to plant native emergent vegetation in locations where the flows will exit the Project site. Native plants around the drainage outlet locations would provide beneficial cover and refugia for wildlife species. The BLM should also require the Applicant to implement bioswales and/or catchment basins. Bioswales and catchment basins could remove silt and pollution from surface runoff water, as well as provide another source of refugia, cover and food for wildlife.

Response

The Hydrology Study for the Lucerne Solar Project (January 2010), prepared by Westwood Professional Service, Inc., has been submitted to BLM and is included in Appendix O of the Final EIS. Specific requirements such as those proposed by the commenter would be addressed in a streambed alteration agreement under the jurisdiction of the California Department of Fish and Game.

Comment Number 105

Comment

The BLM must take a hard look at the Project's impacts to water users, the groundwater aquifer and flooding that result from using at least 270,000 gallons of water per year to clean the solar arrays.

Response

See Response to Comments 100 and 102.

Comment Number 106

Comment

The BLM did not consider compliance with Section 1602 of the California Fish & Game Code. The Project requires a streambed alteration agreement from the CDFG under Section 1602 of the Fish & Game Code. However, the BLM has completely ignored this and any other State requirement.

Response

The need to comply with the State of California Lake and Streambed Alteration Program is described in numerous sections throughout the DEIS.

Section 1.4.2 describes the Proposed Action's relationship to the Lake and Streambed Alteration program, along with various other state and local plans, policies, and programs. In addition, Table 1-2, lists the major permits, approvals, and consultations that would be required before any of the action alternatives could proceed, including the stream alteration agreement. The need for a stream alteration agreement is also compared across alternatives in Table 2-8. Lastly, Chapter 3 of DEIS includes a discussion of applicable plans, policies, and regulations for each resource area evaluated. These discussions are divided into federal, state, and local regulations, each with individual headings, to facilitate the reader's understanding that the BLM considered all levels of regulations that apply to the Proposed Action.

Comment Number 107

Comment

The CDFG must issue a streambed alteration agreement before this Project can proceed. The proposed Project site contains several streams under the jurisdiction of the CDFG. Construction of the Project will alter the natural flow patterns of these streams where concrete pads and structures are installed, and within the solar array field. Thus, development of the proposed Project will temporarily and permanently impact these streams. The CDFG must issue a streambed alteration agreement before the Project Applicant impacts these drainage systems.

Response

See Response to Comment 106.

Comment Number 108

Comment

Because a streambed alteration agreement is required from the CDFG before modifications to the drainages can occur, the BLM must ensure that the Applicant complies with Section 1602 of the Fish & Game Code before approving the Project. Failure to receive the necessary permits could jeopardize downstream drainages and wildlife, as well as violate California law. The BLM must revise the EIS to reflect and disclose compliance with the Fish & Game Code.

Response

See Response to Comment 106.

Comment Number 109

Comment

The BLM did not consider compliance with the California Porter Cologne Water Quality Control Act

The Project Applicant must comply with waste discharge requirements (“WDRs”) of the Regional Water Quality Control Board (“RWQCB”), pursuant to the California Porter Cologne Water Quality Control Act. However, the BLM has completely ignored this and any other State requirement.

Response

Section 3.5.1.2 of the DEIS, describes the state-level plans, policies, and regulations that apply to the project, including the Porter Cologne Water Quality Control Act.

Comment Number 110

Comment

The DEIS clearly states that the Project will discharge storm water into State waters. The Project may also discharge at least 270,000 gallons of non-storm water runoff when the solar panels are cleaned. Because the Project will discharge storm water and non-storm water into State waters, either the Colorado River Basin RWQCB or the Lahontan RWQCB must prescribe WDRs.

Response

Table 1-2 in Chapter 1 describes the permits for all action alternatives the Applicant would be required to obtain including RWQCB. Also see Comment Response 109.

Comment Number 111

Comment

The BLM must identify that the Applicant has not applied for WDRs and no WDRs have been certified for the Project. Approval of the Project by the BLM may, therefore, promote a violation of California law by allowing the Applicant to proceed without all of the necessary permits and approvals. The BLM must evaluate the potential conflict with State law.

