

# **Appendix A**

## **Scoping Report**

# Oberon Renewable Energy Project

## PUBLIC SCOPING REPORT

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## Acronyms

AB	Assembly Bill
AC	alternating current
BLM	United States Bureau of Land Management
CAISO	California Independent System Operator
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CMA	Conservation and Management Actions
CNPS	California Native Plant Society
CRIT	Colorado River Indian Tribes
CWHR	California Wildlife Habitat Relationship system
DC	direct current
DFA	Development Focus Area
DRECP	Desert Renewable Energy Conservation Plan
EA	Environmental Assessment
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EO	Executive Order
EPA	Environmental Protection Agency
GHG	greenhouse gas
ITP	Incidental Take Permit
KOP	Key Observation Point
LUPA	Land Use Plan Amendment
MW	megawatt
MWD	Metropolitan Water District of Southern California
NEPA	National Environmental Policy Act
NOI	Notice of Intent
NOP	Notice of Preparation
NPS	National Park Service
O&M	Operations and Maintenance
OHV	off-highway vehicle
PV	photovoltaic
ROW	right-of-way
RWQCB	Colorado River Basin Regional Water Quality Control Board
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SSC	Species of Special Concern
TCP	Traditional Cultural Property
WDRs	Wastewater Discharge Requirements
WHMA	Wildlife Habitat Management Area



# Section 1 Overview of CEQA Scoping Process

The environmental review of the Oberon Renewable Energy Project (project) is being conducted by two lead agencies: United States Department of Interior, Bureau of Land Management (BLM) as the federal lead agency under the National Environmental Policy Act (NEPA; 42 U.S.C. section 4321 et seq.) and Colorado River Basin Regional Water Quality Control Board (RWQCB) as the State lead agency under the California Environmental Quality Act (CEQA) (Public Resources Code section 21000 et seq.). These agencies held a 30-day public scoping period consistent with NEPA and CEQA requirements that provided an opportunity for the public and agencies to provide comments on the environmental review of the project.

This scoping report documents the NEPA/CEQA scoping process and summarizes the scoping comments received for the project. Specifically, this report describes the scoping events and activities, and summarizes the written comments submitted in response to the public release of the BLM's Notice of Intent (NOI) and the RWQCB's Notice of Preparation (NOP). This report provides the range of issues and alternatives provided in the public comments that will be considered in the preparation of the Environmental Assessment (EA) and the Environmental Impact Report (EIR). The lead agencies will use the comments received during the scoping period to:

- 1) Identify key issues to focus the analysis in the environmental documents
- 2) Identify reasonable alternatives to the project
- 3) Analyze environmental impacts of the project and alternatives
- 4) Identify ways to avoid or reduce environmental impacts.

## 1.1 Introduction

IP Oberon, LLC a subsidiary of Intersect Power LLC, (Applicant) has applied to the BLM for a right-of-way (ROW) grant on public lands, within a Development Focus Area (DFA) to construct, operate, maintain, and decommission a 500-megawatt (MW) solar photovoltaic (PV) energy generating and battery storage project. BLM will prepare an EA to comply with NEPA to respond to the Applicant's request for a right-of-way on federal land.

Due to submittal of a Wastewater Discharge Requirements (WDRs) application package, this project is also under the jurisdiction of the RWQCB. The RWQCB will prepare an Environmental Impact Report (EIR) for the project.

The project would be located on BLM-administered lands in unincorporated Riverside County just east of Desert Center, California, north of I-10 approximately 50 miles east of Indio, CA, approximately 40 miles west of Blythe, CA, and 70 miles north of the California-Mexico border. The project application area covers approximately 5,000 acres of BLM-administered land for the solar facility. Project facilities would occupy approximately 2,700 acres of the overall site.

The project would interconnect with a 500 kV gen-tie line within one 175-foot ROW, running approximately 0.5 miles (2,640 feet) southeast from the solar facility, across BLM administered land, to the existing Southern California Edison (SCE) Red Bluff Substation.

## 1.2 Summary of NEPA/CEQA Scoping Process

The NEPA/CEQA scoping process provides government agencies, Native American tribes, organizations, and members of the public the opportunity to identify environmental issues and alternatives for consideration in the EA and EIR. The scoping process and results are an initial step in the environmental review process.

To comply with NEPA (40 CFR 1501.7), the U.S. Environmental Protection Agency (U.S. EPA) published a NOI in the Federal Register on March 18, 2021, that provided notice of the BLM’s intent to prepare an EA for the project (86 FR 14763). The NOI serves as the official legal notice that a federal agency is commencing preparation of an EA. The Federal Register serves as the U.S. Government’s official noticing and reporting publication. The NOI initiated the public scoping period for the EA, provided information about the project, and served as an invitation to provide comments on the scope and content of the EA. Appendix A includes the NOI published for the project.

The BLM also issued a press release regarding the NOI on March 17, 2021. The NOI and press release (Appendix B) were made available to agencies and the public on BLM’s ePlanning website and mailed to over 100 stakeholders and interested parties:

<https://eplanning.blm.gov>

As required by Section 15082 of the CEQA Guidelines (14 CCR 15000 et seq.), the RWQCB issued an NOP on March 18, 2021, that summarized the project, stated RWQCB’s intention to prepare an EIR, and requested comments from interested parties. Appendix A includes the NOP for the project. The NOP was mailed to approximately 130 contacts and emailed to 28 contacts on the project distribution list. Of the NOPs that were distributed, 26 notices were distributed to Native American tribes. The NOP was filed with the State Clearinghouse, posted on the RWQCB’s webpage, and posted on the project website:

<http://www.aspeneg.com/oberon-renewable-energy-project>

During the comment period, the BLM and RWQCB held one combined public scoping meeting on Tuesday April 13, 2021. Newspaper notices were published on two consecutive weeks in the Desert Sun announcing the public scoping meeting and both the NOI and the NOP included information regarding this public meeting. Due to the COVID-19 pandemic, the public scoping meeting was held virtually through the online web-based platform, Zoom. This meeting took place from 5:00 p.m. to 7:00 p.m. The BLM and RWQCB provided a presentation explaining the NEPA and CEQA processes, the BLM’s and the RWQCB’s roles throughout these processes, and public participation opportunities (Appendix C). The meeting was attended by 32 people. Oral comments were not received during the meeting, but the participants were provided an opportunity to ask questions.

The 30-day comment period began on March 18, 2021 and ended on April 18, 2021 for both NEPA and CEQA. In total, 15 different entities submitted comment letters: 6 from federal, state, and local agencies, 6 from organizations and businesses; 1 Native American tribe; and 2 from individuals (see Table 1-1). These letters have been included in this scoping report and will be considered in the drafting of the EA and the EIR.

### 1.3 Agencies, Organizations, and Persons Providing Scoping Comments

Federal, state, and local agencies; Native American tribes; organizations; and members of the public provided written comments during the scoping period. Written comments received during the CEQA and NEPA scoping periods in response to the NEPA NOI and CEQA NOP are included in Appendix D. Table 1-1 presents the agencies, Tribes, organizations, and individuals that provided written comments during the scoping process in chronological order.

**Table 1-1. Comments Received During Public Scoping Period**

Commenter	Date	NEPA	CEQA
<b>Agencies</b>			
Native American Heritage Commission	3/22/21		X
South Coast Air Quality Management District	4/13/21		X

**Table 1-1. Comments Received During Public Scoping Period**

<b>Commenter</b>	<b>Date</b>	<b>NEPA</b>	<b>CEQA</b>
California Department of Fish and Wildlife	4/14/21	X	X
Metropolitan Water District of Southern California	4/19/21	X	X
U.S. Environmental Protection Agency	4/19/21	X	
Joshua Tree National Park	4/19/21	X	
<b>Organizations</b>			
Desert Tortoise Council	4/15/21		X
Southern California Association of Governments	4/19/21		X
Center for Biological Diversity, Sierra Club, California Native Plant Society, and National Audubon Society	4/19/21	X	X
Western Watersheds Project & Basin and Range Watch	4/19/21	X	X
Defenders of Wildlife / California Native Plant Society / California Wildlife Coalition / Natural Resources Defense Council / Audubon	4/19/21	X	
Eagle Crest Energy Company LLC	5/5/21	X	
<b>Tribal Governments</b>			
Colorado River Indian Tribes	4/21/21	X	X
<b>Individuals</b>			
S. Daniel McLeod	3/27/21	X	
Christina Stuart	4/18/21		X

## 1.4 Scoping Report Organization

This scoping report summarizes the comments and issues identified during the scoping period. The Lead Agencies will review and consider all of the scoping comments received in preparing the EA and the EIR for the project.

- **Section 2** provides a summary of the project.
- **Section 3** provides a summary of the comments received and issues raised during the project’s scoping period.
- **Section 4** provides a summary of future steps in the planning process and indicates opportunities for public participation in the environmental review process.
- **Appendices** that follow Section 4 include the NOI and NOP, BLM’s news release, newspaper ad, scoping presentation, and scoping comment summary and letters.

## Section 2 Summary of the Proposed Project

As noted earlier, IP Oberon, LLC has filed applications with the BLM and RWQCB for the Oberon Renewable Energy Project. The project consists of utility-scale solar PV and energy storage facility. A 500 kV gen-tie line interconnects the project with the SCE Red Bluff Substation. The project would generate up to 500 MW using PV technology and would include up to 500 MW of integrated battery energy storage capacity.

The proposed project is comprised of the following components/facilities:

- **Solar PV Panels and Mounting Systems:** the solar facility would include a type of solar PV system to be selected at the time of procurement. The PV panels will be self-contained units designed to withstand exposure for 35 years. Module mounting systems that may be installed include either fixed-tilt or tracking technology, depending on the PV modules ultimately selected. Modules would be arranged next to each other in long strings called rows and supported by steel piles.
- **Inverters, Transformers, and Electrical Collection System:** The project would be designed and laid out primarily in increments which would include an inverter equipment area and transformers. Panels would be electrically connected into panel strings using wiring secured to the panel racking system. Underground cables would be installed to convey the direct current (DC) electricity from the panels to inverters to convert the DC to alternating current (AC) electricity.
- **Project Substation Yard and Gen-Tie Line:** project substation(s) would transform or step up the voltage from 34.5 kV to 500 kV. A substation would collect consolidated intermediate voltage cables from the MV and PV collector system. Electrical transformers, switchgear, and related substation facilities would be designed and constructed to transform medium-voltage power from the project's delivery system to the 500 kV SCE Red Bluff Substation. Upgrades at Red Bluff Substation would be required by SCE to interconnect the Oberon Project.
- **Operations and Maintenance (O&M) Facility:** The O&M facility would be constructed at the project site with an electrical distribution line running to the O&M building from the existing SCE distribution system adjacent to the solar facility. The O&M building would be designed for project security, employee offices, and parts storage. During O&M, the Applicant may use one of the homes that currently exists on the solar facility site, or it may use an existing home's septic system and build a new O&M building. If a new O&M building is constructed, the O&M building would be approximately 3,000 square feet in size and approximately 15 feet at its tallest point, which would accommodate operation and maintenance staff. The O&M building would be constructed on a concrete foundation with its color to be determined in coordination with the BLM.

Other features/components of the proposed facility include a battery for 500 MW of electricity, a meteorological data collection system, and telecommunications facilities.

Access to the site would be via State Route 177. The project's on-site roadway system would include a perimeter road, access roads, and internal roads. These roads would be surfaced with gravel, compacted dirt, or another commercially available surface and would provide a fire buffer, accommodate project O&M activities such as cleaning of solar panels, and facilitate on-site circulation for emergency vehicles. Dust control would be implemented as necessary to mitigate dust plumes.

## Section 3 Summary of Scoping Comments

This section of the report summarizes the comments raised by agencies, Native American tribes, organizations, and members of the public during the scoping process. Table 1-1 provides a list of commenters including federal, state, and local agencies as well as Tribes, organizations, and individuals who provided comments. A number of environmental concerns were raised during the scoping process that focused on the project's potential effects to environmental resources and issue areas. This scoping report summarizes the comments received according to the following major themes:

- Project Description
- Human environment issues
- Natural environment issues
- Mitigation Measures
- Indirect and cumulative impacts
- Project alternatives
- Document Format, and Permitting Issues
- Issues Outside the Scope of the EA and EIR

### 3.1 Project Description

The Native American Heritage Commission commented that an EIR should be prepared if there is substantial evidence that the project may have a significant effect on the environment; the lead agency needs to determine whether historical resources are within the area of potential effect.

#### Statement of Purpose and Need

The U.S. Environmental Protection Agency (U.S. EPA) commented that the Purpose and Need should clearly identify the factors that are used to evaluate the size of the project and describe the criteria used to determine the minimize feasible project size. The EA should also discuss the energy market that the project would serve, identify purchasers, and mention the renewable portfolio standards.

Defenders of Wildlife, California Native Plant Society, California Wildlife Coalition, Natural Resources Defense Council, Audubon (Defenders of Wildlife et al.) commented that BLM must draft its Purpose and Need statement to encompass how the project will meet the DRECP renewable energy goal and potential alternative means of achieving that goal. It should set the stage for incorporating environmental concerns as part of the project and allow consideration of a considerable range of alternatives.

Western Watersheds Project and Basin & Range Watch commented that the Purpose and Need statement should prioritize protecting microphyll woodlands, wildlife connectivity corridors and tortoise habitat.

#### Designated Utility Corridor

Eagle Crest Energy Company, LLC, expressed concerns about congestion in the Corridor 30-52/Utility Corridor K, due to the increasing number of interconnections to the Red Bluff Substation from solar projects in the region. They expressed specific concerns about the location of project elements to the east of the Red Bluff Substation, since it could create a conflict with the Eagle Crest gen-tie line route. To ensure that future projects can interconnect to the Red Bluff Substation, they requested coordination between the BLM, IP Oberon, LLC, and Eagle Crest Energy, to ensure that the gen-tie lines do not conflict.

## 3.2 Human Environment Issues

### Aesthetic/Visual Resources

Western Watersheds Project and Basin & Range Watch commented that visual resources should be adequately analyzed by using appropriate KOPs, including KOPs from wilderness areas, and from Joshua Tree National Park. A nighttime visual impact assessment was also recommended.

### Cultural Resources

The Native American Heritage Commission comment included a statement about AB 52 applicability to the project and recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible. Letter includes a summary of AB 52 and SB 18, as well as NAHC's recommendations for cultural resources assessments. They also recommended that the applicant should contact the appropriate regional California Historical Research Information System; prepare a professional report if an archaeological survey is required; contact the NAHC for a sacred lands file search and a native American tribal consultation list; and remember that lack of surface evidence of archaeological resources does not preclude their subsurface existence.

Colorado River Indian Tribes (CRIT) expressed concerns about cultural resources, specifically that the potential for cultural resources requires BLM to complete a full EIS review. They also commented that the BLM must ensure that potential impacts to known and unknown cultural artifacts are analyzed and avoided. Including cumulative impacts. CRIT requested a written response.

The U.S. EPA recommended that the results of tribal consultation, the main concerns expressed by tribes, and how those concerns were addressed, are included in the Draft EA. The U.S. EPA recommended that the document discuss how the BLM would avoid or minimize adverse effects on the physical integrity, accessibility, or use of cultural resources or archaeological sites, including traditional cultural properties, throughout the project area. The document should clearly discuss mitigation measures for archaeological sites and TCPs, and include a summary of coordination, identification of NRHP eligible sites, and a Cultural Resource Management Plan. The U.S. EPA recommends addressing the existence of Indian sacred sites in the project areas that may be considered spiritual sites by regional tribal nations. Discuss how the BLM would ensure that the proposed action would avoid or mitigate for the impacts to the sites.

The Joshua Tree National Park expressed concerns about clearing vegetation and water availability; recommended that the National Park Service (NPS) work with BLM and tribal partners to determine the impacts of this on ethnographically sensitive species and offer accommodations to perform ceremonies or other practices.

Western Watersheds Project and Basin & Range Watch commented that the cultural impacts should be better analyzed, as the DRECP did not analyze impacts to regional cultural resources and concerns by local rural communities.

Mr. S. Daniel McLeod expressed concerns about the desert ecosystem, the placement of the project near the Joshua Tree National Park due to cultural resources.

### Existing or Planned Land Uses

The Center for Biological Diversity, Sierra Club, California Native Plant Society, and National Audubon Society (Center for Biological Diversity et al.) stated that the proposed project does not conform with the DRECP and would require a plan amendment, due to noncompliance with Conservation and Management Actions (CMAs.)

Defenders of Wildlife et al. commented that since BLM states it intends to amend the CDCA Plan to exempt the project from compliance with certain unspecified CMAs from the DRECP, otherwise the project could not be authorized. The commenter states that without seeing the CMAs, it limits the ability for the public to provide meaningful scoping comments. The proposed exemption of unspecified DRECP CMAs could lead to future exemptions and undermine the intent of the DRECP. The commenter recommends that the BLM provide the public with a statement on why the project is being further analyzed instead of denied for conflicting with the CDCA plan. BLM should provide documentation of the applicant's efforts to comply with the CDCA plan, and why a modified project was not proposed. Processing another separate land use plan amendment to the CDCA Plan to avoid application of previously adopted CMAs is not necessary and the commenter encouraged BLM to analyze the proposed action within the umbrella of the entire DRECP CMA framework.

The Desert Tortoise Council (Council) commented that a Land Use Plan Amendment to the DRECP to would eliminate tortoise habitat from DFAs. They state that the data analyses in Allison and McLuckie (2018) and USFWS (2014, 2015, and 2017) must be reported in the draft document as baseline information. The Council believes that BLM's management of the Mojave desert tortoise and its habitats in California is not in compliance with FLPMA or the purposes for establishing the CDCA. BLM needs to adopt and implement the management actions of the one population of the Mojave desert tortoise in California that is increasing. This population is managed by the NPS.

## **Solid Waste**

Ms. Christina Stuart expressed concerns about the impacts of solar panels when the project is decommissioned, specifically, regarding waste, hazardous waste, disposal of panels, and recycling. Ms. Stuart requested that the EA disclose exactly how the solar panels will be disposed of and any impacts the disposal will have on the environment.

The U.S. EPA recommends that the document quantify and describe the types of waste, discuss the potential impacts of waste generation, including hazardous waste, from construction and operation activities, as well as the proposed battery storage facilities.

## **Public Health and Safety**

The U.S. EPA recommends a discussion of Valley Fever, and to include measures that would prevent or reduce the risk of exposure to workers and residents.

## **Environmental Justice**

The U.S. EPA recommends that the BLM address adverse environmental effects of the proposed project on minority and low-income communities and outline measures to mitigate for impacts.

## **Transportation and Traffic**

The Southern California Association of Governments regional council's Connect SoCal focuses on integrated, coordinated, and balanced planning for land use and transportation to make a more sustainable region. They presented strategies as guidance for lead agencies, including a jurisdictional level growth estimates and forecasts for years 2016 and 2045. They presented ten goals for guidance on the project, which range from economic prosperity, transportation, greenhouse gas emissions, and conservation.

## **Hazards**

Mr. S. Daniel McLeod expressed concerns relating to safety of battery facilities, and requested the documents related to the risk assessment for the batteries for the project.

Western Watersheds Project and Basin & Range Watch commented that the battery storage facility using air conditioning to cool the battery containers could be inefficient and plans for fires should be developed.

The Center for Biological Diversity et al. commented that management practices for fire prevention must be included.

### 3.3 Natural Environment Issues

#### Biological Resources

The California Department of Fish and Wildlife (CDFW) recommended that the Draft EIR include: (1) An assessment of the various habitat types located within the project footprint, and a map that identifies the location of each habitat type. (2) A general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the project. (3) A complete, recent inventory of rare, threatened, endangered, and other sensitive species located within the project footprint and within offsite areas with the potential to be affected, including California Species of Special Concern (SSC) and California Fully Protected Species (Fish and Game Code § 3511).

The CDFW stated that the following should be included in the Draft EIR: (1) A discussion of potential impacts from lighting, noise, human activity, and wildlife-human interactions created by zoning of development projects or other project activities adjacent to natural areas, exotic and/or invasive species, and drainage. (2) A discussion of potential indirect project impacts on biological resources, including resources in areas adjacent to the project footprint, such as nearby public lands, open space, adjacent natural habitats, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or mitigation lands. (3) An evaluation of impacts to adjacent open space lands from both the construction of the project and long-term operational and maintenance needs. (4) A cumulative effects analysis developed as described under CEQA Guidelines § 15130. (5) The project has several decades long life span. So, the potential loss in desert tortoise and other habitat expansion and population density changes with time needs be accounted for considering fully mitigated standards.

The CDFW and the Desert Tortoise Council recommended that the California Natural Diversity Database (CNDDDB) be used to gather information about the potential presence of species, and surveys should not be restricted or limited to generated lists, as well as a mitigation measure for pre-construction botanical surveys for Special Status Native Plant Populations and Natural Communities with mitigation to protect them. The Desert Tortoise Council states that, if identified in the CNDDDB search, special status plant species surveys and mapping, should be done. CDFW stated that CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. Report any special status species and natural communities detected during project surveys to the CNDDDB.

The CDFW commented that the Draft EIR should include appropriate and adequate avoidance, minimization, and/or mitigation measures for all impacts. Project activities should be designed to avoid any fully protected species, and fully analyze potential adverse impacts to these species. The document should include measures to fully avoid and otherwise protect sensitive plant communities from project-related direct and indirect impacts. The Draft EIR should include mitigation measures for adverse project-related impacts to sensitive species and habitats that are significant to both local and regional ecosystems.

The CDFW recommended that the lead agency add a condition the Draft EIR that requires a CDFW-approved qualified biologist be retained to be onsite prior to and during all ground- and habitat-disturbing activities to move out of harm's way special status species or other wildlife.



The Center for Biological Diversity et al. stated that the documents must document and analyze impacts to rare species that utilize the site. Acquisition of lands that will be managed in perpetuity for conservation must be included as part of the strategy to avoid, minimize and mitigate impacts.

The CDFW and the Desert Tortoise Council recommended surveys for western burrowing owl. CDFW expressed concerns about impacts to burrowing owls. The comment offers mitigation and translocation suggestions.

The Desert Tortoise Council expressed concerns about loss of critical habitat for desert tortoise, and the clarity over what BLM land it is located on. They recommended formal protocol surveys for desert tortoise. They recommend the BLM not to approve a project that would result in a loss of critical habitat to desert tortoise.

Western Watersheds Project and Basin & Range Watch and the Center for Biological Diversity et al. states that Desert Tortoise critical habitat needs to be avoided, and the value of desert tortoise land should be analyzed at a deeper level than a GIS overlay. They expressed concerns about setting a precedent of building in critical habitat. They also requested that a LUPA be included in the EIS to amend the DRECP and remove the existing overlaps of the DFA with all Critical Habitat units.

The Council recommends that the document analyze population trends, sources of mortality, and the effect of degradation/loss of habitat from the project. The Council included a list of best management practices for desert restoration. The Center for Biological Diversity et al. states that translocation cannot substitute for other mitigation, and if used as mitigation, should have a monitoring plan with success criteria.

The Desert Tortoise Council recommended focused surveys for Mojave fringe-toed lizards. The Center for Biological Diversity et al. and Western Watersheds Project and Basin & Range Watch states that due to the presence of Mojave Fringe-toed lizard the documents need to include a comprehensive analysis of the sand transport corridor, and the effects of fencing, be analyzed.

The CDFW recommended an escape ramp be placed in trenches that are left open, to allow for animals to escape that may have become trapped, and that biological monitors should take steps to prevent wildlife from entering or getting trapped in pipes.

The CDFW recommended that a California Endangered Species Act ITP be obtained if the project has the potential to result in take. CDFW expressed concerns related to desert tortoise and recommends inclusion of detailed mitigation measures to avoid potentially significant impacts, as they are listed as threatened under the California Endangered Species Act and listed as a candidate for being considered endangered. The Desert Tortoise Council recommends coordination with the USFWS Palm Springs Office for compliance with the Federal Endangered Species Act.

The Joshua Tree National Park and USFWS should identify any golden eagles using habitat within the park. The applicants should identify any habitat that may be affected and incorporate best management practices from SCEs golden eagle mortality studies.

The Center for Biological Diversity et al. stated that the surveys for the plant communities should follow California Native Plant Society (CNPS) and California Department of Fish and Game (CDFG) floristic survey guidelines and should be documented. Surveys for animals should include an evaluation of the California Wildlife Habitat Relationship System's (CWHR) Habitat Classification Scheme. These surveys must be on maps large enough to be useful, and surveys must be done at different times of the year to accurately evaluate the site.

The Center for Biological Diversity et al. expressed concerns about the project being in a flyway for the endangered Yuma Ridgway's Rail.

The U.S. EPA recommended design features that would further minimize grading, soil disturbance and vegetation removal during construction, as used in the Crimson Solar Project. They also recommend coor-

dination with the U.S. Fish and Wildlife Service under Section 7 of the Endangered Species Act on matters that pertain to species and habitat protection, endangered species, included in the Biological Assessment. General locations of rare plants and describe how potential impacts will be minimized should be included in the Draft EA. Impacts of shade on species in the desert environment, and impacts associated with constructing fences around the project site should be analyzed.

The Joshua Tree National Park expressed concerns about an increase in commercial activity near Desert Center, and the increase in activity it may cause in the eastern end of the park as it is very remote and lacks visitor resources. The National Park said that off-highway vehicle (OHV) use may introduce invasive plant species. The Joshua Tree National Park recommends that the BLM and Joshua Tree National Park partner to identify increase visitation patterns, OHV use or trespass, and invasive plant populations. The Center for Biological Diversity et al. states that Non-Native Plants should be banned from the project site, and the document should evaluate impacts from invasive species.

Western Watersheds Project and Basin & Range Watch commented that mowing and traditional methods of site construction need to be mapped and analyzed, the document should explain what methods will be used.

The Joshua Tree National Park expressed concerns about surface alteration and the effects on microphyll woodlands. The recommended analysis of changes in water flow resulting from nearby solar projects, and hydrological surface modeling to determine how water flow will impact microphyll woodland. They also expressed concerns about fragmentation and other impacts to woodland washes and that impact on bird species. The NPS recommended incorporating recent desert bird studies into the analysis of project effects and retaining microphyll woodland CMAs.

The Center for Biological Diversity et al. stated that the DRECP requires microphyll woodlands be protected from development even within a DFA. Western Watersheds Project and Basin & Range Watch states that all microphyll woodland should be avoided; and the applicant should seek other sites which do not necessitate a land use plan amendment (LUPA) in order to violate CMAs.

Western Watersheds Project and Basin & Range Watch stated that connectivity of wash plant communities needs to be included, along with an analysis of stormwater runoff in ephemeral washes. All microphyll areas and wash habitats need to be avoided, and a buffer of 200 feet around microphyll habitats so that edge-effects do not impact wash habitats.

The U.S. EPA, Center for Biological Diversity et al., the Western Watersheds Project, and Basin & Range Watch expressed concerns about increased fatality risk to birds, and migratory birds, particularly waterfowl, associated with solar PV arrays, known as the “lake effect.”

The U.S. EPA expressed concerns about gen-tie lines and their potential impact to raptors. Western Watersheds Project and Basin & Range Watch state that impacts to tortoise, Mojave fringe-toed lizard, rare plants, microphyll woodland, and avian collisions should be analyzed for the gen-tie line. The Desert Tortoise Council, Western Watersheds Project, and Basin & Range Watch expressed concerns about nesting ravens, and that the proponent should choose a pole type that is least likely to be used for nesting.

The Center for Biological Diversity et al. stated that the document must evaluate all impacts to wildlife movement corridors. Joshua Tree National Park expressed concerns about the habitat linkage that the project is partially within and recommends that modeling should be done, and reduced fencing should be considered. Western Watersheds Project and Basin & Range Watch stated that the multispecies wildlife corridor should be avoided, all I-10 underpasses should be mapped, and connectivity should be maintained in both the wildlife corridor and critical habitat. It should also be analyzed for Burro deer. Defenders of Wildlife et al. recommended evaluation of specific habitat linkages identified in the DRECP.

## Water Resources

Metropolitan Water District of Southern California (MWD) and the U.S. EPA expressed concerns about the quantity of water used for the project. MWD requested that the lead agency provides an analysis of the utilization of groundwater from on-site wells, as well as a cumulative analysis that includes the impact on the groundwater basin from the surrounding solar facilities.

The Center for Biological Diversity et al. stated that any groundwater pumping proposed for the proposed project must be analyzed in terms of groundwater resource availability and water quality in the basin and surface water resources. This effect on the native plant and animal species and their habitats needs to be included. Western Watersheds Project and Basin & Range Watch also expressed concerns about groundwater pumping, pollution and the effect to regional aquifers.

Defenders of Wildlife et al. recommended that BLM require all applicable CMAs associated with groundwater use for the project in order to protect the Chuckwalla Valley groundwater from overdraft. They provided a list in the comment letter.

The U.S. EPA, Western Watersheds Project and Basin & Range Watch suggested that the impacts of changing precipitation patterns on the project, given flood risks, should be analyzed, and a stormwater plan should be developed. The placement of PV panels within and adjacent to washes should be analyzed and should be designed to minimize impacts.

The Desert Tortoise Council stated a jurisdictional waters analysis should be done. The Center for Biological Diversity et al. and the CDFW recommended that the documents must clarify the impacts to the jurisdictional Waters of U.S. and the Water of the State of California, and surface hydrology across the site. An evaluation of the effect of water use by the proposed project needs to be detailed and include alternatives and its impact on the Colorado River Basin. In addition to avoiding wetlands and waters of the U.S., CDFW recommended careful micro-siting of project components to avoid and protect ephemeral drainages or desert washes and dry wash woodlands. The U.S. EPA recommended that BLM and the Applicant refine their site plan to avoid such critical habitat and adhere to buffer sizes as prescribed by the DRECP CMAs.

## Air Resources

The South Coast Air Quality Management District (SCAQMD) commented that the Lead Agency should use SCAQMD's Air Quality Handbook and website as guidance for analyses. They also recommended use of CalEEMod to estimate pollutant emissions, and the use of SCAQMD regional pollutant emissions significance thresholds. The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the proposed project and all air pollutant sources. They also recommended that a mobile source health risk assessment should be prepared if the project uses diesel fueled vehicle trips.

The U.S. EPA recommended a phased approach to site preparation and vegetation removal, to prevent excess dust, and that a detailed discussion of a baseline for air quality conditions should be included along with BLM's coordination with SCAQMD and the NPS to prevent excess emissions. They recommend incorporation of Tier 4 standards for equipment, limited idling, and PM10 monitoring. The U.S. EPA recommends that the Draft EA discuss potential energy needs of the proposed energy storage systems, to what extent such needs can be met by energy generated on site by the solar facility and include air emission estimates for the project.

The Joshua Tree National Park expressed concerns about the highly erodible surface soils and the potential effect on air quality. They recommend that the project include an air quality plan for monitoring.

The Center for Biological Diversity et al. commented that the construction, operation, and eventual decommissioning of the proposed facilities will also increase greenhouse gas emissions and those emissions should be quantified and off-set, and the analysis shall include the loss of carbon sequestration from the project's disturbance, and mitigation for mobile sources.

## Soils

The U.S. EPA recommended practices that minimize disturbance of desert pavement/cryptobiotic soil crusts and preserve habitat and adopting methods and installation techniques that will minimize impacts to soil crusts. They would like confirmation of the extent of desert dune and non-sand dune habitat that will be impacted.

### 3.4 Mitigation Measures

The U.S. EPA recommended that the mitigation measures and the Mitigation Monitoring and Reporting Program be adopted in the final decision document and be included as conditions in construction contracts and any other approvals or enforceable agreements.

The Desert Tortoise Council recommended mitigation for all direct, indirect, and cumulative impacts, that include a translocation, raven management, fire management, weed management and compensation plans. These should have an implementation schedule with key actions per phase, and a monitoring plan to determine if success criteria have been met.

The Southern California Association of Governments recommended a review of the Final Program EIR for Connect SoCal as guidance for mitigation measures.

Defenders of Wildlife et al. stated that compensatory mitigation should be used for desert tortoise critical habitat and microphyll woodland in a 5:1 ratio, and for habitat in general in a 1:1 ratio.

The CDFW and the Desert Tortoise Council recommended inclusion of mitigation measures that specify who will perform a burrowing owl survey, what type of survey, and what actions will be taken should burrowing owl presence be confirmed. CDFW recommends inclusion of pre-construction American Badger and Desert Kit Fox surveys, and a measure to monitor and protect these species. The Center for Biological Diversity et al. states that the documents must estimate the number of desert kit fox or badgers on the project site and analyze impacts to them.

The CDFW recommended inclusion of avian surveys, as well as specific avoidance and minimization measures to ensure no impacts to nesting or migratory birds.

The EPA recommended including an invasive plant management plan for the monitoring and control of noxious weeds and should describe how the project will meet the requirements of E.O. 13112.

The Center for Biological Diversity et al. suggested inclusion of mitigation and monitoring for migratory birds.

The Desert Tortoise Council, Western Watersheds Project, and Basin & Range Watch stated that BLM should require monitoring, nest removal, and depredation permits if tortoise depredation is documented. BLM should require the Proponent to contribute identified funds to the National Fish and Wildlife Foundation's Raven Management Fund for regional and cumulative impacts. The Center for Biological Diversity et al. also expressed concerns about ravens and stated that a raven prevention plan should be included.

MWD stated that regulators should require that project developers monitor groundwater use to ensure that, over the life of the project, there are no impacts to Colorado River resources. If impacts are detected, the project developer should be required to mitigate and offset such impacts.

The CDFW commented that Fish and Game Code section 1602, requires an entity to notify CDFW prior to commencing any activity that may divert water, change material, or deposit debris.

SCAQMD also commented that if the proposed project results in significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized to minimize these impacts. The Joshua Tree National Park recommends that the project include an air quality plan for monitoring.

### 3.5 Indirect and Cumulative Impacts

MWD stated that the potential impacts to the Metropolitan’s transmission system should be addressed; requested that the Lead Agency ensure that the California Independent System Operator (CAISO) includes Metropolitan as a Potentially Affected System for this proposed project and the system should be included in any related technical generation interconnection studies.

The Desert Tortoise Council recommends following the CEC’s eight principles for cumulative analysis.

The Center for Biological Diversity et al. states that the documents must include a robust cumulative impact analysis, including if the cumulative projects will cause adverse impacts to the DFA and surrounding lands, such as wilderness, ACECs, and Wildlife Habitat Management Areas (WHMAs)

### 3.6 Project Alternatives

The U.S. EPA, Center Biological Diversity et al., Western Watersheds Project, and Basin & Range Watch all recommended inclusion of a reduced size alternative. The Western Watersheds Project and Basin & Range Watch stated that this reduced alternative could be reduced to 200-300 MW to meet federal incentives and avoid critical habitat.

Defenders of Wildlife et al. recommended an alternative in which the project is modified to be in compliance with DRECP CMA LUPA-BIO-13, an alternative that avoids development within the Chuckwalla Critical Habitat unit, and an alternative that combines the above that avoids or minimizes loss of habitats and movements of focal and special status species protected by the CMAs.

The U.S. EPA, Center for Biological Diversity et al., and Defenders of Wildlife et al. recommended evaluating an alternative that would fully comply with the CMAs and not require a Land Use Plan Amendment.

The U.S. EPA also recommended using a “crosswalk” table to compare alternatives.

The Desert Tortoise Council and Center for Biological Diversity et al. suggested an alternative to reduce the need for additional solar energy projects in the Mojave Desert, such as rooftop solar, distributed generation, and parking lot solar. Western Watersheds Project and Basin & Range Watch suggested that this should be analyzed as the No Action Alternative.

The Center for Biological Diversity et al. suggested that the document include a preferred alternative that includes the northern portion of the application area and a private lands alternative.

Western Watersheds Project and Basin & Range Watch commented that the efficiency of this utility scale solar project should be analyzed, as 500 MW could only be produced during peak sunlight hours.

The Center for Biological Diversity et al. stated that if there are burrowing owls on the site, at least one alternative should evaluate the reduction of impacts to this rare species by moving the project away from the nesting burrows.

The Center for Biological Diversity et al. suggested an alternative be included that avoids desert tortoise critical habitat.

Several interest groups stated that alternatives should prioritize the avoidance and conservation of the sand transport corridor.

The Center for Biological Diversity et al. requested an alternative that avoids development in the wildlife connectivity corridors linkage area to comply with CMAs.

## **3.7 Document Format, and Permitting Issues**

### **Document Format/Analysis**

The U.S. EPA recommended that the impact assessment methodology should be identified for each resource evaluated and include one or more significance thresholds against which project impacts can be compared. The Draft EA should include a comprehensive description of the affected environment and it should include reasonably foreseeable environmental trends and planned actions. This should include a discussion of the other projects nearby and discuss the conclusions made for these other projects that were completed before they were subject to DRECP CMAs.

### **Agency Permits/Consultation**

The SCAQMD commented that if the proposed project requires a permit from the SCAQMD, they should be identified as a Responsible Agency in the Draft EIR, as it will be used as the basis for evaluating the permit under CEQA.

## **3.8 Issues Outside the Scope of the EA and EIR**

The SCAQMD requested to receive all appendices and technical documents related to the air quality, health risk, GHG analyses, and modeling files. They also offered to work with the lead agency to ensure that the air quality, greenhouse gas, and health risk impacts are accurately evaluated and mitigated where feasible.

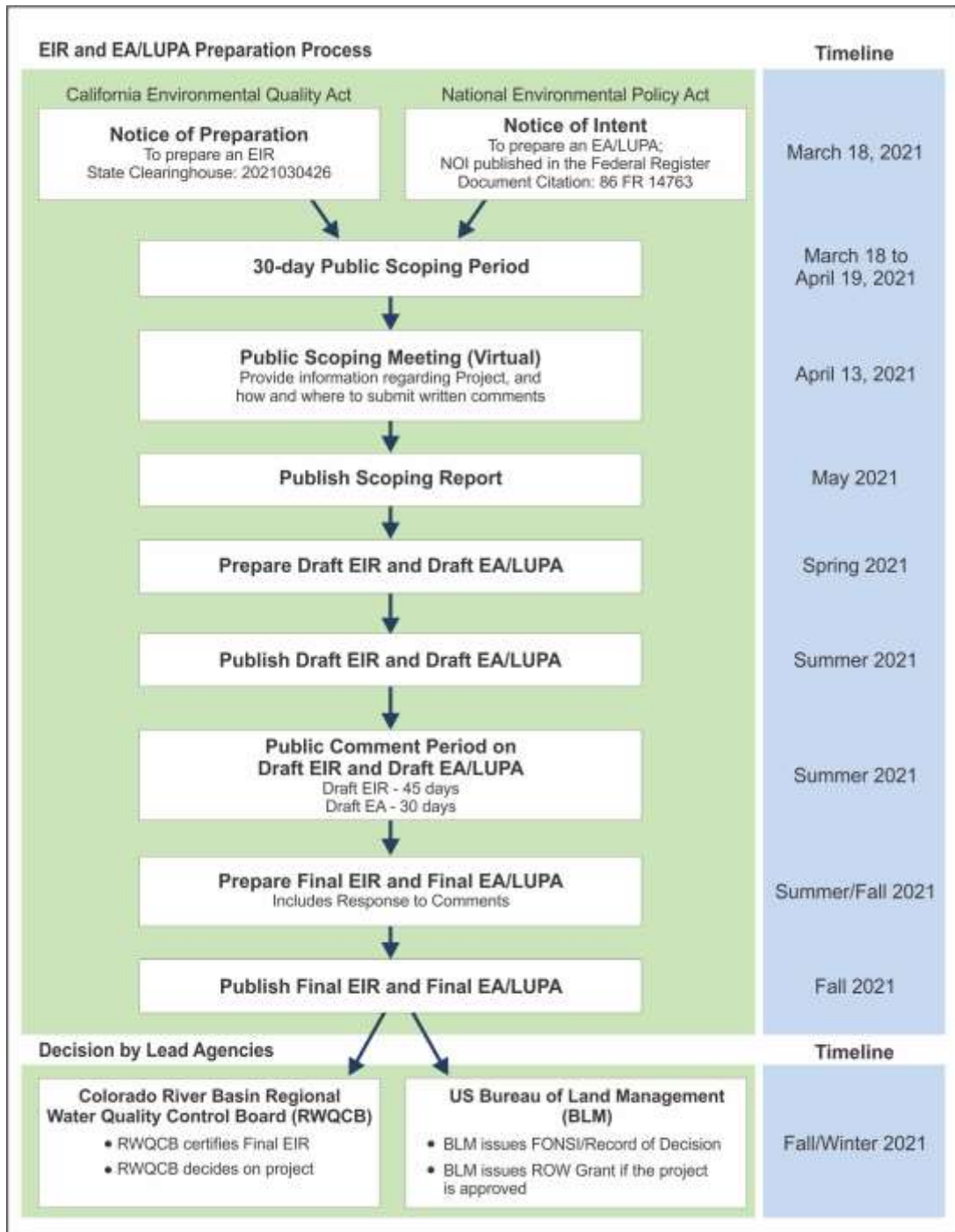
The CDFW stated that fees are payable upon filing of the Notice of Determination by the Lead Agency. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final.

The Desert Tortoise Council asked for a response in an email that the comment letter has been received so they can be sure their concerns have been registered with the appropriate personnel and office for this project. They also expressed concerns that the adverse modification of critical habitat for desert tortoise is enough to trigger a preparation of an EIS, instead of an EA. The Council asked to be identified as an Affected Interest for this and all other BLM projects that may affect species of desert tortoises, and that any subsequent environmental documentation for this particular project is provided to them.

## Section 4 Summary of Future Steps in the Planning Process

The EA and EIR processes require a team of interdisciplinary resource specialists to complete each step. An important part of the environmental planning process is engaging the public and relevant agencies from the earliest stages of and throughout the planning process to address issues, comments, and concerns. The steps of the NEPA and CEQA planning processes and agency authority and decisions to be made are described as follows. Figure 4-1 provides a summary of the EA (NEPA) and EIR (CEQA) processes.

Figure 4-1 Project Review and Timeline



# Appendix A

Notices



# **Appendix A-1**

NEPA Notice of Intent &  
BLM News Release



## DEPARTMENT OF THE INTERIOR

### Bureau of Land Management

[LLCAD06000.L51010000.ER0000.LVRWB19B6970.19X (MO# 4500143795)]

### Notice of Intent to Amend the California Desert Conservation Area Plan and Prepare an Associated Environmental Assessment for the Oberon Solar Project, Riverside County, CA

**AGENCY:** Bureau of Land Management, Interior.

**ACTION:** Notice of intent.

**SUMMARY:** In accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, and the Federal Land Policy and Management Act (FLPMA) of 1976, as amended, the Bureau of Land Management (BLM) Palm Springs-South Coast Field Office is proposing to amend the 1980 California Desert Conservation Area (CDCA) Plan, as amended, and prepare the associated environmental analysis for the Oberon Solar Project (Project). By this notice, the BLM is announcing the beginning of the scoping process to solicit public comments on issues and identify planning criteria.

**DATES:** This notice initiates the public scoping process for the CDCA Plan amendment with associated environmental analysis. Comments on issues may be submitted in writing until [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. The date(s) and location(s) of any scoping meetings will be announced at least 15 days in advance through local news media, newspapers, and the BLM ePlanning website at: <https://go.usa.gov/xfDH5>.

To be included in the analysis, all comments must be received prior to the close of the 30-day scoping period. Additional opportunities for public participation will be available upon publication of the draft plan amendment environmental analysis document.

**ADDRESSES:** You may submit comments on issues and planning criteria by any of the following methods:

- Email: [BLM\\_CA\\_PS\\_OberonSolar@blm.gov](mailto:BLM_CA_PS_OberonSolar@blm.gov)
- Mail: ATTN: Brandon Anderson, BLM.  
22835 Calle San Juan De Los Lagos  
Moreno Valley, CA 92553
- Online via ePlanning: <https://go.usa.gov/xfdH5>

Documents pertinent to this project may be examined during regular business hours upon request using email: [BLM\\_CA\\_PS\\_OberonSolar@blm.gov](mailto:BLM_CA_PS_OberonSolar@blm.gov).

**FOR FURTHER INFORMATION CONTACT:** Brandon Anderson, Assistant District Manager, telephone (951) 697-5215; address Bureau of Land Management, 22835 Calle San Juan De Los Lagos, Moreno Valley, CA 92553; email [BLM\\_CA\\_PS\\_OberonSolar@blm.gov](mailto:BLM_CA_PS_OberonSolar@blm.gov). Documents relevant to this planning process can be found at <https://go.usa.gov/xfdH5>. Contact the Bureau of Land Management to arrange for other means of viewing documents. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Relay Service (FRS) at 1(800) 877-8339 to contact the above individual during normal business hours. The FRS is available 24 hours a day, 7 days a week, to leave a message or question with the above individual. You will receive a reply during normal business hours.

**SUPPLEMENTARY INFORMATION:** The applicant, IP Land Holding, LLC, a wholly owned subsidiary of Intersect Power, has requested a right-of-way (ROW) authorization to construct, operate, maintain, and decommission a 500-megawatt (MW) alternating current solar photovoltaic energy-generating facility along with the necessary ancillary facilities on public lands managed by the BLM. The project is proposed within a 4,700-acre area of public lands managed by the BLM just north and east of Desert Center, California. The Project is within a development focus area, as identified through

the Desert Renewable Energy Conservation Plan (DRECP) amendment to the CDCA Plan.

The DRECP contains Conservation and Management Actions (CMAs) that are intended to avoid and/or minimize impacts to numerous resources within the plan area. However, application of the relevant CMAs to the proposed project would preclude the ability to construct and operate the 500-MW project in an area identified as suitable for renewable energy development. As such, the proposed Project would require a plan amendment to allow solar development within the application area.

This notice informs the public that the BLM intends to prepare a draft CDCA Plan amendment and associated environmental analysis document for the Oberon Solar Project. It also announces the beginning of the scoping process for this effort and seeks public input on environmental issues and potential planning criteria relevant to the project and any potential plan amendments. The public-scoping process may guide the planning process and determine relevant issues that will influence the scope of the environmental analysis, including alternatives and mitigation measures.

Preliminary issues for the Project have been identified by the BLM, other Federal agencies, the State, local agencies, and other stakeholders. Issues include air quality and greenhouse gas emissions, special status wildlife and vegetation species, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, recreation, traffic, visual resources, and cumulative effects.

Written comments may be submitted via one of the methods listed in the **ADDRESSES** section above. Input must be received by the close of the 30-day public-scoping period.

If a plan amendment is necessary, the BLM will integrate the land use planning process with the NEPA process for the project. A preliminary list of the potential planning criteria that will be used to help guide and define the scope of the plan amendment includes:

1. Any plan amendments will be completed in compliance with FLPMA, NEPA, and all other relevant Federal laws, executive orders, and BLM polices.
2. Existing valid plan decisions will not change, and any new plan decisions will not conflict with existing plan decisions.
3. Any plan amendments will recognize valid existing rights.

With respect to the potential land use plan amendment, the BLM will evaluate identified issues to be addressed in the plan amendment, and will place them into one of three categories:

1. Issues to be resolved in the plan amendment.
2. Issues to be resolved through policy or administrative action.
3. Issues beyond the scope of this plan amendment.

The BLM will provide an explanation in the environmental analysis document as to why an issue was placed in category two or three. The public is also encouraged to help identify any management questions and concerns that should be addressed in the environmental analysis and potential land-use plan amendments. The BLM will work collaboratively with interested parties to identify the management decisions that are best suited to local, regional, and national needs and concerns.

The BLM will utilize and coordinate the NEPA scoping process to help fulfill the public involvement process under the National Historic Preservation Act (54 U.S.C. 306108) as provided in 36 CFR 800.2(d)(3). Information about historic and cultural resources within the area that may be potentially affected by the proposed action will assist the BLM in identifying and evaluating impacts to such resources. The BLM will consult with American Indian tribes on a government-to-government basis in accordance with Executive Order 13175 and other policies. Tribal concerns, including impacts on American Indian trust assets and potential impacts to cultural resources, will be given due consideration. Federal, State, and local agencies, along with tribes, and other

stakeholders that may be interested in or affected by the proposed action that the BLM is evaluating, are invited to participate in the scoping process and, if eligible, may request or be requested by the BLM to participate in the development of the environmental analysis as a cooperating agency.

Before including your address, phone number, e-mail address, or other personal identifying information (PII) in your comment, you should be aware that your entire comment -- including your PII -- may be made publicly available at any time. While you can ask us in your comment to withhold your PII from public review, we cannot guarantee that we will be able to do so.

**Danielle Chi,**

*BLM California Deputy State Director, Natural Resources.*

[FR Doc. 2021-05590 Filed: 3/17/2021 8:45 am; Publication Date: 3/18/2021]



U.S. Department of the Interior  
Bureau of Land Management

# News Release

BLM California Desert District

**Media Contact:** Michelle Van Der Linden, (951) 697-5217, [mvanderlinden@blm.gov](mailto:mvanderlinden@blm.gov)

March 17, 2021

CA-CDD-21-09

## **The Bureau of Land Management welcomes public input for a potential solar project on public lands in Riverside County**

**MORENO VALLEY, Calif.** — The Bureau of Land Management Palm Springs-South Coast Field Office is initiating environmental review and seeking public scoping comments on an environmental analysis and land-use plan amendment for a proposed 500-megawatt photovoltaic solar project on public lands in eastern Riverside County.

IP Land Holdings, LLC, seeks authorization to construct the Oberon Solar Project on 4,700-acres of BLM-managed public lands and would create an estimated 750 temporary jobs and eight permanent jobs, and generate enough clean electricity to power 200,000 homes. The proposed project includes battery storage and interconnecting power lines. The environmental assessment will analyze the potential impacts the proposed solar project would have on air quality, biological resources, cultural resources, hydrology, socioeconomic and other relevant issues. The proposed project may also require an amendment to the California Desert Conservation Area Plan.

This is one of the first projects seeking approval under the [Desert Renewable Energy Conservation Plan](#), a landscape-level plan that streamlines renewable energy development while conserving unique and valuable desert ecosystems and providing outdoor recreation opportunities. The Desert Renewable Energy Conservation Plan is focused on 10.8 million acres of public lands in the desert regions of seven California counties – Imperial, Inyo, Kern, Los Angeles, Riverside, San Bernardino, and San Diego.

“The BLM continues to play a role in meeting the nation’s energy needs through the development of renewable energy resources on public lands,” said Acting BLM Field Manager Janet Cheek. “We are committed to conducting a thorough review of the project and greatly value the public’s input during this process.”

The Oberon Solar Project supports the Department of the Interior’s clean energy future priority with the goal of achieving a carbon pollution-free power sector by 2035. Across California, solar projects on BLM-managed public lands have the capacity to generate 6,500 MW of clean electricity for California businesses and residents.

The BLM is seeking public comments on issues, planning criteria, concerns, potential impacts, alternatives, and mitigation measures that should be considered in the analysis. A virtual public scoping meeting is scheduled April 13, 2021, from 5:00 p.m. to 7:00 p.m. You can join the meeting using the link or phone number below:

<https://us02web.zoom.us/j/84009948080>

Webinar ID: 840 0994 8080

Telephone Access: (669) 900-6833

Additional information about the meeting and project is available online at <https://go.usa.gov/xfdH5>.

The deadline to submit public comment is April 19, 2021. Substantive comments will be used to prepare an environmental analysis, which will provide additional opportunities for public comment. More details and instructions for submitting public comment can be found in a Notice of Intent published in the *Federal Register*.

For additional information, please contact the BLM at [BLM\\_CA\\_PS\\_OberonSolar@blm.gov](mailto:BLM_CA_PS_OberonSolar@blm.gov).

-BLM-

*The BLM manages more than 245 million acres of public land located primarily in 12 Western states, including Alaska. The BLM also administers 700 million acres of sub-surface mineral estate throughout the nation. The agency's mission is to sustain the health, diversity, and productivity of America's public lands for the use and enjoyment of present and future generations. Diverse activities authorized on these lands generated \$111 billion in economic output across the country in fiscal year 2019—more than any other agency in the Department of the Interior. These activities supported more than 498,000 jobs.*

22835 Calle San Juan De Los Lagos, Moreno Valley, CA 92553  
Follow the BLM on Twitter, Facebook, and Flickr [@BLMCalifornia](#) and [@BLMCalifornia](#)



# **Appendix A-2**

CEQA Notice of Preparation



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## Colorado River Basin Regional Water Quality Control Board

### ***NOTICE OF PREPARATION OF DRAFT ENVIRONMENTAL IMPACT REPORT***

**Date:** March 18, 2021

**To:** Responsible and Trustee Agencies, Interested Organizations, and Individuals

**Project Title:** Oberon Renewable Energy Project – Draft Environmental Impact Report

**Lead Agency:** Colorado River Basin Regional Water Quality Control Board  
c/o Aspen Environmental Group  
San Francisco, California 94104  
Contact Person: Logan Raub  
Phone Number: (760) 776-8966  
Email: [Logan.Raub@Waterboards.ca.gov](mailto:Logan.Raub@Waterboards.ca.gov)

**Project Website:** <http://www.aspeneg.com/oberon-renewable-energy-project/>

**Applicant:** IP Oberon, LLC  
c/o Intersect Power  
9450 SW Gemini Drive PMB #68743  
Beaverton, OR 97008-7105

**Project Location:** The Oberon Renewable Energy Project would be located in Riverside County, north of Interstate 10 (I-10) and adjacent to the community of Lake Tamarisk in Desert Center, California, on 4,700 acres of public land administered by the U.S. Bureau of Land Management (BLM). The 500-kilovolt (kV) generation tie (gen-tie) transmission line would run north and south of the I-10 freeway to connect into the existing Southern California Edison (SCE) Red Bluff Substation. See Figures 1, 2, and 3 of Attachment A.

**Project Description:** IP Oberon, LLC, a subsidiary of Intersect Power, LLC, proposes to construct, operate, maintain, and decommission a 500 megawatt (MW) solar photovoltaic (PV) electricity generating station, battery energy storage facility, electrical substation, gen-tie lines and associated access roads on approximately 4,700 acres of BLM-managed land in Riverside County, California. The Oberon Renewable Energy Project would interconnect to Southern California Edison's (SCE) 500 kV Red Bluff Substation via one new 500 kV gen-tie line. The proposed 500 kV gen-tie line would be located within one 175-foot right-of-way (ROW), running approximately 0.5 miles southeast from the solar facility, across BLM-administered land, to the SCE Red Bluff Substation. All of the lands within the project application area are within the California Desert Conservation Area (CDCA) Planning Area, within the Riverside East Solar Energy Zone.

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NANCY WRIGHT, CHAIR | PAULA RASMUSSEN, EXECUTIVE OFFICER

BLM will be the lead agency under the National Environmental Policy Act (NEPA), 42 U.S.C. section 4321 et seq. Due to submittal of a Wastewater Discharge Requirements (WDRs) application package, this project is also under the jurisdiction of the Colorado River Basin Regional Water Quality Control Board (Regional Water Board), who is the lead agency responsible for environmental review of the project in compliance with the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq.

Pursuant to section 15082 of the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.), notice is given to responsible and interested agencies that the Regional Water Board plans to oversee the preparation of an Environmental Impact Report (EIR) for the above-described project. The purpose of this notice is to solicit guidance from responsible and trustee agencies, interested organizations, and individuals as to the scope and content of the environmental information to be included in the EIR. In accordance with the time limits mandated by state law, information in that regard should be submitted to this office as soon as possible, but **not later than thirty (30) days after receiving notice.** **Written comments must be received or postmarked by Monday April 19, 2021.**

In addition to offering the opportunity to submit written comments, the Regional Water Board will hold a scoping meeting in conjunction with the U.S. Bureau of Land Management to discuss the proposed project and the environmental process, and to provide agency representation, individuals, and other interested parties the opportunity to make oral comments regarding the scope of the EIR. The combined CEQA and NEPA scoping meeting will be held at the time and place indicated below.

### **Oberon Renewable Energy Project Scoping Meeting**

Date: Tuesday April 13, 2021  
Start Time: 5:00 p.m.  
Location: Zoom Meeting ID: <https://us02web.zoom.us/j/84009948080>  
Webinar ID: 840 0994 8080  
Telephone Access: (669) 900-6833

Attachment A contains a brief project description and lists environmental topics that will be addressed in the Draft EIR. If you have any questions, please contact Logan Raub at (760) 776-8966 or by email at [Logan.Raub@waterboards.ca.gov](mailto:Logan.Raub@waterboards.ca.gov).

# **NOTICE OF PREPARATION**

## **ATTACHMENT A:**

### **OBERON RENEWABLE ENERGY PROJECT**

#### **1.1 Description of the Proposed Project**

IP Oberon, LLC (Proponent), a subsidiary of Intersect Power, LLC, proposes to construct, operate, maintain, and decommission a 500 megawatt (MW) solar photovoltaic (PV) electricity generating station, battery energy storage facility, electrical substation, generation intertie (gen-tie) lines and associated access roads on Bureau of Land Management (BLM) managed land in Riverside County, California (Project). The Project is known as the Oberon Renewable Energy Project.

#### **Project Location**

The Project is located on BLM-administered lands in Riverside County just east of Desert Center, California, north of I-10 (see Figures 1 and 2). The Project site and surrounding lands are part of BLM-administered lands designated for renewable energy development. There are solar facilities in the surrounding area in various stages of development, including operational (Desert Sunlight, Desert Harvest, Palen solar projects), currently under construction (Athos project), and under permitting (Arica and Victory Pass solar projects). Figure 3 illustrates the solar development in the Project area.

#### **Applicant's Project Objectives**

The purpose of the Project is to generate, store, and transmit 500 MW of renewable energy to the statewide wholesale electricity grid. The Applicant's project objectives are as follows:

- Assist with achieving California's renewable energy generation goals under the Clean Energy and Pollution Reduction Act of 2015 (Senate Bill 350) and The 100 Percent Clean Energy Act of 2018 (Senate Bill 100), as well as greenhouse gas (GHG) emissions reduction goals of the California Global Warming Solutions Act of 2006 (AB 32), as amended by Senate Bill 32 in 2016;
- Bring living-wage jobs to eastern Riverside County;
- Minimize environmental impacts and land disturbance associated with solar development by siting the facility on relatively flat, contiguous lands with high solar insolation, in close proximity to established utility corridors, existing transmission lines with available capacity to facilitate interconnection, and road access;
- Further the purpose of Secretarial Order 3285A1, establishing the development of environmentally responsible renewable energy as a priority for the Department of the Interior; and

- Comply with the BLM’s “all-of-the-above” energy strategy to improve the management of energy resources found on federal lands in a balanced way to ensure the Nation’s economic and energy security and quality of life.

## **Project Description**

The Project would be a 500 MW solar photovoltaic generation and integrated energy storage facility that would interconnect to Southern California Edison’s (SCE) 500-kilovolt (kV) Red Bluff Substation via one new 500 kV gen-tie line (see Figure 2, Project Area). IP Oberon, LLC is willing to collocate the gen-tie line with another developer, pending financial negotiations, if the voltages, substation approaches, and timelines are similar. Construction would occur over approximately 15 to 20 months, concluding in or before the fourth quarter of 2023. The Project would operate for a minimum of 35 years and up to 50 or more years. At the end of the Project’s useful life, the Project would be decommissioned and the land returned to its pre-Project contours. Revegetation would be attempted, though revegetation success would be subject to the microclimatic conditions in the area at the time of decommissioning.

The Project application covers approximately 4,700 acres of BLM-administered land within which fewer than 3,000 acres would be developed with solar panels (see Figure 3, Project Area).

The proposed Project would consist of the following major components:

### **Solar Array**

The solar facility would include several million solar panels; the precise panel count would depend on the technology ultimately selected at the time of procurement. The ultimate decision for the panel types and racking systems described here would depend on market conditions and environmental factors, including the recycling potential of the panels at the end of their useful lives. Panels would be sited to avoid Desert Dry Wash (Microphyll) Woodland habitat (see Figure 2, Project Area).

Types of panels that may be installed include thin-film panels (including cadmium telluride [CdTe or “cad tel”] and copper indium gallium diselenide [CIGS] technologies), crystalline silicon panels, or any other commercially available PV technology. Solar thermal technology is not being considered. Panel mounting systems that may be installed include either fixed-tilt or tracking technology, depending on the PV panels ultimately selected.

The PV modules would be manufactured at an offsite location and transported to the Project site. Panels would be arranged in strings with a maximum height of 14 feet. Panel faces would be minimally reflective, dark in color, and highly absorptive.

### **Inverters, Transformers, and Electrical Collection System**

The Project would be designed and laid out primarily in 2 MW to 5 MW increments, which would include an inverter equipment area measuring 40 feet by 25 feet. The color of the inverter equipment would be standard white or desert tan, depending on availability from

the manufacturer. Non-conforming module blocks would be designed and sized as appropriate to accommodate the irregular shape of the developable Project footprint. The final module block increment sizes ultimately would depend on available technology and market conditions. Each 2 MW to 5 MW increment would include an inverter-transformer station constructed on a concrete pad or steel skid, and centrally located within the PV arrays. Each inverter-transformer station would contain up to four inverters, a transformer, a battery enclosure, and a switchboard 8 to 11 feet high. The pads would contain a security camera at the top of an approximately 20-foot pole. If required based on site meteorological conditions, an inverter shade structure would be installed at each pad. The shade structure would consist of wood or metal supports and a durable outdoor material shade structure (metal, vinyl, or similar). The shade structure would extend up to 10 feet above the top of the inverter pad.

Panels would be electrically connected into panel strings using wiring secured to the panel racking system. Underground cables would be installed to convey the direct current (DC) electricity from the panels via combiner boxes located throughout the PV arrays, to inverters to convert the DC to alternating current (AC) electricity. The output voltage of the inverters would be stepped up to the collection system voltage via transformers located in close proximity to the inverters. The 34.5 kV level collection cables would primarily be buried underground within the solar facility, with some segments potentially installed overhead on wood poles outside of the solar facility connecting the two parcel groups.

### **Project Substations and Switchyards**

Project substation(s) would transform or step up the voltage from 34.5 kV to 500 kV. The substation area and associated equipment would be located in a 20-acre area in the southeastern area of the solar facility. Each substation would collect consolidated intermediate voltage cables from the MV and PV collector system. Electrical transformers, switchgear, and related substation facilities would be designed and constructed to transform medium-voltage power from the Project's delivery system to the 500 kV SCE Red Bluff Substation.

### **500 kV Generation-Tie Line**

The Project 500 kV gen-tie line would be located within one 175-foot ROW, running approximately 0.5 miles (2,640 feet) southeast from the solar facility, across BLM-administered land, to the existing SCE Red Bluff Substation.

The Project gen-tie lines would be constructed with either monopoles, lattice steel structures, or wooden H-frame poles. Gen-tie structures would be on average 120 feet tall, with a maximum height up to approximately 200 feet for dead-end structures near the Red Bluff Substation.

Upgrades to Red Bluff Substation would be required by SCE within the existing substation fence line to accommodate interconnection of the Oberon 500 kV gen-tie line.

## **Operation and Maintenance Building**

A new O&M building would be constructed at the Project site with an electrical distribution line running to the O&M building from the existing SCE distribution system adjacent to the solar facility. The O&M building would be designed for Project security, employee offices, and parts storage. During O&M, the Applicant may use one of the homes that currently exists on the solar facility site, or it may use an existing home's septic system and build a new O&M building. If a new O&M building is constructed, the O&M building would be approximately 3,000 square feet in size and approximately 15 feet at its tallest point, which would accommodate operation and maintenance staff. The O&M building would be constructed on a concrete foundation with its color to be determined in coordination with the BLM.

## **12 kV Distribution Line**

Electrical power for the O&M building and substation would be supplied via a new overhead or underground 12 kV distribution line from the existing SCE distribution system adjacent to the solar facility site.

## **SCADA and Telecommunications Facilities**

The facility would be designed with a comprehensive Supervisory Control and Data Acquisition (SCADA) System to allow remote monitoring of facility operation and/or remote control of critical components. The fiber optic or other cabling required for the monitoring system typically would be installed in buried conduit within the access road, leading to a SCADA system cabinet centrally located within the Project site or a series of appropriately located SCADA system cabinets constructed within the O&M building. External telecommunications connections to the SCADA system cabinets could be provided through wireless or hard-wired connections to locally available commercial service providers. The Project's SCADA system would interconnect to this fiber optic network at the switching station, and no additional disturbance associated with telecommunications is anticipated.

## **Battery Energy Storage System (BESS)**

Battery energy storage systems (BESS) can assist grid operators in more effectively integrating intermittent renewable resources into the statewide grid. The Project would include a battery, flywheel, or other similar storage system capable of storing up to 500 MW of power. If provided, the storage system would consist of battery, flywheel banks, or other similar storage technology housed in electrical enclosures and buried electrical cable. The battery system would be concentrated near the Project switching station on approximately 25 acres in the southeastern area of the Project site.

The Applicant plans to expand/upscale the BESS capacity on up to 40 acres within the approved Project area at a future date depending on contracting opportunities. The areas identified for future BESS expansion and its associated substation are located in the vicinity of the proposed BESS and onsite substation and are depicted on Figure 2 (Project Area).

## **Meteorological Data Collection System**

The Project would include a meteorological (MET) data collection system with up to 15 MET stations throughout the solar facility. Each met station would be up to 10 feet tall and would have multiple weather sensors: a pyranometer for measuring solar irradiance, a thermometer to measure air temperature, a barometric pressure sensor, and wind sensors to measure speed and direction. The 4-foot horizontal metal cross-arm of each met system would include the pyranometer mounted on the left-hand side and the two wind sensors installed on a vertical mast to the right. The temperature sensor would be mounted inside the solar shield behind the main mast. Each sensor would be connected by cable to a data logger inside the enclosure.

## **Access Roads**

Access to the Project site would be provided from Highway 177. The Project's on-site roadway system would include a perimeter road, access roads, and internal roads. The perimeter road and main access roads would be approximately 20 feet wide and constructed to be consistent with facility maintenance requirements and county standards, and the gate would be 24 feet wide. These roads would be surfaced with gravel, compacted dirt, or another commercially-available surface and would provide a fire buffer, accommodate Project O&M activities such as cleaning of solar panels, and facilitate on-site circulation for emergency vehicles. Dust control would be implemented as necessary to mitigate dust plumes. However, the roadway system would be specially designed to accommodate the safe passage of desert tortoise and other wildlife across the site. If gravel is used for road surfaces, portions of road lengths would remain free of gravel in strategic locations in order to facilitate tortoise movement. In addition, culverts may be placed along internal roads to avoid the potential to disturb or injure tortoise individuals.

## **Fencing, Site Security, and Lighting**

**Fencing.** The solar facility would be enclosed with fencing that meets National Electric and Safety Code (NEC) requirements for protective arrangements in electric supply stations. The boundary of the Project sites would be secured by up-to 6-foot-high chain-link perimeter fences, topped with one foot of three strand barbed wire, or as dictated by BLM specifications. The fence would typically be set approximately 100 feet from the edge of the array. Desert tortoise exclusion fencing may be constructed along the bottom of the security fence.

**Site Security.** Multiple points of ingress/egress would be accessed via locked gates located at multiple points. Each Project unit would have at least one point of access. It is anticipated that there would be solar facility entrances off of Rice Road to both the east and west, as well as along Orion Road to access the northern Project area.

**Lighting.** Coordination with the California Department of Transportation (Caltrans) would be initiated to ensure compliance with exterior lighting regulations of lighting along Interstate 10. Care would be taken to prevent undue light pollution from the nighttime security lighting. Nighttime lighting would be limited to areas required for operation, safety, or



security, such as the O&M building, and would be directed or shielded from major roadways or possible outside observers. Lighting at high illumination areas not required on a continuous basis would be controlled by switches, motion detectors, etc., to light the areas only when required. All lighting would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties. The Project would use portable lighting for any emergency work that must occur on panels at night.

## **Water Requirements**

Water for construction-related dust control and operations would be obtained from either an on-site or off-site groundwater well. During the construction phase, it is anticipated that a total of up to 700 acre-feet would be used for dust suppression (including truck wheel washing) and other purposes during the 15-month construction timeframe. During construction, restroom facilities would be provided by portable units to be serviced by licensed providers.

During the operation and maintenance phase, water would be required for panel washing and maintenance, and for substation restroom facilities that would be located adjacent to the O&M building. The associated leach field would not be located within 0.25 miles of any drinking water well. During operation, the Project would require the use of approximately 40 acre-feet annually for panel washing (up to four times per year) and other uses. No wastewater would be generated during panel washing as water would be absorbed into the surrounding soil or would evaporate.

## **General Construction Process**

### **Construction Schedule and Workforce**

The start of construction is dependent on obtaining all necessary federal, state, and local approvals. Construction is anticipated to occur over an approximately 15- to 20-month period, depending on Power Purchase Agreement and financing requirements. The Project may be phased. The on-site workforce would consist of laborers, craftsmen, supervisory personnel, supply personnel, and construction management personnel. The on-site workforce is expected to reach its peak of approximately 530 individuals with an average construction-related on-site workforce of 320 individuals. The construction workforce would largely be recruited from within Riverside and San Bernardino Counties. Certain non-local specialty trade workers supporting proprietary plant equipment/components and construction processes may be employed on a short-term basis during construction. Construction equipment would operate between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday for up to a maximum of 8 hours per piece of equipment, daily. Weekend construction work is not expected to be required, but may occur on occasion, depending on schedule considerations. Similarly, if nighttime construction is performed, a night lighting construction plan would be developed.

### **Pre-construction Activities**

Prior to construction activities at the Project site, a number of activities would be undertaken to prepare the site and crews for construction, including: Environmental resource

surveys, geotechnical evaluations, resource and site boundary staking/flagging, desert tortoise exclusion fence installation, construction crew training, and establishment of construction staging areas.

A Stormwater Pollution Prevention Plan (SWPPP) or SWPPP-equivalent document would be designed and implemented prior to and during construction and operations to reduce potential impacts related to erosion and surface water quality.

**Desert Tortoise Exclusion Fence Installation.** A desert tortoise exclusion fence would be installed around the Project perimeter and clearance surveys would be conducted in accordance with the U.S. Fish and Wildlife Service (USFWS) protocol. Tortoises would be removed from the site and handled in accordance with a desert tortoise management and translocation plan and in compliance with Desert Renewable Energy Conservation Plan (DRECP) Conservation and Management Actions (CMAs).

Upon BLM approval and Offer of Right-of-Way (ROW) Grant, the Applicant proposes to install desert tortoise (DETO) exclusion fencing in conjunction with security fencing around a portion of the Project under a Limited Notice to Proceed in January 2022, which includes the Project substation, a laydown area, and one solar PV block for a total of up to 350 acres (as shown on Figure 2). Due to schedule constraints, this proposed fence installation would occur outside of the DETO activity period. The exact location of the solar PV block will be determined based on biological resources survey results and in consultation with BLM and USFWS. The remaining DETO exclusion fencing would be installed in March 2022 and followed by DETO clearance surveys during the spring DETO active period (April/May).

The DETO exclusion fence would be constructed along the bottom of the security fence with durable materials (i.e., 16-gauge or heavier) suitable to resist desert environments, alkaline and acidic soils, wind, and erosion. Fence material would consist of 1-inch horizontal by 2-inch vertical, galvanized welded wire, 36 inches in width. Other materials include: Hog rings, steel T-posts, and smooth or barbed livestock wire. Hog rings would be used to attach the fence material to existing strand fence. Steel T-posts (5- to 6-foot) are used for new fence construction. Standard smooth livestock wire fencing would be used for new fence construction, on which tortoise-proof fencing would be attached. Installing DETO fencing in conjunction with security fencing would also serve as exclusion fencing for desert kit fox.

### **Construction Activities**

The Project would be constructed in the following phases, which would occur simultaneously on different portions of the site:

**Gen-tie Line Construction.** SCE has scheduled a significant interconnection blackout window from May to December 2023, requiring the high-voltage components of the Project (the Project substation and gen-tie line) to be constructed and interconnected no later than April 30, 2023. As a result, the Applicant proposes to construct the gen-tie line, 500 kV substation, a laydown/staging area, and one block of PV panels (approximately 300 acres) beginning in January 2022 under a Limited Notice to Proceed (NTP). Installation of desert tortoise exclusion fencing and security fencing around the 500 kV substation,

laydown/staging area, and the block of PV panels would be included as part of the Limited NTP. SCE would also install any required upgrades to Red Bluff Substation during this time.

The overhead gen-tie line structure foundations would be excavated to a depth of 35 feet or more and include concrete supports depending on final engineering. Gen-tie structures would be on average 120 feet tall. During stringing of the conductor, pull and tensioning temporary work areas may be required outside of the 175-foot ROW.

**Solar Facility Site Preparation.** Mass grading would not be conducted on the Project site. Several solar and storage facility locations would require specific ground treatments, but this represents a minority of the ground surface of the facility. Substation, storage container, O&M facility, and internal and external road locations would require mowing, grubbing, grading and compaction. Inverter station locations would require light grubbing. The solar array areas would require trimming of woody vegetation to a height of 24 inches. Certain areas of the site with highly irregular topography that provide important hydrologic functions to the site would be avoided by project design. Other irregular areas would be more-or-less leveled or smoothed to provide for construction access and installation.

The site cut and fill would be approximately balanced; minimal import/export would be necessary. Onsite pre-assembly of trackers would take place in the staging area.

**Photovoltaic Panel System** – The structures supporting the PV module arrays would consist of steel piles (e.g., cylindrical pipes, H-beams, or similar), which would be driven into the soil using pneumatic techniques, similar to a hydraulic rock hammer attachment on the boom of a rubber-tired backhoe excavator. The piles typically are spaced 10 feet apart. For a single-axis tracking system, piles typically would be installed to a reveal height of approximately 4 to 6 feet above grade, while for a fixed-tilt system the reveal height would vary based on the racking configuration specified in the final design.

**Inverters, Transformers, Substations and Electrical Collector System** – Electrical inverters would be placed on steel skids, elevated as necessary with steel piles to allow for hydrologic flows beneath the inverter structures. Medium-voltage cabling would be installed either underground, or for the low-impact design portion of the Project, would be installed overhead along panel strings in a CAB<sup>1</sup> system to avoid the need for underground cabling and trenching. At the end of panel strings, cables would be combined and routed overhead on wood poles roughly 30 to 50 feet high, depending on voltage.

Substation areas would be excavated for the transformer equipment and control building foundation and oil containment area. The site area for the substation would be graded and compacted to an approximately level grade. Concrete pads would be constructed as foundations for substation equipment, and the remaining area would be graveled. Concrete for foundations would be brought onsite from a batching plant in Blythe or would be batched on site as necessary.

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<sup>1</sup> Cambria Association for the Blind and Handicapped produces overhead cable management systems comprised of cable trays, hooks, and other devices. The sale of CAB Products helps support its services to persons with disabilities.

**Post-Construction Cleanup.** Construction sites would be kept in an orderly condition throughout the construction period by using approved enclosed refuse containers. All refuse and trash would be removed from the sites and disposed of in accordance with BLM regulations. No open burning of construction trash would occur. All vegetation that may interfere with equipment would be trimmed and removed using manual non-mechanical means or sprayed with an approved herbicide, as necessary.

**Construction Site Stabilization, Restoration, and Wildlife Monitoring.** Following the completion of major construction, temporarily disturbed areas would be revegetated for the operations phase pursuant to an approved Restoration Plan. The Plan would describe the Applicant's strategy to minimize adverse effects on native vegetation, soils, and habitat. Where necessary, native re-seeding or vertical mulching techniques would be used. However, it is anticipated that many species will regenerate post-construction due to preservation of desert vegetation during the construction phase.

At the conclusion of restoration activities, and if determined beneficial by USFWS and BLM biologists, previously relocated plants and wildlife would be reintroduced to the Project site and monitored for safety and health.

## **Operation and Maintenance Activities**

The solar modules at the site would operate during daylight 7 days a week, 365 days a year. Operational activities at the Project site would include:

- Solar module washing;
- Vegetation, weed, and pest management;
- Security;
- Responding to automated electronic alerts based on monitored data, including actual versus expected tolerances for system output and other key performance metrics; and
- Communicating with customers, transmission system operators, and other entities involved in facility operations.

Up to 10 permanent staff could be on the site at any one time for ongoing facility maintenance and repairs. Alternatively, approximately 2 permanent staff and 8 Project operators would be located off-site and would be on call to respond to alerts generated by the monitoring equipment at the Project site. Security personnel would be on-call. The O&M building would house the security monitoring equipment, inclusive of security camera feeds for monitoring the Project 24 hours per day.

The Project site maintenance program would be largely conducted on-site during daytime hours. Equipment repairs could take place in the early morning or evening when the plant would be producing the least amount of energy. Key program elements would include maintenance activities originating from the on-site O&M facility.

Maintenance typically would include panel repairs; panel washing; maintenance of transformers, inverters, and other electrical equipment as needed; road and fence repairs; and weed management.

On-site vegetation would be managed to ensure access to all areas of the site and to screen Project elements as needed. Solar modules would be washed as needed (up to four times each year) using light utility vehicles with tow-behind water trailers, as needed, to maintain optimal electricity production. No chemical cleaners would be used for module washing.

No heavy equipment would be used during normal operation. O&M vehicles would include trucks (pickup and flatbed), forklifts, and loaders for routine and unscheduled maintenance and water trucks for solar panel washing. Large heavy-haul transport equipment may be brought to the solar facility infrequently for equipment repair or replacement.

Long-term maintenance schedules would be developed to arrange periodic maintenance and equipment replacement in accordance with manufacturer recommendations. Solar panels are warranted for 25 years or longer and are expected to have a life of 30 or more years, with a degradation rate of 0.5 percent per year. Moving parts, such as motors and tracking module drive equipment, motorized circuit breakers and disconnects, and inverter ventilation equipment, would be serviced on a regular basis, and unscheduled maintenance would be performed as necessary.

**Fire Safety During Operation.** Solar arrays and PV modules are fire-resistant, as they are constructed largely out of steel, glass, aluminum, or components housed within steel enclosures. As the tops and sides of the panels are constructed from glass and aluminum, PV modules are not vulnerable to ignition from firebrands from wildland fires. In a wildfire situation, the panels would be rotated and stowed in a panel-up position. The rotation of the tracker rows would be controlled remotely via a wireless local area network. All trackers could be rotated simultaneously in a hazard situation.

## **Decommissioning**

At the end of the Project's useful life, the solar arrays and gen-tie line would be decommissioned and dismantled. Upon ultimate decommissioning, a majority of Project components will be suitable for recycling or reuse, and Project decommissioning would be designed to optimize such salvage as circumstances allow and in compliance with all local, state, and federal laws and regulations as they exist at the time of decommissioning. Following removal of the above-ground and buried Project components, the site would be restored to its pre-solar facility conditions, or such condition as appropriate in accordance with county policy at the time of decommissioning.

Decommissioning activities would require similar equipment and workforce as construction but would be substantially less intense. The following activities would be involved:

- Dismantling and removal of all above-ground equipment (solar panels, track units, transformers, inverters, substations, O&M buildings, switchyard, etc.)
- Excavation and removal of all above-ground cables

- Removal of solar panel posts
- Removal of primary roads (aggregate-based)
- Break-up and removal of concrete pads and foundations
- Removal of septic system and leach field
- Removal of 34.5 kV distribution lines
- Dismantling of 500 kV gen-tie line
- Scarification of compacted areas

The panels could be sold into a secondary solar PV panel market. It is expected that a robust market for used PV panels will exist in the future because the panels can be used in various configurations and at various scales. Electricity demand is expected to continue to rise and electricity prices are projected to continue their steady increase. Demand for solar energy is rapidly accelerating and is expected to grow for decades to come.

The module's component materials lack toxic metals such as mercury, lead, cadmium telluride, or gallium, and the majority of the components of the solar installation are made of materials that can be readily recycled. If the panels can no longer be used in a solar array, the silicon can be recovered, the aluminum resold, and the glass recycled. Other components of the solar installation, such as the tracker structures and mechanical assemblies, can be recycled, as they are made from galvanized steel. Equipment such as drive controllers, inverters, transformers, and switchgear can be either reused or their components recycled. The equipment pads are made from concrete, which can be crushed and recycled. Underground conduit and wire can be removed by uncovering trenches and backfilling when done. The electrical wiring is made from copper and/or aluminum and can be reused or recycled, as well.

Following decommissioning and dismantling of the solar facility, the Oberon site would be made available for reversion to agricultural use or open space.

## **2.1 Environmental Topics to be Addressed**

### **Introduction**

The Regional Water Board has determined that an Environmental Impact Report (EIR) shall be prepared to address the potential significant impacts of the proposed Oberon Renewable Energy Project. The EIR will involve research, analysis, and study of the following environmental topics:

- |  |                                   |
|--|-----------------------------------|
| ■ Aesthetics/Visual Resources/Reflection           | ■ Greenhouse Gas Emissions        |
| ■ Agricultural Resources                           | ■ Hazards and Hazardous Materials |
| ■ Air Quality                                      | ■ Hydrology and Water Quality     |
| ■ Biological Resources                             | ■ Land Use and Planning           |
| ■ Cultural Resources and Paleontological Resources | ■ Noise                           |
| ■ Energy   | ■ Socioeconomics                  |
| ■ Geology and Soils                                | ■ Traffic and Transportation      |
|  | ■ Wildfire                        |

The EIR will include all topical areas of content required by the California Environmental Quality Act (CEQA), including cumulative impacts, alternatives to the proposed Project, and growth-inducing impacts. For each resource topic, environmental impacts relating to construction, operations, and decommissioning phases of the Project will be identified. However, the level of analysis to be included may vary based on the complexity of the issues, public and agency input to this Notice of Preparation (NOP), and/or refinements to the Project description that may occur subsequent to the publication of this NOP. For impacts that are significant, mitigation measures will be proposed to alleviate or avoid the significant impact(s).

## **Aesthetics/Visual Resources/Reflection**

Placement of PV solar panels, the transmission line, and other Project facilities may alter the views of the Project area. Potential visual impacts of this Project on sensitive receptors and scenic resources will be further evaluated in the EIR, including consideration of construction of other solar projects in the surrounding Project area. Photo simulations of the proposed Project from key observation points will be provided to assist in the evaluation. The EIR will also analyze the possible impacts of reflection of the sun off the solar modules and nighttime lighting of portions of the solar facility.

## **Agriculture Resources**

The potential impact on prime and unique farmlands and lands zoned as such will be evaluated in the EIR, as will the potential impact of converting agricultural lands to non-agricultural uses.

## **Air Quality**

The proposed Project site is located in the Mojave Desert Air Basin (MDAB), and air emissions are regulated by the South Coast Air Quality Management District. The Riverside County portion of the MDAB is designated as nonattainment for the state ozone and particulate matter under 10 micrometers in diameter (PM10) standards. The EIR will address consistency with regional and local air quality plans and evaluate and quantify the short-term and long-term sources of air pollutants generated by the Project, including mobile, stationary, and area source emissions.

## **Biological Resources**

A biological resources assessment will be provided to evaluate the Project's effects on the area's vegetation communities, wildlife habitats, wildlife movement, wetlands and waters, habitat conservation plans/protection ordinances, and sensitive and/or listed species.

## **Cultural Resources and Paleontological Resources**

Cultural resource effects will be analyzed in the EIR, including a query of the Northwest Information Center of the California Historical Resources Information System, analysis of sacred lands identified through consultation with the Native American Heritage Commission, and consultation with Native American Tribes and other interested parties (e.g.,

local historical societies). The evaluation will also address the potential impacts to historic resources and the occurrence of paleontological (fossil) resources.

## **Energy**

The EIR will examine the potential for wasteful, inefficient, or unnecessary consumption of energy resources during Project construction or operation.

## **Geology and Soils**

The EIR will assess soil and geologic conditions of the Project area and address hazards related to seismic activity, including the potential for liquefaction, ground shaking, soil failure, soil stability, and erosion potential.

## **Greenhouse Gas Emissions**

The EIR will address the potential construction- and operation-related impacts relative to greenhouse gas emissions.

## **Hazards and Hazardous Materials**

The EIR will evaluate the presence of hazards or hazardous conditions that could affect construction and operation of the Project, including the location of nearby or on-site hazardous waste sites included on state or federal databases, airport and airstrip hazard zones, emergency response routes, and wildfire hazards.

## **Hydrology and Water Quality**

The EIR will include an analysis of existing drainage systems and will evaluate potential impacts to water resources. Consideration shall be given to mitigation measures and design alternatives that maintain the existing hydrology of the site or redirect excess flows created by hardscapes and reduced permeability from surface waters to areas where they will dissipate by percolation into the landscape.

## **Land Use and Planning**

The proposed Project may affect the use of the Project properties. The EIR will evaluate potential environmental effects to land use that include consistency with land use plans, policies, or regulations of the applicable jurisdictions, including the BLM's Desert Renewable Energy Conservation Plan (DRECP).

## **Noise**

The EIR will determine noise levels due to construction and operation of the proposed Project and will evaluate impacts for consistency with applicable laws, regulations, ordinances, and guidelines.



## **Public Services and Utilities**

With the accommodation of the construction workforce, there may be a temporarily increased demand for public services and utilities, including community facilities and schools, and an increased need for police and fire protection services. The EIR will evaluate the potential for impacts on these public services.

## **Socioeconomics and Population and Housing**

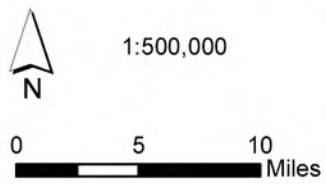
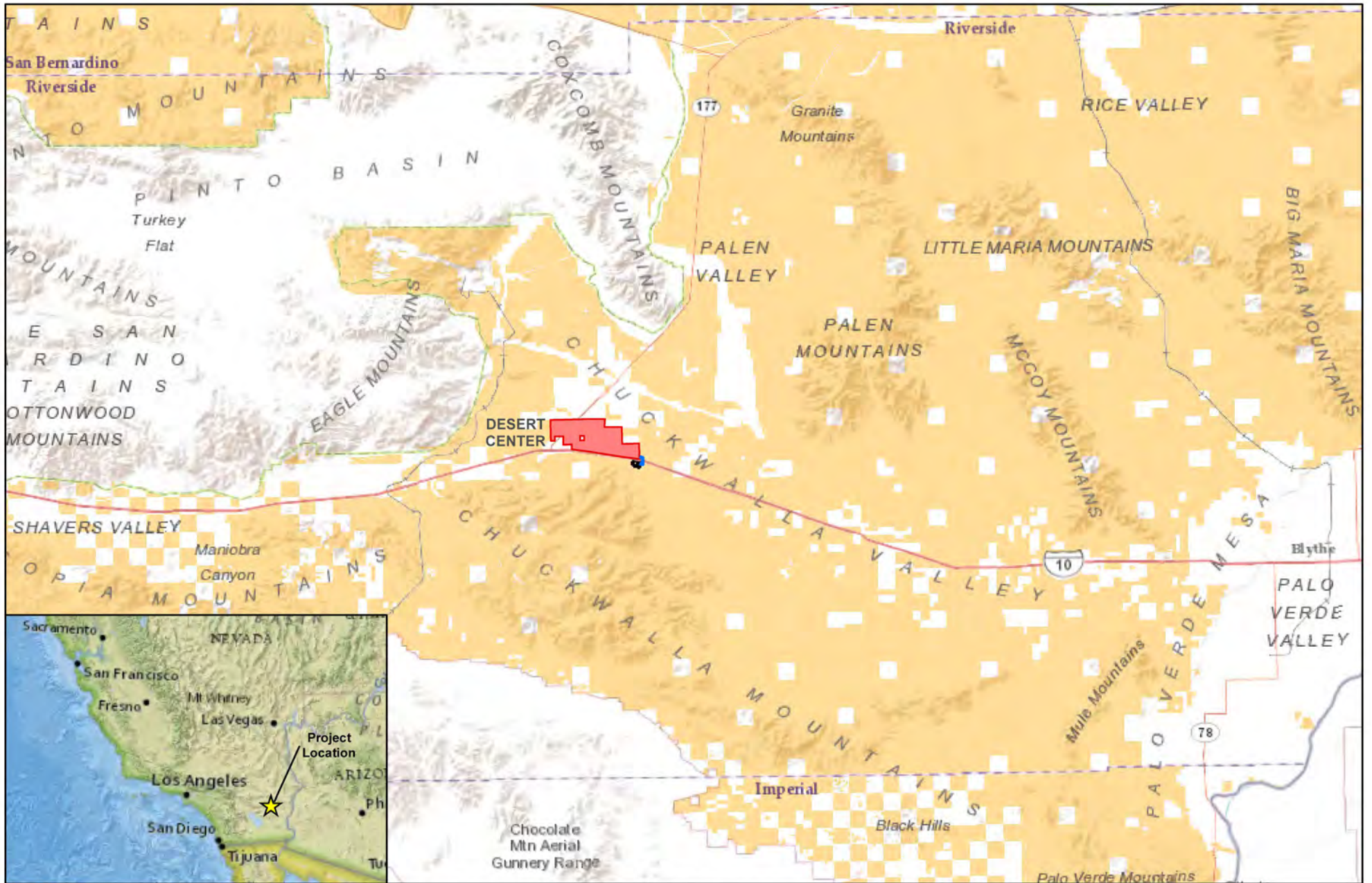
The EIR will address the short- and long-term population and housing impacts that would result from the construction workforce. These effects could include physical and service-related changes within area communities associated with demand for temporary housing.

## **Traffic and Circulation**

The EIR will include a traffic study that evaluates changes in circulation that could result from the proposed Project, focusing on effects during Project construction.

## **Wildfire**

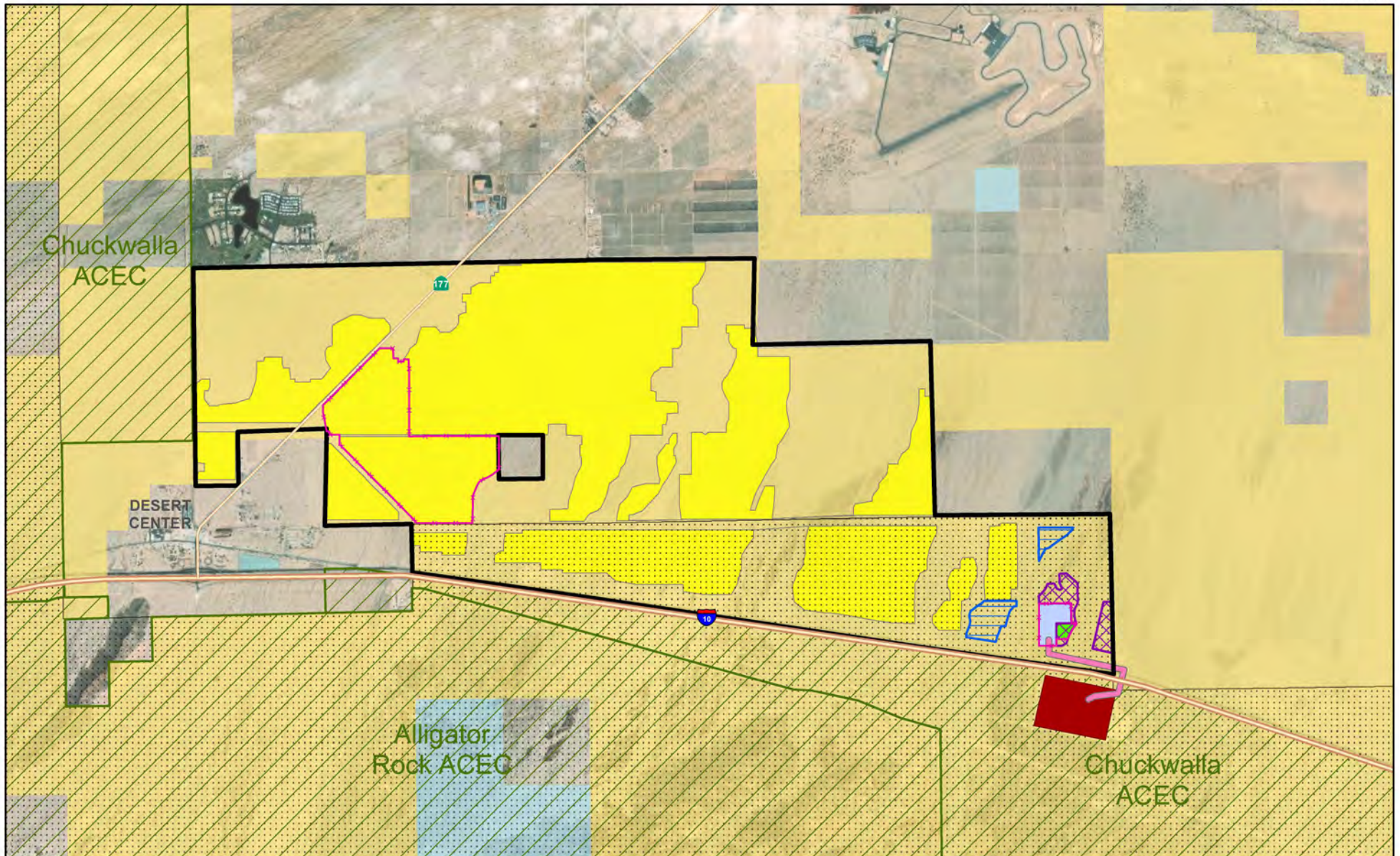
The EIR will examine Project impacts to emergency response and wildfire-related risks.



- Proposed Gen-Tie Line
- Proposed Solar Facility
- ▭ SCE Red Bluff Substation
- BLM-administered Land

**Figure 1**  
**Project Vicinity**





- |   |   |   |
|---|---|---|
| Oberon Project Boundary (approximately 4,700 acres) | Proposed 500 kV Gen-Tie Line Corridor       | Area of Critical Environmental Concern (ACEC) |
| Fenced Solar Array                                  | Battery Energy Storage System (BESS)        | Desert Tortoise Critical Habitat              |
| Proposed Early Desert Tortoise Clearance Areas      | Future Battery Energy Storage System (BESS) | <b>Land Ownership</b>                         |
|   | Proposed Substation                         | Bureau of Land Management                     |
|   | Laydown Area                                | State   |
|   | Existing SCE Red Bluff Substation           |   |

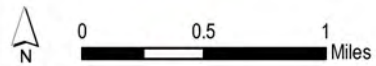


Figure 2

Oberon Renewable Energy Project Area



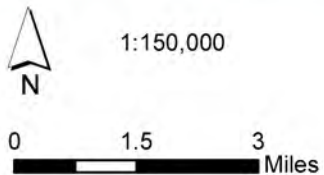
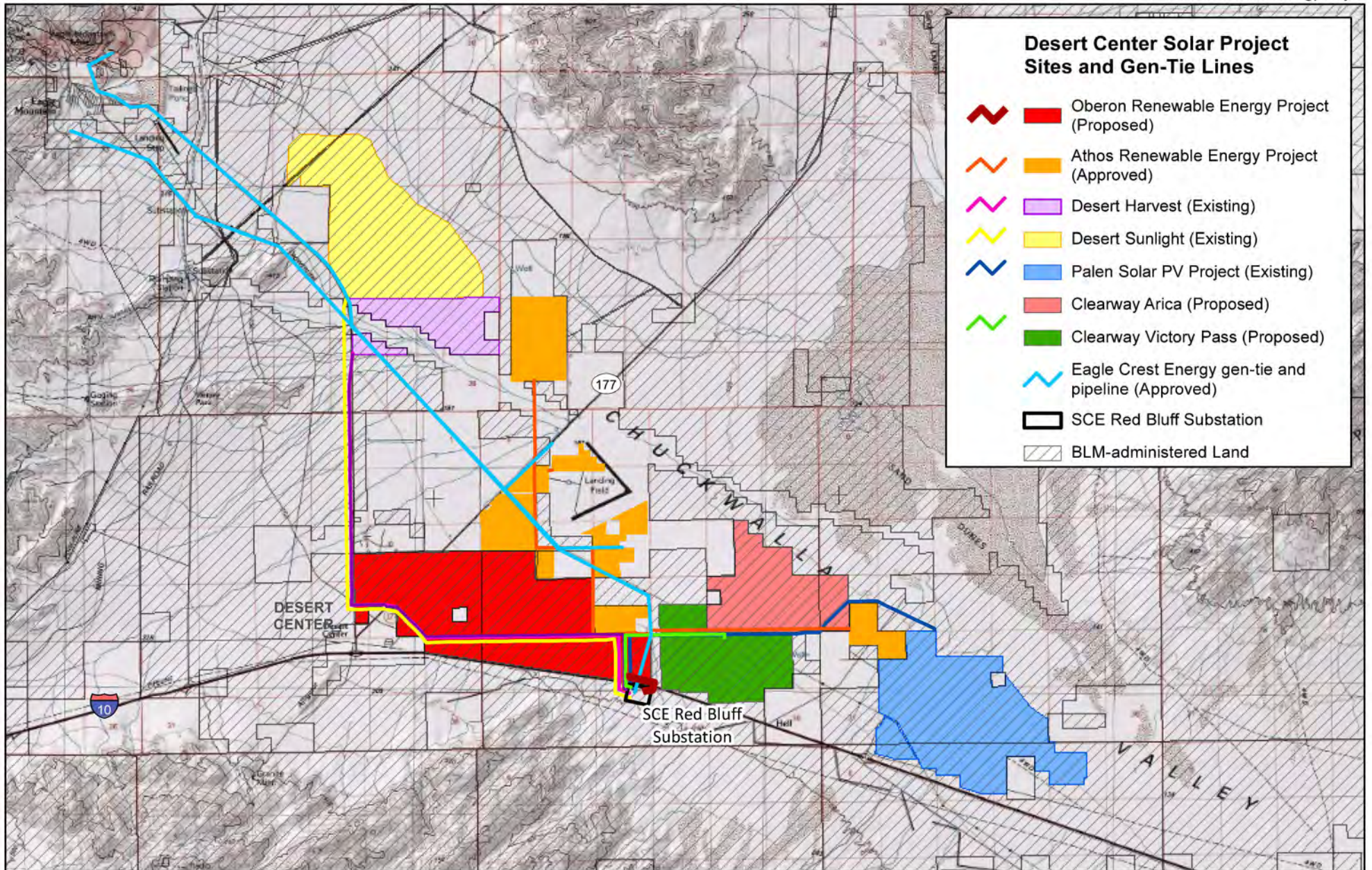


Figure 3

Desert Center Solar Projects



## **Appendix B**

Newspaper Ad: Scoping Meeting Announcement  
& Publication Affidavit



**PROOF OF PUBLICATION**

**STATE OF CALIFORNIA SS.  
COUNTY OF RIVERSIDE**

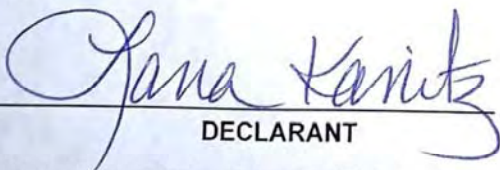
ASPEN ENVIRONMENTAL GROUP  
235 MONTGOMERY ST, STE 640  
  
SAN FRANCISCO CA 94104

I am over the age of 18 years old, a citizen of the United States and not a party to, or have interest in this matter. I hereby certify that the attached advertisement appeared in said newspaper (set in type not smaller than non paniel) in each and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

03/31/2021, 04/07/2021

I acknowledge that I am a principal clerk of the printer of The Desert Sun, printed and published weekly in the City of Palm Springs, County of Riverside, State of California. The Desert Sun was adjudicated a Newspaper of general circulation on March 24, 1988 by the Superior Court of the County of Riverside, State of California Case No. 191236.

I certify under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct.. Executed on this 7th of April 2021 in Green Bay, WI, County of Brown.

  
**DECLARANT**

**Notice of Public Scoping Meeting for Oberon Renewable Energy Project**  
**Proposed by IP Oberon, LLC, a subsidiary of Intersect Power**  
**U.S. Bureau of Land Management**  
**Colorado River Basin Regional Water Quality Control Board**

The U.S. Bureau of Land Management (BLM) will hold a public scoping meeting on April 13, 2021 for the Oberon Renewable Energy Project (Project) proposed by IP Oberon LLC. BLM is the lead agency under the National Environmental Policy Act (NEPA), 42 U.S.C. section 4321 et seq. Due to submittal of a Wastewater Discharge Requirements application package, this Project is also under the jurisdiction of the Colorado River Basin Regional Water Quality Control Board (Regional Water Board), who is the lead agency responsible for environmental review of the proposed Project in compliance with the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq. The BLM and Regional Water Board are seeking public comments on issues, planning criteria, concerns, potential impacts, alternatives, and mitigation measures that should be considered in the NEPA and CEQA analyses, respectively. A combined NEPA and CEQA virtual public scoping meeting is scheduled for April 13, 2021, from 5:00 p.m. to 7:00 p.m. You can join the meeting using the link or phone number below:

**Oberon Renewable Energy Project Scoping Meeting**  
**Tuesday, April 13, 2021**  
**Time: 5:00 – 7:00 p.m.**  
**Via Zoom at: <https://us02web.zoom.us/j/84009948080>**  
**or by Phone: (669) 900-6833, then enter**  
**Meeting ID: 840 0994 8080**

**PROJECT DESCRIPTION**  
IP Oberon, LLC, proposes to construct, operate, maintain, and decommission a 500-megawatt solar photovoltaic (PV) electricity generating station, energy storage facility, electrical substation, gen-tie line, and associated access roads on approximately 4,700 acres of BLM-managed land in Riverside County, California near the community of Desert Center. The Oberon Renewable Energy Project would interconnect to Southern California Edison's Red Bluff Substation via one new 0.5-mile long 500 kilovolt transmission line. All of the lands within the project application area are within the California Desert Conservation Area Planning Area, within the Riverside East Solar Energy Zone.

**ADDITIONAL INFORMATION**  
Additional information about the meeting and project is available online at <https://go.usa.gov/xfdh5> as well as on the project's CEQA website at <http://www.aspeneg.com/oberon-renewable-energy-project/>. In addition to the public scoping meeting, the BLM and Regional Water Board are accepting written comments. Substantive comments will be used to prepare the environmental analyses, which will provide additional opportunities for public comment. The deadline to submit written comments is April 19, 2021. More details and instructions for submitting public comments can be found in the Notice of Intent published in the *Federal Register* and at the Project's CEQA website. For additional information, please contact the BLM at [BLM\\_CA\\_PS\\_OberonSolar@blm.gov](mailto:BLM_CA_PS_OberonSolar@blm.gov) and/or the Regional Water Board at [Logan.Raub@waterboards.ca.gov](mailto:Logan.Raub@waterboards.ca.gov).  
**Published: 3/31, 4/7/2021**

Ad#:0004661062

PO:

**This is not an invoice**

# of Affidavits: 1

# Notice of Public Scoping Meeting for Oberon Renewable Energy Project

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For additional information, please contact the BLM at [BLM CA PS OberonSolar@blm.gov](mailto:BLM_CA_PS_OberonSolar@blm.gov) and/or the Regional Water Board at [Logan.Raub@waterboards.ca.gov](mailto:Logan.Raub@waterboards.ca.gov).



# **Appendix C**

## Scoping Meeting Presentation



U.S. Department of the Interior  
Bureau of Land Management

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# Oberon Renewable Energy Project

Virtual Public Scoping Meeting – April 13, 2021

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# Public Scoping Meeting Format

Virtual Public Meeting begins @ 5:00 p.m.

- Opening & Introductions – Dan Ryan & Brandon Anderson (BLM)
- Proposed Project Presentation – Marisa Mitchell (IP)
- Public Questions on the Project Description
- Agency Presentations –
  - NEPA (BLM) – Dan Ryan & Brandon Anderson (BLM)
  - CEQA (RWQCB) – Hedy Koczwara (Aspen)
- Public Questions & Answers

*\*\*Virtual public meeting is being recorded via Zoom\*\**



# Participating in the Meeting

- **Question and Answer** sessions after project description & presentation
- **Q&A tool** for questions to be answered at the end of the presentation
- **Chat box** for technical support
- **Official Comments** will not be taken during this meeting – they can be submitted:
  - ✓ Through project ePlanning NEPA webpage: <https://go.usa.gov/xfdH5>
  - ✓ By mail or email:
    - NEPA – 1201 Bird Center Drive  
Palm Springs, CA 92262  
[BLM\\_CA\\_PS\\_OberonSolar@blm.gov](mailto:BLM_CA_PS_OberonSolar@blm.gov)
    - CEQA – c/o Aspen Environmental Group  
235 Montgomery Street, Suite 640  
San Francisco, CA 94104  
[Logan.Raub@waterboards.ca.gov](mailto:Logan.Raub@waterboards.ca.gov)

*\*\*To qualify for standing in BLM's NEPA process, please ensure you registered upon meeting entry or provide your contact information to BLM afterwards (telephone participants)\*\**



# Tips for Productive Meetings

- Help ensure everyone gets equal time – use “raise hand” or submit question using “Q&A” tool during the Q&A period.
- Keep questions concise.
- Actively listen to others, seek to understand perspectives.
- Meeting organizers may implement a time limit for each question, to ensure everyone has a chance to ask a question.