Response

See Response to Comment 110.

Comment Number 112

Comment

The BLM must ensure compliance with other federal and State laws governing jurisdictional waters.

According to Mr. Toure, the jurisdictional delineation does not contain sufficient information to adequately and specifically determine jurisdiction of the waters on and impacted by the Project site. Specifically, the delineation relies on incomplete soil data. Further soils surveys are required to support the findings in the jurisdictional delineation. As disclosed, the jurisdictional delineation is faulty.

Response

As noted in Section 1.5 of the DEIS, federal, state, and local permits and approvals would be required before construction and operation of any action alternative could proceed. The Applicant would be responsible for obtaining all permits and approvals required to implement any authorized activities.

The 1987 Wetland Manual and the 2006 Arid West supplement provide the legally accepted method for identifying and delineating US Army Corps of Engineers jurisdictional wetlands in Southern California. In accordance with the method set forth in the 1987 Wetland Manual and the 2006 Arid West supplement, the wetland delineation used three criteria to determine the presence of a wetland: the vegetation, soils, and hydrology of an area must exhibit at least minimal hydraulic characteristics. Based on this approved method, no jurisdictional wetlands were found within any of the drainage systems on the project site.

Further, BLM guidance requires that the agency ensure consistency with all applicable federal, state, and local laws, policies, programs, and plans to the extent possible.

Comment Number 113

Comment

The BLM did not consider all of the Project's impacts associated with new transmission and communications systems. The DEIS states that new communications systems between the site switchyard and the Cottonwood Substation would be required. While the DEIS concludes that construction of the "[c]ommunications systems would be expected to require only minimal site disturbance to implement," there is no discussion or evidence to support this conclusion. The BLM must provide more information about where utility poles will be placed, whether an offsite corridor must be established, and what impacts would be associated with installing new communications systems.

Response

The DEIS concludes that communication systems would require only minimal site disturbance to implement. A Verizon T-1 fiber-optic line would be installed on existing poles between the site switchyard and the Cottonwood Substation. The use of existing infrastructure and the addition of a single line would result in minimal environmental effects because no new poles are proposed for this option. No new off-site corridor must be established for the communications system.

Comment Number 114

Comment

The BLM must consider all significant impacts associated with the Project's energy transmission.

As it is currently written, the DEIS provides nothing more than a list of upgrades the Project requires to transmit energy to the Cottonwood Substation, and it is unclear whether those upgrades will even be sufficient. The BLM must revise the DEIS to include an evaluation of the Project's transmission needs as well as all impacts associated with conveying energy from the Project site.

Response

The DEIS describes the transmission requirements and interconnection status of the Proposed Action to the SCE power grid in the Executive Summary, and Sections 1.5 (Table 1-1), 2.2.3.1, 2.2.2.3, and 2.2.3.4. SCE identified that the upgrades identified would be sufficient for the Proposed Action. SCE performed a system impact study and identified that the existing 33-kV line can carry the 20 megawatts of the first phase with no line modifications. SCE would have to perform additional system impact studies to determine how much additional capacity is on the 33-kV line, although a typical figure is approximately 5 to 6 megawatts. The Applicant and SCE are negotiating a Small Generator Interconnection Agreement, and once it is executed, the identified interconnection facilities would be further refined in the final engineering design.

Comment Number 115

Comment

The DEIS states that Phase I of the Proposed Action would interconnect to the existing Southern California Edison ("SCE") 33-kV transmission line without an upgrade to the existing line. During Phase I, a 33-kV transmission line segment would be constructed across Foothill Road.¹⁵⁹ Phase II would require "reconductoring" (i.e. replacing the existing wire with heavier wire and reusing the existing cross arms and insulators) of the existing SCE transmission line back to the Cottonwood Substation.¹⁶⁰ It is unclear, however, whether Phase II would require additional upgrades. The DEIS acknowledges actual transmission line capacity would have to be verified by a Transmission Study.¹⁶¹ The DEIS also states that new "transmission poles" would be installed.