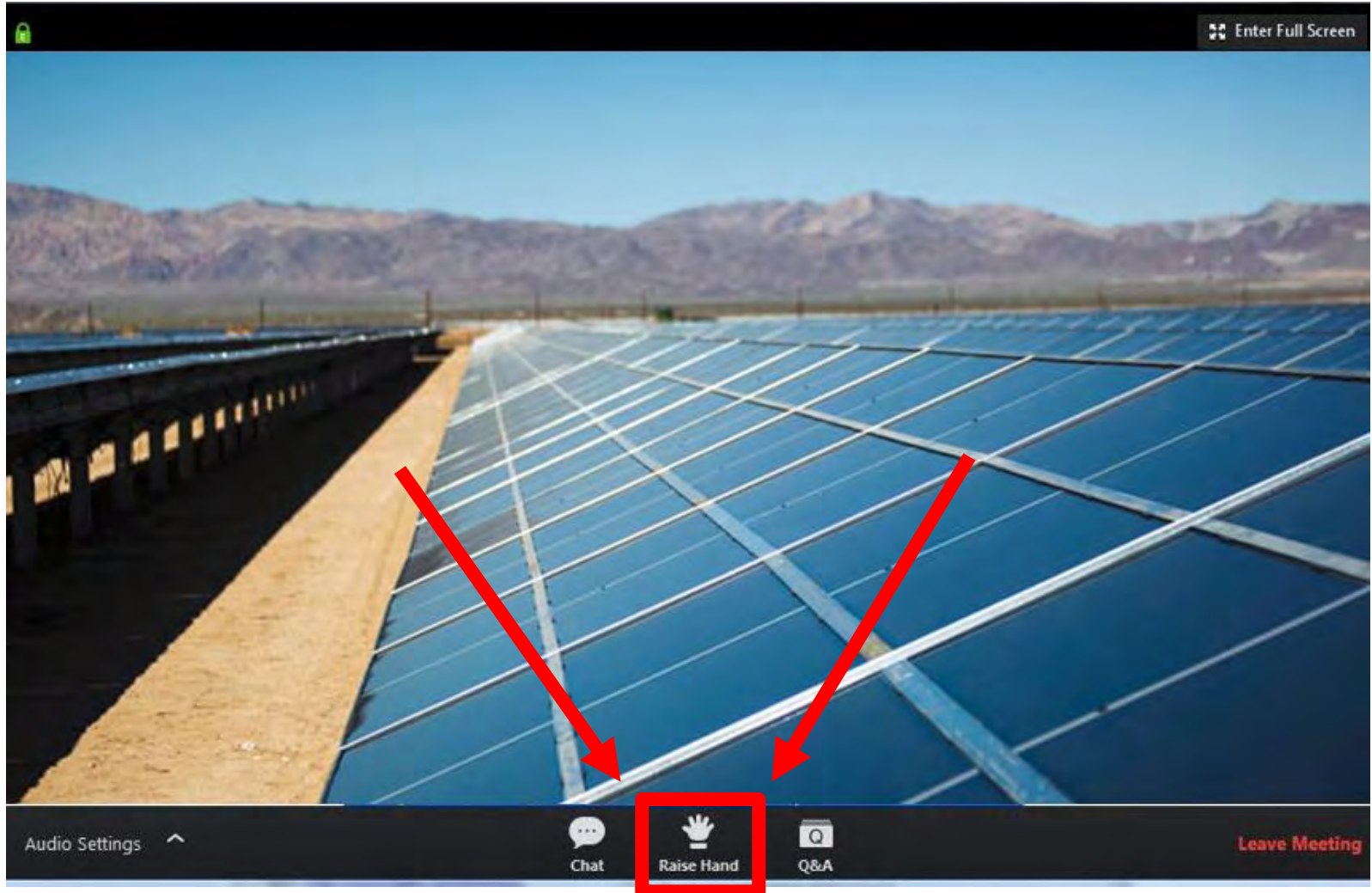


# Submitting Questions

A screenshot of a Zoom meeting interface. The main video area shows a wide-angle view of a solar farm with rows of blue solar panels stretching into the distance under a clear blue sky, with mountains in the background. At the bottom of the screen is a dark control bar. From left to right, it contains: 'Audio Settings' with an upward arrow, 'Chat' with a speech bubble icon, 'Raise Hand' with a hand icon, 'Q&amp;A' with a question mark icon (this button is highlighted with a red square), and 'Leave Meeting' in red text. Two red arrows point from the solar panels towards the Q&amp;A button.



# Raising Hand

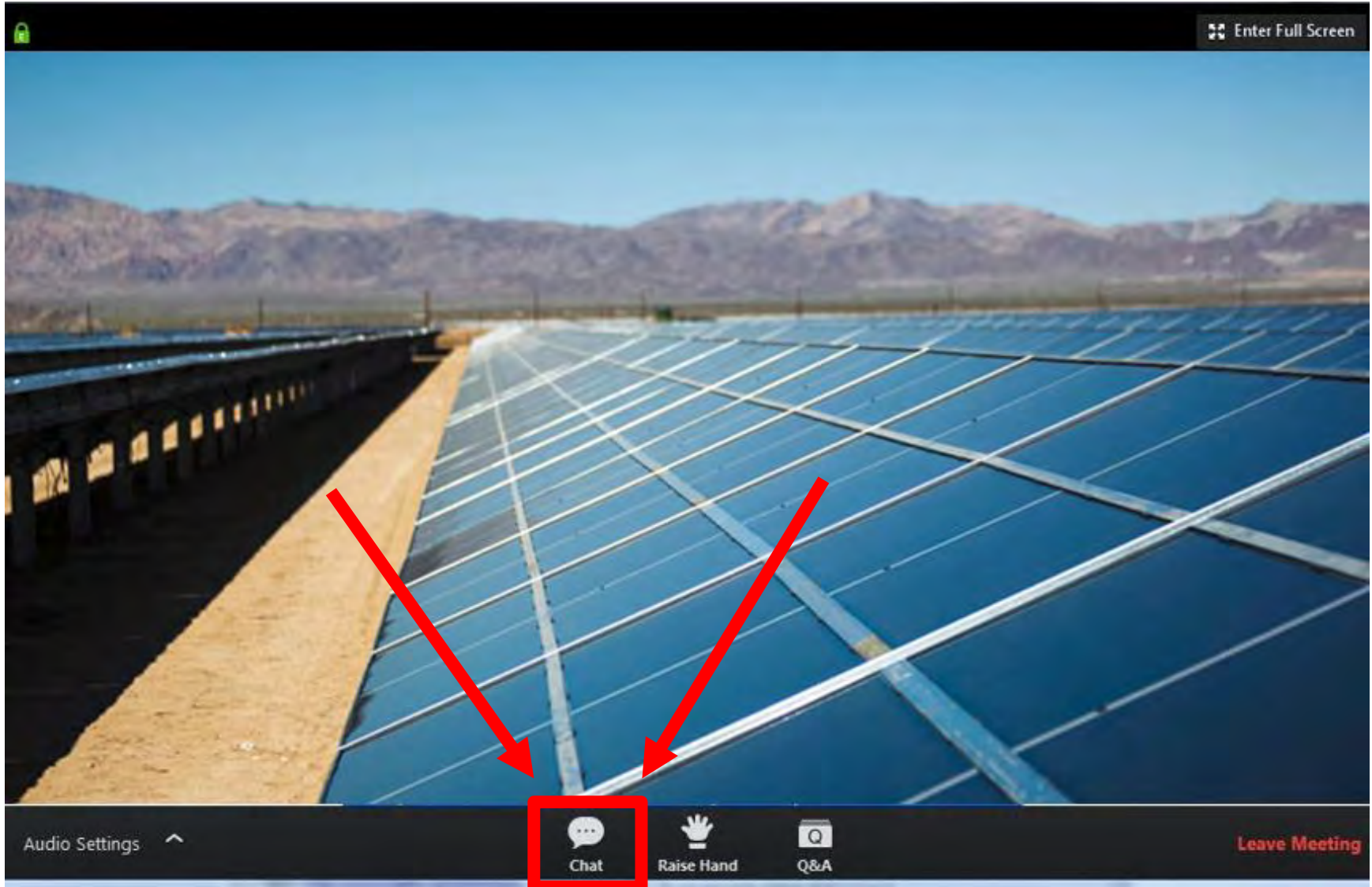


**Telephone Access** – Dial \*9 to Raise Hand





# Chat – Technical Support





# Intersect Power Overview

## Approach to Project Development:

- We take a **low-impact siting** and design approach to project development, working with lead agencies and key stakeholders to minimize environmental impacts and gain stakeholder support, while also maximizing value to ratepayers

## Team:

- Has expertise in real estate, environmental & permitting, interconnection, power marketing, and finance
- Developed, constructed and operated together for **over a decade**
- Delivered **2 GWp to COD** and another **1.75GW to NTP** across **65+ projects**
- Benefits from significant lessons learned and deep experience working together

## Portfolio:

- **Recently completed successful development for 1.75 GWp** of contracted assets all entering construction first half 2021
- **Current portfolio has up to 3 GWp** of projects in various stages of development

# Oberon Project Overview

## Location

- Original application for 6,500 acres across two sites on BLM land in Desert Center, California
- Reduced project area to one 4,700-acre site
- Development footprint limited to < 3,000 acres
- Within Riverside East SEZ & DRECP DFA

## Environmental Diligence Completed

- Desert Tortoise Protocol Surveys
- Rare Plant Surveys
- Habitat Assessment & Jurisdictional Delineation
- Cultural Class I Inventory Report and Class III Surveys
- Hydrology, geotechnical, air quality, visual resources, paleontological resources

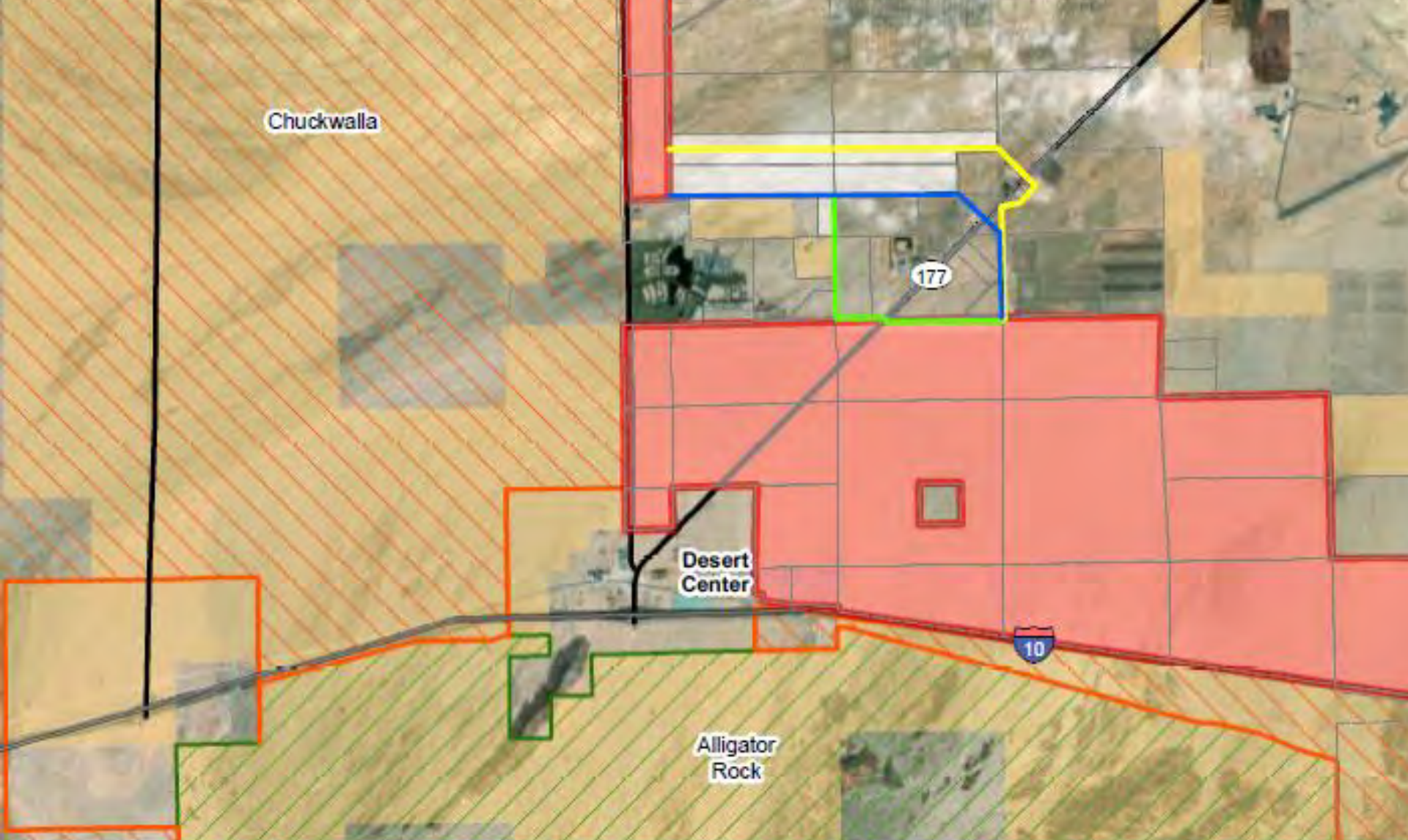
## Interconnection Status

- Executed letter agreement with SCE in June 2020 w/ Oct 2023 in-service date
- LGIA execution by the end of April 2021

## Power Purchase Agreement Status

- Currently negotiating PPAs with multiple offtake partners





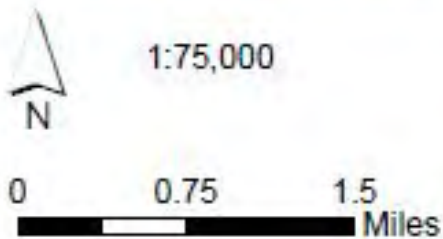
Chuckwalla













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Desert Center

10

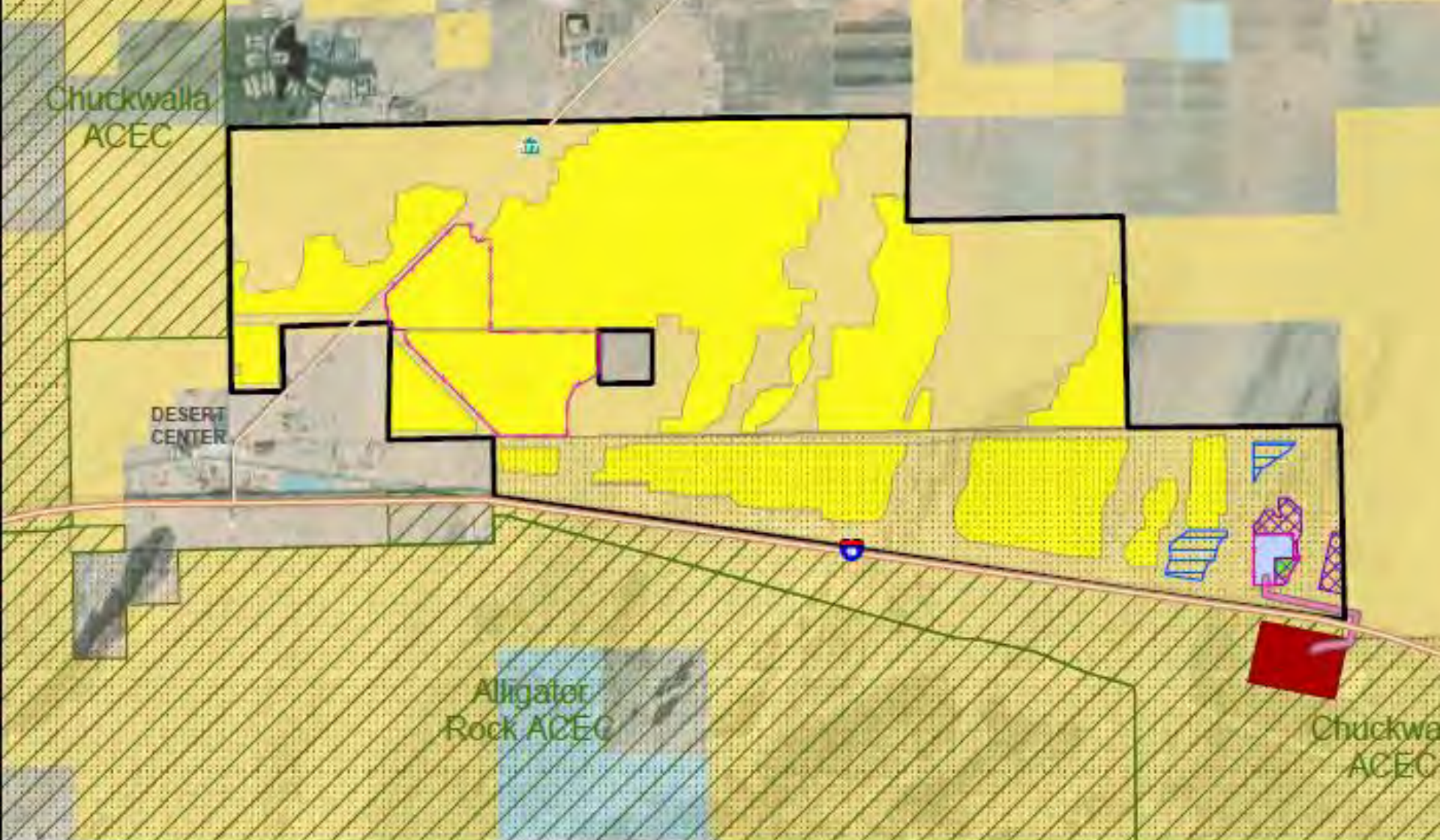
Alligator Rock



- |   |                             |   |                           |   |                     |
|---|-----------------------------|---|---------------------------|---|---------------------|
|  | Proposed Solar Facility     |  | Parcel Line               |  | Alligator Rock ACEC |
|  | Proposed Gen-Tie Route      |  | SCE Red Bluff Substation  |  | Chuckwalla ACEC     |
|  | Gen-tie Alternative Route 2 |  | Bureau of Land Management |  | Desert Center ACEC  |
|  | Gen-tie Alternative Route 3 |  | Gen-Tie Study Area        |  | Chuckwalla ACEC     |

\*ACEC protections only apply





Oberon Project Boundary (approximately 4,700 acres)

Fenced Solar Array

Proposed Early Fencing Areas

Proposed 500 kV Gen-Tie Corridor

Battery Energy Storage System (BESS)

Future Battery Energy Storage System (BESS)

Proposed Substation

Laydown Area

Existing SCE Red Bluff Substation

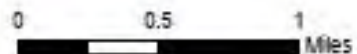
Area of Critical Environmental Concern (ACEC)

Desert Tortoise Critical Habitat

Land Ownership

Bureau of Land Management

State



# Other Technical Studies/Plans

**The following technical reports and plans have been developed with agency coordination:**

- Biological Resources Technical Report
- Jurisdictional Delineation
- Paleontological Technical Report
- Water Supply Assessment
- Air Quality Emissions Report
- Health, Safety, & Noise Plan
- Socioeconomics & Envir. Justice
- Fire Management & Prevention Plan
- Hazardous Materials Mgmt. Plan
- Environmental Compliance & Monitoring Plan
- Dust Control Plan
- Closure & Decommissioning Plan
- Raven Management Plan
- Vegetation Management Plan
- Hydrological Report

# Supporting Technical Reports/Plans

**The following technical reports and plans are in the process of being prepared with agency coordination:**

- Cultural Resources Class III Technical Report, including Indirect Effects Report
- Ethnographic Assessment
- Visual Resources & Surface Management Plan, including Glare
- Transportation Impact Analysis
- Right-of-Way Corridor Conflict Analysis
- Erosion & Sediment Control Plan
- Recreation Plan
- Desert Tortoise Protection & Translocation Plan
- Wildlife Protection & Translocation Plan
- Bird & Bat Conservation Strategy, including Nesting Bird Management Plan
- Integrated Weed Management Plan & associated EA



# Project Description

# QUESTIONS?



# Public Scoping

- The purpose of the scoping process is to gather information, issues, and concerns related to the Oberon Renewable Energy Project from the public and stakeholders.
- This public meeting is being held by the BLM, but serves as a public scoping meeting for both the NEPA and CEQA processes.





# Parallel Permitting Processes

## NEPA

**BLM permitting solar facility  
via National Environmental  
Policy Act – EA & LUPA**

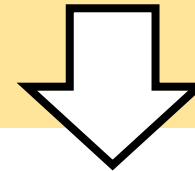
- BLM will consult with US Fish and Wildlife Service & other federal agencies



## CEQA

**WDR permitted via California  
Environmental Quality Act - EIR**

- Will facilitate applicant's consultation w/ State agencies



**After environmental review, a decision would be made  
separately by each authority**

- Decisions anticipated fall 2021
- Will include mitigation measures to protect public health and the environment

**If approved, construction would begin early 2022**



# BLM's Role

- Administration of public lands under Federal Land Policy and Management Act of 1976 (FLPMA)
- Processing of right-of-way grant applications for use of public lands
- Review of the Project to determine consistency with existing land use plans
  - Project subject to California Desert Conservation Area Plan (1980, as amended)
  - Project subject to Desert Renewable Energy Conservation Plan (DRECP)
- Lead federal agency for NEPA, National Historic Preservation Act, etc.
  - Preparation of an Environmental Assessment (EA) to analyze the potential Project effects and DRECP LUPA
  - Tiered to the DRECP EIS
- Lead agency for consultation with the U.S. Fish & Wildlife Service under Section 7 of the Endangered Species Act



# Applicable BLM Regulations & Land Use Plans

- Regulations: 43 CFR 2800
- Right-of-Way Information:
  - General Information  
<https://www.blm.gov/programs/lands-and-realty/right-of-way>
  - Obtaining ROW  
<https://www.blm.gov/programs/lands-and-realty/right-of-way/obtaining-right-of-way>
- Desert Renewable Energy Conservation Plan (DRECP)  
<https://www.blm.gov/programs/planning-and-nepa/plans-in-development/california/desert-renewable-energy-conservation-plan>



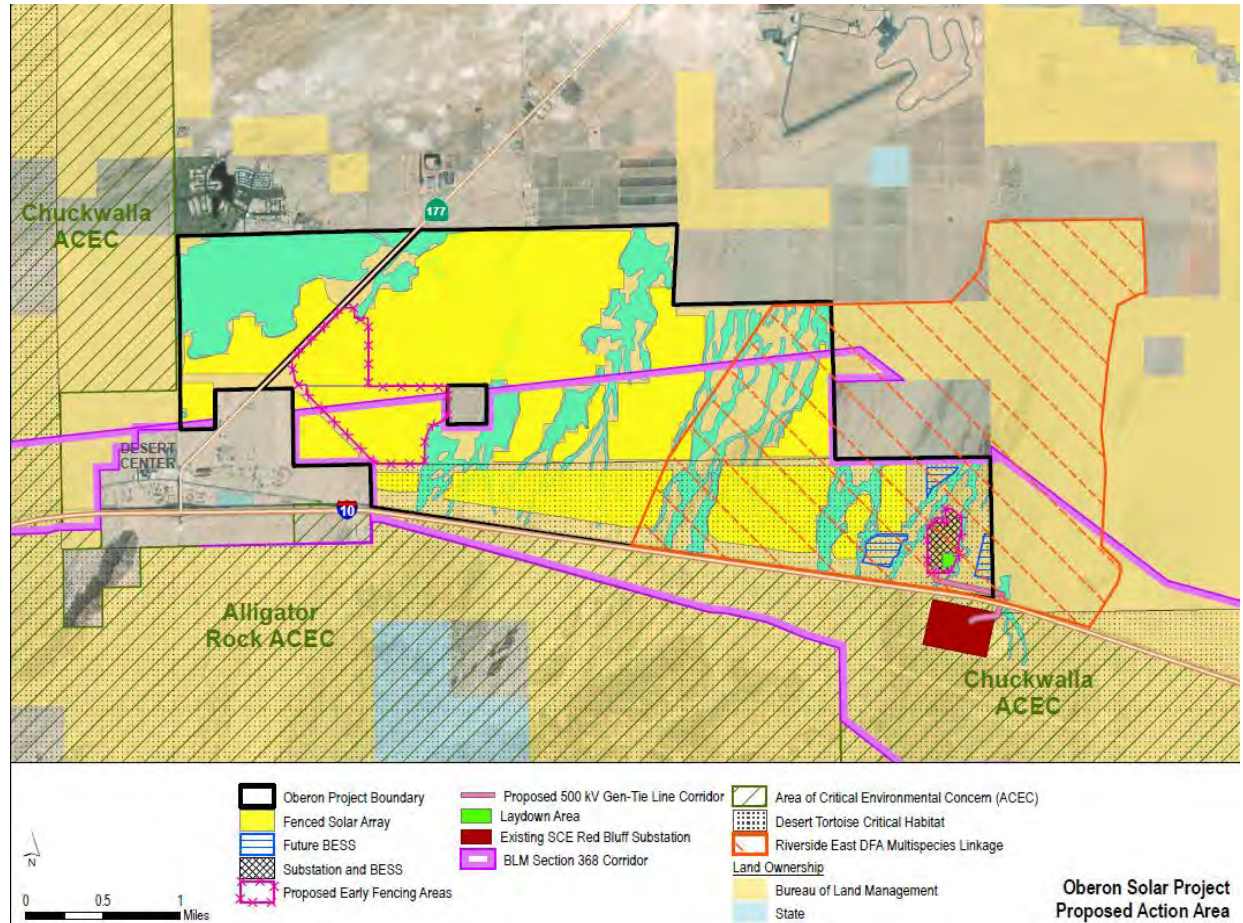
# National Environmental Policy Act

- Establishes an interdisciplinary, public framework for federal decision-making
- Ensures that agencies take environmental factors into account when considering federal actions
- Requires preparation of an environmental analysis for public review



# Land Use Plan Conformance

- The proposed project is located within a Development Focus Area
- Proposed project does not avoid all microphyll woodland or buffers as the DRECP prescribes





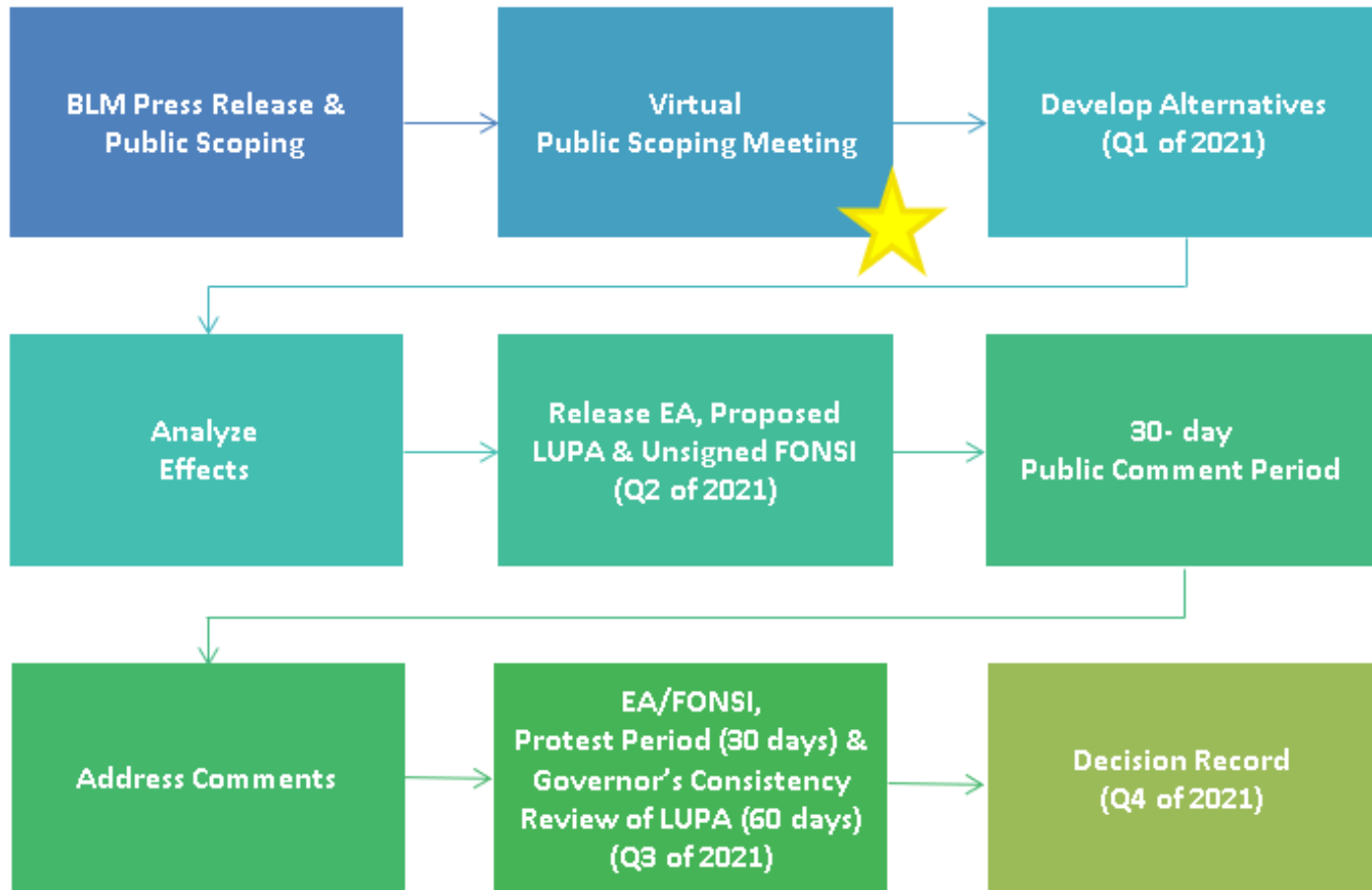


# NEPA Environmental Review Timeline

- **2019 to 2021 –**
  - Application filed August 30, 2019
  - Pre-application meetings held in May and July 2020
  - Plan of Development and technical studies updated in December 2020
- **BLM Press Release** - issued March 18, 2021
- **Public Scoping Period**
  - Public Comment Period: March 18 – April 19, 2021
  - Virtual Public Scoping Meeting: Today, April 13, 2021
- **Next Steps:**
  - Draft EA & Proposed LUPA release
  - Public Review & Comment
  - Final EA/FONSI, LUPA, & Decision Record (expected late 2021)
  - Right-of-Way Grant issued (if approved)



# NEPA Environmental Assessment & Land Use Plan Amendment Process





# Colorado River Basin RWQCB's Role

- Lead agency for the California Environmental Quality Act (CEQA)
- Regulates the discharge of dredged or fill material under section 401 of the Clean Water Act (CWA) and the Porter-Cologne Water Quality Control Act.
- CWA section 401 Water Quality Certification or Waste Discharge Requirement (WDR)





# California Environmental Quality Act

- Requires environmental review of projects that require discretionary review and approval by local or state agencies
- Requires analysis of potential significant impacts
- Preparation of an environmental impact report (EIR) is required for projects that could have a significant impact on the environment



# CEQA EIR Process

- Distribute Notice of Preparation (NOP)
- Scoping (30 days) with public meeting
- Prepare Draft EIR
  - Identify & analyze direct, indirect, & cumulative impacts
  - Recommend mitigation measures & alternatives to avoid or reduce potentially significant impacts
- Circulate Draft EIR for agency & public review (45 days)
- Respond to comments & prepare Final EIR
- After completion of the EIR process, decision-makers render a decision on the project and certify the EIR





# Environmental Analysis Areas

- Air Resources
- Biological Resources
- Cultural, Tribal, & Historic Resources
- Greenhouse Gas Emissions
- Energy Conservation
- Environmental Justice
- Geology & Soils
- Hazards & Hazardous Materials
- Lands & Realty
- Noise
- Paleontology
- Recreation & Public Access
- Social & Economic Effects
- Population & Housing
- Special Designations
- Transportation
- Utilities & Service Systems
- Visual Resources
- Water Resources
- Wildland Fire Ecology



# Public Participation Opportunities

- Provide written comments during scoping period
  - Project ePlanning pages (NEPA)
  - Mail and Email (NEPA & CEQA)
- Review NEPA Environmental Assessment (EA), Land Use Plan Amendment (LUPA), & unsigned Finding of No Significant Impact (FONSI)
- Review CEQA Draft Environmental Impact Report (EIR)

## **NEPA – EA & LUPA**

Lead Agency: BLM

**Public Comment Period Ends:**

Monday, April 19, 2021

## **CEQA - EIR**

Lead Agency: RWQCB

**Public Comment Period Ends:**

Monday, April 19, 2021



# Contact Information

## **Bureau of Land Management**

Oberon Renewable Energy Project,  
*Attention:*

Brandon Anderson,  
Bureau of Land Management  
1201 Bird Center Drive  
Palm Springs, CA 92262

**E-mail:**

[bganderson@blm.gov](mailto:bganderson@blm.gov)

## **Colorado River Basin RWQCB**

Oberon Renewable Energy Project,  
*Attention:*

Logan Raub,  
Project Manager  
73-720 Fred Waring Drive, Suite 100  
Palm Desert, CA 92260

**E-mail:**

[Logan.Raub@waterboards.ca.gov](mailto:Logan.Raub@waterboards.ca.gov)

**CEQA Project Website:**

<http://www.aspeneg.com/oberon-renewable-energy-project/>



# How to Submit Comments\*

## NEPA Comments

Send written comments on the project by **April 19, 2021** to:

**By US mail or courier:**

Oberon Renewable Energy Project,

*Attention:*

Brandon Anderson

Bureau of Land Management

1201 Bird Center Drive

Palm Springs, CA 92262

**By e-mail:**

[BLM\\_CA\\_PS\\_OberonSolar@blm.gov](mailto:BLM_CA_PS_OberonSolar@blm.gov)

**By ePlanning:**

<https://go.usa.gov/xfDH5>

## CEQA Comments

Send written comments on the project by **April 19, 2021** to:

**By US mail or courier:**

Oberon Renewable Energy Project,

*Attention:*

Logan Raub

Colorado River Basin Regional Water

Quality Control Board

c/o Aspen Environmental Group

235 Montgomery Street, Suite 640

San Francisco, CA 94104

**By e-mail:**

[Logan.Raub@waterboards.ca.gov](mailto:Logan.Raub@waterboards.ca.gov)

***\*Comments must be submitted separately to each agency.***



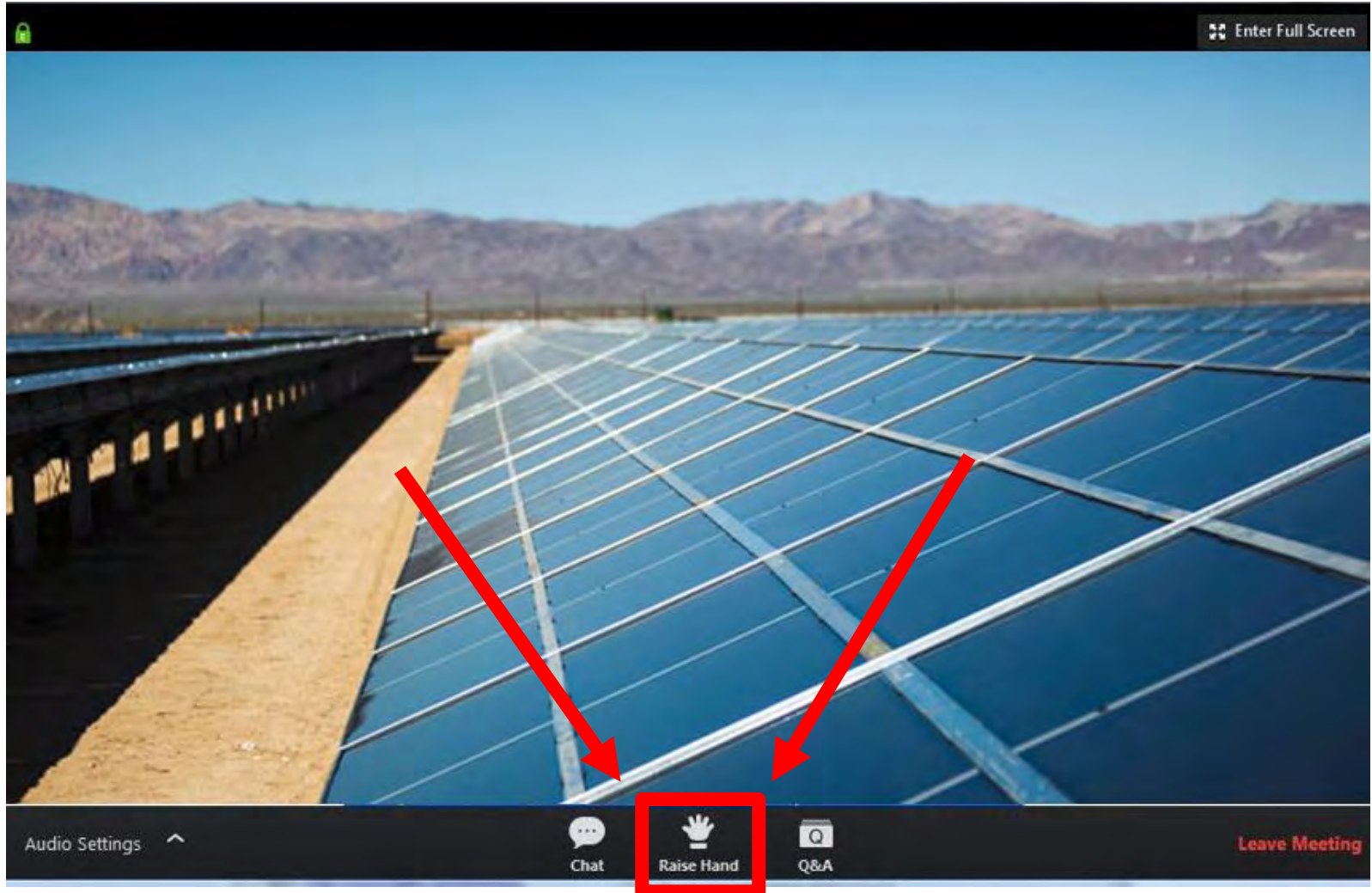


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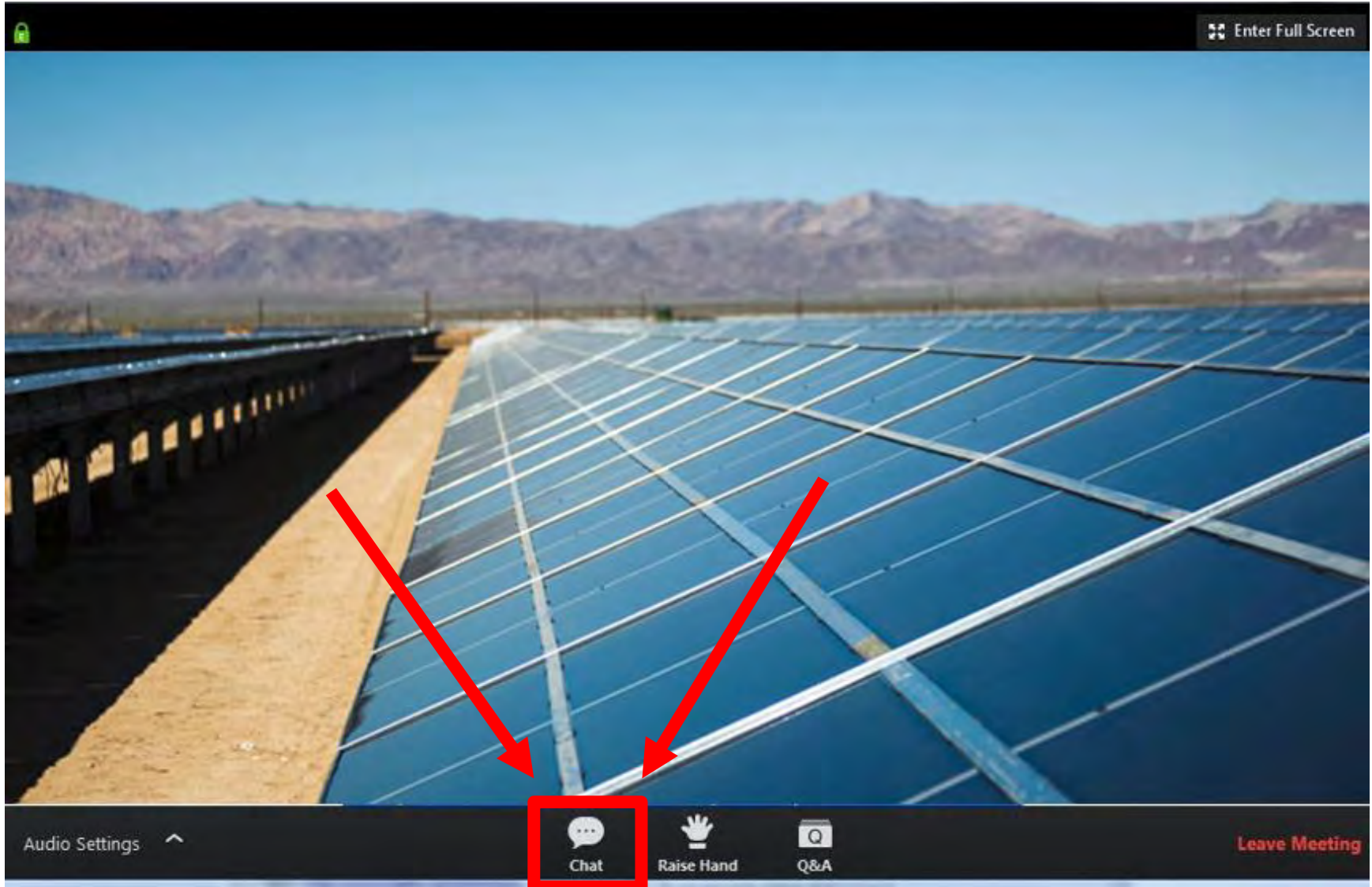


Telephone Access – Dial \*9 to Raise Hand





# Chat – Technical Support





# Questions & Answers

**Note: Formal comments must be submitted in writing.**

# Appendix D

## Scoping Comments

# **Appendix D-1**

## Summary of Written Comments Received

## Appendix D-1 : Summary of Written Comments Received

Date	From	Comments
Agencies		
Letters Submitted to Colorado River Basin RWQCB (CEQA-Lead Agency)		
3/22/21	Native American Heritage Commission	<ul style="list-style-type: none"> <li>▪ There should be an EIR if there is substantial evidence that the project may have a significant effect on the environment – so the lead agency needs to determine whether historical resources are within the area of potential effect.</li> <li>▪ Statement about AB 52 applicability to the project, and recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible. Letter includes a summary of AB 52 and SB 18, as well as NAHCs recommendations for cultural resources assessments.</li> <li>▪ Contact the appropriate regional California Historical Research Information System; Prepare a professional report if an archaeological survey is required; Contact the NAHC for a sacred lands file search and a native American tribal consultation list; and remember that lack of surface evidence of archaeological resources does not preclude their subsurface existence.</li> </ul>
4/13/21	South Coast Air Quality Management District	<ul style="list-style-type: none"> <li>▪ Request to receive all appendices and technical documents related to the air quality, health risk, GHG analyses, and modeling files etc.</li> <li>▪ The Lead Agency should use SCAQMDs Air Quality Handbook and website as guidance for analyses.</li> <li>▪ Recommendation to use of CalEEMod to estimate pollutant emissions.</li> <li>▪ Recommendation to use the SCAQMD regional pollutant emissions significance thresholds.</li> <li>▪ The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the Proposed Project and all air pollutant sources related to the Project in all phases.</li> <li>▪ A mobile source health risk assessment should be prepared if the project uses diesel fueled vehicle trips.</li> <li>▪ If the Proposed Project requires a permit from the SCAQMD, they should be identified as a Responsible Agency in the Draft EIR, as this document will be used as the basis for evaluating the permit under CEQA.</li> <li>▪ If the Proposed Project results in significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized to minimize these impacts.</li> <li>▪ SCAQMD offered to work with the lead agency to ensure that the air quality, greenhouse gasses, and health risk impacts are accurately evaluated and mitigated where feasible.</li> </ul>
Letters Submitted to US Bureau of Land Management (NEPA-Lead Agency)		
4/19/21	U.S. Environmental Protection Agency	<ul style="list-style-type: none"> <li>▪ The Purpose and Need section should clearly identify the factors that are used to evaluate the size of the project and describe the criteria used to determine the minimize feasible project size. The EA should also discuss the energy market that the Project would serve, identify purchasers, and mention the renewable portfolio standards.</li> <li>▪ Recommended to evaluate an alternative that would fully comply with the CMAs and not require a plan amendment, as</li> </ul>

## Appendix D-1 : Summary of Written Comments Received

Date	From	Comments
		<p>well as using a “crosswalk” table to compare alternatives and include a reduced size alternative.</p> <ul style="list-style-type: none"> <li>▪ The impact assessment methodology should be identified for each resource evaluated and include one or more significance thresholds against which project impacts can be compared.</li> <li>▪ The Draft EA should include a description of the affected environment and it should be comprehensive and include reasonably foreseeable environmental trends and planned actions. Include a discussion of the other projects nearby and discuss the conclusions made for these other projects that were completed before they were subject to DRECP CMAs.</li> <li>▪ All mitigation measures and the Mitigation Monitoring and Reporting Program be adopted in the final decision document and be included as conditions in construction contracts and any other approvals or enforceable agreements.</li> <li>▪ The Draft EA should estimate the quantity of water the projects will require during the construction and operations. Describe the source of this water and potential impacts, including reliability.</li> <li>▪ Confirm with the U.S. Army Corps of Engineers that there are no jurisdictional waters requiring a Clean Water Act Section 404 permit, and describe impacts/alts etc.</li> <li>▪ In addition to avoiding wetlands and waters of the U.S., they recommend careful micro-siting of project components to avoid and protect ephemeral drainages or desert washes and dry wash woodlands. They also recommend that BLM and the applicant refine their site plan to avoid such critical habitat and adhere to buffer sizes as prescribed by the DRECP CMAs.</li> <li>▪ Consider in the Draft EA the impacts of changing precipitation patterns on the project, as part of its analysis of impacts to water resources, given flood risks.</li> <li>▪ Placement of PV panels within and adjacent to washes should be designed to minimize impacts.</li> <li>▪ Consideration and implementation of design features that would further minimize grading, soil disturbance and vegetation removal during construction, see Crimson Solar Project.</li> <li>▪ A phased approach to site preparation and removal of vegetation to prevent excess dust should be used.</li> <li>▪ A detailed discussion of a baseline for air quality conditions should be included along with BLMs coordination with SCAQMD and the NPS to prevent excess emissions. They recommend to incorporate tier 4 standards for equipment, limited idling, and PM10 monitoring.</li> <li>▪ A discussion of Valley Fever, and measures to prevent or reduce the risk of exposure to workers and residents.</li> <li>▪ Coordination with the U.S. Fish and Wildlife Service (USFWS) on matters pertaining to species and habitat protection.</li> <li>▪ The Draft EA should include a biological assessment, as well as a description of the progress or outcome of consultation with the USFWS under Section 7 of the Endangered Species Act, and indicate what measures will be taken to protect important wildlife habitat areas.</li> <li>▪ The EPA recommends practices that minimize disturbance of desert pavement and preserve habitat, and a confirmation of</li> </ul>

## Appendix D-1 : Summary of Written Comments Received

Date	From	Comments
		<p>to what extent desert dune and non-sand dune habitat will be impacted.</p> <ul style="list-style-type: none"> <li>▪ The Draft EA should discuss general locations of rare plants and describe how potential impacts will be minimized. It should consider impacts associated with an increase of shade on species in the desert environment, and impacts associated with constructing fences around the project site.</li> <li>▪ The Draft EA should discuss whether there is increased fatality risk to birds, particularly water fowl, associated with solar PV arrays, known as the “lake effect.” The document should also consider transmission line regulations in regards to raptors.</li> <li>▪ The EPA recommends avoiding disturbance of any desert pavement/cryptobiotic soil crusts present and adopting methods and installation techniques that will minimize impacts to soil crusts.</li> <li>▪ The Draft EA should describe how the project will meet the requirements of E.O. 13112. The EPA recommends including an invasive plant management plan for the monitoring and control of noxious weeds.</li> <li>▪ The EPA recommends that the BLM address adverse environmental effects of the proposed project on minority and low-income communities and outline measures to mitigate for impacts.</li> <li>▪ In the Draft EA, summarize the results of tribal consultation and identify the main concerns expressed by tribes, and how those concerns were addressed.</li> <li>▪ Discuss how the BLM would avoid or minimize adverse effects on the physical integrity, accessibility, or use of cultural resources or archaeological sites, including traditional cultural properties, throughout the project area. Clearly discuss mitigation measures for archaeological sites and TCPs. This should include a summary of coordination, identification of NRHP eligible sites, and a Cultural Resource Management Plan.</li> <li>▪ The EPA recommends addressing the existence of Indian sacred sites in the project areas that may be considered spiritual sites by regional tribal nations. Discuss how the BLM would ensure that the proposed action would avoid or mitigate for the impacts to the sites.</li> <li>▪ The document should quantify and describe the types of waste, discuss the potential impacts of waste generation, including hazardous waste, from construction and operation activities, as well as the proposed battery storage facilities.</li> <li>▪ The Draft EA should include an analysis of the potential energy needs of the proposed energy storage systems, discuss to what extent such needs can be met by energy generated on site by the solar facility, and include air emission estimates for the project.</li> </ul>

## Appendix D-1 : Summary of Written Comments Received

Date	From	Comments
4/19/21	Joshua Tree National Park	<ul style="list-style-type: none"> <li>▪ Concerns about clearing vegetation and water availability and recommended that the NPS work with BLM and tribal partners to determine the impacts of this on ethnographically sensitive species and offer accommodations to perform ceremonies or other practices.</li> <li>▪ Concerns about surface alteration and the effects on microphyll woodlands. Recommendation of analysis of changes in water flow resulting from nearby solar projects, and hydrological surface modeling to determine how water flow will impact microphyll woodland.</li> <li>▪ Concerns about the highly erodible surface soils and the potential effect on air quality. They recommend that impacts are minimized to desert crust, and that the Project should include an air quality plan for monitoring.</li> <li>▪ Concerns about the habitat linkage that the project is partially within and recommends that modeling should be done, and reduced fencing should be considered.</li> <li>▪ Concerns about fragmentation and other impacts to woodland washes and that impact on bird species. The NPS recommends incorporating recent desert bird studies into the analysis of project effects and retaining microphyll woodland CMAs.</li> <li>▪ Concerns about the effect's habitat loss may have on the golden eagle populations in the park. They recommend that JTNP and USFWS identify any golden eagles using habitat within the park, and habitat that may be affected, and incorporating best management practices from SCEs golden eagle mortality studies.</li> <li>▪ Concerns about an increase in commercial activity near Desert Center, and the increase in activity it may cause in the eastern end of the park – as it is very remote and lacks visitor resources. OHV use may introduce invasive plant species. The NPS recommends that the BLM and NPS partner to identify increase visitation patterns, OHV use or trespass, and invasive plant populations.</li> <li>▪ They attached a paper titled: Cooling requirements fueled the collapse of a desert bird community from climate change.</li> </ul>
Letters Submitted to Both Lead Agencies		
4/14/21	California Department of Fish and Wildlife	<ul style="list-style-type: none"> <li>▪ <b>CEQA and NEPA comment letters contain the same comments, with the distinction of a DEIR and an EA. There is a slight variation in introduction paragraphs but does not affect the content of the comments.</b></li> <li>▪ Assessment of Biological Resources: CDFW recommends that the DEIR include: <ul style="list-style-type: none"> <li>(1) An assessment of the various habitat types located within the Project footprint, and a map that identifies the location of each habitat type.</li> <li>(2) A general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the Project.</li> <li>(3) A complete, recent inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint and within offsite areas with the potential to be affected, including California Species of Special Concern</li> </ul> </li> </ul>



**Appendix D-1 : Summary of Written Comments Received**

Date	From	Comments
		<p>(SSC) and California Fully Protected Species (Fish and Game Code § 3511).</p> <ul style="list-style-type: none"> <li>▪ Analysis of Direct, Indirect, and Cumulative Impacts to Biological Resources: CDFW recommends to ensure the Project impacts to Bio Resources are fully analyzed, the following information should be included in the DEIR:               <ol style="list-style-type: none"> <li>(1) A discussion of potential impacts from lighting, noise, human activity, and wildlife-human interactions created by zoning of development Projects or other Project activities adjacent to natural areas, exotic and/or invasive species, and drainage.</li> <li>(2) A discussion of potential indirect Project impacts on biological resources, including resources in areas adjacent to the Project footprint, such as nearby public lands, open space, adjacent natural habitats, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or mitigation lands</li> <li>(3) An evaluation of impacts to adjacent open space lands from both the construction of the Project and long-term operational and maintenance needs.</li> <li>(4) A cumulative effects analysis developed as described under CEQA Guidelines § 15130.</li> <li>(5) The project has several decades long life-span. So, the potential loss in desert tortoise and other habitat expansion and population density changes with time needs be accounted for considering fully mitigated standards.</li> </ol> </li> <li>▪ The Document should include appropriate and adequate avoidance, minimization, and/or mitigation measures for all impacts.</li> <li>▪ All project activities should be designed to avoid any fully protected species, and fully analyze potential adverse impacts to these species.</li> <li>▪ The document should include measures to fully avoid and otherwise protect sensitive plant communities from Project-related direct and indirect impacts.</li> <li>▪ CDFW considers adverse Project-related impacts to sensitive species and habitats to be significant to both local and regional ecosystems, and the DEIR should include mitigation measures for adverse Project-related impacts to these resources.</li> <li>▪ CDFW recommends that the lead agency condition the DEIR to require that a CDFW-approved qualified biologist be retained to be onsite prior to and during all ground- and habitat-disturbing activities to move out of harm’s way special status species or other wildlife of low or limited mobility that would otherwise be injured or killed from project-related activities.</li> <li>▪ CDFW recommends that a California Endangered Species Act ITP be obtained if the Project has the potential to result in “take.”</li> <li>▪ CDFW recommends inclusion of detailed mitigation measures to avoid potentially significant impacts to desert tortoise, a CESA threatened listed species and a candidate for endangered species.</li> <li>▪ CDFW recommends inclusion of mitigation measures to avoid potentially significant impacts to burrowing owls, a Species of Special Concern. The measures need to include specificity on</li> </ul>

**Appendix D-1 : Summary of Written Comments Received**

Date	From	Comments
		<p>who will perform the burrowing owl survey, what type of survey will be performed, and what actions will be taken should burrowing owl presence be confirmed during the survey.</p> <ul style="list-style-type: none"> <li>▪ CDFW recommends that the analysis includes the results of avian surveys, as well as specific avoidance and minimization measures to ensure no impacts to nesting or migratory birds.</li> <li>▪ CDFW recommends California Natural Diversity Database be used to gather information about the potential presence of species, and surveys should not be restricted or limited to generated lists, as well as a mitigation measure for pre-construction botanical surveys for Special Status Native Plant Populations and Natural Communities with mitigation to protect them.</li> <li>▪ CDFW recommends inclusion of pre-construction American Badger and Desert Kit Fox survey, and a measure to monitor and protect these species.</li> <li>▪ Biological monitors should take steps to prevent wildlife from entering or getting trapped in pipes.</li> <li>▪ An escape ramp should be placed in trenches that are left open, to allow for animals to escape that may have become trapped.</li> <li>▪ Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may divert water, change material, or deposit debris.</li> <li>▪ CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. Report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database.</li> <li>▪ Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final.</li> </ul>
4/19/21	<ul style="list-style-type: none"> <li>▪ Metropolitan Water District of Southern California</li> </ul>	<ul style="list-style-type: none"> <li>▪ The lead agency should analyze and assess any potential impacts to Metropolitan’s transmission system. The lead agency should ensure that the California Independent System Operator (CAISO) includes Metropolitan as a Potentially Affected System for this proposed Project in accordance with the CAISO Tariff and Business Practice Manuals for the Generation Interconnection Procedures and be included in any related technical generation interconnection studies.</li> <li>▪ If the Project uses groundwater, Metropolitan requests that the lead agency provide an analysis of the utilization of groundwater from on-site wells, as well as a cumulative analysis that includes the impact on the groundwater basin from the surrounding solar facilities.</li> <li>▪ Regulators should require that project developers monitor groundwater use to ensure that, over the life of the project, that there are no impacts to Colorado River resources. If impacts are detected, the project developer should be required to mitigate and offset such impacts.</li> </ul>

## Appendix D-1 : Summary of Written Comments Received

Date	From	Comments
Organizations		
Letters Submitted to Colorado River Basin RWQCB (CEQA-Lead Agency)		
4/15/21	Desert Tortoise Council (CEQA)	<ul style="list-style-type: none"> <li>▪ The Desert Tortoise Council (Council) asked for a response in an email that we have received this comment letter so they can be sure their concerns have been registered with the appropriate personnel and office for this project.</li> <li>▪ Concerns about loss of critical habitat for desert tortoise, and the clarity over what BLM land it is located on. They recommend the BLM not to approve a project that would result in a loss of critical habitat to DETO.</li> <li>▪ Recommends a LUPA that eliminates tortoise critical habitats from DFAs.</li> <li>▪ Why are the project's impacts are not being assessed in a combined EIR/EIS? The adverse modification of critical habitat is sufficient to trigger preparation of an EIS.</li> <li>▪ Recommendation that the data analyses in Allison and McLuckie (2018) and USFWS (2014, 2015, and 2017) must be reported in the draft document as baseline information.</li> <li>▪ The document should analyze population trends, sources of mortality, and the effect of degradation/loss of habitat from the lease of lands.</li> <li>▪ The document should include mitigation for all direct, indirect, and cumulative impacts, that include a translocation, raven management, fire management, weed management and compensation plans. These should have an implementation schedule with key actions per phase, and a monitoring plan to determine if success criteria have been met.</li> <li>▪ The Proponent should choose a pole type least likely to be used by ravens for nesting, and that BLM should require monitoring, nest removal, and depredation permits if tortoise depredation is documented. BLM should require the Proponent to contribute identified funds to the National Fish and Wildlife Foundation's Raven Management Fund for regional and cumulative impacts.</li> <li>▪ List of surveys that need to be done: CNDDDB records search; formal protocol surveys for Mojave desert tortoise; consult with the USFWS Palm Springs Office for compliance with the FESA; jurisdictional waters analysis; focused surveys for Mojave fringe-toed lizards if there are sand habitats; Protocol surveys for western burrowing owl; special status plant species surveys and mapping, if identified in the CNDDDB search.</li> <li>▪ The Council completed a best management practices document on desert restoration (see link in document).</li> <li>▪ Support for alternatives to reduce the need for additional solar energy projects in the Mojave Desert, such as rooftop solar, and the document should include this as an action alternative.</li> <li>▪ The Council believes that BLM's management of the Mojave desert tortoise and its habitats in California is not in compliance with FLPMA or the purposes for establishing the CDCA. BLM needs to adopt and implement the management actions of the one population of the Mojave desert tortoise in California that is increasing. This population is managed by the National Park Service.</li> </ul>

## Appendix D-1 : Summary of Written Comments Received

Date	From	Comments
4/18/21	Christina Stuart	<ul style="list-style-type: none"> <li>▪ The Council recommends following the CEC’s eight principles for cumulative analysis.</li> <li>▪ The Council asked to be identified as an Affected Interest for this and all other BLM projects that may affect species of desert tortoises, and that any subsequent environmental documentation for this particular project is provided to us.</li> </ul>
4/18/21	Christina Stuart	<ul style="list-style-type: none"> <li>▪ The EA needs to analyze the impacts to the environment from decommissioning the solar panels, regarding waste, disposal of panels, recycling. Concerns about hazardous waste.</li> <li>▪ EA to disclose exactly how the solar panels will be disposed of, where they will be disposed, and any impacts this disposal will have on the environment.</li> </ul>
4/19/21	Southern California Association of Governments (CEQA)	<ul style="list-style-type: none"> <li>▪ The SCAG letter notes 10 goals they have that may provide guidance for the project, and they recommend a side-by-side comparison with discussions of consistency or applicability.</li> <li>▪ The letter also mentions demographics and a growth forecast.</li> <li>▪ SCAG recommends a review of the Final Program EIR for Connect SoCal as guidance.</li> </ul>
<b>Letter Submitted to US Bureau of Land Management (NEPA-Lead Agency)</b>		
3/27/21	S. Daniel McLeod	<ul style="list-style-type: none"> <li>▪ The commenter expressed concerns about the desert ecosystem, the placement of the project near the Joshua Tree National Park due to cultural resources.</li> <li>▪ Commenter requests the documents relating to the risk assessment of the storage of batteries at the transmission facility.</li> </ul>
4/19/21	Defenders of Wildlife / California Native Plant Society / California Wildlife Coalition / Natural Resources Defense Council / Audubon	<ul style="list-style-type: none"> <li>▪ BLM states it intends to amend the CDCA Plan to exempt the Project from compliance with certain unspecified CMAs from the DRECP, otherwise the Project could not be authorized. The commenter states that without seeing the CMAs, it limits the ability for the public to provide meaningful scoping comments.</li> <li>▪ The proposed exemption of unspecified DRECP CMAs could lead to future exemptions and undermine the intent of the DRECP. The commenter recommends that the BLM provide the public with a statement on why the project is being further analyzed instead of denied for conflicting with the CDCA plan. BLM should provide documentation of the applicant’s efforts to comply with the CDCA plan, and why a modified project was not proposed.</li> <li>▪ BLM must draft its purpose and need statement to encompass how the project will meet the DRECP renewable energy goal and potential alternative means of achieving that goal. It should set the stage for incorporating environmental concerns as part of the project and allow consideration of a considerable range of alternatives.</li> <li>▪ The following alternatives should be analyzed: modified project that would comply with all CMAs and not require a plan amendment; a modified project in compliance with CMA LUPA-BIO-13; a modified project that avoids development within the Chuckwalla Critical Habitat unit; and a combination of the above that avoids or minimizes loss of habitats and movements of focal and special status species protected by the CMAs.</li> </ul>

**Appendix D-1 : Summary of Written Comments Received**

Date	From	Comments
<ul style="list-style-type: none"> <li>▪ Compensatory Mitigation should be used for Desert tortoise habitat and microphyll woodland in a 5:1 ratio, and for habitat in general in a 1:1 ratio.</li> <li>▪ The commenter recommends that BLM require all applicable CMAs associated with groundwater use for the Project in order to protect the Chuckwalla Valley groundwater from overdraft. (See list in comment)</li> <li>▪ The commenter recommends that each respective EA include a thorough analysis of the direct, indirect and cumulative impacts of existing and future projects on individual focus species and evaluate specific habitat linkages identified in the DRECP.</li> <li>▪ Processing another separate land use plan amendment to the CDCA Plan to avoid application of previously adopted CMAs is not necessary and we encourage BLM to analyze the proposed action within the umbrella of the entire DRECP CMA framework.</li> </ul>		
<p><b>Letter Submitted to Both Lead Agencies</b></p>		
4/19/21	Center for Biological Diversity, Sierra Club, California Native Plant Society, and National Audubon Society	<ul style="list-style-type: none"> <li>▪ The proposed project does not conform with the DRECP and would require a plan amendment, due to noncompliance with CMAs.</li> <li>▪ The DRECP requires Microphyll woodlands, which are an important and rare plant community be protected from development even within a DFA.</li> <li>▪ Wildlife connectivity corridors in the DFA the project as proposed will construct solar fields, energy storage and the substation within the boundaries of this critical multispecies linkage. The document should include an alternative that avoids development in this linkage area to comply with CMAs.</li> <li>▪ Surveys for the plants and plant communities should follow California Native Plant Society (CNPS) and California Department of Fish and Game (CDFG) floristic survey guidelines and should be documented. Surveys for animals should include an evaluation of the California Wildlife Habitat Relationship System’s (CWHR) Habitat Classification Scheme. All rare species (plants or animals) need to be documented. These surveys must be on maps large enough to be useful, and surveys must be done at different times of the year to accurately evaluate the site.</li> <li>▪ The documents must evaluate all direct, indirect, and cumulative impacts to sensitive habitats, including impacts associated with impacts to federally designated critical habitat for the threatened Mojave desert tortoise. (See list of species in comment)</li> <li>▪ Concern about the project being in a flyway for the endangered Yuma Ridgway’s Rail.</li> <li>▪ The project area contains federally designated critical habitat and likely has desert tortoise occurring on site. The document must clearly address alternative proposals for avoiding and minimizing impacts to the desert tortoise and its habitat. Translocation cannot substitute for other mitigation, and if used as mitigation, should have a monitoring plan with success criteria.</li> <li>▪ A raven prevention plan should be included.</li> </ul>

## Appendix D-1 : Summary of Written Comments Received

Date	From	Comments
		<ul style="list-style-type: none"> <li>▪ Additional alternative sites outside of DETO critical habitat.</li> <li>▪ The DEA and DEIR need to include a comprehensive analysis of the sand transport corridor and a thorough impact analysis, due to the presence of Mojave Fringe-toed lizard. Alternatives should prioritize the avoidance and conservation of the sand transport corridor.</li> <li>▪ If there are burrowing owls on the site, at least one alternative should evaluate the reduction of impacts to this rare species by moving the project away from the nesting burrows. The comment offers mitigation and translocation suggestions.</li> <li>▪ Concerns about Migratory birds, with evidence from nearby projects reporting bird mortalities potentially by the “lake effect.” The documents should discuss these impacts and include mitigation and monitoring.</li> <li>▪ The documents must estimate the number of desert kit fox or badgers on the project site and analyze impacts to them. They recommend surveys to establish a baseline and a mitigation and monitoring plans.</li> <li>▪ The Agencies must address proposals for avoiding, minimizing and mitigating the impacts to all the rare species that utilize the site. Acquisition of lands that will be managed in perpetuity for conservation must be included as part of the strategy to avoid, minimize and mitigate impacts.</li> <li>▪ The documents should also evaluate the impact of the proposed project on locally rare species.</li> <li>▪ The documents must clarify the impacts to the jurisdictional Waters of U.S. and the Water of the State of California, and surface hydrology across the site.</li> <li>▪ An evaluation of the effect of water use by the proposed project needs to be detailed and include alternatives and its impact on the Colorado River Basin. Any groundwater pumping proposed for the proposed project must be analyzed in terms of groundwater resource availability and water quality in the basin and surface water resources. This effect on the native plant and animal species and their habitats need to be included.</li> <li>▪ The document must include a preferred alternative that complies with the DRECP and an analysis a reduced footprint alternative, an alternative that includes the northern portion of the application area, a private lands alternative, and alternatives using other technologies including distributed generation.</li> <li>▪ The construction, operation and eventual decommissioning of the proposed facilities will also increase greenhouse gas emissions and those emissions should be quantified and offset. This should also include the loss of carbon sequestration from the project’s disturbance, and mitigation for mobile sources.</li> <li>▪ Best management practices for fire prevention must be included.</li> <li>▪ Non-Native Plants should be banned from the project site, and the document should evaluate impacts from invasive species.</li> <li>▪ The documents must evaluate all impacts to wildlife movement corridors, from the proposed project, and cumulative projects.</li> </ul>

## Appendix D-1 : Summary of Written Comments Received

Date	From	Comments
4/19/21	Western Watersheds Project and Basin & Range Watch	<ul style="list-style-type: none"> <li>▪ The documents must include a robust cumulative impact analysis, including if the cumulative projects will cause adverse impacts to the DFA and surrounding lands, such as wilderness, ACECs, and Wildlife Habitat Management Areas (WHMAs).</li> <li>▪ Desert Tortoise critical habitat needs to be avoided, and the value of DETO land should be analyzed at a deeper level than a GIS overlay. They expressed concerns about setting a precedent of building in critical habitat. They also requested that a LUPA be included in the EIS to amend the DRECP and remove the existing overlaps of the DFA with all Critical Habitat units.</li> <li>▪ All microphyll woodland should be avoided; The DRECP already has hundreds of thousands of acres of designated Development Focus Areas streamlined for solar project siting, and the applicant should seek other sites which do not necessitate a plan amendment in order to violate CMAs.</li> <li>▪ A discussion of how connectivity of wash plant communities needs to be included, along with an analysis of stormwater runoff in ephemeral washes. All microphyll areas and wash habitats need to be avoided, and a buffer of 200 feet around microphyll habitats so that edge-effects do not impact wash habitats.</li> <li>▪ A stormwater plan needs to be developed due to the flash flood risks, and groundwater pollution should be monitored.</li> <li>▪ Groundwater pumping should be analyzed, for effects to regional aquifers.</li> <li>▪ The multispecies wildlife corridor should be avoided, all I-10 underpasses should be mapped, and connectivity should be maintained in both the wildlife corridor and critical habitat. It should also be analyzed for Burro deer.</li> <li>▪ Sand transport corridors, impacts of fences, sand piling on fences, and impacts to Mojave fringe toed lizard should be analyzed for the project and cumulative projects in the area.</li> <li>▪ Avian-solar impacts due to the “lake effect” should be analyzed.</li> <li>▪ Purpose and need statement should prioritize protecting microphyll woodlands, wildlife connectivity corridors and tortoise habitat.</li> <li>▪ The No Action alternative is justified by other projects, such as distributed energy resources. A reduced footprint alternative needs to be analyzed, as a 200-300 MW project could meet federal incentives and avoid critical habitats.</li> <li>▪ Visual resources should be adequately analyzed by using appropriate KOPs, including KOPs from wilderness areas, and from Joshua Tree National Park. A nighttime visual impact assessment is also recommended.</li> <li>▪ All impacts to tortoise, Mojave fringe-toed lizard, rare plants, microphyll woodland, and avian collisions should be analyzed for this gen-tie line. Discussion of how raven nesting will be prevented should be discussed.</li> <li>▪ Battery storage facility using air conditioning to cool the battery containers could be inefficient and plans for fires should be developed.</li> </ul>

### Appendix D-1 : Summary of Written Comments Received

Date	From	Comments
4/20/21	Colorado River Indian Tribes	<ul style="list-style-type: none"> <li>▪ Mowing and traditional methods of site construction needs mapping and analysis; the document should explain what methods will be used.</li> <li>▪ The inefficiency of this utility scale solar project should be analyzed, as 500MW could only be produced during peak sunlight hours, and rooftop and parking lot solar should be analyzed.</li> <li>▪ Cultural impacts should be better analyzed, as the DRECP did not analyze impacts to regional cultural resources and concerns by local rural communities.</li> </ul> <hr/> <ul style="list-style-type: none"> <li>▪ The project is likely to significantly impact cultural resources.</li> <li>▪ BLM must broadly consider impacts to cultural resources.</li> <li>▪ The potential for significant cultural resource impacts requires BLM to complete a full EIS review.</li> <li>▪ BLM must ensure that potential impacts to known and unknown cultural artifacts are analyzed and avoided.</li> <li>▪ The EA or EIS must adequately consider cumulative impacts to cultural resources.</li> <li>▪ Request for written response to the Tribe.</li> </ul>



## **Appendix D-2**

Written Comments Received During Scoping Period

## **Appendix D-2a**

NEPA Scoping Comments Sent to BLM



State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
Inland Deserts Region  
3602 Inland Empire Boulevard, Suite C-220  
Ontario, CA 91764  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



April 14, 2021

Mr. Brandon Anderson  
U.S. Bureau of Land Management  
22835 Calle San Juan De Los Lagos  
Moreno Valley, CA 92553  
(BLM\_CA\_PS\_OberonSolar@blm.gov)

Subject: Notice of Intent to Amend the California Desert Conservation Area Plan  
and Prepare an Associated Environmental Assessment  
Oberon Solar Project

Dear Mr. Anderson:

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent (NOI) to Amend the California Desert Conservation Area Plan and Prepare an Associated Environmental Assessment (EA) from the U.S. Bureau of Land Management (BLM) for the Oberon Solar Project (Project).

BLM is the Lead Agency under the National Environmental Policy Act (NEPA) 42 U.S.C. section 4321 et seq. Due to submittal of a Wastewater Discharge Requirements application package, this Project is also under the jurisdiction of the Colorado River Basin Regional Water Quality Control Board, which is the Lead Agency for preparation of a Draft Environmental Impact Report (DEIR) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines<sup>1</sup>. In accordance with the NEPA of 1969, as amended, and the Federal Land Policy and Management Act (FLPMA) of 1976, as amended, the BLM Palm Springs-South Coast Field Office is proposing to amend the 1980 California Desert Conservation Area (CDCA) Plan, as amended, and prepare the associated environmental analysis for the Project. The Project is within a development focus area, as identified through the Desert Renewable Energy Conservation Plan (DRECP) amendment to the CDCA Plan. The DRECP contains Conservation and Management Actions (CMAs) that are intended to avoid and minimize impacts to numerous resources within the plan area. Application of the relevant CMAs to the proposed Project would preclude construction and operation of the proposed Project.

Thank you for the opportunity to provide comments and recommendations regarding the activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

<sup>1</sup> CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

## **ROLE OF CDFW**

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (Id., § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

## **PROJECT DESCRIPTION**

CEQA Lead: Colorado River Basin Regional Water Quality Control Board

NEPA Lead: U.S. Bureau of Land Management

Applicant: IP Oberon, LLC, a subsidiary of Intersect Power, LLC

Location:

The project site is located in Riverside County, California, north of the I-10 freeway and adjacent to the community of Lake Tamarisk in Desert Center. The gen-tie transmission line would run north and south of the I-10 freeway to connect into the existing Southern California Edison Red Bluff Substation. The gen-tie line would be located within one 175-foot right-of-way (ROW), running approximately 0.5 miles southeast from the solar facility, across BLM land, to the Red Bluff Substation.

Description:

The purpose of the Project is to construct, operate, maintain, and decommission a 500 megawatt (MW) solar photovoltaic (PV) electricity generating station, battery energy storage facility, electrical substation, 500 kilovolt (kV) generation tie (gen-tie) lines and

associated access roads on approximately 4,700 acres of land managed by the U.S. Bureau of Land Management (BLM). The Project would operate for a minimum of 35 years and up to 50 or more years. The Project involves installation of several million PV solar panels mounted on either fixed-tilt or tracking technology. Types of panels may include thin-film panels (cadmium telluride and copper indium gallium diselenide), crystalline silicon panels, or other commercially available PV technology. Project activities will include construction and installation of solar array, inverters, transformers, electrical collection system, substations, switchyards, gen-tie lines, operation and maintenance building, a new overhead or underground distribution line, telecommunications facilities, battery energy storage system, meteorological data collection system with stations, access roads, fencing, security and lighting fencing.

Panels would be electrically connected into panel strings using wiring secured to the panel racking system. Underground cables would be installed to convey the direct current (DC) electricity from the panels via combiner boxes located throughout the PV arrays, to inverters to convert the DC to alternating current (AC) electricity. The output voltage of the inverters would be stepped up to the collection system voltage via transformers located in close proximity to the inverters. The 34.5 kV level collection cables would primarily be buried underground within the solar facility, with some segments potentially installed overhead on wood poles outside of the solar facility connecting the two parcel groups.

Construction is anticipated to occur over an approximately 15 to 20 month period, depending on power purchase agreement and financing requirements. The on-site workforce would consist of laborers, craftsmen, supervisory personnel, supply personnel, and construction management personnel. The on-site workforce is expected to reach its peak of approximately 530 individuals with an average construction-related on-site workforce of 320 individuals.

Operational activities at the Project site would include solar module washing, vegetation, weed, and pest management, security, responding to automated electronic alerts based on monitored data, including actual versus expected tolerances for system output and other key performance metrics; and communicating with customers, transmission system operators, and other entities involved in facility operations. At the end of the Project's useful life, the solar arrays and gen-tie line would be decommissioned and dismantled.

Decommissioning activities would involve dismantling and removal of all above-ground equipment including solar panels, track units, transformers, inverters, substations, operation and maintenance buildings, switchyard, excavation and removal of all above-ground cables, removal of solar panel posts, removal of primary roads, break-up and removal of concrete pads and foundations, removal of septic system and leach field, removal of 34.5 kV distribution lines, and dismantling of 500 kV gen-tie line.

## **COMMENTS AND RECOMMENDATIONS**

CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of those species (biological resources). CDFW offers the comments and recommendations to assist the Lead Agency for adequately identifying and mitigating the Project's significant, or potentially significant, impacts on biological resources. The comments and recommendations are also offered to enable CDFW to adequately review and comment on the proposed Project with respect to impacts on biological resources. CDFW recommends that the EA addresses the following comments.

### **Assessment of Biological Resources**

Section 15125(c) of the CEQA Guidelines states that knowledge of the regional setting of a Project is critical to the assessment of environmental impacts and that special emphasis should be placed on environmental resources that are rare or unique to the region. To enable CDFW to adequately review and comment on the Project, the EA should include a complete assessment of the flora and fauna within and adjacent to the Project footprint, with particular emphasis on identifying rare, threatened, endangered, and other sensitive species and their associated habitats. CDFW recommends that the EA includes the following comments.

1. An assessment of the various habitat types located within the Project footprint, and a map that identifies the location of each habitat type. CDFW recommends that floristic, alliance- and/or association-based mapping and assessment be completed following 2009 or current version of The Manual of California Vegetation. Adjoining habitat areas should also be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.
2. A general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the Project. CDFW's California Natural Diversity Database (CNDDDB) in Sacramento should be contacted to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code, in the vicinity of the proposed Project. CDFW recommends that CNDDDB Field Survey Forms be completed and submitted to CNDDDB to document survey results. Please note that CNDDDB is not exhaustive in terms of the data it houses, nor is it an absence database. CDFW recommends that it be used as a starting point in gathering information about the potential presence of species within the general area of the Project site.



3. A complete, recent inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint and within offsite areas with the potential to be affected, including California Species of Special Concern (SSC) and California Fully Protected Species (Fish and Game Code § 3511). Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). The inventory should address seasonal variations in use of the Project area and should not be limited to resident species. Focused species-specific surveys, completed by a qualified biologist and conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the U.S. Fish and Wildlife Service, where necessary. Note that CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if the Project is proposed to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought. CDFW recommends species-specific surveys for the desert tortoise. CDFW-approved desert tortoise pre-construction surveys cover 100 percent of the project area and adjacent habitat using the methods described in the most recent United States Fish and Wildlife Service (USFWS) Desert Tortoise Field Manual. CDFW recommends survey for burrowing owl, a Species of Special Concern. Survey recommendations and guidelines are provided in the Staff Report on Burrowing Owl Mitigation (Department of Fish and Game, March 2012). Development of a desert kit fox and American badger mitigation and monitoring plan is recommended. Desert kit fox is a protected species, and American badger is a Species of Special Concern. CDFW also recommends a thorough, recent, floristic-based assessment of special status plants and natural communities, following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities.

### **Analysis of Direct, Indirect, and Cumulative Impacts to Biological Resources**

The EA should provide a thorough discussion of the direct, indirect, and cumulative impacts expected to adversely affect biological resources as a result of the Project. To ensure that Project impacts to biological resources are fully analyzed, the following information should be included in the EA:

1. A discussion of potential impacts from lighting, noise, human activity, and wildlife-human interactions created by zoning of development Projects or other Project activities adjacent to natural areas, exotic and/or invasive species, and drainage. The latter subject should address Project-related changes on drainage patterns and water quality within, upstream, and downstream of the Project site, including: volume, velocity, and frequency of existing and post-Project surface flows;

polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-Project fate of runoff from the Project site.

2. A discussion of potential indirect Project impacts on biological resources, including resources in areas adjacent to the Project footprint, such as nearby public lands (e.g. National Forests, State Parks, etc.), open space, adjacent natural habitats, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or mitigation lands (e.g., preserved lands associated with a Natural Community Conservation Plan, or other conserved lands).
3. An evaluation of impacts to adjacent open space lands from both the construction of the Project and long-term operational and maintenance needs.
4. A cumulative effects analysis developed as described under CEQA Guidelines § 15130. Please include all potential direct and indirect Project related impacts to riparian areas, wetlands, vernal pools, alluvial fan habitats, wildlife corridors or wildlife movement areas, aquatic habitats, sensitive species and other sensitive habitats, open lands, open space, and adjacent natural habitats in the cumulative effects analysis. General and specific plans, as well as past, present, and anticipated future Projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.
5. The project has several decades long life-span. So, the potential loss in desert tortoise and other habitat expansion and population density changes with time needs be accounted for considering fully mitigated standards. For adequacy of mitigation analysis, there is a need to consider both spatial and temporal effects on habitat as well as cumulative impacts of the activities on habitat biodiversity and microclimate variability for sustaining desert tortoise and other species.

### **Mitigation Measures for Project Impacts to Biological Resources**

The EA should include appropriate and adequate avoidance, minimization, and/or mitigation measures for all direct, indirect, and cumulative impacts that are expected to occur as a result of the construction and long-term operation and maintenance of the Project. When proposing measures to avoid, minimize, or mitigate impacts, CDFW recommends consideration of the following comments.

### **Fully Protected Species**

Several Fully Protected Species (Fish and Game Code § 3511) have the potential to occur within or adjacent to the Project area. Fully protected species may not be taken or possessed at any time. Project activities described in the EA should be designed to completely avoid any fully protected species that have the potential to be present within or adjacent to the Project area. CDFW also recommends that the EA fully analyze

potential adverse impacts to fully protected species due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. CDFW recommends that the Lead Agency include in the analysis appropriate avoidance, minimization and mitigation measures to reduce any possible indirect impacts to fully protected species.

### **Sensitive Plant Communities**

CDFW considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDDB and are included in the 2009 or current version of The Manual of California Vegetation. The EA should include measures to fully avoid and otherwise protect sensitive plant communities from Project-related direct and indirect impacts. Minimization measures may include transplanting perennial species, seed collection and dispersal from annual species, and other conservation strategies that will protect the viability of the local population. If minimization measures are implemented, monitoring of plant populations will be conducted annually for 5 years to assess the mitigation's effectiveness. The performance standard for mitigation will be no net reduction in the size or viability of the local population.

### **Mitigation**

CDFW considers adverse Project-related impacts to sensitive species and habitats to be significant to both local and regional ecosystems, and the EA should include mitigation measures for adverse Project-related impacts to these resources. Mitigation measures should emphasize avoidance and reduction of Project impacts. For unavoidable impacts, onsite habitat restoration and/or enhancement should be evaluated and discussed in detail. If onsite mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, offsite mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed. The EA should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts in order to meet mitigation objectives to offset Project-induced qualitative and quantitative losses of biological values. Specific issues that should be addressed include restrictions on access, land dedications, long-term monitoring and management, control of illegal dumping, water pollution, and human intrusion.

### **Moving out of Harm's Way**

The proposed project is anticipated to result in the clearing of natural habitats that support native species. To avoid direct mortality, CDFW recommends that the lead agency condition the EA to require that a CDFW-approved qualified biologist be

retained to be onsite prior to and during all ground- and habitat-disturbing activities to move out of harm's way special status species or other wildlife of low or limited mobility that would otherwise be injured or killed from project-related activities. Movement of wildlife out of harm's way should be limited to only those individuals that would otherwise be injured or killed, and individuals should be moved only as far as necessary to ensure their safety. Furthermore, it should be noted that the temporary relocation of onsite wildlife does not constitute effective mitigation for the purposes of offsetting project impacts associated with habitat loss.

### **California Endangered Species Act**

CDFW is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to the California Endangered Species Act (CESA). A CESA Incidental Take Permit (ITP) is issued to conserve, protect, enhance, and restore State-listed CESA species and their habitats. CDFW recommends that a CESA ITP be obtained if the Project has the potential to result in "take" (California Fish and Game Code Section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of CESA-listed species.

Take of any CESA-listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085). If the Project, including the Project construction or any Project-related activity during the life of the Project, results in take of CESA-listed species, CDFW recommends that the Project proponent seek appropriate authorization prior to Project implementation through an ITP. Desert tortoise and Mohave ground squirrel are two CESA-listed threatened species that have potential to occur within the Project Area, presence needs to be determined by protocol surveys required by the Lead Agency. CDFW encourages early consultation, as significant modification to the proposed Project and avoidance, minimization, and mitigation measures may be necessary to obtain a CESA ITP. Please note that the proposed avoidance, minimization, and mitigation measures must be sufficient for CDFW to conclude that the Project's impacts are fully mitigated and the measures, when taken in aggregate, must meet the full mitigation standard.

### **Desert Tortoise**

CDFW recommends inclusion of mitigation measures to avoid potentially significant impacts to desert tortoise, a CESA-listed species as threatened and a candidate for endangered species. The measures need to include specificity on who will perform the survey, what type of survey will be performed, and what actions will be taken should desert tortoise presence be confirmed during the survey. The measures need to address avoidance, minimization, or mitigation measures should desert tortoise enter the Project site during the life of the Project. Take (hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill) is prohibited unless authorized by

state law (Fish and Game Code, §§ 2080 & 2085). Project activities have the potential to take desert tortoise. The measure as written does not ensure a qualified biologist, experienced in locating desert tortoise individuals in all life stages and their sign, will complete the survey following CDFW approved protocols. Additionally, should desert tortoise presence be confirmed, the measure needs to include avoidance, minimization and mitigation to avoid take.

If the Project, including the Project construction or any Project-related activity during the life of the Project, may result in take of CESA-listed species, CDFW recommends that the Project proponent seeks appropriate authorization prior to Project implementation through an incidental take permit (ITP). CDFW recommends inclusion of protocol level survey and a measure for a qualified biologist in the environmental document. A qualified biologist shall conduct a protocol level presence or absence survey no more than 14 days prior to initiating Project activities in accordance with the survey methodology described in U.S. Fish and Wildlife Service Desert Tortoise (Mojave Population) Field Manual. In addition, the survey shall utilize perpendicular survey routes and 100-percent visual coverage of the Project area and 50-foot buffer zone for desert tortoise and their sign. If the survey confirms absence, a qualified biological monitor shall remain on-site during all Project activities to confirm desert tortoise do not enter the Project site. If the survey confirms presence, the Project Proponent shall obtain an ITP for desert tortoise prior to the start of Project activities. If the biological monitor during the life of the Project encounters a desert tortoise, work shall be suspended, and the Project Proponent shall obtain an ITP for the species prior to the restarting Project activities. All clearance surveys need to be conducted during the active season for desert tortoise.

### **Burrowing Owl**

CDFW recommends inclusion of mitigation measures to avoid potentially significant impacts to burrowing owls, a Species of Special Concern. The measures need to include specificity on who will perform the burrowing owl survey, what type of survey will be performed, and what actions will be taken should burrowing owl presence be confirmed during the survey. It is necessary to address avoidance, minimization, or mitigation measures. Project-related activities have potential to take burrowing owl individuals and their nests and may result in loss of burrowing owl habitat. Take of individual burrowing owls and their nests is defined by Fish and Game Code section 86, and prohibited by sections 3503, 3503.5 and 3513. Take is defined in Fish and Game Code Section 86 as “hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill.” Burrowing owls are dependent on burrows at all times of the year for survival and/or reproduction, evicting them from nesting, roosting, and satellite burrows may lead to indirect impacts or take. Loss of access to burrows will likely result in varying levels of increased stress on burrowing owls and could depress reproduction, increase predation, increase energetic costs, and introduce risks posed by having to find and compete for available burrows.

Eviction of burrowing owls is a potentially significant impact under CEQA. CDFW recommends inclusion a measure for a qualified biologist in the environmental document. Burrowing owl surveys shall be conducted by a qualified biologist at least 14 days prior to any Project activities, at any time of year. Surveys shall be completed following the recommendations and guidelines provided within the Staff Report on Burrowing Owl Mitigation (CDFG, March 2012) or most recent version by a qualified biologist. If an active burrowing owl burrow is detected within any Project disturbance area, or within a 500-foot buffer of the disturbance area, a 300- foot radius buffer zone surrounding the burrow shall be flagged, and no impacts to soils or vegetation or noise levels above 65 dBA shall be permitted while the burrow remains active or occupied. Disturbance-free buffers may be modified based on site-specific conditions in consultation with CDFW. The qualified biologist shall monitor active burrows daily and will increase buffer sizes as needed if owls show signs of disturbance. If active burrowing owl burrows are located within any work area and impact cannot be avoided, a qualified biologist shall submit a burrowing owl exclusion plan to CDFW for review and approval. The burrowing owl exclusion plan shall include permanent compensatory mitigation consistent with the recommendations in the Staff Report on Burrowing Owl Mitigation such that the habitat acreage, number of burrows and burrowing owls impacted are replaced. Passive relocation shall take place outside the nesting season (1 February to 31 August).

### **Nesting Birds and Migratory Birds**

It is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Migratory non-game native bird species are protected by international treaty under the federal Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 *et seq.*). In addition, sections 3503, 3503.5, and 3513 of the Fish and Game Code (FGC) also afford protective measures as follows: Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by FGC or any regulation made pursuant thereto; Section 3503.5 states that it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by FGC or any regulation adopted pursuant thereto; and Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA. CDFW recommends that the analysis includes the results of avian surveys, as well as specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur. Project-specific avoidance and minimization measures may include, but not be limited to: Project phasing and timing, monitoring of Project-related noise (where applicable), sound walls, and buffers, where appropriate. The measures should also include specific avoidance and minimization measures that will be implemented should a nest be located within the



Project site. For pre-construction surveys, CDFW recommends that the surveys be required no more than three days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted sooner.

### **Special Status Plant Species**

The Biological Resources Assessment needs to include explanation of methodology and results of the survey of special status plants. CDFW recommends California Natural Diversity Database be used as a starting point in gathering information about the potential presence of species within the general area of the Project site, and surveys should not be restricted or limited to generated lists. It is unclear if a botanical field survey to identify all plants to the taxonomic level necessary to determine rarity and listing status was performed. Botanical field surveys should be conducted during times of year when plants are evident and identifiable (i.e. flowering or fruiting), which may warrant multiple surveys during the season to capture floristic diversity. Habitats, such as desert plant communities that have annual and short-lived perennial plants as major floristic components may require yearly surveys to accurately document baseline conditions for purposes of impact assessment. Sensitive plant species are listed under the CESA as threatened, or endangered, or proposed or candidates for listing; designated as rare under the Native Plant Protection Act; or plants that otherwise meet the definition of rare, threatened, or endangered species under CEQA. Plants constituting California Rare Plant Ranks 1A, 1B, 2A, and 2B generally meet the criteria of a CESA-listed species and should be considered as an endangered, rare or threatened species for the purposes of CEQA analysis. Take of any CESA-listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085). Fish and Game Code Sections 1900–1913 includes provisions that prohibit the take of endangered and rare plants from the wild and a salvage requirement for landowners. To ensure that Project impacts to biological resources are fully analyzed, CDFW recommends a thorough floristic-based assessment of special status plants and natural communities. Note that CDFW generally considers biological field assessments for rare plants valid for a period of up to three years. CDFW recommends inclusion of the following mitigation measure.

Pre-construction botanical surveys shall be conducted at the appropriate time of year by a qualified biologist following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW, March 2018) or most recent version. Should special status plants or natural communities be present in the Project area, a qualified biologist shall develop species specific avoidance, minimization, and mitigation measures to ensure there is no net reduction in the size or viability of the local population. CDFW also recommends that the Lead Agency reviews the listing status of Western Joshua Tree (*Yucca brevifolia*) prior to finalizing the EIR and implements appropriate measures. If the Project, including the Project construction or any Project-related activity during the life of the Project, may result in take of CESA-listed species, CDFW recommends that the Project proponent

seeks appropriate authorization prior to Project implementation through an incidental take permit (ITP). Should any CESA-listed plant species be present at the Project site, the Project Proponent shall obtain an incidental take permit for those species prior to the start of Project activities.

### **American Badger and Desert Kit Fox**

American badger is a Species of Special Concern. Desert kit fox is a protected species and may not be taken at any time pursuant to Title 14 of the California Code of Regulations Section 460. Project activities have the potential to take American badger and desert kit fox individuals, and development may result in loss of habitat and/or foraging habitat. CDFW recommends inclusion of pre-construction American Badger and Desert Kit Fox survey and suggests the following measure be included in the environmental document. No more than 30 days prior to the beginning of ground disturbance and/or Project activities, a qualified biologist shall conduct a survey to determine if potential desert kit fox or American badger burrows are present in the Project Area. If potential burrows are located, they shall be monitored by the qualified biologist. If the burrow is determined to be active, the qualified biologist shall verify there are suitable burrows outside of the Project Area prior to undertaking passive relocation actions. If no suitable burrows are located, artificial burrows shall be created at least 14 days prior to passive relocation. The qualified biologist shall block the entrance of the active burrow with soil, sticks, and debris for 3-5 days to discourage the use of the burrow prior to Project activities. The entrance shall be blocked to an incrementally greater degree over the 3-5-day period. After the qualified biologist has determined there are no active burrows the burrows shall be hand-excavated to prevent re-use. No disturbance of active dens shall take place when juvenile desert kit fox and juvenile American badgers may be present and dependent on parental care. A qualified biologist shall determine appropriate buffers and maintain connectivity to adjacent habitat should natal burrows be present.

### **Wildlife in Pipes and Construction Materials**

Biological Monitor(s) shall visually check all sections of pipe/construction materials for the presence of wildlife sheltering within them prior to the pipe sections being placed in the trench and attached together, or shall have the ends capped while stored on site so as to prevent wildlife from entering. After attachment of the pipe sections to one another, whether in the trench or not, the exposed end(s) of the pipeline shall be capped at the end of each day during construction to prevent wildlife from entering and being trapped within the pipeline.

### **Escape Ramp in Trench**

At the end of each work day, the Biological Monitor(s) shall place an escape ramp at each end of the open trench to allow any animals that may have become entrapped in

the trench to climb out overnight. The ramp may be constructed of either dirt fill or wood planking or other suitable material that is placed at an angle no greater than 30 degree.

### **Lake and Streambed Alteration Program**

Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: Substantially divert or obstruct the natural flow of any river, stream or lake; Substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or Deposit debris, waste or other materials that could pass into any river, stream or lake. Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water. Upon receipt of a complete notification, CDFW determines if the proposed Project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake and Streambed Alteration (LSA) Agreement is required. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify your Project that would eliminate or reduce harmful impacts to fish and wildlife resources. CDFW's issuance of an LSA Agreement is a "Project" subject to CEQA (see Pub. Resources Code 21065). To facilitate issuance of an LSA Agreement, if necessary, the EA should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with CDFW is recommended, since modification of the proposed Project may be required to avoid or reduce impacts to fish and wildlife resources.

### **Environmental Data**

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB).

### **Filing Fees**

Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

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Oberon Solar Project  
April 14, 2021  
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CDFW appreciates the opportunity to comment on the NOP to assist the Lead Agency in identifying and mitigating Project impacts on biological resources. Questions regarding this letter should be directed to Dr. Shankar Sharma, Senior Environmental Scientist Specialist of Renewable Energy at [Shankar.Sharma@wildlife.ca.gov](mailto:Shankar.Sharma@wildlife.ca.gov) or (909) 228-3692.

Sincerely,

DocuSigned by:  
*Alisa Ellsworth*  
84FBB8273E4C480...

Alisa Ellsworth  
Environmental Program Manager

*THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA*

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CRA. Metropolitan's CRA transmission line easements lie on federally owned land, managed by BLM. The transmission lines were built for the sole and exclusive purpose of supplying power from the Hoover and Parker projects to the five pumping plants along the CRA.

Metropolitan's ownership and operation of the CRA and its 230 kV transmissions system is vital to its mission to provide Metropolitan's 5,200-square-mile service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

### **Project Understanding**

IP Oberon, LLC (Proponent), a subsidiary of Intersect Power, LLC, proposes to construct, operate, maintain, and decommission a 500 megawatt (MW) solar photovoltaic (PV) electricity generating station, battery energy storage facility, electrical substation, generation intertie (gen-tie) lines and associated access roads on BLM managed land located near Desert Center in Riverside County, California (Project). The Project is known as the Oberon Renewable Energy Project.

The proposed Project covers approximately 4,700 acres of BLM-administered land for the solar facility. The lands fall within the California Desert Conservation Planning Area and within the Development Focus Area pursuant to the Desert Renewable Energy Conservation Plan (DRECP) amendment. The DRECP contains Conservation and Management Actions (CMAs) that are intended to avoid and/or minimize impacts to numerous resources within the plan area. However, application of the relevant CMAs to the proposed project would preclude the ability to construct and operate the 500 MW Project in an area identified as suitable for renewable energy development. As such, the proposed Project would require a plan amendment to allow solar development within the application area.

The proposed Project would produce up to 500 MW PV generation from an integrated energy facility that would connect to Southern California Edison's (SCE) 500 kV Red Bluff Substation via one new 500 kV gen-tie line. The proposed Project would include a project substation yard approximately 20,000 square feet in size, a battery energy storage facility capable of storing 500 MW of power, and an approximately 3,000-square-foot operations and maintenance (O&M) building and ancillary facilities designed for project security, employee offices, and parts storage. Electrical power for the O&M building and substation would be supplied via a new overhead or underground 12 kV distribution line from the existing SCE distribution system adjacent to the solar facility site.

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### **Power Generation: Potential Impacts to Metropolitan's Transmissions System**

Metropolitan appreciates that the proposed Project would increase solar power to California's grid and provide a new source of flexible supply with the addition of battery storage capabilities. However, Metropolitan requests that the lead agency analyze and assess any potential impacts to Metropolitan's transmission system. Metropolitan also requests that the lead agency ensure that the California Independent System Operator (CAISO) includes Metropolitan as a Potentially Affected System for this proposed Project in accordance with the CAISO Tariff and Business Practice Manuals for the Generation Interconnection Procedures and be included in any related technical generation interconnection studies.

### **Water Resources: Potential Impacts on Colorado River and Local Water Supplies**

Metropolitan is concerned about the potential impacts of desert projects on Colorado River water supplies. Of immediate concern to California's Colorado River water users is the accounting surface that extends west along the I-10 Corridor from the Palo Verde Valley into the Chuckwalla Valley. Water is a scarce resource in the desert southwest, and its use should reflect that scarcity. Metropolitan is primarily concerned with the individual and cumulative impacts of any new demands on Colorado River water resources because the water supplies allocated to California are already fully apportioned and utilized.

Should the proposed Project utilize groundwater from on-site wells for its water supply, Metropolitan requests that the lead agency provide an analysis of the utilization of groundwater from on-site wells. Metropolitan is concerned that any use of groundwater may draw water from a groundwater basin that is hydro-geologically connected to the Colorado River, within an area referred to as the "accounting surface." The extent of the accounting surface area for the Colorado River was determined by the U.S. Geological Survey (USGS) and U.S. Bureau of Reclamation as part of a proposed rule-making process. See Notice of Proposed Rule Regulating the Use of the Lower Colorado River Without an Entitlement, 73 Fed. Reg. 40916 (July 16, 2008) at <http://www.usbr.gov/lc/region/programs/unlawfuluse/FRnotice0708.pdf>; USGS Scientific Investigation Report No. 2008-5113 at <http://pubs.usgs.gov/sir/2008/5113/>. To the extent the proposed Project uses Colorado River water, it must have a documented right to do so.

In addition, Metropolitan asks that regulators require as a condition of project approval that project developers monitor groundwater use to ensure that, over the life of the project, that there are no impacts to Colorado River resources. If impacts are detected, the project developer should be required to mitigate and offset such impacts.

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We appreciate the opportunity to provide input to your planning process and we look forward to receiving future documentation for this project. For further assistance, please contact Ms. Malinda Stalvey at (213) 217-5545.

Very truly yours,

DocuSigned by:  
  
1C5AACFD98D9493...

Jennifer Harriger

Unit Manager, Environmental Planning Section

MKS:ds

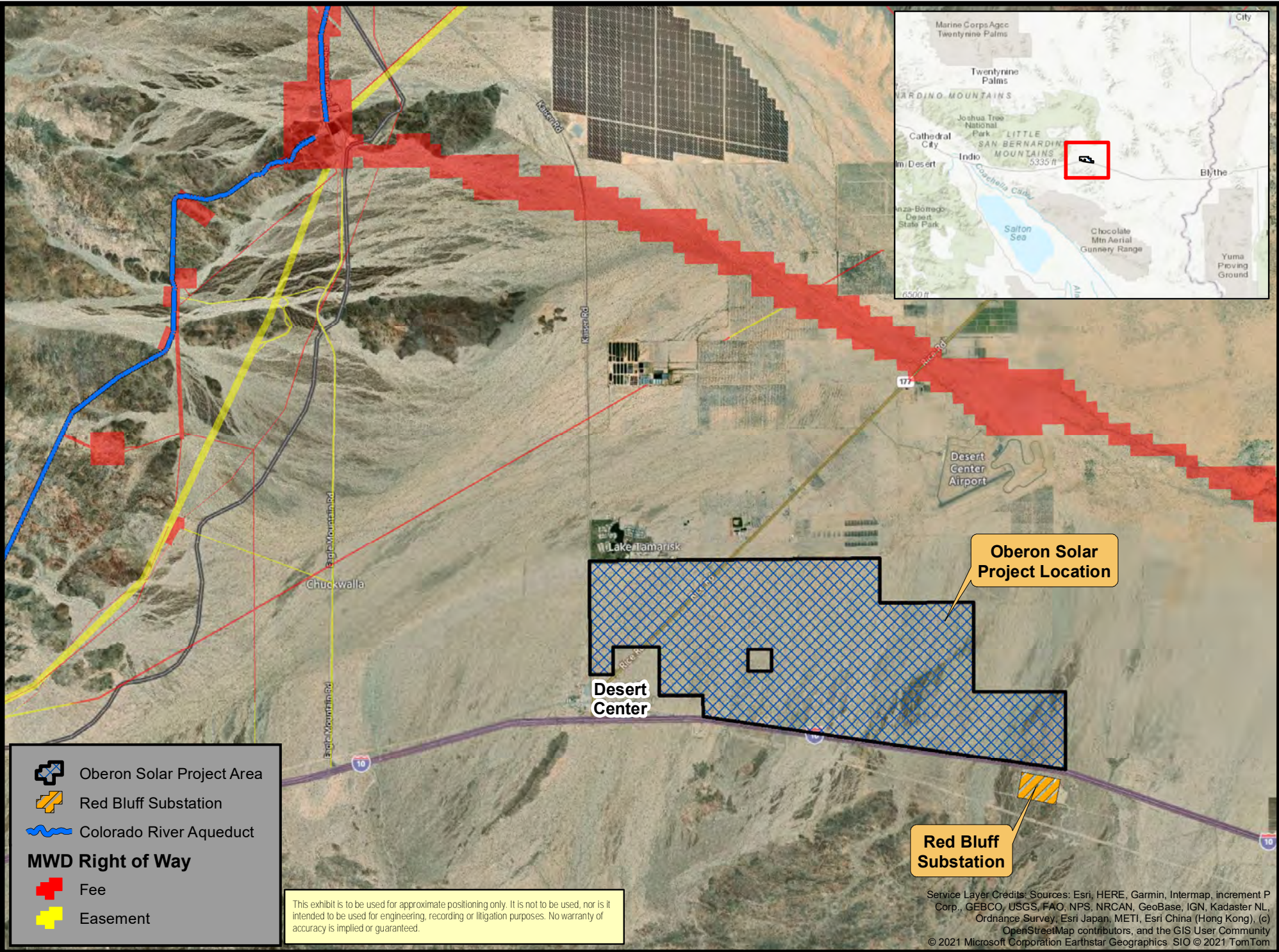
SharePoint\Oberon Solar Project NOI\_Comment Letter

Enclosure:


(1) Location Map



Infrastructure\_Unit\GIS\Geodetics\_and\_Mapping\_Team\Projects\Special\_Requests\Malinda\_Staley\GIS\Oberon\_Solar\_Project\_Map.mxd [Printed 4/15/2021] Photography Date: Bing Prepared by: Tom Blecher (Geodetics & Mapping Team) Checked by: Malinda Staley Job#: GIS21-04-14



 Oberon Solar Project Area

 Red Bluff Substation

 Colorado River Aqueduct

**MWD Right of Way**

 Fee

 Easement

This exhibit is to be used for approximate positioning only. It is not to be used, nor is it intended to be used for engineering, recording or litigation purposes. No warranty of accuracy is implied or guaranteed.

**Oberon Solar Project Location**

**Red Bluff Substation**

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street  
San Francisco, CA 94105-3901

April 19, 2021

Brandon Anderson  
Assistant District Manager  
Bureau of Land Management  
22835 Calle San Juan De Los Lagos  
Moreno Valley, CA 92553

Subject: Scoping comments for the proposed Oberon Solar Project, Riverside County, California

Dear Mr. Anderson:

The U.S. Environmental Protection Agency has reviewed the Notice of Intent published on March 18, 2021 to amend the California Desert Conservation Area (CDCA) Plan and prepare an associated Environmental Assessment for the subject project. Our comments are provided pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508) and Section 309 of the Clean Air Act.

The EPA serves as a Cooperating Agency for this project and has appreciated the opportunity to highlight our concerns and recommendations to the BLM to date. The project is located within a development focus area (DFA), as identified through the Desert Renewable Energy Conservation Plan (DRECP) amendment to the CDCA Plan. As described in the Notice of Intent, the application of the DRECP's Conservation Management Actions (CMAs) to the proposed project would preclude the ability to construct and operate the 500 -megawatt project. As a result, the proposed project would require a plan amendment to allow solar development within the application area.

The EPA continues to support renewable energy resource development consistent with Executive Orders 13990 and 14008. Using renewable energy resources, such as solar power, can help the nation meet its energy requirements while reducing greenhouse gas emissions. We also note that the BLM in conjunction with federal and state resource agencies developed the DRECP and its CMAs through a multi-year intensive public process. The EPA also participated in its development and served as a Cooperating Agency. The DRECP CMAs are intended to assist federal land managers and applicants in balancing renewable energy development while protecting air, aquatic, biological and cultural resources in the Riverside East Solar Energy Zone (SEZ) and other DFAs. The Riverside East SEZ has served as the epicenter for utility scale solar development on federal lands and the EPA encourages careful siting and consistent adherence to the CMAs, avoidance of microphyll woodlands and protection of DRECP designated wildlife connectivity corridors for the multitude of projects proposed in the DFA.