Response

SCE performed a system impact study and identified that the existing 33-kV line can carry the 20 megawatts of the first phase with no line modifications. SCE would have to perform additional system impact studies to determine how much additional capacity is on the 33-kV line, although a typical figure is approximately 5 to 6 MW. This is discussed in Sections 2.2.3.3 and 2.2.3.4. The final engineering for Phase II would not be determined until a formal application and transmission study is completed for

Phase II. At that time, an environmental review would be performed in conjunction with the BLM SF-299 ROW application for SCE upgrades.

Comment Number 116

Comment

The BLM must conduct a Transmission Study and make it available to the public before approving the Project. If the BLM does not identify the transmission line capacity, it cannot know what transmission upgrades the Project will require. Failure to identify and describe all aspects of the Project also impacts the BLM's analysis of environmental consequences. This violates NEPA.

Response

The BLM does not perform transmission studies. SCE performed a system impact study and identified that the existing 33-kV line can carry the 20 megawatts of the first phase with no line modifications. SCE would have to perform additional system impact studies to determine how much additional capacity is on the 33-kV line, although a typical figure is approximately 5 to 6 megawatts. This is discussed in Sections 2.2.3.3 and 2.2.3.4. There are no proposed upgrades to the transmission lines, so there are no direct impacts related to the capacity and transmission. Impacts related to the solar development would be proportional. For example if the full 25 megawatt phase II facility would be built it would use twice the acreage and have twice the impact as a 12.5 megawatt development of Phase II.

Comment Number 117

Comment

In addition, the BLM has not taken a hard look at impacts associated with the transmission upgrades it has already identified as necessary. For example, the DEIS must discuss impacts associated with reconductoring. If machinery is used to replace existing wire with heavier wire, there could be direct and indirect impacts to biological resources, traffic, visual, noise and air quality. The DEIS must also discuss all impacts with installing any new transmission poles offsite.

Response

SCE would have to perform additional system impact studies to determine how much additional capacity is on the 33-kV line, although a typical figure is approximately 5 to 6 megawatts. If additional capacity is required, the 33-kV line would have to be upgraded through reconductoring (i.e., replacing the existing wire with a heavier wire and reusing the existing cross arms and insulators) back to the Cottonwood Substation. This reconditioning is not a part of this EIS and is not considered a part of this project. If additional transmission facilities were required, separate environmental review for those facilities would be conducted. To avoid confusion, all reference to reconductoring has been removed from the FEIS.

Comment Number 118

Comment

Agencies frequently overlook impacts associated with transmitting energy. The BLM must provide more information and discuss all of the impacts associated with connecting to the Cottonwood Substation. The impacts analysis must be supported with a Transmission Study.

Response

The DEIS provides a description of the Gen-Tie Line to Cottonwood Substation and provides a "hard look" environmental analysis of the Proposed Action. Refer to DEIS page 2-15 for a description of the Proposed Action interconnection and transmission component.

Comment Number 119

Comment

The BLM did not consider cumulative significant impacts to transmission

While the DEIS recognizes that complete build out of the Proposed Action would cause a cumulative effect, it concludes that "it is unlikely that the Proposed Action would add sufficient power to electric transmission system to require high voltage transmission lines or new substations." The BLM's logic is faulty, and the agency must reassess its cumulative impact analysis.

Response

This project is a small scale project. The connection is to a 33-kV line. There is no expectation of a transmission line or new substation related to this minimal increase in energy.

Comment Number 120

Comment

First, without a Transmission Study, the BLM cannot conclude that energy from the Proposed Action would not be sufficient enough to require significant transmission upgrades. There is no evidence or basis for that determination.

Response

SCE performed a system impact study and identified that the existing 33-kV line can carry the 20 megawatts of the first phase with no line modifications. SCE would have to perform additional system impact studies to determine how much additional capacity is on the 33-kV line, although a typical figure is approximately 5 to 6 megawatts. Additionally, see Response to Comment 114.

Comment Number 121

Comment

Second, cumulative impacts can result from “individually minor” actions that contribute to a collectively significant impact. Thus, even if the Proposed Action itself would not add sufficient power to require significant transmission upgrades, the Proposed Action’s contribution, along with the other energy projects in the region, may be sufficient.