To assist in the scoping process, we have identified several issues for your attention in the preparation of the EA to address our concerns:

**Purpose and Need**

The Draft EA should clearly identify the underlying purpose and need for the projects and for which alternatives are being proposed. When formulating the need, identify and describe the underlying problem, deficiency, or opportunity that the actions are meant to address. For example, this section should clearly indicate the factors that are used to evaluate the size of the projects, in terms of

megawatts (MWs) and land acreage, in relation to achieving the underlying need. Describe the criteria used to determine the minimum project size that would be considered feasible. The Draft EA should discuss the proposed projects in the context of the larger energy market that the projects would serve; identify potential purchasers of the power produced; and discuss how the projects will assist the State, and other potential purchasers of the energy, in meeting their renewable energy portfolio standards and goals.

### **Alternatives Analysis**

A reasonable range of alternatives will include alternative options for avoiding environmental impacts. Reasonable alternatives could include, but are not necessarily limited to, alternative configurations and mountings, alternative capacities, alternative site preparation techniques and alternative photovoltaic (PV) and energy storage technologies.

As part of the development of alternatives, we recommend that the BLM consider the latest science that was used to develop the DRECP, as well as any recent applicable studies, and evaluate an action alternative that would fully comply with the DRECP CMAs and consequently not require a plan amendment. We recommend that the Draft EA include a ‘crosswalk’ table highlighting how each alternative would meet or not meet the criteria for each CMA. Additionally, a reduced size alternative would allow the applicant greater flexibility to avoid any environmentally sensitive areas and should be considered, if necessary. The Draft EA should provide a discussion of the reasons for the elimination of alternatives which are not evaluated in detail.

### **Impact Assessment Methodology**

The CEQ’s recently updated NEPA Regulations state that in considering whether the effects of the proposed action are significant, agencies shall analyze the potentially affected environment and degree of the effects of the action. In addition, agencies should consider both short- and long- term effects (40 CFR 1501.3). Such analysis will assist an agency determine the appropriate level of NEPA review. We recommend that the impact assessment methodology be identified for each resource evaluated and include one or more significance thresholds against which project impacts can be compared. This will help interpret the impacts for the reader as the DRECP EIS did not analyze site-specific impacts on each resource and conditions have changed in the Riverside East Solar Energy Zone (SEZ) since the DRECP EIS was finalized. The Draft EA should also identify impacts that occur at the same time and place as the proposed action as well as those occurring later in time and further removed in distance from the proposed action (40 CFR 1508.1(g)).

### ***Other Planned Actions and Environmental Trends***

We recommend that the Draft EA identify other planned actions in the local area consistent with - 40 CFR 1502.15. There are currently many solar energy projects in operation, or being proposed and constructed, on public and private lands in the western portion of the Riverside East Solar Energy Zone. Include nearby solar projects (e.g. Desert Sunlight, Desert Harvest, IP Athos, Palen, Arica and Victory Pass, etc.), in addition to other planned actions in the area.

The description of the affected environment (essentially the No Action alternative) should be comprehensive and include reasonably foreseeable environmental trends and planned actions in the area. Such an assessment in the Draft EA will be useful in assisting the BLM determine whether a finding of no significant impact determination can be made. Reasonably foreseeable environmental trends include increasing intensity of precipitation and flood events expected to occur in the project area and degradation of aquatic, biological, cultural and air resources from numerous existing and proposed

utility-scale solar projects in the local area. The condition of these resources and their expected future condition should be considered in the baseline for the impact assessment, with project impacts discussed in this context.

It is important to note that the projects constructed to date, or nearing construction, in the Riverside East SEZ were not subject to the DRECP CMAs and that impacts occurred to resources that were likely greater than what the DRECP would have prescribed. Arica, Victory Pass and Oberon are the first three projects undergoing environmental analysis subject to its requirements. Describe in the Draft EA whether the DRECP anticipated and discussed impacts from interim projects that were ‘grandfathered’ in and whether its conclusions and recommendations account for these changed conditions in the local area.

### **Mitigation, Monitoring and Enforceability**

The EPA recommends that the Draft EA include specific mitigation measures not already included in the proposed action or alternatives and a Mitigation Monitoring and Reporting Program. We recommend that all mitigation measures and the Mitigation Monitoring and Reporting Program be adopted in the final decision document and be included as conditions in construction contracts and any other approvals or enforceable agreements (such as final design approval or enforceable terms, conditions and stipulations in the ROW grant), as appropriate, to minimize adverse environmental impacts to the greatest extent possible. If the BLM finds no significant impacts based on mitigation, the mitigated finding of no significant impact shall state any enforceable mitigation requirements or commitments that will be undertaken to avoid significant impacts (40 CFR 1501.6(c)).

### **Water Resources**

#### *Water Supply and Water Quality*

The Draft EA should estimate the quantity of water the projects will require during the construction phase and during operations (e.g. cleaning the PV panels during routine maintenance). Describe the source of this water and potential effects on other water users. If groundwater will be used, identify the potentially-affected groundwater basin(s) and impacts to groundwater recharge, springs or other surface water bodies, biologic resources, and the potential for subsidence. If water will be supplied from an off-site source, analyze environmental impacts associated with the transport and storage of such an alternative water supply. Identify available technologies to minimize or recycle water, and utilize xeric native plants in any landscaping around buildings. Describe water reliability for the proposed projects in light of the numerous solar facilities in the vicinity and clarify how existing and/or proposed sources may be affected by changing precipitation patterns.

#### *Clean Water Act Section 404 Applicability*

Confirm with the U.S. Army Corps of Engineers that there are no jurisdictional waters requiring a Clean Water Act Section 404 permit for discharge of dredged or fill materials into waters of the United States, including wetlands and “special aquatic sites”. If potential impacts to waters of the U.S. are found, specify the acreage and channel lengths, habitat types, and functions and values of these waters. Describe the potential environmental impacts and discuss alternatives to avoid or minimize those discharges, and potential measures to mitigate potential impacts.

#### *Avoiding Desert Washes*

In addition to avoiding wetlands and waters of the U.S., we recommend careful micro-siting of project components to avoid and protect ephemeral drainages or desert washes and dry wash woodlands. These

waters are being impacted by the numerous large-scale solar projects in the Riverside East SEZ. Desert washes perform a diversity of hydrologic, biochemical, and geochemical functions that directly affect the integrity and functional condition of higher-order waters downstream. Healthy ephemeral waters with characteristic plant communities control rates of sediment deposition and dissipate the energy associated with flood flows. Ephemeral washes also provide habitat for breeding, shelter, foraging, and movement of wildlife. Many plant populations are dependent on these aquatic ecosystems and adapted to their unique conditions. These values are present regardless of whether the washes are deemed jurisdictional waters of the U.S. under Section 404 of the Clean Water Act.

We note that the eastern portion of the proposed project site is located in a large desert dry wash woodland. This area was also designated by the DRECP as one of three critical wildlife connectivity corridors. We continue to recommend that BLM and the applicant refine their site plan to avoid such critical habitat and adhere to buffer sizes as prescribed by the DRECP CMAs to further protect these resources. The EPA continues to recommend such buffer zones on all projects under development in the Riverside East SEZ and we note that the Crimson Solar project proposes to meet these requirements.

#### *Flood Control*

Consider in the Draft EA the impacts of changing precipitation patterns on the project, as part of its analysis of impacts to water resources. Discuss the anticipated extent and depth of overland flows through the development areas given a 500-year flood event, as compared to a 100-year event. Identify design considerations needed to accommodate future anticipated effects (e.g. increased intensity and severity of storms) such as upsizing the stormwater management system. Describe whether 200-ft buffers around desert wash woodlands/scrub would protect against a 100-year as well as a 500-year storm event.

#### *Placement of Panels to Minimize Erosion and Impacts to Site Hydrology*

Placement of PV panels within and adjacent to washes could result in erosion, increased sedimentation, migration of channels, and local scour. To minimize these potential impacts, we recommend: 1) avoiding placement of support structures in washes; 2) committing to the use of natural washes in their present location and natural form; 3) utilizing existing natural drainage channels on site in lieu of concrete-lined channels; 4) avoiding microphyll woodlands and including adequate natural buffers on either side of desert washes including for flood control, as prescribed by the DRECP CMAs; 5) minimizing the number of road crossings over washes; and 6) designing necessary crossings to provide adequate flow-through during storm events; 7) maintaining micro-level topography to the greatest extent possible; and 8) mounting PV panels at sufficient height above ground to maintain natural vegetation.

#### **Site Preparation and Minimizing Impacts to Soils and Vegetation**

The EPA strongly supports consideration and implementation of design features that would further minimize grading, soil disturbance and vegetation removal during construction. Limiting soil disruption will minimize potential impacts to sensitive soils, soil productivity, drainage, erosion, vegetation and fugitive dust. Research at the Ivanpah Solar Electric Generating Station indicates that mowing instead of grading at concentrated solar facilities may allow for recovery of desert shrubs to pre-construction percent ground cover and heights within seven years.<sup>1</sup> To minimize such impacts and maximize opportunities for vegetation recovery, we recommend that the BLM consider design elements that have been proposed at the Crimson Solar Project<sup>2</sup> located in the Riverside East SEZ. Specifically, we

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<sup>1</sup> Grodsky, W.M. & R.R. Hernandez. 2020. Solar energy impacts on the ecosystem services and indigenous value of desert plants. *Nature Sustainability*. *In revision*.

<sup>2</sup> Crimson Solar Project, Draft Environmental Impact Statement and Environmental Impact Report and Draft Land Use Plan

recommend: using a track-mounted pile driver for solar array support structure installation which would limit soil disturbance to the areas under the two 12- to 18-inch wide tracks with a 4-foot space between the tracks; using only hand techniques to trim vegetation greater than 18 inches; and mounting inverters and transformers on steel skids and piers to allow for soils underneath to remain pervious and undisturbed. The EPA recommends that these measures be incorporated under the preferred alternative and be included as conditions of certification in the final environmental document.

Additionally, we recommend the subject projects consider incorporating propagule islands – patches of intact vegetation and soils that provide seeds and soil microbial propagules that could facilitate revegetation or recolonization of adjacent disturbed areas. Such patches have protected sensitive plants at the Ivanpah site and have been proposed at the BLM’s Yellow Pine Solar project in Nevada.

#### *Phased Approach to Site Preparation and Removal of Vegetation*

Prematurely grading or disturbing the entire site and removing vegetation can result in excessive dust problems and unnecessary impacts to habitat, vegetation, soils and other resources – particularly if the project is not constructed in its entirety. As PV technology improves, less land is needed per MW generated. During past solar site visits, we have seen large acreages graded that ultimately were not needed to meet the MW goals for a project. This land now sits idle, fenced in and may take decades to be restored. To avoid a similar outcome, we recommend a mitigation measure or permit condition that would require a phased approach to construction that ensures only the necessary acreage is built upon. Consider including a condition of certification in the final environmental document that requires that soil disturbance be contingent upon, and proportional to, an existing power purchase agreement (PPA).

#### **Air Quality**

The Draft EA should provide a detailed discussion of ambient air conditions (baseline or existing conditions), National Ambient Air Quality Standards, nonattainment areas, general conformity requirements, and potential air quality impacts of the project, including to neighboring Joshua Tree National Park, for each fully evaluated alternative. Emissions of all air pollutants, including greenhouse gases, should be estimated for construction and operations. The Draft EA should analyze reasonable practicable mitigation measures to reduce project-related greenhouse gas, fugitive dust, and other emissions. Typical mitigation measures include design changes to reduce construction and operations emissions, fugitive dust control measures, mobile and stationary source controls and administrative controls

Local significance thresholds for air quality may be exceeded during construction based on past solar project estimates. Given the potential for concurrent construction schedules for Arica, Victory Pass and Oberon, we recommend that the BLM closely coordinate with the South Coast Air Quality Management District and the National Park Service and provide an update on such coordination in the Draft EA. Reasonable mitigation measures to reduce fugitive dust should be implemented, for the benefit of localized receptors such as construction workers and nearby residents, and to minimize potential exposure to *Coccidioides immitis* (see Valley Fever comment below). The BLM conducted a survey for the Crimson Solar Project Final EIS to confirm the availability of Tier 4 engines for future project construction and found 85% of off-road equipment could meet Tier 4 standards. We support the usage of Tier 4 engines for this project as well. The Crimson Solar Final EIS also included a commitment to limit idling on-site to two minutes for off-road equipment, further reducing emissions beyond California’s five-minute maximum idling requirement. We recommend that the BLM include these mitigation strategies for both projects and include as conditions of certification in the environmental document.

Consider also requiring the installation of real-time PM<sub>10</sub> dust monitoring equipment, like that installed at other BLM solar facilities (e.g. Desert Sunlight), to monitor dust during both the construction and operational phases of the project.

#### *Valley Fever*

The project site is located in an area that the Centers for Disease Control has classified as endemic for *Coccidioides immitis*, a fungus causing Valley Fever in humans.<sup>3</sup> Riverside County has the highest incidences of cases per 100,000 people in California. Ground disturbing activities associated with the proposed projects may result in dispersal of *Coccidioides* spores. A discussion of this potential health and safety impact should be included in the Draft EA. Measures can be identified to prevent or reduce the risk of exposure to workers and local residents.

#### **Biological Resources and Habitat Protection**

The EPA recommends coordination with the U.S. Fish and Wildlife Service (USFWS) on matters pertaining to species and habitat protection. We offer the following general recommendations based on our experience with multiple solar projects:

#### *Protected Species*

The Draft EA should identify all petitioned and listed threatened and endangered species and critical habitat that might occur within the project areas. The document should identify and quantify which species or critical habitat might be directly or indirectly affected by each alternative. We recommend that the Draft EA include a biological assessment, as well as a description of the progress or outcome of consultation with the USFWS under Section 7 of the Endangered Species Act. The Draft EA should indicate what measures will be taken to protect important wildlife habitat areas from potential adverse effects of proposed activities.

Analysis of impacts and mitigation on listed species should include: (1) baseline conditions of habitats and populations of the covered species; (2) a clear description of how avoidance, mitigation and conservation measures will protect and encourage the recovery of the covered species and their habitats in the project area; and (3) monitoring, reporting and adaptive management efforts to ensure species and habitat conservation effectiveness.

#### *Desert Biodiversity and Aeolian Sand Habitat*

Impacts to biological resources can be substantial in desert habitats. Unless projects establish strict conservation goals for desert aquatic resources, renewable energy production may come at the expense of desert biodiversity. Less than 1% of the vegetation in deserts is riparian (streamside), yet most desert animal species, whether birds, mammals, reptiles or amphibians, rely on riparian habitat for at least part of their life cycle. In arid areas, disturbed vegetation is slow to recover.

We recommend practices that minimize disturbance of desert pavement and preserve habitat to the greatest extent feasible. Vegetation clearing and soil disturbance could result in a disruption of geomorphic process (e.g. sand transportation) essential to the function and integrity of certain desert habitats (e.g. sand dunes). Confirm, in the Draft EA, the extent to which desert dune and non-sand dune habitat will be impacted.

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<sup>3</sup> See: <http://www.cdc.gov/fungal/diseases/coccidioidomycosis/causes.html>





THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

April 19, 2021

Mr. Brandon Anderson  
Bureau of Land Management  
22835 Calle San Juan De Los Lagos  
Moreno Valley, CA 92553

**VIA EMAIL**  
BLM\_CA\_PS\_OberonSolar@blm.gov  
NEPA #: DOI-BLM-CA-D060-2020-0040-EA

Dear Mr. Anderson:

Notice of Intent to Amend the California Desert Conservation Area Plan and Prepare an Associated Environmental Assessment for the Oberon Solar Project, Riverside County, CA

The Metropolitan Water District of Southern California (Metropolitan) has reviewed the Bureau of Land Management's (BLM) Notice of Intent to Amend the California Desert Conservation Area Plan and Prepare an Associated Environmental Assessment for the Oberon Solar Project, Riverside County, CA. Metropolitan is pleased to submit comments for consideration to the BLM. Metropolitan provides these comments to ensure that any potential impacts on its facilities in the vicinity of the proposed Project and on Colorado River water resources are adequately addressed in the proposed environmental document.

**Background**

Metropolitan is a public agency and regional water wholesaler. It is comprised of 26 member public agencies serving approximately 19 million people in six counties in southern California. One of Metropolitan's major water supplies is the Colorado River via Metropolitan's Colorado River Aqueduct (CRA). Metropolitan holds an entitlement to water from the Colorado River. The CRA consists of tunnels, open canals and buried pipelines. CRA-related facilities also include above and below ground reservoirs and aquifers, access and patrol roads, communication facilities, and residential housing sites. The CRA, which can deliver up to 1.25 million acre-feet of water annually, extends 242 miles from the Colorado River, through the Mojave Desert and into Lake Mathews. Metropolitan has five pumping plants located along the CRA, which consume approximately 2,400 gigawatt-hours of energy when the CRA is operating at full capacity.

Concurrent with its construction of the CRA in the mid-1930s, Metropolitan constructed 305 miles of 230 kilovolt (kV) transmission lines that run from the Mead Substation in southern Nevada, extend south, then branch east to Parker, California, and then west along Metropolitan's

### *Vegetation Management*

The Draft EA should discuss general locations of rare plants and describe how potential impacts will be minimized. The Draft EA should also consider impacts associated with an increase of shade on vegetation and species in the desert environment, and impacts associated with constructing fences around the project site. If any pesticides and herbicides would be used for vegetation treatment, the Draft EA should address any potential toxic hazards related to the application of the chemicals, and describe what actions would be taken to ensure that impacts will be minimized. Soils under PV arrays are frequently sterilized with pesticides to prevent weed growth, which prevents the natural revegetation of native plants that could minimize erosion and provide wildlife habitat. We recommend maintaining the presence of native plants under PV panels, to the greatest extent possible. We encourage the use of fencing that could also allow for unimpeded flows during precipitation events.

### *Impacts to Birds*

The Draft EA should discuss whether there is increased fatality risk to birds, particularly water fowl, associated with solar PV arrays. Birds may mistake the PV panels for water – the so-called “lake effect” – resulting in unexpected deaths of birds from collisions with the solar panels. The Draft EA should discuss the issue of avian mortality and describe measures to minimize potential impacts. We recommend that the Bird and Bat Conservation Strategies include avian mortality monitoring and adaptive management measures.

The Draft EA should include assurances that the design of the transmission line would comply with current standards and practices that reduce the potential for raptor fatalities and injuries. The commonly referenced source of such design practices is found within the Avian Power Line Interaction Committee documents: *Suggested Practices for Avian Protection on Power Lines: State of the Art in 2006* manual and *Reducing Avian Collisions with Power Lines: The State of the Art in 2012*.

### *Cryptobiotic Soil Crusts*

We recommend avoiding disturbance of any desert pavement/cryptobiotic soil crusts present in the project application area and adopting methods and installation techniques that will minimize impacts to soil crusts to the maximum extent possible.

### *Invasive Species*

Executive Order (E.O.) 13112, *Invasive Species* (February 3, 1999), mandates that federal agencies, whose actions may affect the status of invasive species, use their relevant authorities to prevent their introduction, provide for their control, and minimize the economic, ecological, and human health impacts that invasive species cause. The Draft EA should describe how the project will meet the requirements of E.O. 13112. We recommend including an invasive plant management plan for the monitoring and control of noxious weeds.

### **Environmental Justice**

Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” (February 16, 1994), directs federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations. It further directs agencies to develop a strategy for implementing environmental justice and providing minority and low-income communities access to public information and public participation. As such, we recommend that the BLM address adverse environmental effects of the proposed project on these communities and outline measures to mitigate for impacts.

We encourage the BLM to use EPA’s EJSCREEN and/or the most recent American Community Survey from the U.S. Census Bureau (i.e., 2014-2018) for the Draft EA to determine the presence of minority and low-income populations.

After the BLM has determined if minority and low-income populations exist in the project area, we recommend that the Draft EA discuss whether these communities would be potentially affected by the proposed action or in conjunction with the numerous project under development or in operation in the area. We also recommend addressing whether any of the alternatives would cause any disproportionate adverse impacts, such as higher exposure to toxins; changes in existing ecological, cultural, economic, or social resources or access; cumulative or multiple adverse exposures from environmental hazards; or community disruption.

If it is determined that minority and low-income populations may be disproportionately impacted, describe in the Draft EA the measures taken by the BLM to fully analyze the environmental effects of the action on minority communities and low-income populations and identify potential mitigation measures. Clearly identify a monitoring and adaptive management plan to ensure that mitigation is effective and successful.

### **Consultation with Tribal Governments**

It is important that formal government-to-government consultation take place early in the scoping phase of the project to ensure that all issues are adequately addressed in the EA. The principles for interactions with tribal governments are outlined in the presidential “Memorandum on Government-to Government Relations with Native American Tribal Governments” (April 29, 1994) and Executive Order 13175, “Consultation and Coordination with Indian Tribal Governments” (November 6, 2000).

In the Draft EA, summarize the results of tribal consultation and identify the main concerns expressed by tribes (if any), and how those concerns were addressed. As a resource, we recommend the document *Tribal Consultation: Best Practices in Historic Preservation*<sup>4</sup>, published by the National Association of Tribal Historic Preservation Officers. The EPA Region 9 has a robust tribal program. If you need assistance with consultation or updated tribal contacts, please contact John (JR) Herbst at (619) 235-4787 or [herbst.john@epa.gov](mailto:herbst.john@epa.gov).

### **National Historic Preservation Act**

Consultation for tribal cultural resources is required under Section 106 of the National Historic Preservation Act. Historic properties under the NHPA are properties that are included in the National Register of Historic Places or that meet the criteria for the NRHP. Section 106 of the NHPA requires a federal agency, upon determining that activities under its control could affect historic properties, to consult with the appropriate State Historic Preservation Office/Tribal Historic Preservation Office. Under NEPA, any impacts to tribal, cultural, or other treaty resources must be disclosed in the Draft EIS. Section 106 of the NHPA requires that federal agencies consider the effects of their actions on cultural resources, following the regulation at 36 CFR 800.

In the Draft EA, discuss how the BLM would avoid or minimize adverse effects on the physical integrity, accessibility, or use of cultural resources or archaeological sites, including traditional cultural properties, throughout the project area. Clearly discuss mitigation measures for archaeological sites and

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<sup>4</sup> National Association of Tribal Historic Preservation Officers. May 2005. *Tribal Consultation: Best Practices in Historic Preservation*. Available at [http://www.nathpo.org/PDF/Tribal\\_Consultation.pdf](http://www.nathpo.org/PDF/Tribal_Consultation.pdf).

TCPs. We encourage the BLM to append any Memoranda of Agreements to the Draft EA, after redacting specific information about these sites that is sensitive and protected under Section 304 of the NHPA. We also recommend providing a summary of all coordination with Tribes and with the State and Tribal Historic Preservation Offices, including identification of NRHP eligible sites and development of a Cultural Resource Management Plan.

### **Executive Order 13007**

Executive Order 13007, “Indian Sacred Sites” (May 24, 1996), requires federal land managing agencies to accommodate access to, and ceremonial use of, Indian sacred sites by Indian religious practitioners, and to avoid adversely affecting the physical integrity, accessibility, or use of sacred sites. It is important to note that a sacred site may not meet the NRHP criteria for a historic property and that, conversely, a historic property may not meet the criteria for a sacred site. It is also important to note that sacred sites may not be identified solely in consulting with tribes located within geographic proximity of the project. Tribes located outside the direct impact area the plan area may also have religiously significant ties to lands within the plan area and should be included in the consultation process.

In the Draft EA, address the existence of Indian sacred sites in the project areas, including seeps and springs, that may be considered spiritual sites by regional tribal nations. Discuss how the BLM would ensure that the proposed action would avoid or mitigate for the impacts to the physical integrity, accessibility, or use of sacred sites.

### **Hazardous Waste and Pesticides**

The Draft EA should discuss the potential impacts of waste generation, including hazardous waste, from construction and operation activities, as well as the proposed battery storage facilities. The document should identify projected waste types and volumes and describe their expected storage, disposal, and management. The Draft EA should explain how the generation of hazardous waste would be minimized, and identify applicable federal hazardous waste requirements. If PV panel trackers will utilize hazardous materials such as refrigerants, discuss and evaluate potential impacts from accidental or unexpected releases. The Draft EA should discuss whether any pesticides, including herbicides or rodenticides, would be used at the project site.

### **Battery Storage**

Include an analysis of the potential energy needs of the proposed energy storage systems (e.g. for HVAC), discuss to what extent such needs can be met by energy generated on site by the solar facility, and include air emission estimates for the projects, as needed.

We appreciate the opportunity to provide comments on the preparation of the Draft EA. When the Draft EA and/or other environmental analysis is released for public review, please send one copy to the address above (mail code: TIP-2). If you have any questions, please contact me at (415) 972-3238 or [plenys.thomas@epa.gov](mailto:plenys.thomas@epa.gov).

Sincerely,



Tom Plenys  
Environmental Review Branch



# United States Department of the Interior

JOSHUA TREE NATIONAL PARK  
74485 National Park Drive  
Twentynine Palms, CA 92277



IN REPLY REFER TO:

1.B (JOTR-S)

April 19, 2021

To: Janet Cheek, Field Manager, BLM Palm Springs Office

From: David Smith, Superintendent, Joshua Tree National Park

Re: Scoping comments for proposed Oberon Solar Project

The National Park Service (NPS) appreciates the opportunity to provide scoping comments for the National Environmental Policy Act (NEPA) process regarding the proposed Oberon Solar project.

The project would join a series of new and proposed solar projects to the southeast of Joshua Tree National Park (the park). The National Park Service manages this park through the Organic Act and through the park's enabling legislation to provide for the conservation of the park's resources and for public enjoyment.

We recognize the important role that renewable energy development plays in the global response to climate change and recognize that climate change is the greatest threat to the park. We also recognize that the park plays a key role in the economic and environmental health of Riverside County and the Southland. These comments are offered as recommendations to help ensure the continued environmental health of our public lands and economic sustainability of our deserts.

### Ethnographic Resources, including water

The National Park Service works closely with traditionally associated communities of this desert area. Joshua Tree National Park is tied to BLM lands through a cultural landscape formed via the Salt Song corridor and other traditional trail and landscape uses and values.

**Concern:** The proposed project would clear vegetation with traditional uses and could affect water availability. Ethnographic resources of concern on the shared landscape include chia, annual salvia, ironwood, creosote rings, viewsheds, and water. Salt Songs are visually and physically connected landscapes which derive significance from both the symbolic and phenomenological experience of traversing through them; the proposed project may change this landscape and the experience of moving through it.

**Recommendation:** The NPS recommends that the BLM work closely with tribal partners to determine the impacts to ethnographically significant species, plant and wildlife communities, and their uses to traditionally associated communities. The NPS recommends accommodation for

traditionally associated communities to complete activities on the site to address losses for which no mitigation is possible, including the opportunity to perform ceremony or cultural practices related to those resources, and accommodation to allow such practices to occur with regard to appropriate seasonality or other temporal concerns (e.g., at the correct time in a lunar cycle).

### Water Quantity and Microphyll Woodlands

Current research suggests that microphyll woodlands provide essential ecosystem services. The woodlands and their seasonal washes (streams) transport water, seeds, and other nutrients to nearby desert ecosystems. Microphyll woodlands comprise only a small portion of desert acreage but account for a much larger portion of the habitat for migrating birds.

**Concern:** The surface alteration related to this project and nearby solar projects may divert water from microphyll woodlands or otherwise affect the hydrology and survival of these vital migratory bird support areas.

**Recommendation:** The NPS recommends analysis of changes in water flow resulting from nearby solar projects, as well as hydrological surface modeling to determine how water flow and erosion will affect microphyll woodlands on the project site and downstream.

### Air Quality

Air quality is an important component of the overall visitor experience at the park. Joshua Tree National Park is a congressionally designated Class I air quality area.

**Concern:** Surface soils at the site are highly erodible. Palliative measures need to be sufficient to keep fugitive dust from entering the park during frequent high wind events characteristic of the desert. During construction of the nearby Desert Sunlight solar project, the mitigation measures identified in initial permitting documents were insufficient to control fugitive dust. Significant changes to the dust control plan and an additional Environmental Assessment were needed in the course of construction.

**Recommendation:** The NPS recommends that every effort be made to minimize impact to the desert crust in the target areas while retaining as many existing native plants to help stabilize soils. The NPS also recommends that the project include a clearly defined plan for air quality monitoring at the park boundary throughout construction, including a responsible party and funding source for the monitoring, and also include an adaptive management plan for fugitive dust, building on the lessons learned at the adjacent solar projects.

### Wildlife

The California Desert Connectivity Project provides a comprehensive and detailed habitat connectivity analysis for the California deserts. The Connectivity Project identified a Desert Linkage Network to maintain habitat for movement between landscape blocks. The landscape blocks identified in the project vicinity are the Palen–McCoy Mountains to the northeast and the

Chocolate Mountains to the southwest. These landscape blocks are connected by broad habitat linkages.

**Concern:** The proposed project is partially located within a habitat linkage area. Even though Nelson's bighorn sheep only occasionally use the valley floor habitat either for foraging or as movement routes among mountain ranges, these valley floor movements are crucial for genetic connectivity and the long-term survival of the bighorn sheep and other desert species.

**Recommendation:** The NPS recommends analyzing connectivity for wildlife such as desert bighorn sheep and other bird and wildlife species that move among the park and the project areas. Please consider reduced fencing or other means to maintain connectivity.

### Migratory Birds

Joshua Tree National Park hosts over 250 species of birds, many of them migratory birds that spend portions of their lives outside the park. Recent research documented a decline in migratory bird species of woodland washes in the park.

**Concern:** Fragmentation and other impacts to woodland washes may further impact declining bird species in Joshua Tree National Park.

**Recommendation:** The NPS recommends incorporating recent desert bird studies (see attached peer-reviewed reference) into the analysis of project effects. The NPS also recommends retaining the microphyll woodland Conservation Management Action protections that currently exist within the BLM Resource Management Plan.

### Golden Eagles

Federally protected golden eagles use habitat extending from the southern area of the park onto surrounding BLM lands.

**Concern:** General habitat loss may impact golden eagle populations in the park.

**Recommendation:** The NPS recommends close coordination with Joshua Tree NP and with the USFW to identify any golden eagles using habitat within the park and also habitat that may be affected by the project. The NPS also recommends incorporation of best management practices and lessons learned from Southern California Edison's golden eagle mortality studies and eagle take permits.

### Increased traffic and Off-Highway Vehicle (OHV) Use

Desert Center was formerly a remote area. Solar construction and operations increase human activity and the visibility of Desert Center as a desert destination.

**Concern:** As commercial activity increases near Desert Center, the eastern end of the park may see more activity. The park has inadequate visitor support infrastructure, no fee stations or water



sources, and infrequent ranger patrols on the eastern end. In the absence of park structure, increased OHV trespass and damage to cultural resources are likely. Ground disturbance from the construction project itself and from OHV use may bring new invasive plant infestations into the park, and the park is seldom able to monitor invasives on the eastern end.

Recommendations: The NPS recommends that BLM and NPS partner to identify increased visitation patterns, OHV use or trespass, and invasive plant populations in the eastern end of the park and surrounding BLM lands. The NPS also recommends that BLM use best available science to analyze likely increases in OHV damage and cultural resource threats with increased commercial activity in the area.

Thank you for the opportunity to comment. If you have any questions or comments, please contact me at 760-367-5501 or [David\\_Smith@nps.gov](mailto:David_Smith@nps.gov) , or the Chief of Science and Resource Stewardship, Jane Rodgers at 760-367-5560 or [Jane\\_Rodgers@nps.gov](mailto:Jane_Rodgers@nps.gov).



# Cooling requirements fueled the collapse of a desert bird community from climate change

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Climate change threatens global biodiversity by increasing extinction risk, yet few studies have uncovered a physiological basis of climate-driven species declines. Maintaining a stable body temperature is a fundamental requirement for homeothermic animals, and water is a vital resource that facilitates thermoregulation through evaporative cooling, especially in hot environments. Here, we explore the potential for thermoregulatory costs to underlie the community collapse of birds in the Mojave Desert over the past century in response to climate change. The probability of persistence was lowest for species occupying the warmest and driest sites, which imposed the greatest cooling costs. We developed a general model of heat flux to evaluate whether water requirements for evaporative cooling contributed to species' declines by simulating thermoregulatory costs in the Mojave Desert for 50 bird species representing the range of observed declines. Bird species' declines were positively associated with climate-driven increases in water requirements for evaporative cooling and exacerbated by large body size, especially for species with animal-based diets. Species exhibiting reductions in body size across their range saved up to 14% in cooling costs and experienced less decline than species without size reductions, suggesting total cooling costs as a mechanism underlying Bergmann's rule. Reductions in body size, however, are unlikely to offset the 50 to 78% increase in cooling costs threatening desert birds from future climate change. As climate change spreads warm, dry conditions across the planet, water requirements are increasingly likely to drive population declines, providing a physiological basis for climate-driven extinctions.

thermoregulation | climate change | desert birds | evaporative cooling | Bergmann's rule

Climate change threatens to accelerate the ongoing, rapid loss of biodiversity (1, 2), prompting an urgent need to identify the mechanisms that make species vulnerable (3). Vulnerability to climate change increases when environmental conditions challenge an organism's capacity to balance heat and water budgets (4), suggesting physiological mechanisms will underlie some population declines (5). However, the physiological bases of climate vulnerability are often inferred indirectly from population declines (6), and empirical evidence supports the uncoupling of species interactions as the most common cause of climate-driven extinctions (7). A major impediment to detecting the physiological bases of climate vulnerability is the complex nature of the organism–climate interaction, especially for endotherms. Heat transfer through avian plumage and mammal pelage complicates our understanding of the homeothermic requirements of endotherms (8, 9). Establishing meaningful links between physiology and long-term population responses to climate change would represent a major advance for predicting endotherm climate vulnerability.

At a fundamental level, energy imbalance between an organism and its environment—manifested as changes in mass, water, and heat—drives climate vulnerability (4). The primary determinants of energy exchange are environmental temperature and body size (10). Body size determines an organism's total energetic requirements, whereas temperature modulates this relationship

(11). Warming temperatures can influence the spatial and temporal patterns in body size by causing local energetic imbalances (12). Large-bodied endotherms, for instance, simultaneously experienced rapid extinction (13) and reductions in body size during Pleistocene warming (14), with analogous patterns occurring in response to human-caused climate change (15). Similar negative associations between body size and average annual temperature have also been reported across species' geographic ranges in a pattern generally referred to as Bergmann's rule (16). However, models of heat flux have not supported a mechanistic explanation of Bergmann's rule (17), possibly due to their focus on the benefits of greater heat retention in large-bodied endotherms inhabiting cool climates. Given that geographic variation in body mass is more strongly associated with maximum than minimum temperatures (18), shifting perspectives to evaluate size-dependent cooling costs in hot environments might produce different insights.

We developed simulation models of heat flux to evaluate whether water requirements for evaporative cooling contributed to the collapse of the Mojave Desert bird community over the last century that has been explicitly linked to climate change (19). Since the original surveys by Joseph Grinnell and others in the early 20th century, Mojave sites, situated mostly within national parks and reserves with minimal land use change, have lost on average 43% of their bird species. Occupancy probability

## Significance

Climate change—especially accelerated warming and drying—threatens to increase extinction risk, yet there is little evidence that physiological limitations have contributed to species declines. This study links species-specific water requirements for cooling body temperature to the collapse of a Mojave Desert bird community over the past century from climate change. Species occupying the hottest, driest sites were less likely to persist. Birds with the greatest water requirements for cooling their body temperature experienced the largest declines. Large-bodied carnivores and insectivores were especially vulnerable to cooling costs because they obtain water primarily from their food. Climate warming increases the evaporative cooling demand for birds, which will affect geographic patterns in body size and future extinction risk.

Author contributions: E.A.R., K.J.I., B.O.W., B.S., and S.R.B. designed research; E.A.R. and K.J.I. performed research; E.A.R. and K.J.I. analyzed data; E.A.R., B.O.W., and S.R.B. wrote the paper; and K.J.I. provided critical data.

The authors declare no conflict of interest.

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Data deposition: The Python script for these simulations has been deposited on GitHub ([https://github.com/ecophysiology/cooling\\_costs](https://github.com/ecophysiology/cooling_costs)). Specimen identification numbers have been deposited on the Open Science Framework (<https://osf.io/jtptsf/>).

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significantly declined for 39 of 135 (29%) breeding birds, while only one species significantly increased. Climate change, particularly a long-term decline in precipitation, was the most important driver of site-level persistence of species (19). Drying conditions should impose the greatest pressure on homeothermy in warming environments by increasing water requirements for cooling, while simultaneously limiting the availability of water. Here, we evaluated the prediction that persistence of bird species over the past century should be lowest at hot, dry sites due to greater water requirements for cooling. We then estimated species-specific cooling requirements in 50 species using a simulation-based approach that linked climate warming to biophysical traits, such as body size, shape, and plumage properties. We focused on cooling costs because water requirements for homeothermy in birds increase exponentially under warm conditions, leading to potentially lethal dehydration under climate change (20). We used our simulations to 1) test whether increases in cooling requirements over the past century were associated with occupancy declines species experienced in the Mojave, and 2) explore cooling requirements as a mechanism underlying Bergmann's rule.

## Results

**Persistence of Desert Birds and Climate.** Community-level occupancy analyses revealed the probability of persistence at a site over the last century was lowest for birds in hot, dry environments (Fig. 1 and *SI Appendix, Table S1*). Moreover, the presence of standing water increased persistence probabilities across all climatic conditions (Fig. 1 and *SI Appendix, Table S1*). Low persistence probabilities at the hottest, driest sites with the greatest water requirements for cooling and limited access to water suggests an underlying mechanism of species declines related to cooling costs. Moderately lower persistence also occurred in the coolest, wettest sites located in the high elevation sites when surface water was absent (Fig. 1).

**A General Model of Cooling Costs for Birds.** We developed estimates of cooling requirements using an energy balance equation:

$$Q = M - E - C \frac{dT_b}{dt} = K_e(T_b - T_e), \quad [1]$$

where  $Q$  is the net sensible heat flux,  $M$  is the heat generated through metabolic processes,  $E$  is the heat lost via evaporative processes,  $C$  is the heat capacitance of the isothermal core,  $T_b$  is body temperature,  $K_e$  is the effective conductance, and  $T_e$  is the operative temperature (*SI Appendix, Heat flux simulation*). To generate estimates of chronic heat stress, we estimated daily water requirements for evaporative heat loss ( $Q < 0$  in red; Fig. 2 *B, E, and H*), using physical calculations that incorporated variation in 10 thermally relevant, avian traits that affect heat flux from measurements of museum specimens (Fig. 2 *A, D, and*

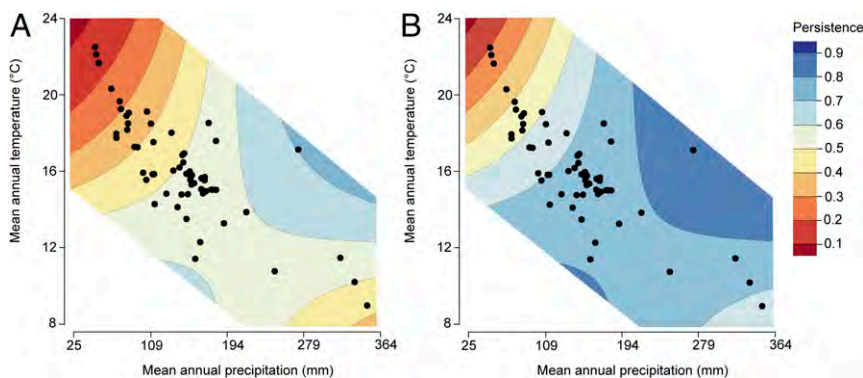
*G*) for 50 species (*SI Appendix, Table S2*). Our approach uses first principles to simulate the combined influence of air temperature, radiation, and solar exposure on the amount of cooling required to maintain a stable body temperature. Our model is similar to endothermic simulations of heat flux (9), except we focus on the increase in thermoregulatory costs over the last century to isolate the impact of climate change.

Our general model of endotherm thermoregulation accurately simulated avian evaporative water loss (Fig. 2). Simulations revealed that water requirements for evaporative cooling are greatest 2 h after midday, reduced by seeking shade, and greater in large-bodied species (Fig. 2 *B, E, and H*). Model estimates of water requirements were strongly correlated to  $Q$  measured from controlled laboratory studies of birds (Fig. 2 *C, F, and I*), validating that our model accurately predicted intraspecific and interspecific homeothermic requirements. Model outputs of  $T_e$  also closely matched empirical measurements from field studies in complex thermal environments (*SI Appendix, Fig. S1*).

## Declines in Avian Occupancy, Cooling Costs, and Behavioral Traits.

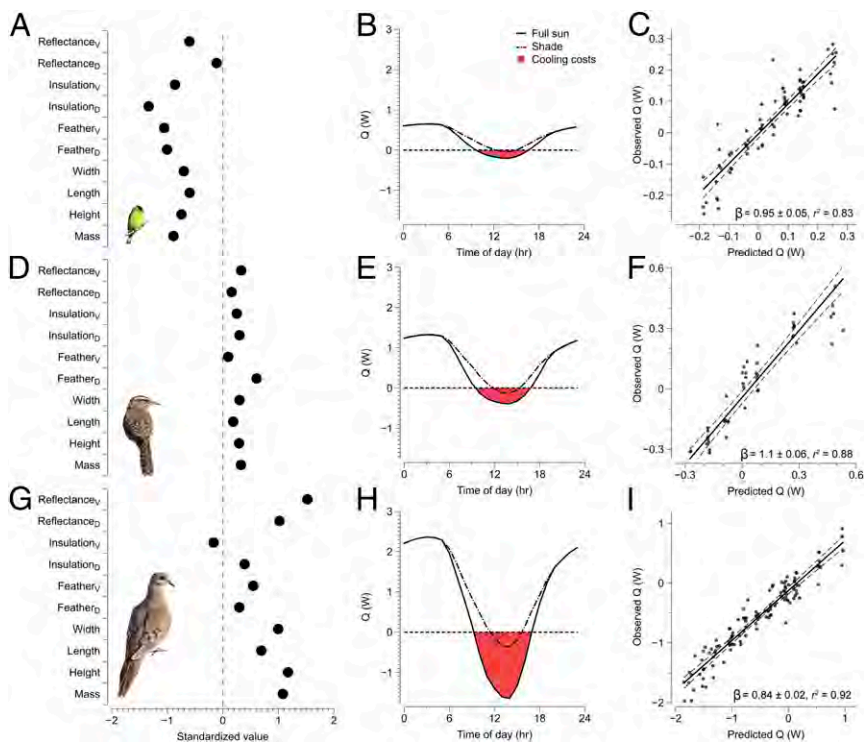
Our simulations indicated that the increase in cooling costs over the past century was a likely mechanism underlying avian declines from climate change. On average, cooling costs increased by 18.8% ( $\pm 5.0\%$ ) relative to historic climates (*SI Appendix, Fig. S2E*). The increase in cooling costs was positively correlated with body mass (Fig. 3*A*), with the largest species experiencing a 42-fold increase in cooling costs relative to the smallest species for the same degree of warming. Both mass and cooling costs were positively associated with the degree of species decline (Fig. 3 *A and B*), but AICc (Akaike information criterion corrected for small sample size) weights indicated the evidence in favor of cooling costs was 4.5 times greater than body mass (*SI Appendix, Table S3*). Phylogenetic analyses indicated that these relationships were unassociated with relatedness (*SI Appendix, Fig. S4*; median value of  $P = 0.127$ ; see also ref. 19). The relationship between cooling costs and occupancy decline was robust upon incorporating hyperthermia and shade-seeking behavior (*SI Appendix, Table S4*), suggesting that physiological and behavioral strategies for seeking cooler microhabitats were unable to compensate for the increase in cooling costs.

Increased cooling costs may disproportionately affect species with certain behavioral traits. Diet is especially likely to affect cooling costs by determining the primary source of water intake. Compared to plant-eating species, birds with animal-based diets infrequently drink from freestanding water (21), rely on preformed water from their prey during the hottest, driest times of year (22, 23), and tend to have higher resting water loss rates (24). For birds with more plant-based diets, meeting their requirements for water intake depends on the distance to surface water (21, 25). We found that cooling costs explained nearly half of the variation in decline for insectivores and carnivores



**Fig. 1.** Low persistence at hot, dry sites suggests water requirements underlie avian community collapse. (A) Avian persistence over the last century was lowest in the hottest, driest sites in the absence of surface water. Persistence was moderate in less hot and dry sites, and declined slightly in cool, wet sites likely due to factors not related to cooling costs. (B) Predictions for persistence in the presence of surface water indicate that persistence was much higher in areas except for hot, dry sites.





**Fig. 2.** Simulation-based model predicts intraspecific and interspecific variation in cooling costs. (A, D, and G) Standardized values of biophysical traits (defined in *SI Appendix, Table S10*) used to estimate thermoregulatory costs of the (A) lesser goldfinch (*Spinus psaltria*), (D) cactus wren (*Campylorhynchus brunneicapillus*), and (G) mourning dove (*Zenaidura macroura*). Biophysical traits were standardized relative to all 50 study species. (B, E, and H) Net sensible heat flux ( $Q$ ) during the hottest day of the year in the Mojave Desert while sitting in full sun (solid line) and 50% shade (dashed line). Cooling costs, or the amount of water required for evaporative cooling in watts (W), are displayed in red and do not incorporate thermoregulatory mechanisms (e.g., panting, gular flutter, or cutaneous water loss) that a particular species might use to thermoregulate. (C, F, and I) Performance of simulation in predicting  $Q$  from the integrated value of metabolic rate, evaporative heat loss, and changes in body temperature from physiological studies of the 3 species. Images for the species were downloaded from Google image search engine with the usage rights to use and share and modified in Adobe Photoshop.

(Fig. 3B), consistent with our expectations. Decline in birds with plant-based diets was unrelated to the variation in cooling costs (Fig. 3B). By converting cooling costs to insect requirements, we demonstrated that body size magnifies food demands for hydration, as larger species require approximately 7 times more prey biomass per day than smaller birds to offset increased cooling costs, regardless of prey size (Fig. 3C). Elevational preference, habitat preference, migratory mode, clutch size, and sexual dimorphism were not associated with occupancy decline after accounting for cooling costs (*SI Appendix, Tables S5–S9*). Long-term changes in wind speed and food availability were also unlikely factors underlying species declines (*SI Appendix, Supplementary Text*).

**Body Size, Cooling Costs, and Bergmann’s Rule.** We examined the relationship between body mass and average annual temperature using 28,367 records from western North America (*SI Appendix, Analysis of geographic variation in avian body mass*). Most bird species tended to follow Bergmann’s rule, as reflected by smaller masses in warmer climates (negative slopes for 80%, 40 out of 50 species, of which 22 were significant), while 20% tended to exhibit larger masses, counter to Bergmann’s rule (positive slopes for 10 species, of which 2 were significant) (Fig. 4A and *SI Appendix, Fig. S6*). Positive relationships reflect the diverse mechanisms underlying geographic variation in body size (26). Nevertheless, the magnitude of variation, either supporting or countering Bergmann’s rule, may have consequences for species in hot environments that can be explicitly evaluated using thermoregulatory simulations (27).

We estimated the consequences of body size variation by comparing cooling costs from simulations that used the observed geographic variation in body size to those that held body size constant. The analysis determined whether the increase or reduction in body mass with respect to latitude was related to the collapse of desert birds. Occupancy decline over the last century was unrelated to the reduction in cooling requirements for species that followed Bergmann’s rule (Fig. 4B), suggesting that

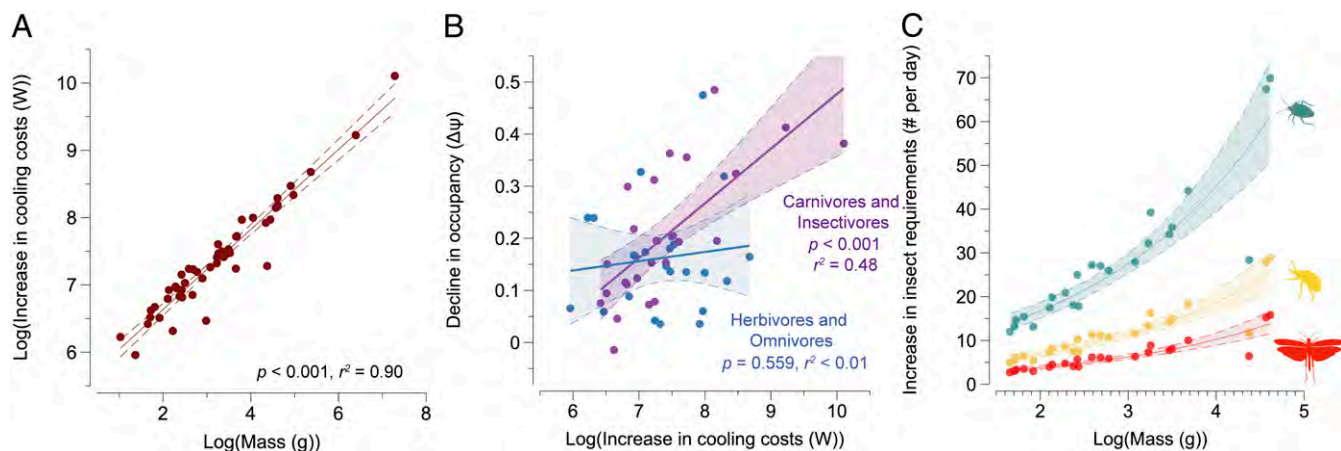
reductions in body size alleviated some of the water requirements for Mojave birds. For species with a pattern counter to Bergmann’s rule, however, occupancy declines were positively related to cooling costs resulting from increased body size in the Mojave (Fig. 4C). The benefits and costs of geographic variation in body size were localized to the hottest regions of the California desert (Fig. 4D and E), possibly contributing to the limited support for Bergmann’s rule at continental scales (26).

**Impact of Future Climate Change on Cooling Costs.** Our simulations provide a heuristic understanding for reductions in body size and activity to decrease cooling requirements under future climate change (Fig. 5). We estimated that Mojave birds will experience an increase in water requirements of 50 to 78% under future climate scenarios, all else held equal (Fig. 5A). To avoid this cost, birds would need to reduce body mass by 36 to 52% on average, depending upon the warming scenario and species (Fig. 5B). In extreme cases, body mass in birds has declined by as much as 27.2% over 49 y (28), but such reductions are rare and seem unlikely. Alternatively, birds might lessen vulnerability by reducing activity by 18 to 36% (Fig. 5C), but reductions in activity would likely reduce survival or reproductive success (29).

Reductions in basal water loss, excretory water loss, or feather absorbance are unlikely to offset cooling costs because thermoregulatory costs are commonly an order of magnitude higher than basal water loss rates (30–32), excretory water loss typically represents a small fraction of the total water budget (33), and climate warming requires unrealistic reductions in feather absorbance (*SI Appendix, Reductions in activity and body mass under climate change*).

**Discussion**

**Cooling Costs as a Driver of the Desert Bird Community Collapse.** Over the past century, the Mojave Desert bird community collapsed in association with a long-term reduction in precipitation from climate change (19). Despite being located primarily on protected lands, sites lost on average 43% of their breeding bird



**Fig. 3.** Water requirements for evaporative cooling contributed to occupancy decline in desert birds. (A) The increase in cooling costs over the past century of warming ( $\sim 1.5^\circ\text{C}$ ) was positively related to avian body mass. (B) An interaction between diet and cooling costs revealed that occupancy decline in carnivores and insectivores (purple) was highly associated with water requirements but less so in herbivores and omnivores (blue). (C) The number of additional insects per day required to offset the increase in cooling costs assuming a diet of herbivorous stink bugs (*Dendrocoris contaminates* in green), beetles (*Edrotes ventricosus* in yellow), and grasshoppers (*Boottettix argentatus* in red). Larger birds need to find more prey than smaller birds, but they can reduce the number of prey needed by finding larger, yet more dispersed prey. Silhouettes were downloaded from [www.phylopic.org](http://www.phylopic.org) and edited in Adobe Photoshop.

species and occupancy probability declined significantly for 29% of the 135 species. Our simulations revealed a potential physiological basis underlying the community collapse by linking climate with the fundamental need to thermoregulate. The probability of a species persisting was lowest at the hottest, driest sites and at sites without surface water (Fig. 1). Together, these conditions challenge the capacity of endotherms to offload excess heat via evaporative cooling. Persistence of species was also moderately lower at cooler, wetter sites at high elevations (Fig. 14), suggestive of multiple underlying mechanisms. These high elevation sites were the wettest sites but also experienced the greatest increase in average temperature and a recent destructive fire (19). Although other factors may have contributed to the collapse, multiple lines of evidence indicate cooling costs as an important underlying mechanism.

We developed a heat flux model for birds that used similar equations derived from the same general theory as previous approaches (9, 34, 35), with 2 exceptions. We focused on the change in cooling costs without incorporating basal water requirements, and we modeled heat flux on the dorsal and ventral sides separately, as opposed to averaging across the whole organism. Quantifying the change in cooling costs isolated the impact of climate change on water requirements independent of the costs imposed by obligatory water loss to offset metabolic heat production (i.e., basal water requirements). Incorporating basal water requirements would not affect our interpretations, because basal cooling costs scale positively with body size (36). Thus, incorporating these rates would further exacerbate the size-mediated impact of climate change on cooling costs. We also modeled heat flux by considering morphological differences across the dorsal and ventral sides of birds (37). Simulating heat flux in this way offers an opportunity to incorporate the physiological role of morphological variation, such as differences in feather absorbance between the dorsum and ventrum (*SI Appendix, Table S2*).

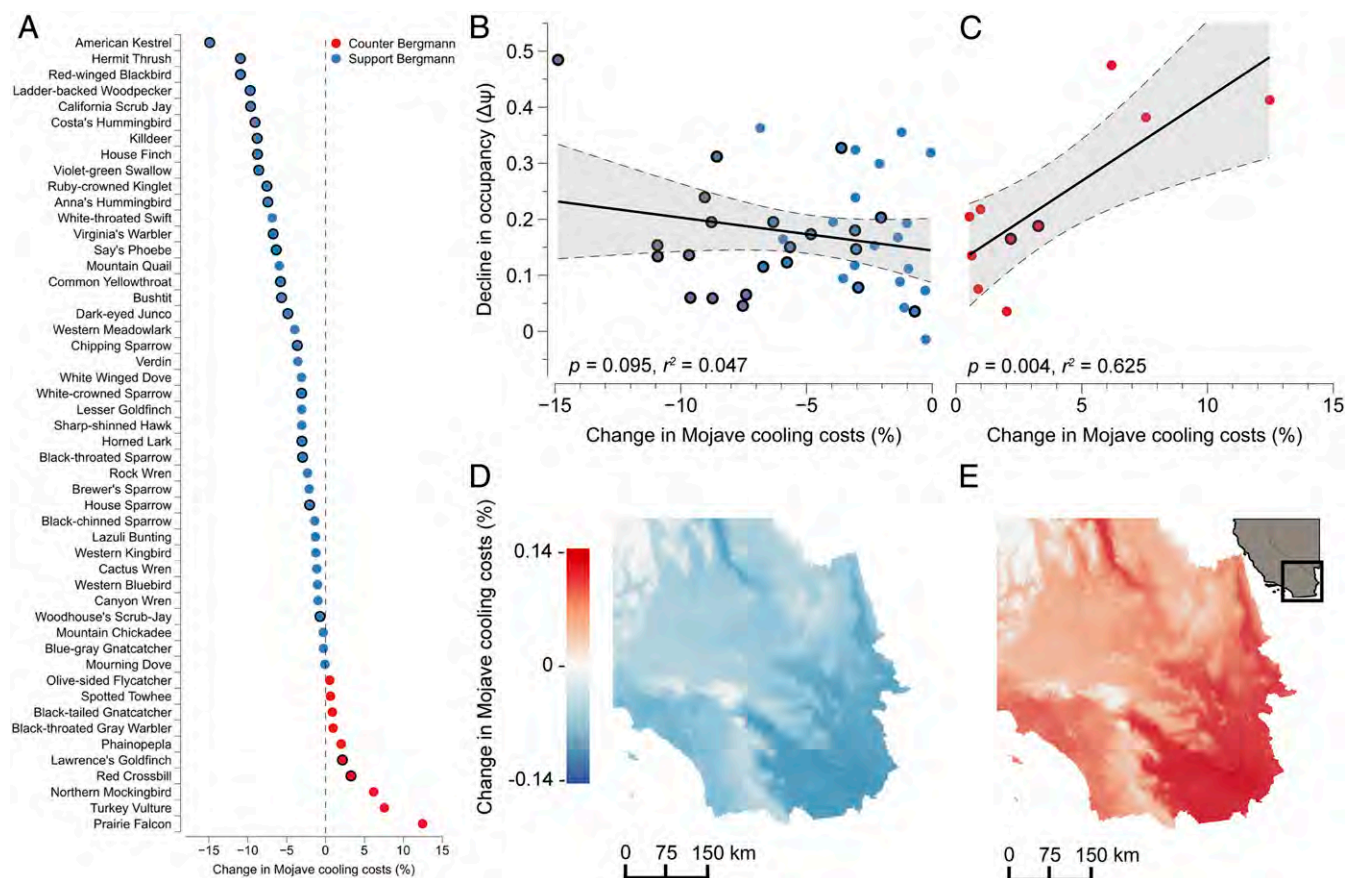
We demonstrated that avian declines were strongly correlated with the increase in water requirements for homeothermy (Fig. 3). The increase in cooling costs potentially explains the greater declines in larger-bodied species (Fig. 3 and *SI Appendix, Table S3*) and appears robust to behavioral modifications such as seeking shade under vegetation (*SI Appendix, Table S4*). The increase in cooling costs also disproportionately affected species based upon their dietary preferences. Dietary preferences

influence the source of preformed water, a factor not considered in recent studies of water-related stress from climate change in birds (20, 38). Desert birds with animal-based diets infrequently drink surface water, instead relying predominantly on their prey for water (22, 23). Increased cooling costs translate into higher foraging rates, exacerbating water loss through increased activity (39) and solar exposure (40). Because birds with plant-based diets drink from free surface water, balancing water budgets appears less likely to be related to thermoregulatory costs and more likely to be affected by the distance from surface water (19, 41). Thus, the physiological basis of climate change in desert birds may act through its effects on the magnitude of cooling costs for insectivores and carnivores, whereas its relevance for herbivores and omnivores may be determined by the distance to surface water.

A bird's sensitivity to cooling costs may also depend on its behavioral repertoire and the availability of cooler microhabitats. During the hottest periods of the day, desert birds restrict foraging to shaded microhabitats or cease foraging entirely (23, 42). The ability of small insectivores, like the Verdin, to forage in the shade reduces heat gain from the environment while maintaining energy and water intake (42), possibly contributing to the higher persistence of smaller birds over the last century. Larger birds, however, likely struggle to access cooler conditions due to the small dimensions of commonly available microhabitats (43). Moreover, large carnivorous birds in the Mojave Desert are most often observed perching in direct sunlight (44), which increases water requirements for evaporative cooling from solar exposure. Desert birds can dramatically lower cooling costs by ceasing activity, finding cool microhabitats, or soaring to higher altitudes, but such behaviors involve spending less time foraging, defending territories, and finding mates (45)—all important components of fitness (46). Having less time for fitness-related activities might also have a disproportionate impact on larger bodied birds.

The observed declines in larger birds conflicts with recent predictions that smaller birds are more vulnerable to water-related challenges than larger birds due to high surface area-to-volume ratios (20). A higher ratio results in smaller birds more rapidly reaching critical dehydration tolerances, all else equal. However, this perspective does not capture the need for greater absolute water intake requirements of larger-bodied species. These opposing perspectives reflect the long-standing debate on whether higher mass-specific fluxes of water or heat, as opposed





**Fig. 4.** The change in cooling costs due to geographic variation in body size and their relationship to decline in the Mojave. (A) The percent change in cooling costs between simulations with and without geographic variation in body size; colors indicate species with slopes that support Bergmann's rule (blue) and countered Bergmann's rule (red). Points with black outline indicate species that significantly supported or countered Bergmann's rule. (B and C) Percent change in Mojave cooling costs, weighted by uncertainty of body mass regressed against average annual temperature, was unrelated to occupancy decline for species that followed Bergmann's rule but positively associated with decline for species that violated Bergmann's rule; colors are as in A. (D and E) Spatial variation in size-related cooling costs for the American kestrel (*Falco sparverius*) and the prairie falcon (*Falco mexicanus*) illustrate the impact of body size variation is localized to the desert. These 2 species exhibited the greatest reduction and increase in mass in the Mojave Desert, respectively.

to the total flux, are more ecologically relevant (47). In our study, we found no support for mass- or surface area-specific rates explaining declines (SI Appendix, Fig. S2). Rather, large desert birds require nearly 7 times more prey than small-bodied birds to offset their cooling costs from a  $\sim 1^\circ\text{C}$  increase in mean air temperature, despite losing water at a proportionally lower rate (Fig. 3C). Models that explicitly incorporate water intake also indicate that small-bodied birds balance water budgets more easily (48). Birds might switch to larger, more hydrating prey (Fig. 3C, orange and red) to reduce the total number of insects required for hydration. However, densities are much lower for large insects in the Mojave (SI Appendix, Fig. S3) and are lowest during the hottest months of the year (SI Appendix, Fig. S4).

**Cooling Costs and Bergmann's Rule: Cause or Consequence?** The influence of body size pervades the biological hierarchy of life—from driving physiological rates at the cellular level to affecting the function of ecological networks (49). This wide array of interactions implies variation in body size can be driven by many mechanisms, including heat dissipation, resource availability, and dispersal limitations (16).

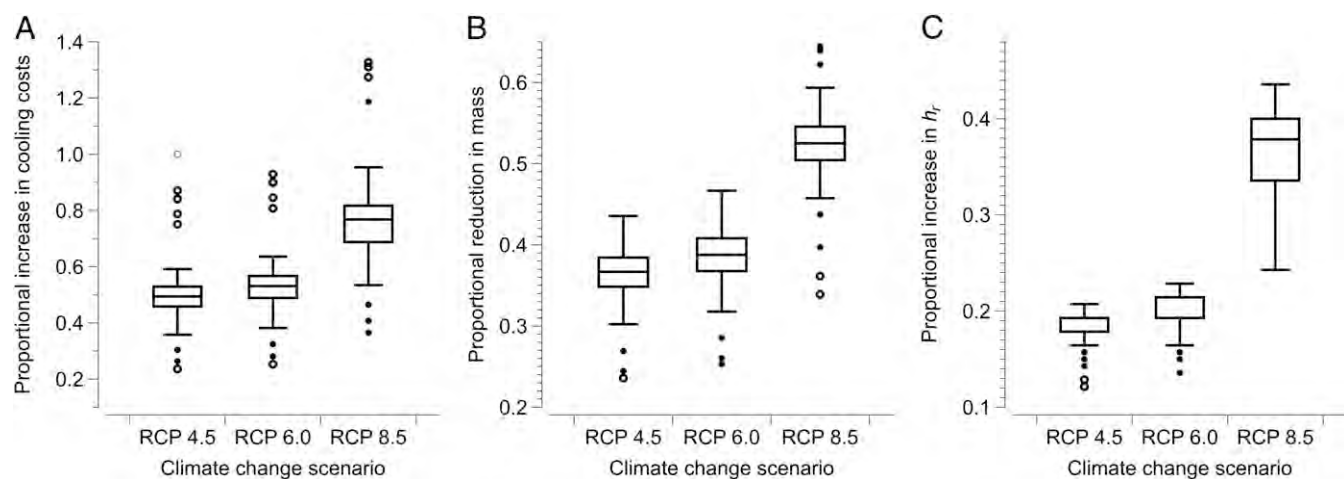
Our analysis suggests that cooling costs can be both a cause and a consequence of geographic variation in body size. Reductions in body size in hot environments was associated with sustained occupancy over the past century (Fig. 4), indicating total cooling costs as a mechanism underlying Bergmann's rule.

Species exhibiting a pattern counter to Bergmann's rule comprised 20% of our sample, implying mechanisms unrelated to thermoregulation to underlie geographic variation in body size (47). Nevertheless, increased body size in warm climates translated into negative consequences for species persistence.

Many bird species did not exhibit significant variation in body size with climate, consistent with other analyses (26). Our analysis indicates that the physiological mechanism underlying body size clines may be related to total cooling costs, rather than mass-specific heating and cooling as others have proposed (47). Geographic variation in body size likely depends upon the impact of behavior, physiology, and morphology on the magnitude of total cooling costs, as well as the extent to which species experience extreme environmental conditions across their geographic range. Exploring these interactions will reveal the multiple processes driving the high degree of interspecific variation in the support for Bergmann's rule (26).

**Conclusions**

Species interactions are thought to cause most climate-driven extinctions to date (7), partly because the physiological bases of climate vulnerability are complicated by thermodynamic relationships with the environment. By directly modeling the water requirements of desert birds, our study illustrates the importance of an intrinsic, physiological basis of avian decline that is associated with climate change (19). We uncovered greater climate



**Fig. 5.** The potential for reductions in body size or activity to alleviate cooling costs under climate change. (A) The increase in cooling costs for 3 climate change scenarios, Representative Concentration Pathway (RCP) 4.5, 6.0, and 8.5, assuming organisms maintain the same levels of activity as under contemporary climates. Global air temperatures are predicted to rise 1.8 °C, 2.2 °C, and 3.7 °C under these RCP scenarios, respectively. (B) Reductions in mass required to maintain contemporary levels of cooling costs. (C) Increase in hours of activity restriction ( $h_r$ ) required to maintain contemporary levels of cooling costs. We expressed values relative to contemporary mass, cooling costs, or  $h_r$ . Box plots illustrate median values with interquartile ranges.

vulnerability in larger species from accelerated water requirements, which was especially relevant for birds with animal-based diets and at sites without surface water.

Water requirements are increasingly likely to drive population declines as climate change spreads warm and dry conditions across the planet over the next century (50). Thus, species with large body size, with animal-based diets, and that violate Bergmann’s rule may become more vulnerable globally. Although our study focused on a physiologically challenging desert environment, ecologists can leverage climate–organism interactions to identify the relevance of other intrinsic, physiological factors. In tropical environments, for instance, rising temperatures may predispose ectotherms with high thermal sensitivities to greater climate vulnerability (51). Thus, linking physiology to relevant ecological traits may become a powerful approach to identifying biodiversity vulnerable to climate change.

## Methods

**Avian Occupancy and Persistence.** Resurveys evaluated the response of desert birds to climate and environmental change at 61 sites throughout the Mojave Desert that were originally surveyed for avian diversity during the early 20th century by Joseph Grinnell and colleagues (19). Iknayan and Beissinger (19) used a dynamic, multispecies occupancy model (MSOM) that incorporated imperfect detection to yield species-specific estimates of occupancy probability (the proportion of sites occupied during historical and modern surveys) for 135 bird species. Values from their dataset S1 were used to calculate the difference between historic and modern occupancy ( $\Delta\Psi$ ) for each species. Here, we modified their MSOM to test whether species occupying hot, dry sites, where the demand for evaporative water for cooling is greatest, were less likely to persist over the past century. Detection covariates included era to account for differences between the time periods, and Julian day and its quadratic term to allow detection to vary during the breeding season. Initial occupancy covariates included historic climate averages (annual precipitation, mean annual temperature) during the initial survey period (1906 to 1965) derived from the basin characterization model (BCM) (52), using a 5-km window to capture local variability. We included the same climate covariates measured from 1986 to 2015 for persistence. Colonization was modeled without covariates because it rarely occurred ( $\gamma = 0.003$ ; 95% credible interval,  $<0.001$  to  $0.009$ ). See ref. 19 for more model details and code.

**Heat Flux Simulation.** We developed an index of chronic water requirements for evaporative cooling using species-specific traits from Mojave birds. We focused on 50 species for this analysis, 39 species that significantly declined in occupancy and 11 species without significant change, which encompassed the range of occupancy decline over the last century. Our index of water requirements captures the interspecific differences in thermal conditions that species experience due to their unique body size, shape, and feather

properties in the same environment. Although species may have behavioral and physiological strategies for coping with thermal stress, our approach generates a conservative and standardized estimate of thermal stress while also exploring the sensitivity of physiological and behavioral strategies for reducing heat loads (*SI Appendix, Heat flux simulation*).

Cooling costs were based upon the conditions a bird experiences in the Mojave Desert National Preserve (35°00’39” N, –115°28’24” W) during July, the average hottest month of the year (52). This site reflected the average altitude, and thus climatic conditions, of resurvey sites (simulation site, 1,285 m; average resurvey site, 1,250 m). We calculated water required for evaporative cooling for an average daily temperature cycle in July based on average air temperatures between 1900 to 1930 (when most historic surveys were conducted) and 1985 to 2015 (the period preceding our resurveys) from the BCM (52). We calculated the difference in cooling costs between historic and modern climates for each species and used these water requirements for cooling as a covariate in statistical analyses. We converted the daily increase in cooling costs into the number of insects needed to offset the increase in water requirements for insectivorous birds (*SI Appendix, Ecological relevance of cooling costs*). By using average climatic conditions, the index captures the increase in daily water requirements that a bird might experience over several weeks or months in the Mojave. We validated our simulations using published data on thermoregulatory profiles of desert birds (30) and operative temperatures from taxidermic mounts in nature (43) (*SI Appendix, Validation of the heat flux model*).

**Model Parameterization from Museum Measurements.** We parameterized our model by measuring biophysical characteristics of bird specimens in the Museum of Vertebrate Zoology at the University of California, Berkeley. We quantified the 1) shape of each species, 2) average feather length across the dorsum and ventrum, 3) plumage depth across the dorsum and ventrum, and 4) feather absorbance. We obtained the mean body mass of each species from the VertNet database (<http://www.vertnet.org/>) based upon collection points in western North America. (*SI Appendix, Museum measurements for parameterization of the heat flux model*).

**Body Mass and Bergmann’s Rule Analyses.** We examined the consequences for 50 species of Mojave birds of geographic variation in body mass on water requirements for evaporative cooling. We evaluated the association between body mass and air temperature for each species (*SI Appendix, Analysis of geographic variation in avian body mass*). We grouped species based upon the sign of their slope to categorize species and determine whether the magnitude of body size variation (either supporting or countering Bergmann’s rule) was associated with occupancy decline. We then used our simulation to determine whether geographic variation in body mass had consequences for cooling costs in the Mojave Desert. For each species, we calculated the cooling costs from simulations that used the body mass 1) associated with the Mojave Desert and 2) from the highest latitude from western North America for that species. The analysis was designed to estimate the relative



costs or benefits of body size difference in the Mojave Desert. We calculated the change in cooling costs (in watts) between each location and expressed the difference relative to the average mass in the Mojave. We then examined associations between these values and the change in occupancy.

**Statistical Analyses.** Statistical analyses were conducted in R (version 3.4) and Python (version 3.5) using linear regression and type II analysis of covariance (Figs. 2–4). We used the natural logarithm of mass and cooling costs to meet the assumptions of linear regressions. We used AICc to evaluate the effect of cooling costs and the interaction with life history traits (SI Appendix, Table S7). In a post hoc analysis, we analyzed the relationship between occupancy decline and cooling costs by grouping species that primarily eat animals (carnivores [ $n = 4$ ] and insectivores [ $n = 22$ ]) to compare with those primarily consuming plants

(herbivores [ $n = 7$ ] and omnivores [ $n = 17$ ]), and used AICc to compare models (SI Appendix, Table S7). For the analysis of the decline in occupancy versus percent change in Mojave cooling costs (Fig. 4 B and C), we weighted each estimate by the inverse of the SE of the regression between body mass and annual temperature to incorporate uncertainty (19). We also evaluated the potential for relatedness to underlie the observed species declines (SI Appendix, Statistical Analyses).

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*Submitted via Electronic Mail*

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**RE: Scoping Comments on BLM's Notice of Intent ("NOI") to prepare an Environmental Assessment (EA) and the Colorado River Basin Regional Water Quality Control Board's Notice of Preparation ("NOP") on an Environmental Impact Report (EIR) for the Proposed Oberon (CACA- 58539) Solar Project.**

Dear Mr. Anderson and Mr. Raub,

The Center for Biological Diversity, the Sierra Club, California Native Plant Society, and National Audubon Society (Conservation Organizations) submit these scoping comments on BLM's Notice of Intent ("NOI") to prepare an Environmental Assessment (EA) and the Colorado River Basin Regional Water Quality Control Board's Notice of Preparation ("NOP") on an Environmental Impact Report (EIR) for the Proposed Oberon (CACA- 58539) Solar Project, in compliance with the National Environmental Policy Act of 1969 (NEPA), as amended, and the federal Endangered Species Act (ESA), the California Environmental Quality Act (CEQA) and the California Endangered Species Act (CESA) on the potential impacts of the proposed project.

The Center is a non-profit environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. These scoping comments are submitted on behalf of the Center's 1.7 million staff, members and online activists throughout California and the western United States many of whom live in southern California and enjoy visiting, studying, photographing and hiking in the California Desert Conservation Area, including the areas on and around the proposed project sites.

The Sierra Club is a non-profit corporation of approximately 2.5 million members and supporters dedicated to exploring, enjoying, and protecting the wild places of the earth; to practicing and promoting the responsible use of the earth's ecosystems and resources; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. The Sierra Club and its members utilize the natural, scenic and biological resources of the Southern California desert through their corporate and individual activities including scientific research, planning, education, and recreation.

The California Native Plant Society (CNPS) is a statewide, non-profit organization with more than 10,000 members across 35 chapters. The mission of CNPS is to conserve California native plants and their natural habitats, and to increase the understanding, appreciation, and horticultural use of native plants. CNPS works closely with decision-makers, scientists, and local planners to advocate for well-informed policies, regulations, and land management practices.

For more than a century, Audubon has built a legacy of conservation success by mobilizing the strength of its network of two million members and supporters, 450 local chapters, 41 Audubon centers, 23 state offices, and dedicated professional staff to connect people with nature and the power to protect it. A powerful combination of science, education and policy expertise combine in efforts ranging from protection and restoration of local habitats to the implementation of policies that safeguard birds, other wildlife, and the resources that sustain us all—in the U.S. and across the Americas. The development of renewable energy is a critical component of efforts to reduce greenhouse gas emissions, avoid the worst consequences of global warming, and to assist California in meeting emission reductions. The Conservation Organizations strongly support the development of renewable energy production, and the generation of electricity from solar power with electric storage, in particular. However, like any project, proposed solar power projects should be thoughtfully planned to minimize impacts to the environment. Renewable energy projects should avoid impacts to sensitive species and habitats and should be sited in proximity to the areas of electricity end-use in order to reduce the need for extensive new transmission corridors and the efficiency-loss associated with extended energy transmission. Only by maintaining the highest environmental standards regarding local impacts, and effects on species and habitat, can renewable energy production be truly sustainable.

The Oberon Project is a proposed solar photovoltaic (PV) generating facility with a proposed output of 500 MW photovoltaic solar system which has no energy storage on approximately 4,700 acres with a proposed development footprint of <3,000 acres. It includes 500 MW energy storage facilities. It is located on public lands in Riverside County, CA on lands with the BLM's designated under the Desert Renewable Energy Conservation Plan Amendment (DRECP) as a Development Focus Area. Ancillary facilities including one on-site substation and

switchyard and one 500 kV gen-tie, running approximately 0.5 mile southeast from the solar facility to the existing Red Bluff Substation.

The proposed project does not meet the requirements of the DRECP as described below and therefore the project needs to be revised to comply with the DRECP in order to avoid needing a plan amendment. The BLM must require the project to be redesigned to meet the requirements of the DRECP.

The Energy Production and Utility Corridors section of the California Desert Conservation Area Plan (1980) as amended requires at minimum that the following resource issues be addressed:

- 1) Consistency with the Desert Plan, including designated and proposed planning corridors;
- 2) Protection of air quality;
- 3) Impact on adjacent wilderness and sensitive resources;
- 4) Visual quality;
- 5) Waste disposal;
- 6) Seismic hazards; and
- 7) Regional equity.

Additionally, several other resources are of concern to us and need to be addressed in detail as follow below:

### **Failure to Comply with DRECP**

One of our main concerns is the stated need for a plan amendment for the project because it does not comply with the Conservation Management Actions (CMAs) required by the DRECP. Unacceptable impacts from this project as proposed include, but are not limited to, development in and impacts to microphyll woodlands and wildlife connectivity corridors.

As the U.S. Fish and Wildlife Service notes in its Biological Opinion for the DRECP, “The development focus areas are large enough to provide substantial flexibility for siting projects.” The project needs to take advantage of the substantial flexibility for siting and craft a project that complies with the DRECP in order to quickly move through the permitting process without a plan amendment being needed. Because the proposed project does not conform with the DRECP and would require a plan amendment, the BLM should have rejected this application and required that the initial project proposal conform with DRECP.

#### *Microphyll Woodlands*

Because the currently proposed project is located in an area with extensive microphyll woodlands within the DFA, the LUPA-wide CMAs, which are applicable throughout the DRECP area, include LUPA-BIO-SVF-6 which states:

“Microphyll woodland: impacts to microphyll woodland (see Glossary of Terms) will be avoided, except for minor incursions (see Glossary of Terms).”

(Emphasis added). The Glossary of Terms defines microphyll woodlands as:

**“microphyll woodlands.** Consist of drought-deciduous, small-leaved (microphyllus), mostly leguminous trees. Occurs in bajadas and washes where water availability is somewhat higher than the plains occupied by creosote bush and has been called the “riparian phase” of desert scrub (Webster and Bahre 2001). Composed of the following alliances: desert willow, mesquite, smoke tree, and the blue palo verde-ironwood.”

DRECP BLM LUPA at xviii

And where the Glossary of Terms defines minor incursions as:

**“minor incursion.** Small-scale allowable impacts to sensitive resources, as per specific CMAs, that do not individually or cumulatively compromise the conservation objectives of that resource or rise to a level of significance that warrants development and application of more rigorous CMAs or a DRECP LUPA amendment. Minor incursions may be allowed to prevent or minimize greater resource impacts from an alternative approach to the activity. Not all minor incursions are considered unavoidable impacts.”

DRECP BLM LUPA at xviii

The proposed project map provided at the scoping meeting (see Attachment A) shows large areas of microphyll woodlands being developed in the array areas in yellow, these cannot be considered “minor incursions.” The DEA and DEIR needs to provide a preferred alternative that will comply with all DRECP CMAs including LUPA-BIO-SVF-6 and eliminate all development in microphyll woodlands and the need for a plan amendment.

The map also shows the arrays being developed up to the edges of the mapped microphyll woodlands with no buffer to protect the structure of the washes or impacts to waters of the state. Maintaining microphyll woodlands in the desert is critically important to the health of the ecosystem as a whole and conservation of many plant and wildlife species. For example, the DRECP explains:

Old-growth microphyll woodlands provide the highest amount of aboveground biomass of any plant community in the Sonoran Desert outside of the Colorado River riparian zone and constitute a reservoir for carbon sequestration. The complex physical structure and cover of the woodlands provide essential habitat for neotropical migratory birds crossing the California deserts to reach nesting sites in the Pacific Coast states and Alaska.

(Draft DRECP and EIR/EIS, p. II.3-331)<sup>1</sup> The California State Wildlife Action Plan 2015 includes conservation of desert dry wash woodlands (also called microphyll woodlands)

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<sup>1</sup> See also Mark Dimitt, A Natural History of the Sonoran Desert, 2000 “Dry wash woodlands occupy less than 5%

in the desert region as an important conservation target and has a goal of *increasing* this habitat type by 2025 (*id.* at 5.6-45). The agencies cannot allow destruction of any of this habitat type without undermining the state’s conservation goals. The DRECP requires this important and rare plant community be protected from development even within a DFA.

Wildlife Connectivity Corridors in the DFA

The proposed project site is located in the most-westernly BLM-identified wildlife linkage within the Riverside-East DFA (Attachment B - Appendix D, Figure D-2, Final DRECP 2016 and Attachment C – USFWS’ Biological Opinion). Unfortunately, these two maps do not reflect the same boundaries of the Multispecies Linkages in the DFA, which is confusing. The DEA and DEIR need to identify which Multispecies Linkage is the currently adopted boundary by clearly referencing where it was adopted. Regardless, the project as proposed will construct solar fields, energy storage and the substation within the boundaries of this critical multispecies linkage shown in both maps.

The previously approved Athos project, on private property directly north of the Oberon proposed project, has already blocked part of the linkage. As currently proposed Victory Pass project on public land would effectively block a significant portion of the eastern part of the wildlife linkage. The Oberon proposed project would effectively eliminate the other half of the multispecies wildlife linkage and includes over 600 acres of wildlife habitat that the DRECP identified to be conserved to allow for wildlife passage within the DFA. This is unacceptable.

The proposed project must be reconfigured to avoid intrusion into the multispecies linkage as per LUPA-BIO-13 which states:

“The siting of projects along the edges (i.e. general linkage border) of the biological linkages identified in Appendix D (Figures D-1 and D-2) will be configured (1) to maximize the retention of microphyll woodlands and their constituent vegetation type and inclusion of other physical and biological features conducive to Focus and BLM Special Status Species’ dispersal, and (2) informed by existing available information on modeled focus and BLM Special Status Species habitat and element occurrence data, mapped delineations of vegetation types, and based on available empirical data, including radio telemetry, wildlife tracking sign, and road-kill information. Additionally, projects will be sited and designed to maintain the function of Focus and Special Status Species connectivity and their associated habitats in the following linkage and connectivity areas:

- ....
- Within a 1.5-mile-wide linkage across Interstate 10 to connect the Chuckwalla Mountains to the Chuckwalla Valley east of Desert Center.
- ....”

(Emphasis added). Clearly blocking the linkage will not “maintain the function of... connectivity”. As climate change progresses and the DFA is developed, the identified

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of this subsection of the Sonoran desert but support 90% of its bird life.”



multispecies wildlife linkages increase in importance to allow wildlife to move to suitable habitat.

The DEA and DEIR needs to include a preferred alternative that avoids development in the wildlife linkage area in order to comply with LUPA-BIO-13, and maintain connectivity function in the wildlife linkage. While BLM did not expressly state at the scoping meeting that this aspect of the proposed site development would require a plan amendment, the direct and cumulative impacts to the wildlife linkage would clearly violate the DRECP CMAs by undermining the connectivity function of the linkage which is unacceptable.

Rather than consider any plan amendment for this proposed project, BLM must include a preferred alternative that conforms to the DRECP and maintains the protections for microphyll woodlands and maintains the functions of the wildlife linkages that were adopted in the carefully balanced plan.

### **Biological Resources**

Based on the proposed project description, this project is proposed on an ecologically functional desert landscape that may host a suite of rare species. Careful documentation of the current site resources is imperative in order to analyze how best to site the project to avoid and minimize impacts and then to mitigate any unavoidable impacts.

#### ***Biological Surveys and Mapping***

While it appears that some of the biological resources surveys have preceded the scoping input for the project, the Conservation Organizations request that thorough, seasonal surveys be performed for sensitive plant species and vegetation communities, and animal species under the direction and supervision of the BLM and resource agencies such as the US Fish and Wildlife Service and the California Department of Fish and Wildlife. Full disclosure of survey methods and results to the public and other agencies without limitations imposed by the applicant must be implemented to assure full NEPA/CEQA/FESA/CESA compliance.

Confidentiality agreements or non-disclosure agreements regarding environmental resources must not be required of any biologists participating in the surveys in support of the proposed project. Surveys for the plants and plant communities should follow California Native Plant Society (CNPS) and California Department of Fish and Game (CDFG) floristic survey guidelines<sup>2</sup> and should be documented. A full floral inventory of all species encountered needs to be documented and included in the DEAs and the DEIR. Surveys for animals should include an evaluation of the California Wildlife Habitat Relationship System's (CWHR) Habitat Classification Scheme. All rare species (plants or animals) need to be documented with a California Natural Diversity Data Base form and submitted to the California Department of Fish

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<sup>2</sup> [http://cnps.org/wp-content/uploads/2018/03/cnps\\_survey\\_guidelines.pdf](http://cnps.org/wp-content/uploads/2018/03/cnps_survey_guidelines.pdf) ; [https://www.cnps.org/wp-content/uploads/2018/03/guidelines-rare\\_veg\\_mapping.pdf](https://www.cnps.org/wp-content/uploads/2018/03/guidelines-rare_veg_mapping.pdf) ; <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=102342&inline> and <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>

and Game using the CNDDDB Form<sup>3</sup> as per the State’s instructions<sup>4</sup>.

The Conservation Organizations request that the vegetation maps be at a large enough scale to be useful for evaluating the impacts. Vegetation and dune habitat mapping should be at such a scale to provide an accurate accounting of sand transport corridor, wash areas and adjacent habitat types that will be directly or indirectly affected by the proposed activities. A half-acre minimum mapping unit size is recommended, such as has been used for other development projects.

Adequate surveys must be implemented, not just a single season of surveys, in order to evaluate the existing on-site conditions. In this area, both spring and fall vegetation surveys should be implemented. Due to unpredictable precipitation, desert organisms have evolved to survive in these harsh conditions and if surveys are performed at inappropriate times or year or in particularly dry years many plants that are in fact on-site may not be apparent during surveys (ex. annual and herbaceous perennial plants). The project application should be put on hold and not proceed if key surveys have not been completed due to low rainfall or other factors that inhibit plant expression above ground.

### ***Impact Analysis***

The EAs and EIR must evaluate all direct, indirect, and cumulative impacts to sensitive habitats, including impacts associated with impacts to federally designated critical habitat for the threatened Mojave desert tortoise. Much of the desert tortoise critical habitat lies within the designated multispecies wildlife linkage.

A number of rare resources have high potential to occur on this site including:

<i>Common Name</i>	<i>Scientific Name</i>	<i>State/Federal/Other Status</i>
Yuma Ridgway’s rail (formerly Yuma clapper rail)	<i>Rallus obsoletus yumanensis</i> (formerly <i>Rallus longirostris yumanensis</i> )	CE/FP/FE
Desert Tortoise	<i>Gopherus agassizii</i>	CT/FT
Mojave fringe-toed lizard	<i>Uma scoparia</i>	CSC
Couch’s spadefoot	<i>Scaphiopus couchii</i>	CSC
Arizona Bell’s vireo	<i>Vireo bellii arizonae</i>	CE
Burrowing owl	<i>Athene cucicularia hypugaea</i>	CSC/BLM SS
LeConte’s thrasher	<i>Toxostoma lecontei</i>	CSC
Crissal thrasher	<i>Toxostoma crissale</i>	CSC
Loggerhead shrike	<i>Lanius ludovicianus</i>	CSC/FSC/MB
Prairie falcon	<i>Falco mexicanus</i>	CSC/MB
Elf owl	<i>Micrathene whitneyi</i>	CE
Gila woodpecker	<i>Melanerpes uropygialis</i>	CE
Gilded flicker	<i>Colaptes chrysoides</i>	CE

<sup>3</sup> [http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB\\_FieldSurveyForm.pdf](http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB_FieldSurveyForm.pdf)

<sup>4</sup> [http://www.dfg.ca.gov/biogeodata/cnddb/submitting\\_data\\_to\\_cnddb.asp](http://www.dfg.ca.gov/biogeodata/cnddb/submitting_data_to_cnddb.asp)

Merlin	<i>Falco columbarius</i>	<i>WL</i>
Mountain plover	<i>Charadrius montanus</i>	<i>CSC</i>
Sonoran yellow warbler	<i>Setophaga petechia sonorana</i>	<i>CSC</i>
Southwestern willow flycatcher	<i>Empidonax trailii extimus</i>	<i>CE/FE</i>
Summer tanager	<i>Piranga rubra</i>	<i>CSC</i>
Vermillion flycatcher	<i>Pyrocephalus rubinus</i>	<i>CSC</i>
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	<i>CE/FT</i>
Yellow-breasted chat	<i>Icteria virens</i>	<i>SSC</i>
Nelson's bighorn sheep	<i>Ovis canadensis nelsonii</i>	<i>Game species</i>
Arizona myotis	<i>Myotis occultus</i>	<i>CSC</i>
California leaf-nosed bat	<i>Macrotus californicus</i>	<i>CSC</i>
Cave myotis	<i>Myotis velifer</i>	<i>CSC</i>
Colorado river cotton rat	<i>Signondon arizonae plenus</i>	<i>CSC</i>
Pallid bat	<i>Antrozous pallidus</i>	<i>CSC</i>
Pocketed free-tailed bat	<i>Nyctinomops femororsaccus</i>	<i>CSC</i>
Western yellow bat	<i>Lasiurus xanthinus</i>	<i>CSC</i>
Bradley's cuckoo wasp	<i>Ceratchrysis bradleyi</i>	
Las Animas colubrine	<i>Colubrina californica</i>	<i>CA RP List 2B.3</i>
Harwood's milkvetch	<i>Astragalus insularis var. harwoodii</i>	<i>CA RP List 2B.2</i>
Alverson's foxtail cactus	<i>Coryphantha alversonii</i>	<i>CA RP List 4.3</i>
Abram's spurge	<i>Euphorbia abramsiana</i>	<i>CA RP List 2B.2</i>
Angel trumpets	<i>Acleisanthes longiflora</i>	<i>CA RP List 2B.3</i>
Bitter hymenoxys	<i>Hymenoxys odorata</i>	<i>CA RP List 2B.1</i>
California ditaxis	<i>Ditaxis serrata var. californica</i>	<i>CA RP List 3.2</i>
California satintail	<i>Imperata brevifolia</i>	<i>CA RP List 2B.1</i>
Desert beardtongue	<i>Penstemon pseudospectabilis ssp. pseudospectabilis</i>	<i>CA RP List 2B.2</i>
Gravel milkvetch	<i>Astragalus sabulonum</i>	<i>CA RP List 2B.2</i>
Harwood's eriastrum	<i>Eriastrum harwoodii</i>	<i>CA RP List 1B.2</i>
Roughstalk witch grass	<i>Panicum hirticaule ssp. hirticaule</i>	<i>CA RP List 2B.1</i>

**State Designation**

CE – State listed as endangered.  
 FP – fully protected species under CESA  
 CT State listed as threatened. Species that although not presently threatened in California with extinction are likely to become endangered in the foreseeable future.  
 CSC California Department of Fish and Game “Species of Special Concern.” Species with declining populations in California.

**Federal Designation**

FE Federally listed as endangered.  
 FT Federally listed as threatened.  
 MB Migratory Bird Treaty Act. of 1918. Protects native birds, eggs, and their nests.  
 BCC U.S. Fish and Wildlife Service Bird of Conservation Concern.  
 BLM SS BLM Sensitive Species.

**Other**

California Native Plant Society (CNPS)  
 1B.1 Plant rare, threatened or endangered in California and elsewhere, and very threatened.  
 1B.2 Plant rare, threatened or endangered in California and fairly threatened in CA.  
 2B.1 Plant rare, threatened or endangered in California, but more common elsewhere, and very threatened in CA  
 2B.2 Plant rare, threatened or endangered in California, but more common elsewhere, and fairly threatened in CA.

2B.3 Plant rare, threatened or endangered in California, but more common elsewhere, and not very threatened in CA. 4.3 Plants of a limited distribution, and not very threatened in CA.
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All of these species have been identified as occurring in the general vicinity of the project site.<sup>5</sup> Therefore, the DEA and the DEIR must adequately address the impacts and propose effective ways to avoid, minimize, and mitigate the impacts to these resources through alternatives including alternative siting and alternative on-site configurations.

### ***Yuma Ridgway's Rail (formerly denoted Yuma Clapper Rail)***

Protected since 1967 as an endangered species, the Yuma Ridgway's rail (*Rallus obsoletus yumanensis*) is a bellwether for the health of desert waterways. It is both a state and federally-listed endangered species and in California is a fully protected species. Despite decades of protection, its numbers continue to decline. Two Yuma Ridgway's rail mortalities have been reported at industrial-scale solar projects built on bird-migration corridors on public and private lands in the California desert. By 2006, only 451 to 968 of these birds remain along the lower Colorado River and the Salton Sea<sup>6</sup>. The proposed project lies within the within the flyway between the Yuma Ridgway rail's two strongholds. Because the PV projects, like the proposed project, appear to be particularly attractive to "waterbirds" (see below section on migratory birds) including the Yuma Ridgway's rail, this proposed project could imperil Yuma Ridgway rails and therefore the EAs and EIR need to evaluate the potential impacts to these highly endangered birds.

### ***Desert Tortoise and Designated Critical Habitat***

The desert tortoise is continuing to decline throughout its range despite being under federal and state Endangered Species Acts protection as threatened<sup>7</sup>. The proposed Oberon project contains federally designated critical habitat and likely has desert tortoise occurring on site. Even though the proposed project is outside desert wildlife management areas (DWMAs) as identified in the Northern and Eastern Colorado Plan<sup>8</sup> and the Desert Renewable Energy Conservation Plan<sup>9</sup>, it still contains approximately 600 acres of critical habitat. The EAs and EIR must clearly address alternative proposals for avoiding and minimizing impacts to the desert tortoise and its federally designated critical habitat. This could be achieved with project redesign to comply with the CMAs mentioned above, because much of the federally designated critical habitat for desert tortoise is located inside the designated multispecies wildlife linkage in the DRECP.

If avoidance of all desert tortoise critical habitat is not possible after redesign to meet the

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<sup>5</sup> CNDDDB 2020 <http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp>

<sup>6</sup> USFWS 2006 [https://ecos.fws.gov/docs/five\\_year\\_review/doc782.pdf](https://ecos.fws.gov/docs/five_year_review/doc782.pdf)

<sup>7</sup> USFWS 2010

[https://www.fws.gov/nevada/desert\\_tortoise/documents/reports/2020/2019\\_DRAFT\\_RangewideMojaveDesertTortoiseMonitoring.pdf](https://www.fws.gov/nevada/desert_tortoise/documents/reports/2020/2019_DRAFT_RangewideMojaveDesertTortoiseMonitoring.pdf)

<sup>8</sup> BLM 2006 <http://www.blm.gov/ca/st/en/fo/cdd/neco.html>

<sup>9</sup> <https://www.blm.gov/programs/planning-and-nepa/plans-in-development/california/desert-renewable-energy-conservation-plan>

DRECP requirements, then mitigation is required at a ratio of at least 5:1 (acquired for mitigation:impacted from the project). Unfortunately, impacts to the multispecies wildlife linkage is not mitigable, because wildlife linkages are specific to their location. By not developing in the multispecies wildlife linkage, most of the desert tortoise critical habitat will also be protected.

Any necessary acquisition of lands for mitigation will be managed in perpetuity for conservation must be included as part of the strategy to mitigate impacts to the tortoise. Mitigation lands should be in federally designated critical habitat within the Colorado Desert Recovery Unit.

Translocation as a long-term strategy for minimizing and mitigating impacts to desert tortoise may be a tool for augmenting conservation of the desert tortoise<sup>10</sup> although it may not be effective in retaining the existing genetic diversity<sup>11</sup>. However, it cannot substitute for other mitigation such as preservation of habitat and providing habitat connectivity. Moreover, to date, translocation does not have a proven track record of success. If translocation of desert tortoise (or for any species) is to be a part of the mitigation strategy, a detailed final plan must be included as part of the DEAs and DEIR. It must include methodologies for determining appropriate conservation area(s) where tortoises may be translocated that are permanently preserved, impacts to existing “host” tortoise populations that occur on the translocation site, when/how the tortoise are to be translocated, how tortoise diseases will be addressed, and requisite monitoring of host and translocated tortoises, etc.. Monitoring of the translocated and existing “host” tortoises needs to occur for a long enough time period that is realistic to evaluate success of the translocation –10 years may be a more realistic minimum for tracking impacts to this long-lived species. Success criteria for translocation must also be clearly identified. Any temporary project site needs to be fenced with tortoise proof fencing during construction and the permanent project sites need to be fenced to prevent tortoise mortality. All associated roads also need to be fenced.

An aggressive raven prevention plan also needs to be developed as part of the DEA and DEIR and followed during project development and implementation.

In addition, the DEA and DEIR should also incorporate additional alternatives that would avoid impacts to the desert tortoise, for example, by identifying and analyzing *alternative sites* outside of desert tortoise occupied and critical habitat or in areas that have already been severely disturbed by other prior land uses as well as alternative project configurations that would avoid or significantly reduce impacts.

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<sup>10</sup> <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1092&context=usgsstaffpub>

<sup>11</sup> <https://cpb-us-w2.wpmucdn.com/people.uwm.edu/dist/9/244/files/2016/07/MulderTortoiseTranslocationRecruitmentBiolCons2017-2kt1oo6.pdf>

### *Mojave Fringe-toed Lizard*

The DEA and DEIR must identify if the Oberon project lies within or directly adjacent to the critical sand transport corridor<sup>12</sup> which creates dune and stabilized sand flat habitat that is critical for the Mojave fringe-toed lizard (*Uma scoparia*). The sand transport corridor in this general area is extensive, originating in the Pinto Basin of Joshua Tree National Park, moving through the Palen Valley and the Palen/McCoy Valley and extending eastwards to the edge of the agricultural development in the Palo Verde Valley south of Interstate 10. Numerous renewable energy projects have been permitted and some built along this important sand transport corridor feature, leading to our concerns about downwind impacts and the reduction of habitat for the Mojave fringe-toed lizard. The DEA and DEIR need to include a comprehensive analysis of the sand transport corridor and a thorough impact analysis from the proposed projects. Disruption of sand transport corridor functionality upwind affects all downwind resources and disrupts eolian function. Secondly, because sand dune habitat is a rare resource on the landscape because the geological and geographical features that transport sand and form dunes are extremely limited, the species that have evolved to rely on this unique habitat are also quite rare and typically endemic only to dune systems. Impacts to sand transport systems are therefore comparatively greater than impacts to other habitat types because of the uniqueness of the eolian habitat. Impacts are also much more challenging to mitigate because of the limited habitat type and complex eolian requirements that form and maintain the sand transport and dune habitat. We remain very concerned that, coupled with the other projects that are already permitted, inadequate amount of mitigation habitat is available to actually mitigate the impacts, particularly near the Mojave fringe-toed lizards that will be impacted by this project. The proposed project area, indeed the whole of the Riverside-East DFA in the dune/stabilized sand habitat supports the southernmost genetic clade of the Mojave fringe-toed lizard<sup>13</sup>, and therefore impacts and mitigation need to be evaluated based on the uniqueness of the local lizards.

The DEA and DEIR alternatives should all prioritize avoidance and conservation of the sand transport corridor, sand dune and stabilized sand flat areas. Models have been developed to identify conservation areas that are essential to maintain sand transport corridors<sup>14</sup>. These data and models should be incorporated into the analysis of impacts and all key areas that maintain the eolian function of the sand transport corridors should be unavailable for solar development.

Impacts to Mojave fringe-toed lizard in this area have already been significant and any additional impacts must be avoided. Although avoidance of Mojave fringe-toed lizard mortalities was the goal during construction/operation of the another project near the downwind portions of the sand transport - the Colorado River substation - despite speed limits, vehicle escorts and other avoidance measures, significant Mojave fringe-toed lizard mortalities were documented<sup>15</sup>. The EAs and EIR need to require avoidance of all habitat areas and require stronger minimization measures to prevent any additional mortalities to the lizards from the proposed projects.

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12 <http://www.cpuc.ca.gov/environment/info/aspen/dpv2/sfeir/apps/ap3.pdf>

13 Murphy et al. 2006

14 Barrows 1996

15 Helix 2013.



We also note that any facility put in or even adjacent to a sand transport corridor will suffer significant impacts from sand abrasion and require regular clearing of sand from the structures, increasing maintenance and operational costs.

### ***Burrowing Owl***

Burrowing owls are continuing to decline in California. If burrowing owls are identified on the site, at least one alternative should evaluate the reduction of impacts to this rare species by moving the project away from the nesting burrows. Additionally, acquisition lands may be required as part of the mitigation and will need to be managed in perpetuity for conservation. Mitigation lands should be high-quality habitat and, at minimum 5:1 mitigation should be provided of all acres of burrowing owl habitat destroyed. If translocation is proposed as an avoidance measure, active translocation has shown greater success in survival of the owls than passive relocation. Additional measures for avoidance and minimization should also be incorporated into the evaluation of impacts to this species.

### ***Migratory Birds***

The Conservation Organizations are concerned about the effect of this project on migratory birds, both rare and common. Evidence from large PV solar project – Desert Sunlight - and a solar trough project – Genesis, both of which are located within the Riverside-East DFA, documented many water bird mortalities<sup>16</sup>. Indeed, Desert Sunlight reported a state and federally endangered species bird mortality – the Yuma Ridgway rail<sup>17</sup>, even though on-site surveys never identified this species as occurring on the site, nor was habitat present on site. Few if any of the bird species that died on the project sites were recorded as occurring on site in the pre-construction avian surveys. These large solar projects may in fact be attracting migratory birds to them, through the birds mistaking the project infrastructure as water – the “lake effect”<sup>18</sup>. Both BLM and CDFW are member agencies of the Multiagency Avian-Solar Collaborative Working Group<sup>19</sup> and one focus of that group is research into the impacts to avian species from solar projects. While no working group data or reports have been published since 2018, we support using the data to inform avoidance, minimization and mitigation for impacts from these projects. Because large-scale PV projects apparently pose a significant hazard to migratory birds and especially water birds, the EAs and EIR need to discuss these potential impacts and propose alternatives to avoid and minimize the impact, as well as identify and release as part of the EAs and EIR, a robust monitoring scheme to actually collect data.

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16 <http://www.kcet.org/news/rewire/solar/water-birds-turning-up-dead-at-solar-projects-in-desert.html> ; [http://docketpublic.energy.ca.gov/PublicDocuments/09-AFC-08C/TN200657\\_20130930T120056\\_August\\_2013\\_Monthly\\_Compliance\\_Report.pdf](http://docketpublic.energy.ca.gov/PublicDocuments/09-AFC-08C/TN200657_20130930T120056_August_2013_Monthly_Compliance_Report.pdf)

17 <http://www.kcet.org/news/rewire/solar/water-birds-turning-up-dead-at-solar-projects-in-desert.html>

18 <http://www.kcet.org/news/rewire/solar/water-birds-turning-up-dead-at-solar-projects-in-desert.html>

19 <https://blmsolar.anl.gov/program/avian-solar/>

## *Desert Kit Fox and Badgers*

The desert kit fox and badgers are experiencing unprecedented impacts from development of renewable energy projects in their habitat. While amount of acreage of proposed solar energy projects is currently decreased from highs of more than 96,000 acres in January 2013<sup>20</sup>, we remain concerned about the impacts to desert kit foxes and badgers in the context of their great site fidelity, challenges of “passive relocation” where the animals generally go to great effort to return to their on-site territories.

The DEA and DEIR must estimate the number of desert kit fox or badgers on the project sites and analyze impacts to them from the proposed projects. Previous BLM FEIS for a large-scale PV solar project similar to the proposed project includes a much more comprehensive evaluation of desert kit fox occupancy on the project site and requires significantly greater avoidance, minimization and mitigation measures<sup>21</sup>. Measures that should be included in the American Badger and Desert Kit Fox Monitoring and Management Plan include but are not limited to:

- Baseline desert kit fox census and population health survey, by characterizing the demography (e.g., size, structure, and distribution) of the kit fox population on the site and receiving areas, and a testing component in which researchers trap and test a representative subsample of the population for canine distemper, and generally describe animal health on the site and receiving areas.
- Incorporation of the baseline desert kit fox census and health survey findings into a cohesive management strategy that minimizes disease risk to kit fox populations; provides a program for tagging, radio-tracking and monitoring of a subset of displaced kit foxes during the construction phase to understand how displacement affects regional kit fox populations; specifically identifies preconstruction survey methods for kit foxes (and large carnivores e.g., badgers) in the Project area; describes preconstruction and construction-phase relocation methods from the site, including the possibility for passive and active relocation from the site (and outlines identified CDFW permit and MOU requirements for active relocation); coordinates survey findings prior to and during construction to meet the information needs of wildlife health officials in monitoring the health of kit fox populations; and includes contingency measures that would be performed if canine distemper were documented in the Project area or in potential relocation areas, and measures to address potential kit fox reoccupancy of the site
- Implementation of the desert kit fox/badger management plan that includes preconstruction surveys, avoidance of active den complexes and implementation of measures to monitor, minimize and contain any canine distemper outbreaks.

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20 BLM 2012. Solar Apps and Auths

<http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/pa/energy/solar.Par.84447.File.dat/BLM%20Solar%20Apps%20and%20Auths.pdf>

21 BLM 2012. McCoy PA-FEIS Vol. 1 - Chapter 4

[http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/palmsprings/Solar.Par.89379.File.dat/Vol1\\_McCoy%20PA-FEIS.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/palmsprings/Solar.Par.89379.File.dat/Vol1_McCoy%20PA-FEIS.pdf)

- On 10/22/13, the CDFW veterinarians docketed a draft outline of a new desert kit fox program which identifies many concerns about project impacts the desert kit fox<sup>22</sup>. The DEIR identifies likely kit fox and dens on the proposed project site, although it is unclear if these are natal dens (DEIR at 4-88). According to the state, passive relocation or hazing activities conducted in an area experiencing or adjacent to distemper cases may enhance disease transmission and spread by multiple mechanisms. Many unanswered questions remain, and the American badger and Desert kit fox monitoring and management plan (MM BIO-6) must include mechanisms to answer them:
  - Do passively relocated animals re-establish territories adjacent to the solar site?
  - Does this depend on the density or spatial distribution of foxes around a site?
  - Do relocated foxes experience lower survival or different causes of mortality that might need to be addressed through mitigation efforts.
  - Recursion rate – how likely are relocated foxes going to try to get back on site and return to former den areas?
  - What’s the demographic shifts of neighbors?
  - Reproductive impact appears highly negative (n=1 relocated pair this year had den failure; most other dens were successful this year in producing pups).
  - Are artificial dens helpful?
  - What are the longer-term translocation effects?