Response

Each individual utility-scale power generation facility in California must apply for interconnection to the California Independent System Operator-managed grid. At that time, any specific transmission grid modifications would be identified and determined on a case-by-case basis. As stated in previous responses, SCE performed a system impact study and identified that the existing 33-kV line can carry the 20 megawatts of the first phase with no line modifications. SCE would have to perform additional system impact studies to determine how much additional capacity is on the 33-kV line.

The cumulative impacts of this and the other reasonably foreseeable power projects in and around Lucerne Valley may require significant transmission upgrades to deliver the power to the SCE service area. However, this project does not require a transmission line upgrade. This is discussed in Section 4.9.3.

Comment Number 122

Comment

The BLM must take a hard look at the Project’s cumulative impacts to transmission. The BLM must also provide more information about the transmission needs of the other action alternatives so that a meaningful comparison can be made.

Response

See Response to Comment 114. The transmission requirements for all of the alternatives are the same.

Comment Number 123

Comment

The BLM did not consider all direct and indirect noise impacts to sensitive species and sensitive receptors. The DEIS notes that sensitive receptors, such as nearby residences and special management areas, may be impacted by construction and operation noise from the Project. There is no acknowledgement in the DEIS, however, that wildlife may be impacted by construction and operation noise. Sounds that are rare or even minor may have a negative impact on wildlife and sensitive species in the area. The BLM must take a hard look at noise impacts to wildlife and sensitive species.

Response

Noise impacts on sensitive species are addressed in Section 4.6.3.2 of the DEIS, under “Effect BIO-4: Disturb wildlife or result in wildlife mortality. Specifically, the DEIS found that Noise, vibration, and human activity would likely cause most wildlife species to avoid the Proposed Action area until the disturbance conditions have concluded. The presence of humans, construction equipment, and dust would cause wildlife to alter foraging and breeding behavior and could cause wildlife to avoid suitable habitat. To avoid avian disturbance before construction, the Applicant would attempt to clear Proposed Action areas of suitable nesting habitat during the nonbreeding season, from September 1 through January 31. Additionally, there are provisions for mitigation measures which would be utilized if construction is conducted during the breeding season. Once the Proposed Action is constructed, transmission poles could also pose a direct collision hazard to birds. Most species are expected to reoccupy adjacent habitats following construction and recovery of the vegetation.”

No long-term indirect effects on wildlife due to noise, vibration, or dust are anticipated because construction and maintenance would be temporary, although wildlife would be indirectly affected because of the presence of the PV farm.

Noise-related impacts for Alternative 4 were found to be similar to those identified for Alternative 3. Impacts for Alternative 5 were found to be similar to those identified for Alternative 3 but reduced in comparison, based on the reduced area of disturbance.

Comment Number 124

Comment

The BLM did not consider impacts from hazardous materials. Although the DEIS identified prospecting features in the Project area, the BLM failed to take a hard look at potential health risks associated with previous mining activities on the site.

Response

During the cultural resource inventory, evidence of limestone prospecting was found, specifically excavated trenches or test pits. The debris varied from pit to pit, but much of the debris was not associated with mining and was characterized by the cultural resource specialist as refuse and household debris. Much of the debris included cans and bottles, but a few locations had some construction debris, such as wire and some timber. The cultural resource specialist classified the debris as originating from the 1920s to the 1970s and included motor oil cans and three bottles labeled Clorox and Purex. Depending on whether these containers contained material or not, they could be considered hazardous waste. Hazardous wastes are discussed in Sections 3.14 and 4.14. None of the prospecting locations were eligible for listing on the National Register of Historic Places.

Limestone prospecting usually involves removal of stone, as opposed to chemical processing of materials.

Comment Number 125

Comment

Matt Hageman, an expert in hazardous materials, reviewed the DEIS with respect to hazards associated on the site from remnants of hand-dug mining pits. In his comments, he concludes that unevaluated significant impacts to construction workers and future site workers from mining debris may occur. Those impacts include dermal contact and ingestion of dust with soils that may contain metals at concentrations that are hazardous to human health.

Response

The available information is that mining debris is not present at the site. The bulk of the remaining debris includes cans, bottles, and some limited construction debris. Although there were three bottles labeled Clorox or Purex, they appear to have been of household size (32 ounce). In addition, there are cans labeled motor oil. If these contained liquids, they could be hazardous wastes and would have to be disposed of properly. Hazardous wastes are discussed in Sections 3.14 and 4.14.

Previous prospecting at the site was for limestone, which does not necessarily involve the use of many hazardous chemicals, as do other types of mining.

Comment Number 126

Comment

Mr. Hagemann recommends that the BLM conduct a Phase I Environmental Site Assessment to evaluate these potential human health risks. If the Phase I Assessment finds the mining debris to represent potential human health risks, a Phase II Environmental Site Assessment should be conducted to include sampling of the debris.¹⁶⁹ To assess the Project's impacts adequately, the BLM must conduct a Phase I Assessment and include the results in a revised DEIS that is circulated for public review.

Response

To reduce potential exposures to contaminated soils, the Applicant would implement MM HAZ-2 and would characterize any hazardous material/waste discarded on-site, as well as any discolored or odorous soil to be excavated. With implementation of the Applicant's Site Safety Plan, MM HAZ-2, Spill Prevention and Response Plan, the SWPPP, and MM HAZ-1, the Proposed Action would not expose workers to contaminated or hazardous materials at levels in excess of those permitted by federal and California Occupational Safety and Health Administration.

Comment Number 127

Comment

The BLM did not consider all impacts to cultural resources

The DEIS acknowledges that five ethnic groups historically used the Proposed Action area: the Mohave, Kawaiisu, Southern Paiute (Las Vegas and Chemehuevi groups), Vanyume/Serrano and Western Shoshone. The BLM neglected to notify all of the tribes, however, about the Proposed Action. The BLM's failure to consult with all of the tribes that have historic ties to the Project area precludes an analysis of all of the Project's foreseeable impacts

Response

Section 5.2.3 of the DEIS lists the Native American tribes that were given notice of preparation of the EIS, as follows:

- Morongo Band of Mission Indians;
- San Fernando Band of Mission Indians;
- San Manuel Band of Mission Indians;
- Serrano Nation of Indians.

The Chemehuevi Tribe and the Twentynine Palms Band of Mission Indians were also given notice of the EIS, and Section 5.2.3 of the Final EIS has been corrected to add both additional tribes to this list.

Comment Number 128

Comment

The BLM did not notify the Chemehuevi tribe about the Proposed Action. The Chemehuevi tribe considers all of San Bernardino County and parts of Riverside, Kern and Inyo Counties its ancestral, historical homeland.

Response

See Response to Comment 127. BLM did consult with the Chemehuevi tribe.

Comment Number 129

Comment

Because Lucerne Valley is only twenty miles from the Chemehuevi's ancient village and major trade route, it is likely that the Chemehuevi used the Project area and have ties to the land. The BLM must consult with the Chemehuevi, and all tribes that have ties to the land, to determine if there are historical

resources that have not been identified. Failure to do so arbitrarily limits the BLM's hard look at the Project's impacts and conflicts with Section 106 of the National Historic Preservation Act.

Response

BLM did consult with this tribe. See Response to Comment 127.

Comment Number 130

Comment

The DEIS contains an arbitrarily narrow purpose and need statement that impermissibly promotes private objectives. The purpose and need statement sets out one simple goal: "to process a ROW application." This narrowly defined statement implies that BLM stands to gain nothing more than a rubber-stamped document at the end of this process. It is nonsensical to think that the BLM would spend taxpayer money and impact the environment for such an inconsequential result.

Response

See Response to Comment 013.

Comment Number 131

Comment

The statement fits the Applicant's goals and objectives better than the BLM's. According to the DEIS, the Applicant has two goals: (1) promote solar technology, and (2) develop 45 MW of energy on public land to maintain a profit margin. While it is unclear what the BLM would gain from the Project, a ROW application rubber stamped "approved" would clearly help the Applicant meet its goals. Thus, the arbitrarily narrow purpose and need statement promotes the Applicant's objectives instead of the BLM's.