The answers to these questions are currently unknown to our knowledge, despite projects consistently moving forward for construction and operation. In addition, the State also identifies that the current monitoring is limited in scope and inadequate to address needs and methods and outcomes for relocation are not evaluated systematically or reported. The American badger and Desert kit fox monitoring and management plans must address these issues.

### *Other Rare Species*

The diversity of rare species found across the landscape near and on the Oberon site is impressive and suggests that the proposed project sites are part of a larger ecologically intact and functioning unit<sup>23</sup>. The Agencies must clearly address proposals for avoiding, minimizing and mitigating the impacts to all the rare species that utilize the sites for part or all of their lifecycle.

Acquisition of lands that will be managed in perpetuity for conservation must be included as part of the strategy to avoid, minimize and mitigate impacts to the other species found on site as well. Acquisition is particularly important for these species because the proposed project appears to have little compatibility with any type of on-site conservation of plant communities or wildlife.

For the rare plants, avoidance is preferable because of the general lack of success in transplanting rare plants<sup>24</sup>. If transplantation is to be a part of the mitigation strategy, a detailed

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<sup>22</sup> [http://docketpublic.energy.ca.gov/PublicDocuments/09-AFC-07C/TN200995\\_20131022T141658\\_Exhibit\\_2005\\_CDFW\\_Outline\\_for\\_Proposed\\_Desert\\_Kit\\_Fox\\_Health\\_M.pdf](http://docketpublic.energy.ca.gov/PublicDocuments/09-AFC-07C/TN200995_20131022T141658_Exhibit_2005_CDFW_Outline_for_Proposed_Desert_Kit_Fox_Health_M.pdf)

<sup>23</sup> CNDDDB 2010 <http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp>

<sup>24</sup> Fiedler 1991

final plan must be included as part of the EIS on the methodology for determination of appropriate conservation area where plants may be transplanted, when/how plants are to be transplanted and identification of success criteria for transplantation. Monitoring of the transplanted plants needs to occur for a time period that is realistic to evaluate long-term success of the plants.

### ***Locally Rare Species***

The Conservation Organizations request that the DEA and DEIR also evaluate the impact of the proposed project on locally rare species (not merely federal- and state-listed threatened and endangered species). The preservation of regional and local scales of genetic diversity is very important to maintaining species in perpetuity especially considering global climate change. Therefore, we request that all species found at the edge of their ranges or that occur as disjunct locations be evaluated for impacts by the proposed permitted activities.

### **Water Resources and Water Quality**

The proposed projects appear to potentially impact on-site drainages on the project site. The DEA and DEIR must clarify the impacts to the jurisdictional Waters of U.S. and the Water of the State of California, and surface hydrology across the site. Impacts to waters of the state must be fully analyzed. The project must avoid, minimize and mitigate any impacts to surface waters and surface hydrology. Impacts should be avoided to the greatest extent possible and if impacts remain, they must be minimized and mitigated. In doing so, any reroute of waters and drainage on the site must assure that downstream processes are not impacted.

An evaluation of the effect of water use by the proposed project during construction and operations needs to be detailed and include alternatives and its impact on the Colorado River Basin. Any groundwater pumping proposed for the proposed project (in conjunction with other groundwater issues [pumping, nitrate plume etc.] in the basin) must be analyzed in terms of groundwater resource availability as well as water quality in the basin and surface water resources, and its effect on the native plant and animal species and their habitats need to be included in the DEA and DEIR.

### **Alternatives**

The DEA and DEIR must include a preferred alternative that complies with the DRECP and a robust analysis of other alternatives, including a reduced footprint alternative, an alternative that includes the northern portion of the application area (see Attachment D), a private lands alternative and alternatives using other technologies including distributed generation. The stated objectives of the project by the applicant cannot unreasonably constrain the range of feasible alternatives evaluated in the DEA or DEIR. The Agencies must establish an independent set of objectives that do not unreasonably limit the DEA's and DEIR's analysis of feasible alternatives including alternative sites. At a minimum, alternatives including the no-action alternative, an environmentally preferred alternative which complies with the DRECP, a conservation alternative that avoids all critical habitat, rare sand habitat and other significant

impacts to resources (including cultural resources), and an alternative where power generation is sited adjacent to power consumption need to be included.

### **Other Issues**

The construction, operation and eventual decommissioning of the proposed facilities will also increase greenhouse gas emissions and those emissions should be quantified and off-set. This would include the manufacture and shipping of components of the project and the car and truck trips associated with construction and operations. That GHG analysis should also include the loss of carbon sequestration from the project's disturbance of desert soils, plant communities and other resources. Similarly, such activities will also impact air quality and traffic in the area and these impacts should be disclosed, minimized and mitigated as well. For mobile sources, since consistency with the AQMP will not necessarily achieve the maximum feasible reduction in mobile source greenhouse emissions, the DEA and DEIR should evaluate specific mitigation measures to reduce greenhouse emissions from mobile sources.

#### ***Fire Impacts***

Because the any industrial project increases the potential for human-caused fire to occur on site, fire prevention including best management practices must be addressed and clearly identified in the DEA and DEIR - not only on-site protection of resources, but also preventing fire from moving into the adjacent lands. Fire is incredibly detrimental to desert ecosystems, resulting in degradation of the habitat and if frequently returned results in a type conversion to non-native vegetation<sup>25</sup>.

#### ***Non-Native Plants***

The DEA and DEIR must identify and evaluate impacts to species and ecosystems from invasive exotics species. Many of these species invade disturbed areas, and then spread into wildlands. Fragmentation of intact, ecologically functioning habitat/communities further aides the spread and degradation of habitat and plant communities<sup>26</sup>. These factors for wildland weed invasions are present in the project, and their effect must be evaluated in the DEA and DEIR.

Additionally, landscaping with exotic species is often the vector for introducing invasive exotics into adjacent habitats. Invasive landscape species displace native vegetation, degrade functioning ecosystems, provide little or no habitat for native animals, and increase fire danger and carrying capacity<sup>27</sup> and should be banned from the project site.

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<sup>25</sup>[http://www.nps.gov/moja/naturescience/upload/Fire%20congress%202006\\_brooks%20and%20draper\\_extended%20abstract.pdf](http://www.nps.gov/moja/naturescience/upload/Fire%20congress%202006_brooks%20and%20draper_extended%20abstract.pdf)

<sup>26</sup> Bossard et al 2000

<sup>27</sup>[http://dhtlral.gosolarcalifornia.org/sitingcases/genesis\\_solar/documents/others/testimony\\_central\\_biological\\_diversity/exhibits/Exh.%20806.%20Brooks%202000.%20Competition%20between%20alien%20annual%20grasses%20and.pdf](http://dhtlral.gosolarcalifornia.org/sitingcases/genesis_solar/documents/others/testimony_central_biological_diversity/exhibits/Exh.%20806.%20Brooks%202000.%20Competition%20between%20alien%20annual%20grasses%20and.pdf)

## ***Wildlife Movement***

In addition to the concerns stated above about the DRECP-identified multispecies wildlife linkage, recently, the Dingell Act also requires “(C) identify critical wildlife and species migration corridors recommended for preservation; and “(D) include recommendations for ensuring the biological connectivity of public land managed by the Secretary and the Secretary of Defense throughout the California Conservation Area”. This requirement reinforces the importance of preserving the existing multispecies linkage in the proposed project area that has already been identified. The DEA and DEIR must evaluate all direct, indirect, and cumulative impacts to wildlife movement corridors, not only from these proposed projects but also from existing projects that were permitted and constructed prior to the DRECP’s adoption. The analysis should cover movement of large mammals, as well as other taxonomic groups, including small mammals, birds, reptiles, amphibians, invertebrates, and vegetation communities.

## **Cumulative Impacts**

The DEA and DEIR must also include a robust cumulative impact analysis,<sup>28</sup> we urge the BLM to include such an analysis. Because of the number of currently permitted and proposed projects in this project’s vicinity, the region, and the CDCA, a thorough analysis of the cumulative impacts from all these projects as well as other types of project (including the most recent upsurge of illegal marijuana grows) on the resources needs to be included. Because the project sites are within the Riverside East DFA, projects located in the zone have the potential to cumulatively significantly impact the existing biological resources and ecological processes that currently exist within the zone despite the safeguards included in the Desert Renewable Energy Conservation Plan. To date numerous renewable energy projects and associated infrastructure projects have been permitted in the DFA, including the Colorado River substation, Desert Sunlight, Genesis, the Desert Harvest, McCoy, Blythe, Athos, Desert Quartzite solar projects and the Ten West transmission line. Potentially the Crimson project will be finalized soon. Additionally, new proposals of Arica and Victory Pass are currently in the permitting process.

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<sup>28</sup> Cumulative impacts analysis is a part of the BLM’s required NEPA project analysis. *See, e.g.*, 43 C.F.R. §46.30, §46.115. Furthermore, Secretarial Order # 3399 “Department-Wide Approach to the Climate Crisis and Restoring Transparency and Integrity to the Decision-Making Process” (April 16, 2021) expressly states that BLM should continue to apply NEPA in the manner it had before the 2020 changes to the CEQ NEPA regulations:

. . . In order to ensure the effective and efficient implementation of the Department’s policies in analysis conducted pursuant to NEPA, this order requires all Bureaus/Offices to utilize science and enhance opportunities for Tribal and environmental justice community engagement in the NEPA and decision-making process.

a. Applying NEPA. Bureaus/Offices will not apply the 2020 Rule in a manner that would change the application or level of NEPA that would have been applied to a proposed action before the 2020 Rule went into effect on September 14, 2020. Bureaus/Offices will continue to follow the Department’s NEPA regulations at 43 C.F.R. Part 46, Department Manual procedures (516 DM Ch. 1-15), and guidance and instruction from the Office of Environmental Policy and Compliance. If Bureaus/Offices believe that the Department’s NEPA regulations irreconcilably conflict with the 2020 Rule, they will elevate issues to the relevant Assistant Secretary and to CEQ.

(Section 5). [https://www.doi.gov/sites/doi.gov/files/elips/documents/so-3399-508\\_0.pdf](https://www.doi.gov/sites/doi.gov/files/elips/documents/so-3399-508_0.pdf)



While the DFA may be appropriate for some renewable energy development, especially on already disturbed private lands, the DEA and DEIR must evaluate if the cumulative impact from the projects will cause significant unmitigable impacts not only to the DFA but to the surrounding resources including Joshua Tree National Park, which already is impacted by border development on the south, east and west boundaries, as well as BLM's identified Areas of Critical Environmental Concern (ACECs), Wildlife Habitat Management Areas (WHMAs) and federally designated Wilderness.

Thank you for your consideration of these comments. Please add us to the distribution list for the DEA and DEIR and all notices associated with this project.

Sincerely,



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## References

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**Attachments:**

**Attachment A:** Land Use Plan Conformance map from BLM scoping meeting

U.S. Department of the Interior  
Bureau of Land Management

## Land Use Plan Conformance

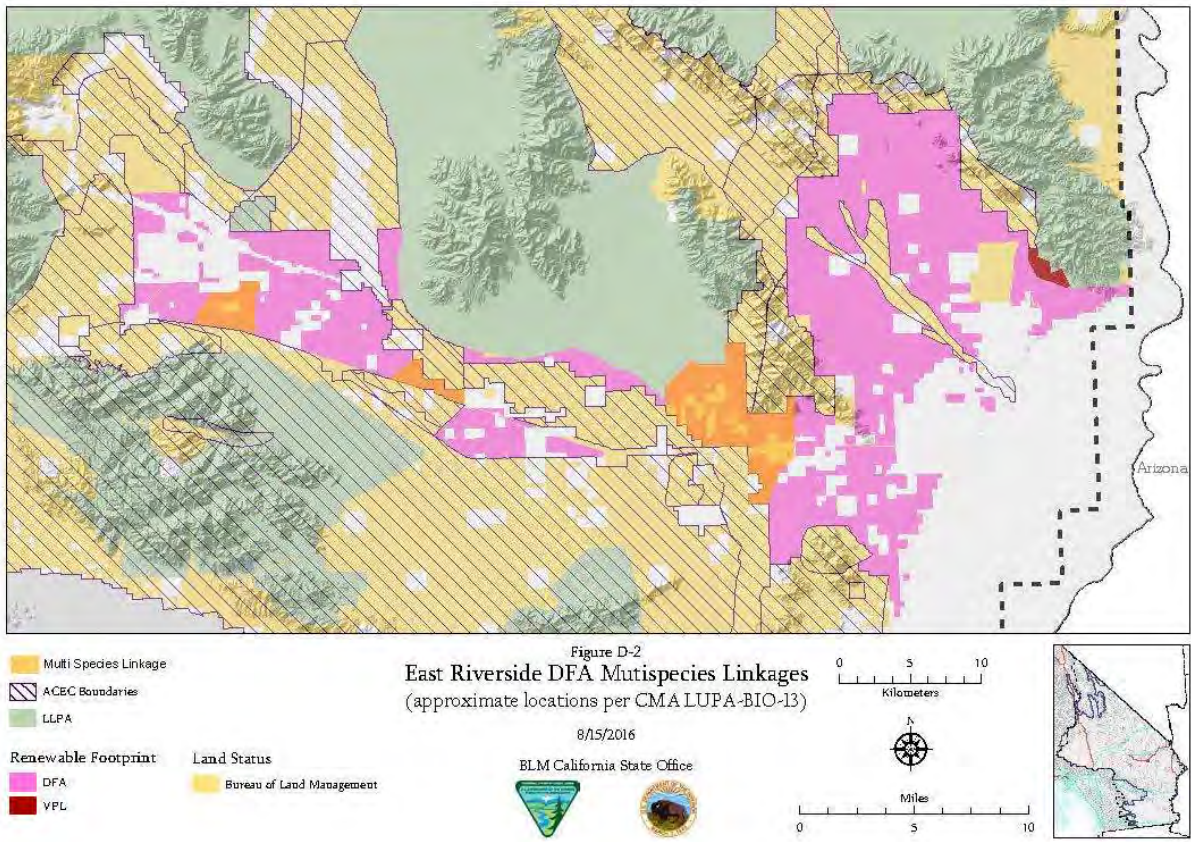
- The proposed project is located within a Development Focus Area
- Proposed project does not avoid all microphyll woodland or buffers as the DRECP prescribes

Legend:

- Oberon Project Boundary
- Fenced Solar Array
- Future BESS
- Substation and BESS
- Proposed Early Fencing Areas
- Proposed 500 kV Gen-Tie Line Corridor
- Laydown Area
- Existing SCE Red Bluff Substation
- BLM Section 368 Corridor
- Area of Critical Environmental Concern (ACEC)
- Desert Tortoise Critical Habitat
- Riverside East OFA Multipurpose Linkage
- Land Ownership
- Bureau of Land Management
- State

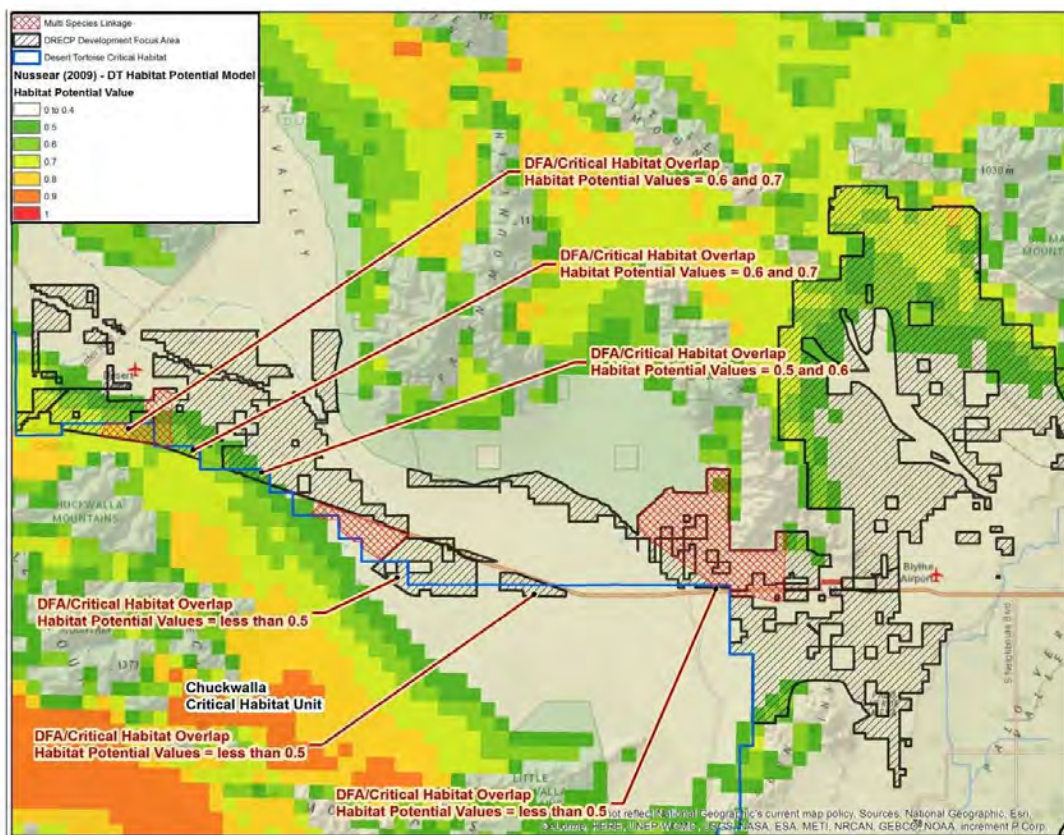
Oberon Solar Project Proposed Action Area

**Attachment B: Riverside-East DFA from Final DRECP 2016, Appendix D, Figure D-2**

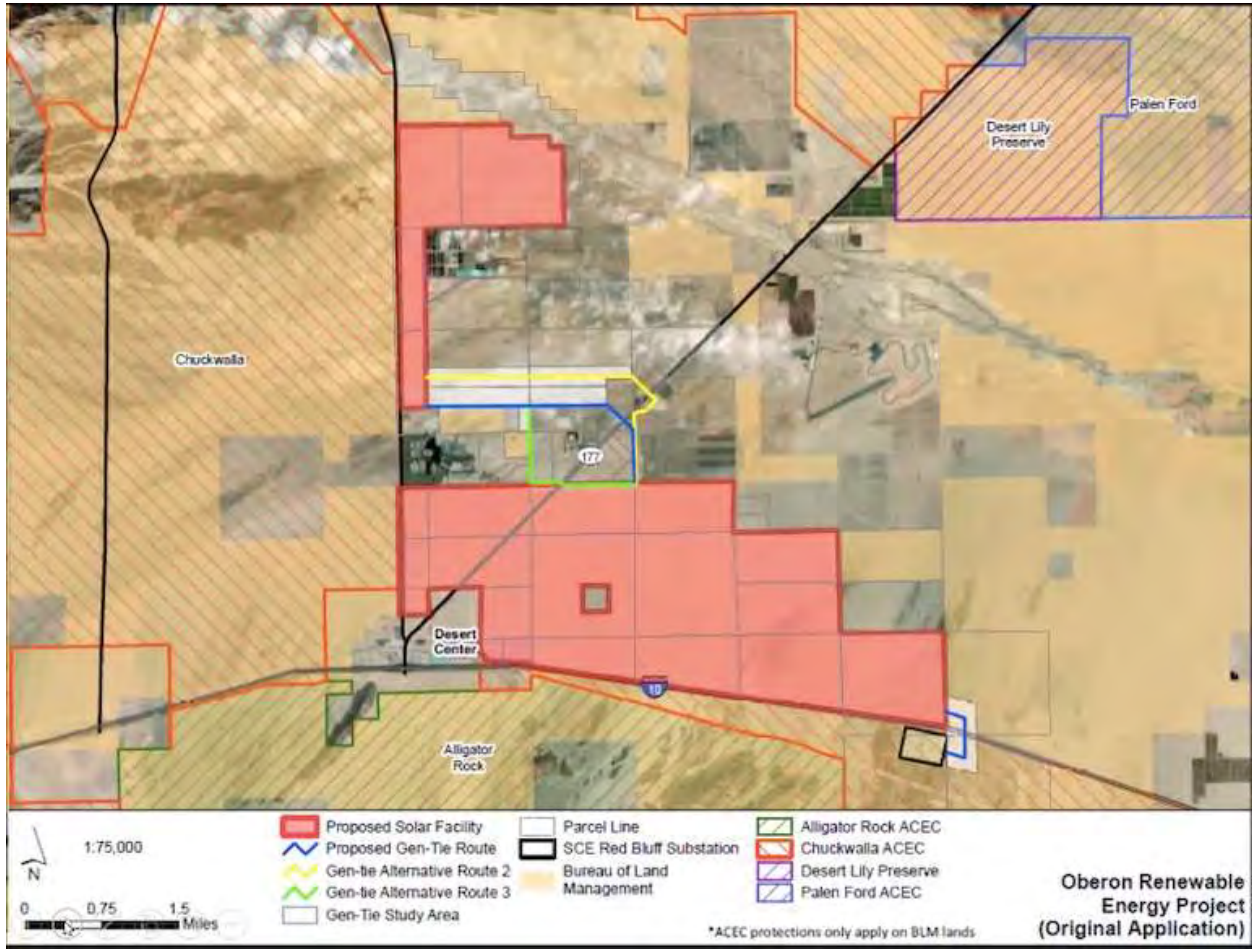




Attachment C: USFWS' Biological Opinion for the DRECP, page 83.



**Attachment D:**







April 19, 2021

Brandon Anderson, Assistant District Manager  
California Desert District  
Bureau of Land Management  
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Moreno Valley, CA 92553  
Sent via email to: [BLM\\_CA\\_PS\\_OberonSolar@blm.gov](mailto:BLM_CA_PS_OberonSolar@blm.gov)

Re: Scoping comments on proposed Oberon Solar Project

Dear Mr. Anderson:

Thank you for the opportunity to provide scoping comments on the proposed Oberon Solar Project (Project). Scoping comments included in this letter are submitted by the following organizations on behalf of their members and supporters: Defenders of Wildlife (Defenders), California Native Plant Society (CNPS), California Wilderness Coalition (CalWild), Natural Resources Defense Council (NRDC) and the National Audubon Society.

Defenders is a national conservation organization founded in 1947 and dedicated to protecting all wild animals and plants in their natural communities. To this end, we employ science, public education and participation, media, legislative advocacy, litigation, and proactive on-the-ground

Defenders, CNPS, CalWild, NRDC and Audubon Scoping Comments on Proposed Oberon Solar Project

solutions to impede the accelerating rate of extinction of species, associated loss of biological diversity, and habitat alteration and destruction. Defenders has 2.2 million members in the U.S., including 323,000 in California.

CNPS is a statewide, non-profit organization dedicated to conserving California native plants and their natural habitats, and to increase the understanding, appreciation, and horticultural use of native plants. CNPS works closely with decision-makers, scientists, and local planners to advocate for well-informed policies, regulations, and land management practices. CNPS has more than 10,000 members in 35 chapters throughout California.

CalWild is a California non-profit conservation organization founded in 1976. CalWild works to protect and restore the state's wildest natural landscapes and watersheds on federal public lands. These important wild places provide clean air and water, refuges for wildlife, mitigation against the effects of climate change, and outstanding opportunities for recreation and spiritual renewal for people. We work with local communities to identify wild places that need protection, and then we build coalitions to support permanent protection for forests, mountains, rivers, deserts and other natural areas. CalWild has thousands of members in California.

NRDC is a non-profit environmental organization that uses law, science and the support of its members and activists to protect the planet's wildlife and wild places and to ensure a safe and healthy environment for all living things. NRDC has worked for many years to protect wildlands and natural values on public and private lands and to promote cost-effective energy efficiency measures and sustainable energy development. NRDC has been a long-time advocate for many of the "smart from the start" planning hallmarks of the DRECP, including landscape-level conservation planning, guided low-conflict development, and strategic regional mitigation that produces enduring protection for sensitive areas. NRDC has 2.4 members and activists in the U.S., including more than 380,000 in California.

### Project Description

The Project is a 500 MW photovoltaic electricity generating facility and related infrastructure that would be constructed within a 4,700-acre block of public lands in the southwestern portion of the Chuckwalla Valley near Desert Center, CA, and within a Development Focus Area (DFA). The Project also includes a proposal by the Bureau of Land management (BLM) to exempt the Project from compliance with certain unspecified Conservation Management Actions (CMAs) included in the 2016 Desert Renewable Energy Conservation Plan (DRECP), which were adopted as amendments to the California Desert Conservation Area (CDCA) Plan. Without exemptions of certain CMAs, BLM has determined that the 500 MW Project would not be able to be constructed.

BLM intends to analyze the effects of the Project, including a CDCA Plan amendment exempting the Project from compliance with certain CMAs, in an Environmental Assessment (EA) that is tiered from the Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) for the DRECP.

### Scoping Comments

Our scoping comments on the Project are as follows:

**1. BLM's Notice of Intent in the Federal Register:** BLM states it intends to amend the CDCA Plan to exempt the Project from compliance with certain unspecified CMAs from the DRECP, otherwise the Project could not be authorized. The failure of the BLM to include a description of the CMAs that it believes must be amended limits the ability of the public to provide meaningful scoping comments for the proposed EA. The purpose of the scoping process is to allow for the public to provide the BLM with information about any significant issues that could arise from the proposed action. The BLM has stated that its EA will include analyzing a plan amendment that exempts the project from compliance with unspecified CMAs. Without clearly knowing which CMAs the BLM intends to amend through the plan amendment, the public is limited in terms of what information it can submit as part of the scoping process to help the BLM identify significant issues. Indeed, the public is left to guess which of the many CMAs the BLM may be proposing to exempt. Without this information, the BLM's Notice of Intent is deficient and fails to serve the goal of meaningfully engaging the public.

**2. The Proposed Exemption of Unspecified DRECP CMAs:** Although not specified, we anticipate the CMAs of potential concern are those designed to maintain functioning wildlife linkages for various species of special concern, and protect Microphyll Woodland habitat, while concurrently allowing solar energy project development to continue, subject to modification based on applicable CMAs. Without detailed explanation, BLM simply states that a CDCA amendment would be needed:

*"...application of the relevant CMAs to the proposed project would preclude the ability to construct and operate the 500-MW project in an area identified as suitable for renewable energy development. As such, the proposed Project would require a plan amendment to allow solar development within the application area."*

Although BLM determined that application of current CMAs would preclude a 500 MW project from being approved, a smaller project that conforms to applicable CMAs may be feasible. We are concerned that if BLM proceeds with an amendment to the CDCA Plan to allow the Project to be approved and constructed, through an exemption for compliance with certain CMAs, it will potentially establish a precedent for BLM's acceptance and authorization of future applications for renewable energy projects in DFAs by means of an exemption from certain CMAs. This would incrementally undermine the intent and function of the DRECP amendments to the CDCA Plan.

We recommend that after the close of the scoping process for the Project, BLM provide the public with written documentation, posted on BLM's website for the Project, of why it determined that the Project warrants further analysis, rather than being rejected for conflicting with the CDCA Plan, as amended. BLM should also provide information regarding efforts to modify the Project so that it would conform with the CDCA Plan, and why such a modified Project was not proposed. We make this recommendation based on the ROD for the DRECP, which states, in part:

*"BLM-authorized activities on public land must conform to the applicable land use plan. If the BLM receives an application for a project that does not conform to the land use plan, it may reject the application without additional analysis. If the BLM determines, however, that the proposal warrants further analysis, it must undertake a plan amendment, which includes a public process, as described in the land use planning regulations at 43 CFR 1610.2"*

In addition, the CMAs in the DRECP amendments to the CDCA Plan were developed over a period of several years in cooperation with the California Department of Fish and Wildlife (CDFW), and subject to review and comment by the public, including stakeholder organizations. We recommend BLM refrain from concluding at the outset of the environmental scoping process for

the Project that a Plan amendment is needed, especially in the absence of input from the public and the CDFW. The ROD for the DRECP addressed the nature and importance of CMAs:

*“The CMAs were designed to achieve the goals and objectives for activities within the LUPA’s various land use allocations. These measures identify a specific set of avoidance, minimization, and compensation measures, and allowable and non-allowable actions for siting, design, pre-construction, construction, maintenance, implementation, operation, and decommissioning activities on BLM-managed lands. The intent of these is to provide certainty on what avoidance and minimization measures, design features, and compensation/mitigation measures would be required for a particular action within any one of the LUPA’s land use allocation types.”*

Depending on the consequences of exempting a proposed land use from applicable CMAs, it is likely that some associated actions could result in direct, indirect and cumulative impacts that create unnecessary and undue degradation of the public lands. If so, this would result in a failure by BLM to maintain environmental quality of our public lands in the CDCA. The latter two consequences would violate provisions of the Federal Land Policy and Management Act. We strongly oppose BLM entertaining proposed non-land use plan conforming projects by way of “consideration by amendment.” There is ample land in the East Riverside DFA, some of which is under application by the Project proponent and relatively close by, which could potentially be utilized to avoid violating the CMAs, especially since photovoltaic solar does not have to be contiguous.

**3. Purpose and Need:** We recommend the BLM avoid drafting its purpose and need too narrowly. Instead of drafting a purpose and need that is intended only to respond to the project proponent’s application for a right of way, the BLM must draft its purpose and need statement to encompass how the project will meet the DRECP renewable energy goal and potential alternative means of achieving that goal. In particular, the purpose and need statement should set the stage for incorporating environmental concerns as part of the project.

As courts have cautioned, “One obvious way for an agency to slip past the structures of NEPA is to contrive a purpose so slender as to define competing ‘reasonable alternatives’ out of consideration (and even out of existence.)” *Davis v. Mineta*, 302 F.3d 1104, 1119 (10th Cir. 2002) (quoting *Simmons v. United States Army Corps of Eng’rs*, 120 F.3d 664, 669 (7th Cir. 1997).

Therefore, the BLM should draft its purpose and need statement to ensure that it allows for the EA to consider a reasonable range of alternatives, as discussed more fully below.

**4. Alternatives to the Project:** In addition to analyzing the effects of a No Action alternative, or no project, we recommend BLM analyze action alternatives that would comply, to varying degrees, with the CMAs designed to protect various types of habitats that support important species and their movements. Based on our review of the DRECP and its CMAs we ask that BLM analyze the following alternatives to the Project:

- A modified project that would fully comply with **all** applicable CMAs and not require an amendment to the CDCA Plan, including a project with a smaller footprint.
- A modified project in compliance with CMA LUPA-BIO-13.
  - Maximum retention of microphyll woodlands and features supporting dispersal of Focus and Special Status Species (e.g., desert tortoise, desert kit fox, American badger, burro mule deer).

- Project sited and designed to maintain the function of Special Status Species connectivity habitat within a 1.5-mile-wide linkage across Interstate 10 connecting the Chuckwalla Mountains to the Chuckwalla Valley east of Desert Center.
- Project that largely avoids construction of new dirt and paved roads within habitat linkages for Focus and Special Status Species (unless a new road is beneficial to minimize net impacts to habitats and species of concern).
- A modified project that largely avoids development (i.e., no photovoltaic solar panels) within the Chuckwalla Critical Habitat Unit for the threatened desert tortoise, and specifically located north of the Interstate Highway 10.
- A combination of the above that substantially avoids or minimizes loss of habitats and movements of Focal and Special Status Species protected by CMAs.

**5. Compensatory Mitigation:** To the extent that the Project and any alternatives analyzed overlap with habitats afforded varying levels of protection through applicable CMAs, we recommend that the CMA specifying compensatory mitigation for loss of specific habitats (i.e., LUPA-BIO-COMP-1) be fully applied, as follows, and not be exempted by an amendment to the CDCA Plan:

<u>Habitat Feature</u>	<u>CMA Compensation Requirement</u>
Desert tortoise critical habitat	5:1
Microphyll woodland	5:1
Habitat in general (Standard Biological Resources Compensation Ratio)	1:1

CMA LUPA-BIO-COMP-2, 3 and 4, provide compensatory mitigation for individual species or groups of species (Focus and BLM Special Status Species), including birds, bats and golden eagle. We recommend these CMAs be applied to the Project and not be exempted by an amendment to the CDCA Plan.

**6. Groundwater:** We presume the Project will require the use of groundwater during construction, operation and decommissioning, which will likely be pumped from the Chuckwalla Valley groundwater reservoir by wells developed within the Project boundary. The DRECP includes extensive discussion of groundwater and numerous CMAs have been designed to avoid, minimize and compensate for adverse impacts to groundwater resources. We therefore urge BLM to require all applicable CMAs associated with groundwater use for the Project in order to protect the Chuckwalla Valley groundwater from overdraft. We consider the following CMAs particularly important given the cumulative effects of numerous solar energy projects in the DFA:

- LUPA-SW-17: *An activity's groundwater extraction shall not contribute to exceeding the estimated perennial yield for the basin in which the extraction is taking place. Perennial yield is that quantity of groundwater that can be withdrawn from the groundwater basin without exceeding the long-term recharge of the basin or unreasonably affecting the basin's physical, chemical, or biological integrity.*
- LUPA-SW-21: *Consideration shall be given to design alternatives that maintain the existing hydrology of the site or redirect excess flows created by hardscapes and reduced permeability from surface waters to areas where they will dissipate by pervolation into the landscape.*

- LUPA-SW-22: *All hydrologic alterations shall be avoided that could reduce water quality or quantity for all applicable beneficial uses associated with the hydrologic unit in the project area, or specific mitigation measures shall be implemented that will minimize unavoidable water quality or quantity impacts, as determined by BLM in coordination with USFWS, CDFW, and other agencies, as appropriate.*
- LUPA-SW-23: *A Water (Groundwater) Supply Assessment shall be prepared in conjunction with the activity's NEPA analysis and prior to an approval or authorization. This assessment must be approved by the BLM in coordination with USFWS, CDFW, and other agencies, as appropriate, prior to the development extraction, injection, or consumptive use of any water resource. The purpose of the Water Assessment is to determine whether over-use or over-draft conditions exist within the project basin(s), and whether the project creates or exacerbates these conditions. The Assessment shall include an evaluation of existing extractions, water rights, and management plans for the water supply in the basin(s) (i.e., cumulative impacts), and whether these cumulative impacts (including the proposed project) can maintain existing land uses as well as existing aquatic, riparian, and other water-dependent resources within the basin(s).*
- LUPA-SW-24: *A Groundwater Monitoring and Reporting Plan, and Mitigation Action Plan shall be prepared to verify the Water Supply Assessment and adaptively manage water use as part of operations. This plan shall be approved by BLM, in coordination with USFWS, CDFW, and other agencies as appropriate, prior to the development, extraction, injection, or consumptive use of any water resource.*
- LUPA-SW-26: *Groundwater pumping mitigation shall be imposed if groundwater monitoring data indicate impacts on water-dependent resources that exceed those anticipated and otherwise mitigated for in the NEPA analysis and ROD, even if the basin's perennial yield is not exceeded. Water-dependent resources include riparian or phreatophytic vegetation, springs, seeps, streams, and other approved domestic or industrial uses of groundwater.*
- LUPA-SW-32: *Colorado River hydrologic basin - The Colorado River Accounting Surface Method, as defined in U.S. Geological Survey Scientific Investigations Report 2008-5113, and existing and future updates or a similar methodology, are considered the best available data for assessing activity/project related ground water impacts in the Colorado River hydrologic basin. They shall be used to determine whether activity/project-related pumping would result in the extracted water being replaced by water drawn from the Colorado River. If activity/project-related groundwater pumping results in the static groundwater level at the well being within 1 foot, equal to, or below the Accounting Surface in [the Chuckwalla Valley groundwater basin] hydrologically connected to the Colorado River, that consumption shall be considered subject to the Law of the River (Colorado River Compact of 1922 and amendments). In such circumstances, BLM shall require the applicant to offset or otherwise mitigate the volume of water causing drawdown below the Accounting Surface.*

We recommend all the groundwater CMAs applicable to the Project be included in the EA, and especially each identified above that we consider particularly important in protecting the Chuckwalla Valley groundwater basin from overdraft.

**7. Impact Analysis in the EA:** As more photovoltaic solar projects are added to the East Riverside DFA, we recommend that each respective EA include a thorough analysis of the direct, indirect and cumulative impacts of existing and future projects on individual focus species, BLM Special Status



Species, and habitat connectivity. Further, each subsequent EA analysis should evaluate specific habitat linkages identified in the DRECP (i.e., Landscape Wildlife Linkages/Figure D-1, Multispecies Linkages/Figure D-2, East Riverside DFA Linkages/Figure D-15). DRECP amendments to the CDCA Plan require maintaining functional habitat linkages, especially in DFAs where renewable energy project development is prioritized and receives the benefits of streamlined permitting.

**8. Conclusion:** The Project is one of three new utility-scale photovoltaic solar projects proposed for inclusion within the East Riverside DFA that will be subject to compliance with the DRECP amendments to the CDCA Plan. This includes compliance with all applicable CMAs, some of which are described previously in this letter. The Arica and Victory Pass solar projects also proposed for inclusion within this DFA will similarly be analyzed and disclosed in separate EAs.

We emphasize the importance of maintaining the framework of CMA requirements to determine if proposed renewable energy projects can be considered under the DRECP or would require further design modification for final consideration under this adopted land use plan amendment. If such modification is required, the resulting adjusted project footprint location should be included in the EA as an alternative to the project proposed by the applicant.

The public is not well served by concluding at the initial public involvement stage of a proposed action's environmental analysis that the only path forward is to exempt that project's compliance with certain adopted CMAs. Processing another separate land use plan amendment to the CDCA Plan to avoid application of previously adopted CMAs is not necessary and we encourage BLM to analyze the proposed action within the umbrella of the entire DRECP CMA framework.

Please contact us if additional information or clarification of our comments is needed.

Sincerely,



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**Western  
Watersheds  
Project**



**Basin and Range Watch**

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Via email: [BLM\\_CA\\_PS\\_OberonSolar@blm.gov](mailto:BLM_CA_PS_OberonSolar@blm.gov)

April 19, 2021

**RE: Scoping Comments on Oberon Solar Project. DOI-BLM-CA-D060-2020-0040-EA**

Dear Mr. Anderson,

Intersect Power, LLC, proposes to construct, operate, maintain, and decommission a 500 megawatt (MW) solar photovoltaic electricity generating station, battery energy storage facility, electrical substation, generation intertie (gen-tie) lines and associated access roads on Bureau of Land Management (BLM) managed land in Riverside County, California within the Riverside East Development Focus Area (DFA) in Chuckwalla Valley. The Project is known as the Oberon Renewable Energy Project.

Western Watersheds Project is a non-profit conservation organization with more than 12,000 members and supporters. Our mission is to protect and restore western watersheds and wildlife through education, public policy initiatives, and legal advocacy. We have visited the site of the proposed Oberon Solar Project to record the biodiversity and other public lands resources on this site.

Basin and Range Watch is a 501(c)(3) non-profit working to conserve the deserts of Nevada and California and to educate the public about the diversity of life, culture, and history of the ecosystems and wild lands of the desert. Federal and many state agencies are seeking to open up millions of acres of unspoiled habitat and public land in our region to energy development. Our goal is to identify the problems of energy sprawl and find solutions that will preserve our natural ecosystems, open spaces, and quality of life for local communities. We support energy efficiency, better rooftop solar policy, and distributed generation/storage alternatives, as well as local, state and national planning for wise energy and land use following the principles of conservation biology. We have visited the site of the proposed Yellow Pine Solar Project eight times. We have taken photos of the region, hikes on the site and have observed unique flora and fauna on the site.

## **1. The Project Needs To Be Reviewed With an Environmental Impact Statement**

This utility-scale solar project has several concerning proposals: the applicant is seeking to construct an industrial solar energy project with storage in Federally Threatened Mojave Desert tortoise Critical Habitat, in a Multispecies Wildlife Connectivity Corridor designated in the Desert Renewable energy Conservation Plan (DRECP), and on approximately 70-plus acres of microphyll woodland that would be inconsistent with Conservation Management Actions (CMAs) listed in the DRECP, the latter requiring a Land Use Plan Amendment (LUPA).

For this reason we request a Environmental Impact Statement (EIS) in order to fully analyze the specific significant impacts to this location. BLM is currently proposing to analyze this massive energy project with simply an Environmental Assessment (EA), tiering to the DRECP EIS of 2015. But the level of specific detail was not analyzed in that earlier EIS. We doubt whether the DRECP EIS for the Riverside East DFA included significant impacts analysis of solar projects overlapping with Critical Habitat to this unprecedented extent.

The large and new impacts, not previously analyzed, require an EIS with 45-day comment, and not a brief EA with 30-day comment period. This would better match the more detailed analysis under the California Environmental Quality Act (CEQA) of a proposed Environmental Impact Report being undertaken by the Colorado River Basin Regional Water Quality Control Board. The project will require a waste discharge permit from the water board, and significant impacts were admitted to require a full EIR with 45-day public comment.

## **2. Desert Tortoise Critical Habitat Needs To Be Avoided**

The applicant is seeking to construct an industrial energy facility and solar field in approximately 600 acres of US Fish and Wildlife Service-designated Critical Habitat for the Federally Threatened Agassiz's desert tortoise on the north side of Interstate-10 in Chuckwalla Valley.

When questioned about this unprecedented overlap, the applicant's contractor Aspen Environmental stated that the consulting company Ironwood Consulting was looking at the "value" of this tortoise habitat. Our field visits indicate this is excellent desert tortoise habitat, as it is on a slightly higher rise close to the adjacent Chuckwalla Mountains on the south side of the highway. The Critical Habitat site contains numerous washes flowing out of the nearby Chuckwalla Mountains, with desert ironwood trees (*Olneya tesota*)—the seed pods of which are a favored food item for tortoises. In addition, the presence of native grasses such as big galleta (*Hilaria rigida*) are another indicator of good tortoise habitat and a favored adult tortoise forage. During rainy years, spring wildflower displays here are excellent, providing more sources of tortoise forage species. The current extreme drought in the southwestern deserts will bias any surveys in spring 2021, and will only show a snapshot of poor forage conditions on this usually biodiverse Colorado Desert ecosystem.

Simply eyeing a map of GIS layer will not be able to show the "value" of tortoise habitat, and tortoises often prefer habitats that to the untrained human eye appear low in value.

Building a large solar field inside and on top of a 600-acre block of Critical Habitat would set an example for future solar developers to disregard this important land management designation, one of the best tools for conserving the California Desert from further encroachment and disturbance. A precedent should not be set.

Therefore, we request that a LUPA be included in the EIS to amend the DRECP and remove the existing overlaps of the DFA with all Critical Habitat units. This defect in the DFA boundary should be fixed during this federal action opportunity, sooner, rather than later.



Large washes pour out of the Chuckwalla Mountains, containing palo verde, desert ironwood, and smoke tree microphyll habitat. Desert tortoise Critical Habitat south of I-10.





Washes coming out of the Chuckwalla Mountains with ocotillo, ironwood, and palo verde. Desert tortoise Critical Habitat south of I-10.

**3. All Microphyll Woodland Should Be Avoided**

We have walked this area, and the southern portion of the project site is a higher alluvial fan pouring off the Chuckwalla Mountains to the south, and slopes downward to the north towards Palen Dry lake. We have seen a high diversity of plants along these washes, including desert ironwood (*Olneya tesota*), Blue palo verde (*Parkinsonia florida*), and Smoke tree (*Psoralea argemone*).

The applicant, in seeking a large-scale 500-MW solar project, cannot respect the DRECP directives, and is seeking to build on more than 70 acres of this sensitive habitat that is protected by CMAs. The applicant is proposing to build sections of solar field between Dry Desert Wash habitats containing microphyll species, but overlaps others and does not properly buffer the solar fields from the edges of these washes. The applicant will need to use heavy machinery including masticators, to remove large microphyll trees, in addition to mowing machinery. These significant impacts to microphyll habitats will trigger a plan amendment because of the inability of the project to comply with CMAs calling for avoidance of microphyll woodland.

This is unacceptable. That any renewable energy developer, miner, rancher, off-road racer, road-builder or other public lands user could come along in the future and desire to encroach into designated conservation lands by asking BLM to amend the DRECP would defeat



the entire purpose of the DRECP, which took years of planning and balancing multiple uses and resource protections. The DRECP already has hundreds of thousands of acres of designated Development Focus Areas streamlined for solar project siting, and the applicant should seek other sites which do not necessitate a plan amendment in order to violate CMAs.



Photo showing the sloping fan coming off the Chuckwalla Mountains, looking northwards. This is in the area of the project, slightly to the east, and north of I-10. The wash has a dense growth of big galleta grass, creosote, cheesebush, and bursage, and is excellent desert tortoise habitat.



Big galleta grass along wash near the Oberon Solar Project site, Chuckwalla valley looking northeast towards Palen Dry lake in the distance. This is north of I-10.



A desert ironwood tree along a wash near the project site, Chuckwalla valley looking north. This is north of the I-10.





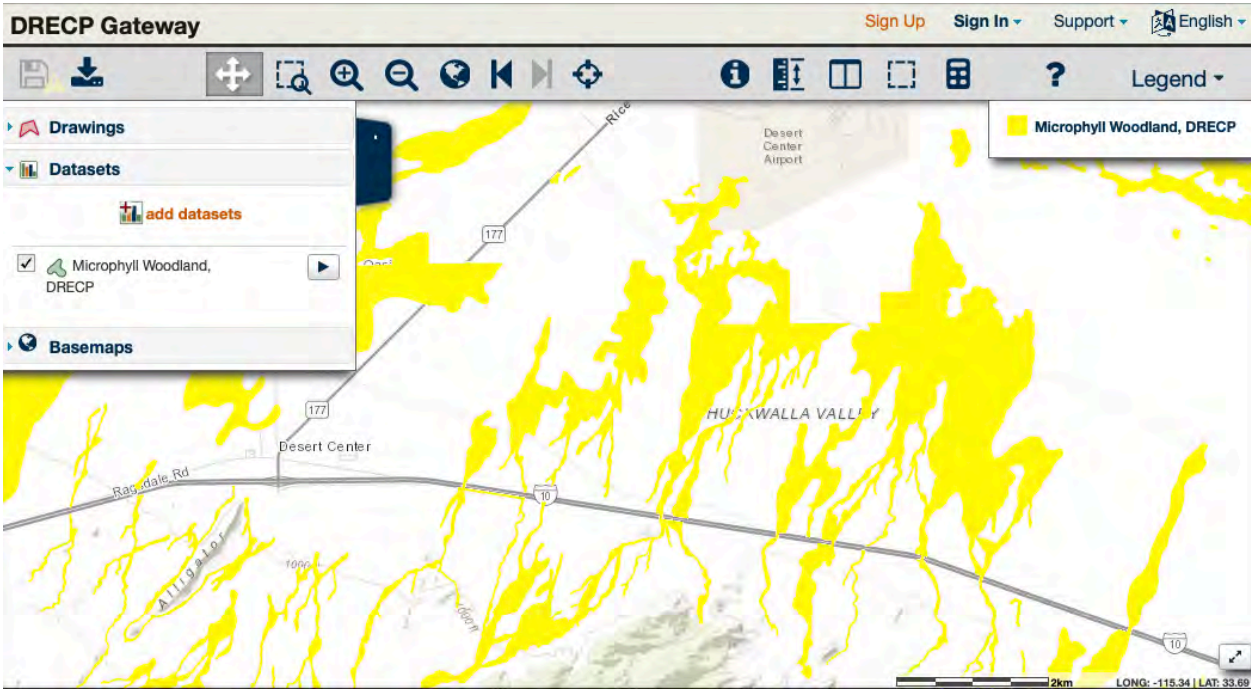
Sunset view of microphyll woodland along washes in the vicinity of the project site, with desert ironwood.



Big galleta grass, palo verde, and ironwood trees along a wash north of I-10 in the vicinity of the project site.



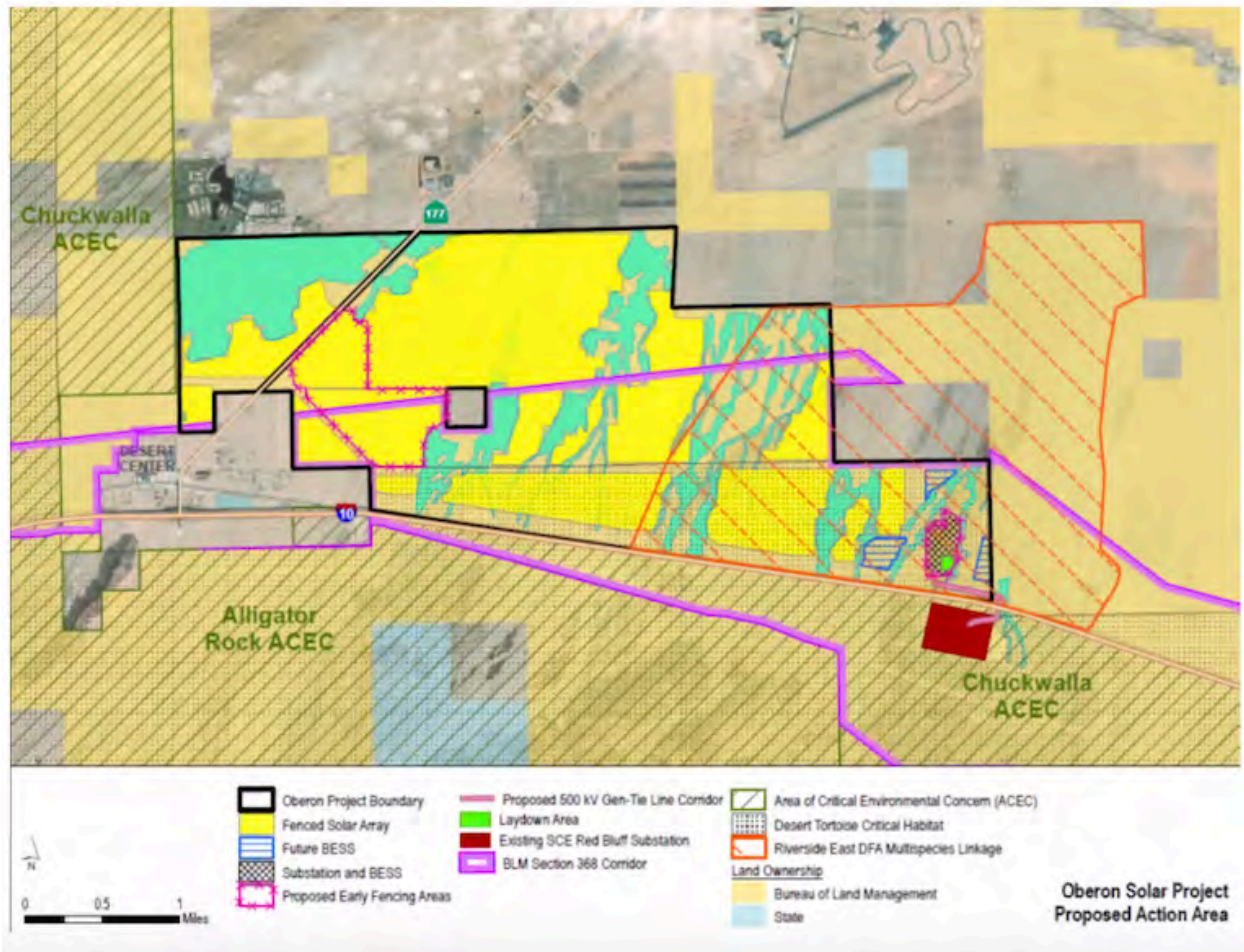
Desert gold blooming in the lower parts of Chuckwalla Valley south of Palen Dry Lake, after a rainy winter and spring. Looking westward towards Desert Center.



DRECP databasin map of microphyll woodland showing washes flowing downslope and northward from the Chuckwalla Mountains, through the proposed Oberon project site.



A discussion of how connectivity of wash plant communities needs to be included, because the solar field would block flow of flood waters in washes, potentially cutting off water-dependent microphyll woodland and killing patches on the other side of the proposed solar fields. This area receives monsoonal summer thunderstorms that are at times heavy, with flash floods flowing down washes into basin playas. Analysis of stormwater runoff needs to be undertaken related to the connectivity of microphyll habitats in ephemeral washes.



Map shown at the BLM Zoom scoping meeting on April 13, showing proposed solar fields cutting off wash flow from connecting washes coming off the Chuckwalla Mountains to the south—overlapping and even preferring tortoise Critical Habitat and multispecies linkage.

All microphyll areas and wash habitats need to be avoided, and a buffer of 200 feet around microphyll habitats so that edge-effects of development, ground disturbance, and invasive weed expansion do not impact wash habitats. The washes often change course over the years as distributaries shift in unpredictable but natural ways. This needs analysis.

#### 4. The Multispecies Wildlife Corridor Should Be Avoided

The Riverside East DFA Multispecies Wildlife Linkage should be discussed in detail with overview maps discussing what landscape blocks are being connected, between which

mountain ranges regionally, and which species depend on this linkage for genetic connectivity and dispersal.

All I-10 underpasses should be mapped, and impacts of the solar project analyzed. Desert tortoises and other wildlife, including desert bighorn sheep, have been photographed in camera trap surveys as using freeway underpasses. This connectivity should be maintained in both the wildlife corridor and Critical Habitat.