Response

See Response to Comment 130.

Comment Number 132

Comment

The BLM must consider alternate sites
The BLM's failure to consider alternate sites was arbitrary and capricious
The federal agency will violate NEPA if it impermissibly determines that alternate sites do not have to be considered.

The BLM's decision not to consider alternate sites is impermissible because it is based on an arbitrarily narrow purpose and need statement. The BLM may not adopt private interests to draft a narrow purpose and need statement that excludes alternatives that fail to meet specific private objectives. Yet, that was the result of the process here. The BLM must consider reasonable alternatives, even if the Applicant does not like the alternative or is incapable of implementing the Project on an alternative site.¹⁹³ Thus, as drafted, the DEIS violates NEPA's basic requirement to consider alternatives.

Response

See Response to Comments 013 and 014.

Comment Number 133

Comment

The Project site is on undisturbed lands that are prone to flooding and may contain valuable mineral resources

The proposed Project site is not ideal for long term energy generation. This particular site lies within mostly undisturbed desert habitat that contains untouched and intact environmental resources. Disturbed areas, such as roads and sediment berms, make up only one percent of the site. The rest of the site is characterized by desert scrub vegetation and desert washes. Special-status species, such as the desert tortoise, were observed on the site. In addition, many prehistoric and historic sites have been recorded between the Proposed Action site and the Victorville area.

Response

As noted in Section 2.3 of the DEIS, during the pre-application screening, the Applicant, in coordination with BLM, considered several factors to identify a project site, including site topography, proximity to transmission lines, avoidance of Areas of Critical Environmental Concern and Desert Wildlife Management Areas, designated off-highway vehicle areas, wilderness study areas, and designated wilderness areas.

The Proposed Action and the action alternatives would not significantly increase the potential for flooding in the watershed or its subbasins as discussed in Section 4.5.2.3 of the FEIS.

Potential impacts on biological resources have been identified, along with mitigation applied. In addition, no cultural resources eligible for inclusion on the NRHP are known to occur in the Proposed Action area, in the proposed locations for temporary access roads, or within a one-mile radius of the site perimeter.

Comment Number 134

Comment

This particular site is also prone to flooding events. According to the National Oceanic and Atmospheric Administration, Lucerne Valley was flooded in 1958, 1960, 1965, 1967, 1969, 1972, 2001, and twice in 2005 just six days apart. It is likely that even more flash flood events occurred, because the study is not comprehensive. In fact, modeling, not included in the DEIS, suggests that flooding of the Project site is possible during episodic rain events. Residents and resource agencies have also noted that this area is subject to intense flooding events, including flash floods.

Response

The DEIS discusses the potential impacts from flooding of the Proposed Action site in Sections 4.3.2.3, 4.5.2.3, and 4.5.3.

Comment Number 135

Comment

Finally, mineral extraction may be a beneficial and valuable use of the site. Gold, copper, silver, lead, sand, gravel, stone and uranium have all been prospected, produced and/or processed within five miles of the Project site. It is likely, given the importance of mining in Lucerne Valley's history and the presence of mineral resources around the Project site, that valuable mineral resources are located on the Project site.

Response

There are no active mining operations or mining claims within the project site. The DEIS concludes that due to the lack of known mineral resources at the site, no effect on mineral or energy resources would occur. See Section 4.17.2.3 of the FEIS.

Comment Number 136

Comment

Because the Project site is on undisturbed land with potentially valuable mineral resources that is also subject to intense and frequent flooding, it is not ideal for long-term energy generation. The BLM must consider other sites that will reduce the Project's impacts and support energy generation.

Response

Refer to Section 2.3.1, which describes alternative site locations considered by CES and the BLM. The technical and business criteria included whether the sites were close to existing high-voltage transmission lines that would allow access to the market and whether the sites were subject to significant environmental concerns, such as critical habitat, or contained sensitive resources.

Comment Number 137

Comment

An alternate site on disturbed land not subject to frequent flooding would reduce the Project's environmental impacts and be more conducive to long-term energy generation. The BLM should consider an alternate site on disturbed land. In the desert to the north of the Project site, as well as in Kings and Fresno Counties, there is an extensive amount of abandoned farmland that would facilitate long-term energy generation while reducing the Project's impacts on environmental resources.²⁰⁴ Both areas have existing infrastructure and are near roads and existing power lines.²⁰⁵ Because both areas have successfully been used for long-term agriculture use, it is also unlikely that the frequency of flash floods would impact long-term energy generation. The BLM must evaluate siting the Proposed Action on these alternate sites, or risk failing to evaluate a viable alternative.

Response

See Response to Comment 014.

Comment Number 138

Comment

The BLM must consider an alternative site design with four sides. The Proposed Action has twelve sides and a very high boundary-to-area ratio. The design of Alternatives 4 and 5 are not specified, but the DEIS implies that the design of the alternatives would be irregular as well. The BLM should consider a project design with four sides to reduce the boundary-to-area ratio and minimize impacts to biological resources and drainage systems.

Response

Although the layout of the proposed boundary is 12 sided, it is an overall L-shaped layout, reducing the impacts of the edge effect to essentially a six-sided boundary. This would have similar impacts as a four-sided layout. Under Alternative 5, the boundary layout and acreage is reduced, creating two separate, smaller parcels, one square and the other rectangular. See Chapter two for a full description of the alternatives.

Additionally, due to the small amount of public land near the project site, the size of the project and the available public land with the desirable slope for solar energy development, it is not possible to configure the project into a four sided parcel. Please see Section 2.4 of the FEIS.

Comment Number 139

Comment

The high boundary-to-area ratio increases the Project's impacts to biological resources. Instead of impacting a discreet parcel of land, the Project's impacts are spread out in different directions and on different parcels. The solar arrays nearly surround one parcel and envelop large areas of three other parcels.

A twelve-sided configuration also impacts species movements more than a project with four sides. Because there are twelve sides, there are twelve obstructions to migratory movement; there is no clear migratory path for species to move around the Project. A project with four sides, however, would have a clearer path for species to move around.

Response

See Response to Comment 138.

Comment Number 140

Comment

The BLM should consider approving this alternative instead of the Proposed Action. The Proposed Action will impact desert tortoises significantly, and may also impact the Western burrowing owl and Mohave ground squirrel. Implementation of this alternative, however, may significantly reduce the Project's impacts to sensitive biological resources.

Response

Your interest in an alternative with reduced boundaries is included in the public record and will be taken into account by the authorized officer when a Record of Decision for the project is implemented. We appreciate your input and participation in the public review process.

Comment Number 141

Comment

The BLM must consider an alternative design the reduces impacts to drainage systems

The Project will impact the natural drainage systems that run through the Project site, which will in turn impact water quality and biological resources, as well as increase the potential for flooding on the Project site. The BLM should consider a site design that avoids, or significantly minimizes, these impacts.

Response

Impacts on these dry swales would be mitigated through the 1602 streambed alteration agreement. See chapter 4.5 of the FEIS.

Comment Number 142

Comment

Mr. Toure provided diagrams of two alternative site designs. Both site designs completely avoided or significantly reduced impacts to the blue-line drainages that run through the Project site. These alternative site designs would also allow water from Project activities to be captured in bioswales and discharged into dry washes. The BLM should consider this alternative to reduce the significant impacts to water resources caused by the Proposed Action.

Response

See Response to Comment 141.

Comment Number 143

Comment

The Project will require approval of a streambed alteration agreement from the CDFG and WDRs by the RWQCB. Thus, the Applicant will require approval under CEQA before it can proceed with Project construction. The BLM must work with the CDFG and RWQCB to facilitate this process. It is essential for the BLM to encourage preparation of a joint EIS/EIR at the earliest possible stage to avoid duplication of materials and resources and unnecessary delay.

Response

See Response to Comment 030.

Comment Number 144

Comment

The DEIS does not comply with CEQA. First, California courts have repeatedly held that “an accurate, stable and finite project description is the sine qua non of an informative and legally sufficient [CEQA document].”²¹⁶ Compliance with CEQA, therefore, requires that the environmental document provide an accurate, consistent and complete description of the Project. As discussed above, the DEIS fails to do so.

Response

As described in Section 1.2 of the DEIS, the EIS has been prepared following regulations promulgated by the Council on Environmental Quality for implementing the procedural provisions of NEPA (40 CFR, 1500-1508), the Department of the Interior’s NEPA regulations (43 CFR Part 46), the BLM NEPA Handbook (H-1790-1), Sections 201, 202, and 206 of FLPMA (43 CFR 1600), and the BLM Land Use Planning Handbook (H-1601-1).

This EIS is not intended to comply with CEQA.

Comment Number 145

Comment

Second, CEQA imposes an affirmative obligation on agencies to avoid or reduce environmental harm by adopting feasible project alternatives or mitigation measures. The DEIS does not propose sufficient mitigation measures, however, to reduce or avoid the Projects impacts. For example, the DEIS states that tortoise-proof fencing and transmission poles installed for the Project could “cause increased predation of reptiles, small mammals, and small birds around the Proposed Action site because raptors would use the infrastructure for perches.” Predatory ravens are a leading cause of mortality for the desert tortoise. The DEIS does not disclose, however, how perching will be discouraged on the tortoise-proof fence and the transmission poles. Thus, it is unclear whether the Project’s impacts will be sufficiently mitigated.

Response

See Response to Comment 144. Mitigation measures MM BIO-7: Avian Protection and MM BIO-10: Desert Tortoise Proof Exclusion Fence both include features to deter bird perching. Additional details regarding these features have been added to the Final EIS. Additionally, MM BIO-12 addresses requirements related to raven management.

Comment Number 146

Comment

Because the CDFG and the RWQCB must issue permits before the Applicant can begin any development on the Project site, the BLM must abide by the requirements of NEPA and work with the State agencies to develop a joint EIS/EIR. This will avoid duplication of government materials and resources.

Response

The BLM’s consultations with state agencies is described in Section 5.0 of the DEIS. In addition, all state agencies with permitting authorities were provided copies of the Notice of Intent to prepare the EIS. In addition, through the California State Clearinghouse, state agencies were provided copies of the DEIS. Copies of the Final EIS/California Desert Conservation Area Plan Amendment will be sent to the California State Clearinghouse to conduct the Governor’s Consistency Review, as required by 43 CFR 1610.3-2(e).

Table 1-2 of the DEIS identifies the major permits, consultation, and approvals that would be required before construction and operation of any action alternative could proceed. The Applicant is responsible for obtaining all permits and approvals required to implement any authorized activities. State and local agencies were asked to become the CEQA lead, no agency accepted the role.

Comment Number 147

Comment

The foregoing comments, together with those of the experts, establish that the DEIS simply cannot pass muster under NEPA. The only option is for the BLM to prepare a revised EIS/EIR that is recirculated for public review and comment. We respectfully urge the BLM to do so prior to taking any action on the Applicant’s pending federal permit applications to ensure that the basic requirements of NEPA are met.

Response

The BLM, as lead agency, has determined that the DEIS and the revisions made in the Final EIS do not require recirculation of the environmental document.

Your comment is included in the public record and will be taken into account by the authorized officer when a Record of Decision for the project is implemented. We appreciate your input and participation in the public review process.

Comment Number 148

Comment

LVEDA provides an “open forum” dealing with major projects and issues affecting/benefiting Lucerne Valley – therefore is not taking a direct “pro or con” position on this project. However we are in general opposition to utility-scale solar projects – especially on public land – preferring the use of

improved solar power generating technology would be deployed at the site to continue renewable power generation. However, should the site be removed from power generation service, the site would be made suitable for reclamation. All equipment, buildings, concrete foundations, and driven piles would be removed from the site. Consistent with BLM requirements, the Applicant will prepare a detailed decommissioning plan that includes specific decommissioning procedures that both protects public health and safety and is environmentally acceptable for approval by the BLM. The decommissioning plan must be approved by the BLM prior to permanent decommissioning. When the BLM begins to consider decommissioning, it will contact the USFWS to determine whether additional Section 7 consultation would be appropriate. Materials used on-site would be reused at other locations, sold as scrap, or recycled whenever possible.”