This corridor should also be analyzed for use by **Burro deer** (*Odocoileus hemionus eremicus*), a Colorado Desert, California endemic. Solar fields next to washes and microphyll habitats may inhibit the movement of these uncommon desert deer, which favor ironwood thickets.

## **5. Sand Transport Corridors Should Be Analyzed**

Maps, impacts of fences and sand piling up on fences, and impacts to the sensitive species Mojave fringe-toed lizard (*Uma scoparia*) should be analyzed. Cumulative impacts to this sand endemic lizard have been considerable in the Chuckwalla Valley, with the construction of the Desert Sunlight Solar Farm, Desert Harvest Solar Project, Palen Solar Project, Genesis Solar Energy Project, Blythe Solar Project, McCoy Solar Project, and proposed Crimson Solar Project, Arica and Victory Solar Projects, and Desert Quartzite Solar Project, along with new transmission and substation infrastructure.

The cumulative significant impacts of these developments on removing fringe-toed lizard habitat, disturbance and blockage of sand flows, and the increase of invasive weeds, needs to be analyzed, as this group of populations could be a new undescribed taxon when finer genetic studies are undertaken in the future.

## **6. Avian-Solar Impacts Should Be Analyzed**

As other large-scale solar projects in the DFA have resulted in the mortality due to “lake-effect” impacts, resulting in collisions, this important concern should be fully analyzed and mitigation measures enumerated, including those not tiered to in the DRECP. This is a growing concern with waterbirds that fly across the desert from the Salton Sea and Gulf of California, to Colorado River water bodies.

## **7. Purpose and Need Statement**

The purpose and need statement should prioritize protecting microphyll woodlands, wildlife connectivity corridors, and tortoise habitat, and minimize the need for large-scale solar projects on public lands.

## **8. Alternatives**

The No Action alternative is justified by successful and increasing Distributed Energy Resources being deployed at greater rates in the built environment, including rooftop solar,



parking lot shade structures, distributed battery storage, microgrids, solar gardens, energy conservation and energy efficiency. These inefficient, remote, utility-scale solar projects with huge transmission costs, are no longer needed on high-value lands with natural resource conflicts on public lands.

A reduced-footprint alternative needs to be analyzed. The applicant will still be able to gain a PPA and take advantage of federal incentives with a 200 or 300 MW solar project that avoids all microphyll woodland, tortoise Critical Habitat, and the wildlife connectivity corridor.

## **9. Visual Resources Should Be Adequately Analyzed**

Adequate KOPs should be photographed close to the edge of the solar project area, not at a distance as is often done. KOPs from nearby Wilderness Areas should be included, as well as night-time visual impact assessments that could harm night-sky viewing. A KOP from Joshua Tree National Park should also be included.

## **10. Transmission Gen-Tie Line**

The proposed Project would produce up to 500 MW solar photovoltaic generation and integrated energy storage facility located near Desert Center, California that would interconnect to Southern California Edison's (SCE) 500 kilovolt (kV) Red Bluff Substation via one new 500 kV gen-tie line.

All impacts to tortoise, Mojave fringe-toed lizard, rare plants, microphyll woodland, and avian collisions should be analyzed for this very large gen-tie line. Discussion of how raven nesting will be prevented should be discussed in the EA.

## **11. Battery Storage Facility**

According to the BLM eplanning website, the project would include a battery, flywheel, or other similar storage system capable of storing up to 500 MW of power. If provided, the storage system would consist of battery, flywheel banks, or other similar storage technology housed in electrical enclosures and buried electrical cable. The battery system would be concentrated near the Project switching station on approximately 20 acres in the southeastern area of the Project site.<sup>1</sup>

During a BLM Zoom scoping meeting on April 13, 2021, I asked whether Lithium-ion battery banks would be used for storage, and how they would be cooled in a hot low desert where summer temperatures typically reach 118-120 degrees F? Lithium-ion batteries require a controlled temperature be maintained in a very narrow range in order to maintain function, efficiency, and avoid fires. The applicant responded that Lithium battery units would be cooled with HVAC systems in containers, and that the containers would be painted white. Using air-conditioning to cool the battery containers will be inefficient, and probably a parasitic load off

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<sup>1</sup> <https://eplanning.blm.gov/eplanning-ui/project/2001226/510>

the grid. Plans for fires should be developed and warnings to local communities. This should be analyzed in the EIS.

## **12. Mowing and Traditional Methods of Site Construction Need to Be Analyzed**

The applicant during a BLM Zoom scoping meeting stated that about half of the project is proposed to be mowed, and would then have wildlife-permeable fencing during operation. This should be mapped, and discussion of which areas are going to be developed using traditional disk and roll grading methods.



Photo showing the “drive and crush” method of construction at Sunshine Valley Solar Project in Amargosa valley, Nevada, a newer method which is supposed to be “less impactful” than traditional construction methods. We do not think this is a low-impact method, but highly degrades and destroys Mojave Desert habitats, biological soil crusts, crushes animal burrows, releases Carbon sequestered in roots and caliche soils, causes air quality problems, erosion, and pollinator disruption. These areas are subsequently mowed to keep the vegetation down. This extreme surface disturbance often results in invasive weed increase. This all needs analysis.

## **13. The Inefficiency of This Utility-scale Solar Project Should Be Analyzed**

In addition to poor efficiency of the project to cool Lithium battery containers, the applicant stated that to avoid large washes of microphyll, the project would be crammed into around 2,700 acres between the dry wash habitats, yet maintain a 500 MW rating. I asked how this would be accomplished? The applicant answered that the solar panels would be squeezed together more than usual, and this would result in overlap and shading of panels during the morning and afternoon hours. 500 MW would only be produced at peak time of day when the sun is overhead.

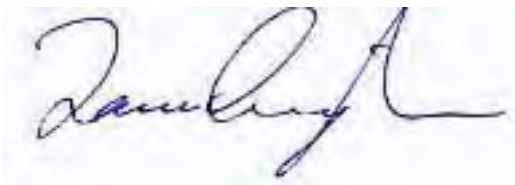
This is also unacceptable, to use high-value Colorado Desert ecosystems as places to build highly inefficient large-scale solar projects, as if these public lands are a renewable resource themselves—there is not enough land in the California Desert to achieve a 100% RPS, and lands should be maximized for resource conservation and the most efficient use for energy production. This argues for a much more efficient Distributed Energy Resource alternative and No Action, where rooftop and parking lot solar in a distributed urban environment could best maximize efficiencies of land use, and battery cooling in already air-conditioned structures, or coastal cities where summer temperatures would not result in parasitic loads simply to cool batteries.

#### **14. Cultural Impacts Should Be Better Analyzed**

The DRECP did not analyze significant impacts to many regional cultural resources and concerns by local rural communities, including those of People of Color, low income communities in the desert, and native tribal cultural landscapes. This needs much broader outreach and analysis.

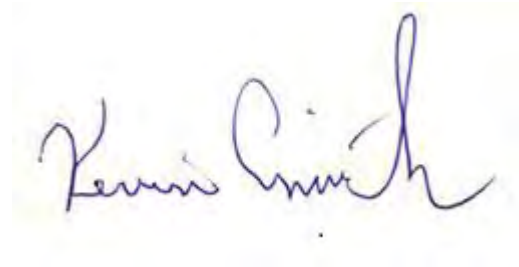
Thank you for considering these comments. Western Watersheds Project and Basin and Range Watch thank you for this opportunity to assist the BLM by providing scoping comments for this project. Please keep Western Watersheds Project and Basin and Range Watch informed of all further substantive stages in this and related NEPA processes and documents by contacting us at [lcunningham@westernwatersheds.org](mailto:lcunningham@westernwatersheds.org) and [atomicquailranch@gmail.com](mailto:atomicquailranch@gmail.com).

Sincerely,

A handwritten signature in blue ink, appearing to read 'Laura Cunningham', is written over a light blue rectangular background.

Laura Cunningham  
California Director  
Western Watersheds Project  
Cima CA 92323  
Mailing: P.O. Box 70  
Beatty NV 89003

775-513-1280  
lcunningham@westeranwatersheds.org

A handwritten signature in blue ink that reads "Kevin Emmerich". The signature is written in a cursive style with a large, looped initial 'K'.

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# Eagle Crest Energy Company, LLC

May 5, 2021

Via Email (BLM CA PS OberonSolar@blm.gov)

Oberon Solar Project  
Attn: Brandon G. Anderson, Realty Specialist  
Bureau of Land Management  
Palm Springs South Coast Field Office  
1201 Bird Center Drive  
Palm Springs, CA 92234

**RE: Oberon Renewable Energy Project (CACA-58539)  
Eagle Crest Energy Company LLC's concerns regarding possible gen-tie route**

Dear Mr. Anderson:

On behalf of Eagle Crest Energy Company, LLC ("Eagle Crest"), a wholly-owned indirect subsidiary of NextEra Energy Resources, LLC ("NextEra"), we hereby submit comments on the proposed Oberon Renewable Energy Project ("Project"), proposed by IP Oberon, LLC, a subsidiary of Intersect Power, LLC. Eagle Crest does not oppose the Project, but we do have concerns about the potential for portions of the Project's facilities to be located near the Southern California Edison ("SCE") Red Bluff Substation.

As discussed below, such location of Project facilities could compromise the ability of other proposed and possible future projects to interconnect with the Red Bluff Substation. Accordingly, we respectfully request that the BLM make clear, including *inter alia*, in its NEPA analysis and any right-of-way ("ROW") grant or other authorizations that all Project facilities must be set back from the substation a distance sufficient to ensure that the Project would not affect the ability of future projects to interconnect into the substation. Specifically, we want to ensure that in the future, there will be sufficient space to allow for additional 500kV interconnections on the north and east sides of the Red Bluff Substation and 230 kV interconnections on the north and west sides of the Red Bluff Substation. In addition, we want to ensure that the Project's generation tie line (gen-tie) route into the Red Bluff Substation does not conflict with gen-tie route needed for Eagle Crest's Eagle Mountain Pumped Storage project.

## **I. The Red Bluff Substation is a Critical Part of Regional Utility Corridor**

The Red Bluff Substation plays a critical role in transmission planning in the region. As the BLM is well aware, there is an array of existing utility corridors (Section 368 and BLM corridors), U.S. Department of Energy's Energy Corridors, and a host of relating planning efforts that rely upon the Red Bluff Substation. There are a number of currently proposed and contemplated interconnections into this substation from across the region, including not only Eagle Crest's gen-tie and pipeline route, but also gen-ties for Desert Sunlight, Desert Harvest, Clearway, Athos and Palen.

Pursuant to Section 368 of the Energy Policy Act of 2005 ("EPAAct"), the Secretaries of Agriculture, Commerce, Defense, Energy, and Interior are directed to designate corridors for oil, gas, and hydrogen pipelines and electricity transmission and distribution facilities (i.e., energy corridors) on Federal lands in eleven (11) western states, including California. EPAAct also directs these agencies to conduct environmental reviews relating to such corridors, and to incorporate them into relevant agency land use and resource management plans or equivalent plans.

Corridor 30-52 extends east along Interstate 10 (I-10) from Palm Springs in southern California to the Palo Verde Nuclear Generating Station and the western suburbs of Phoenix in central Arizona. Federally

Eagle Crest Energy Company, LLC

700 Universe Boulevard, Juno Beach, FL 33408

designated portions of this corridor are entirely on BLM-administered land; the corridor has a 10,560-ft width over most of its length in California. The corridor spans 199.7-miles, with 97.7 miles designated on BLM-administered lands.

As noted in the Section 368 Energy Corridor Regional Reviews—Region I, there is a lot of congestion in the area of Corridor 30-52:

“There are five 500-kV SCE Transmission lines, including a recently completed 500-kV project within parts of the corridor in California between the Devers and Colorado River substations. Give major transmission lines and several major natural gas pipelines run through the corridor. Many of the energy production projects along I-10 and the Riverside East SEZ have generation-tie lines that use the corridors, **which create congestion near the major substations (Red Bluff and Colorado River)**. This congestion is compounded by the Mecca Hills and Orocopia Wilderness and Joshua Tree National Park, which reduce the size of and the potential for increasing the size of the corridor.” (Section 368 Energy Corridor Regional reviews – Region 1, Corridor 30-52, March 2019, p. 5, emphasis added.)


Geographic constraints and congestion near the substations will only increase as the agencies modify corridors. Currently, the agencies are considering various revisions and reductions in the utility corridors in the region (see Section 368 Energy Corridor Regional reviews – Region 1, Corridor 30-52, March 2019, p. 6.) In addition, the Desert Renewable Energy Conservation Plan (“DRECP”) and Eastern Riverside Solar Energy Zone (“SEZ”) both anticipate a number of future solar projects in eastern portion of their relevant planning areas in the region, all of which will interconnect into the Red Bluff Substation.

## **2. The BLM Should Require the Project to Site its Facilities and Gen-Tie Route to Avoid Impacting Existing and Planned Gen-Tie Lines Connecting Into the Red Bluff Substation**

The Project, including its gen-tie, substation and battery storage facilities, appears largely to be proposed within CDCA Utility Corridor K, West-wide Section 368 Energy Corridor (Corridor 30-52 or BLM Utility Corridor J). Our understanding is that the Project boundary and survey area is adjacent to the north and west of the Red Bluff Substation. According to the BLM’s eplanning webpage for the Project, the substation yard and battery storage facility are proposed in the southeastern corner of the Project site, which we understand to be the area immediately adjacent to the west side of the Red Bluff Substation. Moreover, the Project’s gen-tie appears to be located in the same corridor as Eagle Crest’s gen-tie route, and to possibly conflict with Eagle Crest’s need to interconnect on the east side of the substation.

As stated above, Eagle Crest does not oppose the Project, and submits these comments solely for the purpose of ensuring that future projects can interconnect to the Red Bluff Substation. Accordingly, we respectfully request that the BLM require the Project to coordinate with Eagle Crest to ensure that the gen-ties for the two projects do not conflict.

Thank you for your consideration of this request.

  
Steve Lowe  
President  
Eagle Crest Energy Company, LLC





# COLORADO RIVER INDIAN TRIBES

## *Colorado River Indian Reservation*

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*Via Email Only*

April 20, 2021

Brandon Anderson  
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Logan Raub  
Colorado River Basin Regional Water Quality Control Board  
c/o Aspen Environmental Group  
235 Montgomery Street, Suite 640  
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**RE: NEPA and CEQA Scoping Comments of the Colorado River Indian Tribes on the Proposed Oberon Renewable Energy Project and California Desert Conservation Area Plan Amendment**

Dear Mr. Anderson and Mr. Raub:

On behalf of the Colorado River Indian Tribes (CRIT or the Tribes), I write to respond to BLM's March 18, 2021 press release soliciting scoping comments on the agency's NEPA review of the proposed Oberon Renewable Energy Project and California Desert Conservation Area ("CDCA") Plan Amendment (together, "Project"). I also write to respond to the Colorado River Basin RWQCB's ("RWQCB") notice of preparation soliciting comments on the agency's CEQA review of the proposed Oberon Renewable Energy Project ("Project"). The Project consists of a 500 megawatt solar PV electricity generating station and battery energy storage facility capable of storing up to 500 megawatts of power, 120,000 square foot substation, an operation and maintenance building approximately 3,000 square feet in size, a 500 kV gen-tie line connecting the Project to the SCE Red Bluff Substation, a 12 kV distribution line, and associated access roads. The Project would be located within the ancestral territory of members of the Tribes.

As a preliminary matter, the Colorado River Indian Tribes are a federally recognized Indian tribe comprised of over 4,440 members belonging to the Mohave, Chemehuevi, Hopi and Navajo Tribes. The almost 300,000-acre Colorado River Indian Reservation sits astride the Colorado River between Blythe, California and Parker, Arizona. The ancestral homelands of the

Tribes' members, however, extend far beyond the Reservation boundaries. Significant portions of public and private lands in California, Arizona, and Nevada were occupied by the ancestors of the Tribes' Mohave and Chemehuevi members since time immemorial. These landscapes remain imbued with substantial cultural, spiritual, and religious significance for the Tribes' current members and future generations. For this reason, we have a strong interest in ensuring that potential cultural resource and other environmental impacts associated with the proposed Project are adequately considered and mitigated.

The Colorado River Indian Tribes adopted a government-to-government consultation policy in May 2017, which CRIT attached to its October 8, 2020 comments on the Project. As stated therein, agency acknowledgment of the policy is required before an agency schedules a government-to-government consultation meeting with the Tribal Council. To date, the BLM Palm Springs Office has not acknowledged the policy. For this reason, any communication between BLM and the Tribes regarding this Project continues to be for informational purposes only. The Tribes likewise request that the RWQCB review and acknowledge the policy.

#### **I. The Project is Likely to Significantly Impact Cultural Resources.**

Because of the Tribes' past, present, and future connection to the land on which the Project is proposed, CRIT has concerns about the Project's potential for significant cultural resource impacts. Specifically, CRIT is concerned about the construction and ground disturbance required to install the PV panels and mounting systems, as well as the onsite substations to connect to the adjacent switchyard. The project area spans 4,700 acres and includes a nearly a mile-long gen-tie line. This Project has the potential to significantly impact cultural resources in the Area of Potential Effects (APE) as well as the surrounding landscape.

The Oberon Renewable Energy Project is one of dozens of energy projects either approved or under consideration by BLM, state, and local agencies in the area. The collective impact of this transformation of the desert has had, and will continue to have, considerable adverse impacts on the Tribes and the cultural, spiritual, and religious practices of CRIT members. CRIT continues to be concerned that federal and state governments intend to approve all energy projects, no matter what the cost to affected tribes, native plants and animals, and the desert ecosystem as a whole. The disturbance of new lands to these projects is likely to result in disturbance of additional cultural resources and, thus, raises concerns.

Specifically, the Tribes are troubled by the Project's potential to remove, damage, or destroy cultural resources and artifacts. These resources are sacred and finite. According to the belief system of CRIT's Mohave members, the disturbance of any cultural resources affiliated with their ancestors is taboo, and thus considered a severe cultural harm. The federal and state environmental review must include a thorough Class III survey of the site and consideration of the potential for buried cultural resources. Likewise, the associated environmental review must consider mechanism to reduce this cultural harm, including avoidance of sites and resources and tribal reburial of both archaeological and non-archaeological resources.

## **II. BLM Must Broadly Consider Impacts to Cultural Resources**

CRIT is concerned about the cultural harm that will result from both the unearthing and destruction of prehistoric archaeological resources and the Project's impacts on other cultural resources. In preparing EISs and EIRs for other solar energy facilities in the region, BLM, state, and local agencies have artificially constrained the definition of "cultural resources," thereby undermining the accuracy and quality of subsequent analysis. In particular, BLM has been reticent about identifying Traditional Cultural Properties and Landscapes within the region, thereby under-analyzing the impacts of these projects. These resources could include viewsheds and landscapes, plants and animals used in and/or central to cultural and religious practices and creation stories, and religious and customary practices (e.g., hunting and gathering, religious ceremonies, and trail-walking). By using an expansive definition of cultural resources for this Project, BLM can ensure that impacts to a host of important tangible and intangible resources are properly considered.

Likewise, the RWQCB must consult with the Tribes to thoroughly consider the potential for Tribal Cultural Resources as defined in AB 52.

## **III. The Potential for Significant Cultural Resource Impacts Requires BLM to Complete A Full Environmental Impact Statement Review**

Throughout its scoping meeting materials and proposed timelines for the Project, BLM appears to have pre-determined that only an Environmental Assessment is needed for the Project. BLM's presentation slides outlining "public participation opportunities" and "next steps" lists "Review Environmental Assessment (EA) and unsigned Finding of No Significant Impact (FONSI)." BLM's pre-determination that the Project will have no significant impacts violates NEPA and ignores the facts on the ground. Where an agency desires to collect sufficient evidence and conduct analysis to determine whether a project will have significant impacts, an EA may be an appropriate vehicle for doing so. *See* BLM Departmental Manual, 516 DM 11, § 11.7(A)(1). It is only after that analysis is complete that BLM decides whether to prepare a full Environmental Impact Statement (EIS) or to issue a FONSI. *Id.* At this point, without having undertaken any of its environmental review, BLM cannot know that a FONSI is the appropriate choice. The agency must be open to either possibility, depending on the EA analysis. Indeed, given that the Project is sited on Tribal members' ancestral territory and that other nearby projects have had significant cultural resource impacts, it is very likely that this Project will have significant cultural resource impacts as well. If so—or if there are any other significant environmental impacts from the Project—a full EIS will be warranted. 516 DM 11, § 11.7(E).

## **IV. BLM Must Ensure that Potential Impacts to Known and Unknown Cultural Artifacts Are Analyzed and Avoided.**

Given CRIT's ongoing experience with utility-scale solar development on land near its Reservation, the Tribes are concerned about the Project's likely impact on both known and unknown archaeological resources. Many of these cultural artifacts are intimately linked to current CRIT members, who consider their disturbance and/or damage to be a significant cultural

harm. While cremation sites are of unique importance to the Tribes, other types of artifacts, including groundstones, ceramics, and lithics, are also held sacred.

As a result, all cultural resources should be fully surveyed, inventoried, and evaluated in a manner that does not harm the resources or remove them from the site prior to preparation of the EA or EIS so that the environmental analysis fully and adequately takes cultural resource impacts into account, including through ethnographic studies. BLM and the RWQCB should also ensure that cultural resource mitigation and treatment plans are in place prior to any ground disturbing activities at the sites. Indeed, NEPA requires lead agencies to identify the “environmental impacts of the proposed action” and “[m]eans to mitigate adverse environmental impacts.” *See, e.g.*, NEPA Regulations § 1502.16. Likewise, CEQA requires that agencies “identify the significant effects on the environment of a project” and “mitigate or avoid the significant effects on the environment.” *See, e.g.*, Pub. Res. Code § 21002.1.

In addition, BLM and the RWQCB should ensure that all other mitigation measures are developed to ensure maximum protection for cultural resources. Avoidance of cultural resources—even if they are ineligible for listing on the national or state registers—should be the priority. The agencies also should ensure that tribal monitors are used during all activities that have the potential to impact cultural resources, including but not limited to mowing, grading, and excavation. The presence of tribal monitors will help ensure that all resources of value to the Tribes are recognized and treated with appropriate respect. Furthermore, the mitigation measures should allow for in-situ or adjacent reburial of prehistoric cultural resources, if such resources are located in the project area and cannot be avoided. In the past, BLM has, without providing any reason for doing so, required solar companies to destroy cultural resources instead of opting for reburial. Reburial is an effective, culturally sensitive, and lawful mechanism for addressing some of the Project’s potential harms. *See* 40 C.F.R. § 1508.1(s) (defining mitigation to include actions to “reduc[e] or eliminat[e] the impact . . . by preservation”). Such measures help ensure that the footprint of the ancestors of Tribal members are not erased during construction.


#### **V. The EA or EIS Must Adequately Consider Cumulative Impacts to Cultural Resources.**

The agencies should also analyze cumulative impacts to cultural resources. As CRIT has explained, the collective and continual destruction and removal of cultural resources from the Tribes’ ancestral lands due to energy projects has already caused tremendous spiritual harm to CRIT members. In addition to triggering extensive cultural resource removal, these energy projects are often sited in a way that severs the connectivity between cultural resource sites—a connectivity that is vital to the traditional value of these cultural resources. In considering the potential cultural resources impacts of the Oberon Renewable Energy Project and amendments to the CDCA Plan, BLM must analyze those impacts in light of other past, present, and reasonably foreseeable future actions impacting cultural resources in this region. BLM must also describe the methodology used to assess cumulative impacts and list out the other projects considered in analyzing cumulative impacts.

**VI. Conclusion.**

Thank you for considering these comments. To best understand how these comments are taken into account in draft environmental review, we request that BLM and the RWQCB provide written responses to our concerns, either in a letter to the Tribe and/or in the documents. Please copy the Tribes' Attorney General Rebecca A. Loudbear, at rloudbear@critdoj.com, Deputy Attorney General Antoinette Flora, at aflora@critdoj.com and THPO Director Bryan Etsitty, at betsitty@crit-nsn.gov, on all correspondence to the Tribes.

Respectfully,



Amelia Flores  
Chairwoman, Colorado River Indian Tribes

cc: CRIT Tribal Council  
Rebecca A. Loudbear, CRIT Attorney General  
Bryan Etsitty, Director, Tribal Historic Preservation Office

## Email: Oberon Renewable Energy Project

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**From:** Sam McLeod <[mcleods2022@gmail.com](mailto:mcleods2022@gmail.com)>

**Sent:** Saturday, March 27, 2021 7:45 AM

**To:** PS\_OberonSolar, BLM\_CA <[BLM\\_CA\\_PS\\_OberonSolar@blm.gov](mailto:BLM_CA_PS_OberonSolar@blm.gov)>

**Subject:** [EXTERNAL] NEPA Documents

To whom it may concern:

In order to keep public comment germane to the project at hand, I graciously ask to receive the full NEPA documents. On the surface, this project would benefit a very small number of citizens of California; however, the impacts on the fragile desert ecosystem over the span of 4,700 acres initially and the continued impacts to the ecosystem on the area of 20 acres reveals the need for full transparency in order to make a fully informed opinion on this matter. Moreover, the placement of this site near the pristine land tract of Joshua Tree National Park, which contains many irreplaceable Native American treasures, endangers the sanctity of the region. Additionally, without full access to the planning documents, a well-reasoned opinion cannot be produced because of the lack of intimate knowledge of the cultural and natural resources to be impacted. Finally, I request the documents relating to the risk assessment of the storage of the batteries that are to be stored at the transmission facility.

Respectfully,

S. Daniel McLeod



## **Appendix D-2b**

CEQA Scoping Comments Sent to  
Colorado River Basin RWQCB



## NATIVE AMERICAN HERITAGE COMMISSION

RECEIVED  
MAR 30 2021  
REGIONAL

March 22, 2021

Logan Raub  
Colorado River Basin Regional Water Quality Control Board  
73-720 Fred Waring Drive, Suite 100  
Palm Desert, CA 92260CHAIRPERSON  
**Laura Miranda**  
LuiseñoVICE CHAIRPERSON  
**Reginald Pagaling**  
ChumashSECRETARY  
**Merri Lopez-Keifer**  
LuiseñoPARLIAMENTARIAN  
**Russell Attebery**  
KarukCOMMISSIONER  
**William Mungary**  
Paiute/White Mountain  
ApacheCOMMISSIONER  
**Julie Tumamait-  
Stenslie**  
ChumashCOMMISSIONER  
[Vacant]COMMISSIONER  
[Vacant]COMMISSIONER  
[Vacant]EXECUTIVE SECRETARY  
**Christina Snider**  
PomoNAHC HEADQUARTERS  
1550 Harbor Boulevard  
Suite 100  
West Sacramento,  
California 95691  
(916) 373-3710  
[nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)  
[NAHC.ca.gov](http://NAHC.ca.gov)Re: **2021030426, Oberon Renewable Energy Project, Riverside County**

Dear Mr. Raub:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

**Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.**

## AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
  - a. A brief description of the project.
  - b. The lead agency contact information.
  - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
  - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).
  
2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).
  - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).
  
3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
  - a. Alternatives to the project.
  - b. Recommended mitigation measures.
  - c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).
  
4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
  - a. Type of environmental review necessary.
  - b. Significance of the tribal cultural resources.
  - c. Significance of the project's impacts on tribal cultural resources.
  - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).
  
5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).
  
6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
  - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
  - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).



- 7. Conclusion of Consultation:** Consultation with a tribe shall be considered concluded when either of the following occurs:
- a.** The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
  - b.** A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).
- 8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document:** Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).
- 9. Required Consideration of Feasible Mitigation:** If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).
- 10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:**
- a.** Avoidance and preservation of the resources in place, including, but not limited to:
    - i.** Planning and construction to avoid the resources and protect the cultural and natural context.
    - ii.** Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
  - b.** Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
    - i.** Protecting the cultural character and integrity of the resource.
    - ii.** Protecting the traditional use of the resource.
    - iii.** Protecting the confidentiality of the resource.
  - c.** Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
  - d.** Protecting the resource. (Pub. Resource Code §21084.3 (b)).
  - e.** Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
  - f.** Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).
- 11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource:** An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
- a.** The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
  - b.** The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
  - c.** The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: [http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation\\_CalEPAPDF.pdf](http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf)



## SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: [https://www.opr.ca.gov/docs/09\\_14\\_05\\_Updated\\_Guidelines\\_922.pdf](https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf).

Some of SB 18's provisions include:

1. **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation.** There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation:** Consultation should be concluded at the point in which:
  - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
  - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>.

### NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center ([http://ohp.parks.ca.gov/?page\\_id=1068](http://ohp.parks.ca.gov/?page_id=1068)) for an archaeological records search. The records search will determine:
  - a. If part or all of the APE has been previously surveyed for cultural resources.
  - b. If any known cultural resources have already been recorded on or adjacent to the APE.
  - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
  - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
  - b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
  - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
  - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
  
4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
  - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, § 15064.5(f) (CEQA Guidelines § 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
  - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
  - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code § 7050.5, Public Resources Code § 5097.98, and Cal. Code Regs., tit. 14, § 15064.5, subdivisions (d) and (e) (CEQA Guidelines § 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address:

[Andrew.Green@nahc.ca.gov](mailto:Andrew.Green@nahc.ca.gov).

Sincerely,



Andrew Green  
Cultural Resources Analyst

cc: State Clearinghouse





# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

SENT VIA E-MAIL:

April 13, 2021

[Logan.Raub@Waterboards.ca.gov](mailto:Logan.Raub@Waterboards.ca.gov)

Logan Raub  
Colorado River Basin Regional Water Quality Control Board  
c/o Aspen Environmental Group  
73-720 Fred Waring Drive, Suite 100  
Palm Desert, California 92260

## **Notice of Preparation of a Draft Environmental Impact Report for the Oberon Renewable Energy Project (Proposed Project)**

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. Our comments are recommendations on the analysis of potential air quality impacts from the Proposed Project that should be included in the Draft Environmental Impact Report (EIR). Please send a copy of the Draft EIR upon its completion and public release directly to South Coast AQMD as copies of the Draft EIR submitted to the State Clearinghouse are not forwarded. **In addition, please send all appendices and technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all emission calculation spreadsheets, and air quality modeling and health risk assessment input and output files (not PDF files). Any delays in providing all supporting documentation for our review will require additional review time beyond the end of the comment period.**

### **CEQA Air Quality Analysis**

Staff recommends that the Lead Agency use South Coast AQMD's CEQA Air Quality Handbook and website<sup>1</sup> as guidance when preparing the air quality and greenhouse gas analyses. It is also recommended that the Lead Agency use the CalEEMod<sup>2</sup> land use emissions software, which can estimate pollutant emissions from typical land use development and is the only software model maintained by the California Air Pollution Control Officers Association.

South Coast AQMD has developed both regional and localized significance thresholds. South Coast AQMD staff recommends that the Lead Agency quantify criteria pollutant emissions and compare the emissions to South Coast AQMD's CEQA regional pollutant emissions significance thresholds<sup>3</sup> and localized significance thresholds (LSTs)<sup>4</sup> to determine the Proposed Project's air quality impacts. The localized analysis can be conducted by either using the LST screening tables or performing dispersion modeling.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the Proposed Project and all air pollutant sources related to the Proposed Project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of

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<sup>1</sup> South Coast AQMD's CEQA Handbook and other resources for preparing air quality analyses can be found at: <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook>.

<sup>2</sup> CalEEMod is available free of charge at: [www.caleemod.com](http://www.caleemod.com).

<sup>3</sup> South Coast AQMD's CEQA regional pollutant emissions significance thresholds can be found at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>.

<sup>4</sup> South Coast AQMD's guidance for performing a localized air quality analysis can be found at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>.

heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips, and hauling trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers and air pollution control devices), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, such as sources that generate or attract vehicular trips, should be included in the analysis. Furthermore, emissions from the overlapping construction and operational activities should be combined and compared to South Coast AQMD's regional air quality CEQA *operational* thresholds to determine the level of significance.

If the Proposed Project generates diesel emissions from long-term construction or attracts diesel-fueled vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the Lead Agency perform a mobile source health risk assessment<sup>5</sup>.

In the event that implementation of the Proposed Project requires a permit from South Coast AQMD, South Coast AQMD should be identified as a Responsible Agency for the Proposed Project in the Draft EIR. The assumptions in the air quality analysis in the EIR will be the basis for evaluating the permit under CEQA and imposing permit conditions and limits. Questions on permits should be directed to South Coast AQMD's Engineering and Permitting staff at (909) 396-3385.

### **Mitigation Measures**

In the event that the Proposed Project results in significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized to minimize these impacts. Any impacts resulting from mitigation measures must also be analyzed. Several resources to assist the Lead Agency with identifying potential mitigation measures for the Proposed Project include South Coast AQMD's CEQA Air Quality Handbook<sup>1</sup>, South Coast AQMD's Mitigation Monitoring and Reporting Plan for the 2016 Air Quality Management Plan<sup>6</sup>, and Southern California Association of Government's Mitigation Monitoring and Reporting Plan for the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy<sup>7</sup>.

South Coast AQMD staff is available to work with the Lead Agency to ensure that air quality, greenhouse gas, and health risk impacts from the Proposed Project are accurately evaluated and mitigated where feasible. If you have any questions regarding this letter, please contact me at [lsun@aqmd.gov](mailto:lsun@aqmd.gov).

Sincerely,

*Lijin Sun*

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

LS  
RVC210318-04  
Control Number

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<sup>5</sup> South Coast AQMD's guidance for performing a mobile source health risk assessment can be found at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis>.

<sup>6</sup> South Coast AQMD's 2016 Air Quality Management Plan can be found at: <http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2017/2017-mar3-035.pdf> (starting on page 86).

<sup>7</sup> Southern California Association of Governments' 2020-2045 RTP/SCS can be found at: [https://www.connectsocial.org/Documents/PEIR/certified/Exhibit-A\\_ConnectSoCal\\_PEIR.pdf](https://www.connectsocial.org/Documents/PEIR/certified/Exhibit-A_ConnectSoCal_PEIR.pdf).



State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
Inland Deserts Region  
3602 Inland Empire Boulevard, Suite C-220  
Ontario, CA 91764  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



April 14, 2021

Mr. Logan Raub  
Colorado River Basin Regional Water Quality Control Board  
c/o Aspen Environmental Group  
235 Montgomery Street, Suite 640  
San Francisco, California 94104  
(Logan.Raub@Waterboards.ca.gov)

Subject: Notice of Preparation of a Draft Environmental Impact Report  
Oberon Renewable Energy Project  
State Clearinghouse No. 2021030426

Dear Mr. Raub:

The California Department of Fish and Wildlife (CDFW) received a Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) from the Colorado River Basin Regional Water Quality Control Board for the Oberon Renewable Energy Project (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines<sup>1</sup>.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

## **ROLE OF CDFW**

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (Id., § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may

<sup>1</sup> CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

## **PROJECT DESCRIPTION**

CEQA Lead: Colorado River Basin Regional Water Quality Control Board

Applicant: IP Oberon, LLC, a subsidiary of Intersect Power, LLC

Location:

The project site is located in Riverside County, California, north of the I-10 freeway and adjacent to the community of Lake Tamarisk in Desert Center. The gen-tie transmission line would run north and south of the I-10 freeway to connect into the existing Southern California Edison Red Bluff Substation. The gen-tie line would be located within one 175-foot right-of-way (ROW), running approximately 0.5 miles southeast from the solar facility, across BLM land, to the Red Bluff Substation.

Description:

The purpose of the Project is to construct, operate, maintain, and decommission a 500 megawatt (MW) solar photovoltaic (PV) electricity generating station, battery energy storage facility, electrical substation, 500 kilovolt (kV) generation tie (gen-tie) lines and associated access roads on approximately 4,700 acres of land managed by the U.S. Bureau of Land Management (BLM). The Project would operate for a minimum of 35 years and up to 50 or more years. The Project involves installation of several million PV solar panels mounted on either fixed-tilt or tracking technology. Types of panels may include thin-film panels (cadmium telluride and copper indium gallium diselenide), crystalline silicon panels, or other commercially available PV technology. Project activities will include construction and installation of solar array, inverters, transformers, electrical collection system, substations, switchyards, gen-tie lines, operation and maintenance building, a new overhead or underground distribution line, telecommunications facilities, battery energy storage system, meteorological data collection system with stations, access roads, fencing, security and lighting fencing.

Panels would be electrically connected into panel strings using wiring secured to the panel racking system. Underground cables would be installed to convey the direct current (DC) electricity from the panels via combiner boxes located throughout the PV arrays, to inverters to convert the DC to alternating current (AC) electricity. The output

voltage of the inverters would be stepped up to the collection system voltage via transformers located in close proximity to the inverters. The 34.5 kV level collection cables would primarily be buried underground within the solar facility, with some segments potentially installed overhead on wood poles outside of the solar facility connecting the two parcel groups.

Construction is anticipated to occur over an approximately 15-to-20-month period, depending on power purchase agreement and financing requirements. The on-site workforce would consist of laborers, craftsmen, supervisory personnel, supply personnel, and construction management personnel. The on-site workforce is expected to reach its peak of approximately 530 individuals with an average construction-related on-site workforce of 320 individuals.

Operational activities at the Project site would include solar module washing, vegetation, weed, and pest management, security, responding to automated electronic alerts based on monitored data, including actual versus expected tolerances for system output and other key performance metrics; and communicating with customers, transmission system operators, and other entities involved in facility operations. At the end of the Project's useful life, the solar arrays and gen-tie line would be decommissioned and dismantled.

Decommissioning activities would involve dismantling and removal of all above-ground equipment including solar panels, track units, transformers, inverters, substations, operation and maintenance buildings, switchyard, excavation and removal of all above-ground cables, removal of solar panel posts, removal of primary roads, break-up and removal of concrete pads and foundations, removal of septic system and leach field, removal of 34.5 kV distribution lines, and dismantling of 500 kV gen-tie line.

## **COMMENTS AND RECOMMENDATIONS**

CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of those species (biological resources). CDFW offers the comments and recommendations to assist the Lead Agency for adequately identifying and mitigating the Project's significant, or potentially significant, impacts on biological resources. The comments and recommendations are also offered to enable CDFW to adequately review and comment on the proposed Project with respect to impacts on biological resources. CDFW recommends that the DEIR addresses the following comments.

### **Assessment of Biological Resources**

Section 15125(c) of the CEQA Guidelines states that knowledge of the regional setting of a Project is critical to the assessment of environmental impacts and that special emphasis should be placed on environmental resources that are rare or unique to the

region. To enable CDFW to adequately review and comment on the Project, the DEIR should include a complete assessment of the flora and fauna within and adjacent to the Project footprint, with particular emphasis on identifying rare, threatened, endangered, and other sensitive species and their associated habitats. CDFW recommends that the DEIR includes the following comments.

1. An assessment of the various habitat types located within the Project footprint, and a map that identifies the location of each habitat type. CDFW recommends that floristic, alliance- and/or association-based mapping and assessment be completed following 2009 or current version of The Manual of California Vegetation. Adjoining habitat areas should also be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.
2. A general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the Project. CDFW's California Natural Diversity Database (CNDDDB) in Sacramento should be contacted to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code, in the vicinity of the proposed Project. CDFW recommends that CNDDDB Field Survey Forms be completed and submitted to CNDDDB to document survey results. Please note that CNDDDB is not exhaustive in terms of the data it houses, nor is it an absence database. CDFW recommends that it be used as a starting point in gathering information about the potential presence of species within the general area of the Project site.
3. A complete, recent inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint and within offsite areas with the potential to be affected, including California Species of Special Concern (SSC) and California Fully Protected Species (Fish and Game Code § 3511). Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). The inventory should address seasonal variations in use of the Project area and should not be limited to resident species. Focused species-specific surveys, completed by a qualified biologist and conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the U.S. Fish and Wildlife Service, where necessary. Note that CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if the Project is proposed to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought. CDFW recommends species-specific surveys



for the desert tortoise. CDFW-approved desert tortoise pre-construction surveys cover 100 percent of the project area and adjacent habitat using the methods described in the most recent United States Fish and Wildlife Service (USFWS) Desert Tortoise Field Manual. CDFW recommends survey for burrowing owl, a Species of Special Concern. Survey recommendations and guidelines are provided in the Staff Report on Burrowing Owl Mitigation (Department of Fish and Game, March 2012). Development of a desert kit fox and American badger mitigation and monitoring plan is recommended. Desert kit fox is a protected species, and American badger is a Species of Special Concern. CDFW also recommends a thorough, recent, floristic-based assessment of special status plants and natural communities, following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities.

### **Analysis of Direct, Indirect, and Cumulative Impacts to Biological Resources**

The DEIR should provide a thorough discussion of the direct, indirect, and cumulative impacts expected to adversely affect biological resources as a result of the Project. To ensure that Project impacts to biological resources are fully analyzed, the following information should be included in the DEIR:

1. A discussion of potential impacts from lighting, noise, human activity, and wildlife-human interactions created by zoning of development Projects or other Project activities adjacent to natural areas, exotic and/or invasive species, and drainage. The latter subject should address Project-related changes on drainage patterns and water quality within, upstream, and downstream of the Project site, including: volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-Project fate of runoff from the Project site.
2. A discussion of potential indirect Project impacts on biological resources, including resources in areas adjacent to the Project footprint, such as nearby public lands (e.g. National Forests, State Parks, etc.), open space, adjacent natural habitats, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or mitigation lands (e.g., preserved lands associated with a Natural Community Conservation Plan, or other conserved lands).
3. An evaluation of impacts to adjacent open space lands from both the construction of the Project and long-term operational and maintenance needs.
4. A cumulative effects analysis developed as described under CEQA Guidelines § 15130. Please include all potential direct and indirect Project related impacts to riparian areas, wetlands, vernal pools, alluvial fan habitats, wildlife corridors or wildlife movement areas, aquatic habitats, sensitive species and other sensitive habitats, open lands, open space, and adjacent natural habitats in the cumulative

effects analysis. General and specific plans, as well as past, present, and anticipated future Projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

5. The project has several decades long life-span. So, the potential loss in desert tortoise and other habitat expansion and population density changes with time needs be accounted for considering fully mitigated standards. For adequacy of mitigation analysis, there is a need to consider both spatial and temporal effects on habitat as well as cumulative impacts of the activities on habitat biodiversity and microclimate variability for sustaining desert tortoise and other species.

### **Mitigation Measures for Project Impacts to Biological Resources**

The DEIR should include appropriate and adequate avoidance, minimization, and/or mitigation measures for all direct, indirect, and cumulative impacts that are expected to occur as a result of the construction and long-term operation and maintenance of the Project. When proposing measures to avoid, minimize, or mitigate impacts, CDFW recommends consideration of the following comments.

#### **Fully Protected Species**

Several Fully Protected Species (Fish and Game Code § 3511) have the potential to occur within or adjacent to the Project area. Fully protected species may not be taken or possessed at any time. Project activities described in the DEIR should be designed to completely avoid any fully protected species that have the potential to be present within or adjacent to the Project area. CDFW also recommends that the DEIR fully analyze potential adverse impacts to fully protected species due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. CDFW recommends that the Lead Agency include in the analysis appropriate avoidance, minimization and mitigation measures to reduce any possible indirect impacts to fully protected species.

#### **Sensitive Plant Communities**

CDFW considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDDB and are included in the 2009 or current version of The Manual of California Vegetation. The DEIR should include measures to fully avoid and otherwise protect sensitive plant communities from Project-related direct and indirect impacts. Minimization measures may include transplanting perennial species, seed collection and dispersal from annual species, and other conservation strategies that will protect the viability of the local population. If minimization measures are implemented,

monitoring of plant populations will be conducted annually for 5 years to assess the mitigation's effectiveness. The performance standard for mitigation will be no net reduction in the size or viability of the local population.

## **Mitigation**

CDFW considers adverse Project-related impacts to sensitive species and habitats to be significant to both local and regional ecosystems, and the DEIR should include mitigation measures for adverse Project-related impacts to these resources. Mitigation measures should emphasize avoidance and reduction of Project impacts. For unavoidable impacts, onsite habitat restoration and/or enhancement should be evaluated and discussed in detail. If onsite mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, offsite mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed. The DEIR should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts in order to meet mitigation objectives to offset Project-induced qualitative and quantitative losses of biological values. Specific issues that should be addressed include restrictions on access, land dedications, long-term monitoring and management, control of illegal dumping, water pollution, and human intrusion.

## **Moving out of Harm's Way**

The proposed project is anticipated to result in the clearing of natural habitats that support native species. To avoid direct mortality, CDFW recommends that the lead agency condition the DEIR to require that a CDFW-approved qualified biologist be retained to be onsite prior to and during all ground- and habitat-disturbing activities to move out of harm's way special status species or other wildlife of low or limited mobility that would otherwise be injured or killed from project-related activities. Movement of wildlife out of harm's way should be limited to only those individuals that would otherwise be injured or killed, and individuals should be moved only as far as necessary to ensure their safety. Furthermore, it should be noted that the temporary relocation of onsite wildlife does not constitute effective mitigation for the purposes of offsetting project impacts associated with habitat loss.

## **California Endangered Species Act**

CDFW is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to the California Endangered Species Act (CESA). A CESA Incidental Take Permit (ITP) is issued to conserve, protect, enhance, and restore State-listed CESA species and their habitats. CDFW recommends that a CESA ITP be obtained if the Project has the potential to result in "take" (California Fish and Game Code Section

86 defines “take” as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”) of CESA-listed species.

Take of any CESA-listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085). If the Project, including the Project construction or any Project-related activity during the life of the Project, results in take of CESA-listed species, CDFW recommends that the Project proponent seek appropriate authorization prior to Project implementation through an ITP. Desert tortoise and Mohave ground squirrel are two CESA-listed threatened species that have potential to occur within the Project Area, presence needs to be determined by protocol surveys required by the Lead Agency. CDFW encourages early consultation, as significant modification to the proposed Project and avoidance, minimization, and mitigation measures may be necessary to obtain a CESA ITP. Please note that the proposed avoidance, minimization, and mitigation measures must be sufficient for CDFW to conclude that the Project’s impacts are fully mitigated and the measures, when taken in aggregate, must meet the full mitigation standard.

### **Desert Tortoise**

CDFW recommends inclusion of mitigation measures to avoid potentially significant impacts to desert tortoise, a CESA-listed species as threatened and a candidate for endangered species. The measures need to include specificity on who will perform the survey, what type of survey will be performed, and what actions will be taken should desert tortoise presence be confirmed during the survey. The measures need to address avoidance, minimization, or mitigation measures should desert tortoise enter the Project site during the life of the Project. Take (hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill) is prohibited unless authorized by state law (Fish and Game Code, §§ 2080 & 2085). Project activities have the potential to take desert tortoise. The measure as written does not ensure a qualified biologist, experienced in locating desert tortoise individuals in all life stages and their sign, will complete the survey following CDFW approved protocols. Additionally, should desert tortoise presence be confirmed, the measure needs to include avoidance, minimization and mitigation to avoid take.

If the Project, including the Project construction or any Project-related activity during the life of the Project, may result in take of CESA-listed species, CDFW recommends that the Project proponent seeks appropriate authorization prior to Project implementation through an incidental take permit (ITP). CDFW recommends inclusion of protocol level survey and a measure for a qualified biologist in the environmental document. A qualified biologist shall conduct a protocol level presence or absence survey no more than 14 days prior to initiating Project activities in accordance with the survey methodology described in U.S. Fish and Wildlife Service Desert Tortoise (Mojave Population) Field Manual. In addition, the survey shall utilize perpendicular survey routes and 100-percent visual coverage of the Project area and 50-foot buffer zone for

desert tortoise and their sign. If the survey confirms absence, a qualified biological monitor shall remain on-site during all Project activities to confirm desert tortoise do not enter the Project site. If the survey confirms presence, the Project Proponent shall obtain an ITP for desert tortoise prior to the start of Project activities. If the biological monitor during the life of the Project encounters a desert tortoise, work shall be suspended, and the Project Proponent shall obtain an ITP for the species prior to the restarting Project activities. All clearance surveys need to be conducted during the active season for desert tortoise.

### **Burrowing Owl**

CDFW recommends inclusion of mitigation measures to avoid potentially significant impacts to burrowing owls, a Species of Special Concern. The measures need to include specificity on who will perform the burrowing owl survey, what type of survey will be performed, and what actions will be taken should burrowing owl presence be confirmed during the survey. It is necessary to address avoidance, minimization, or mitigation measures. Project-related activities have potential to take burrowing owl individuals and their nests and may result in loss of burrowing owl habitat. Take of individual burrowing owls and their nests is defined by Fish and Game Code section 86, and prohibited by sections 3503, 3503.5 and 3513. Take is defined in Fish and Game Code Section 86 as “hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill.” Burrowing owls are dependent on burrows at all times of the year for survival and/or reproduction, evicting them from nesting, roosting, and satellite burrows may lead to indirect impacts or take. Loss of access to burrows will likely result in varying levels of increased stress on burrowing owls and could depress reproduction, increase predation, increase energetic costs, and introduce risks posed by having to find and compete for available burrows.

Eviction of burrowing owls is a potentially significant impact under CEQA. CDFW recommends inclusion a measure for a qualified biologist in the environmental document. Burrowing owl surveys shall be conducted by a qualified biologist at least 14 days prior to any Project activities, at any time of year. Surveys shall be completed following the recommendations and guidelines provided within the Staff Report on Burrowing Owl Mitigation (CDFG, March 2012) or most recent version by a qualified biologist. If an active burrowing owl burrow is detected within any Project disturbance area, or within a 500-foot buffer of the disturbance area, a 300- foot radius buffer zone surrounding the burrow shall be flagged, and no impacts to soils or vegetation or noise levels above 65 dBA shall be permitted while the burrow remains active or occupied. Disturbance-free buffers may be modified based on site-specific conditions in consultation with CDFW. The qualified biologist shall monitor active burrows daily and will increase buffer sizes as needed if owls show signs of disturbance. If active burrowing owl burrows are located within any work area and impact cannot be avoided, a qualified biologist shall submit a burrowing owl exclusion plan to CDFW for review and approval. The burrowing owl exclusion plan shall include permanent compensatory

mitigation consistent with the recommendations in the Staff Report on Burrowing Owl Mitigation such that the habitat acreage, number of burrows and burrowing owls impacted are replaced. Passive relocation shall take place outside the nesting season (1 February to 31 August).

### **Nesting Birds and Migratory Birds**

It is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Migratory non-game native bird species are protected by international treaty under the federal Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 *et seq.*). In addition, sections 3503, 3503.5, and 3513 of the Fish and Game Code (FGC) also afford protective measures as follows: Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by FGC or any regulation made pursuant thereto; Section 3503.5 states that it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by FGC or any regulation adopted pursuant thereto; and Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA. CDFW recommends that the analysis includes the results of avian surveys, as well as specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur. Project-specific avoidance and minimization measures may include, but not be limited to: Project phasing and timing, monitoring of Project-related noise (where applicable), sound walls, and buffers, where appropriate. The measures should also include specific avoidance and minimization measures that will be implemented should a nest be located within the Project site. For pre-construction surveys, CDFW recommends that the surveys be required no more than three days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted sooner.

### **Special Status Plant Species**

The Biological Resources Assessment needs to include explanation of methodology and results of the survey of special status plants. CDFW recommends California Natural Diversity Database be used as a starting point in gathering information about the potential presence of species within the general area of the Project site, and surveys should not be restricted or limited to generated lists. It is unclear if a botanical field survey to identify all plants to the taxonomic level necessary to determine rarity and listing status was performed. Botanical field surveys should be conducted during times of year when plants are evident and identifiable (i.e. flowering or fruiting), which may warrant multiple surveys during the season to capture floristic diversity. Habitats, such as desert plant communities that have annual and short-lived perennial plants as major floristic components may require yearly surveys to accurately document baseline



conditions for purposes of impact assessment. Sensitive plant species are listed under the CESA as threatened, or endangered, or proposed or candidates for listing; designated as rare under the Native Plant Protection Act; or plants that otherwise meet the definition of rare, threatened, or endangered species under CEQA. Plants constituting California Rare Plant Ranks 1A, 1B, 2A, and 2B generally meet the criteria of a CESA-listed species and should be considered as an endangered, rare or threatened species for the purposes of CEQA analysis. Take of any CESA-listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085). Fish and Game Code Sections 1900–1913 includes provisions that prohibit the take of endangered and rare plants from the wild and a salvage requirement for landowners. To ensure that Project impacts to biological resources are fully analyzed, CDFW recommends a thorough floristic-based assessment of special status plants and natural communities. Note that CDFW generally considers biological field assessments for rare plants valid for a period of up to three years. CDFW recommends inclusion of the following mitigation measure.

Pre-construction botanical surveys shall be conducted at the appropriate time of year by a qualified biologist following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW, March 2018) or most recent version. Should special status plants or natural communities be present in the Project area, a qualified biologist shall develop species specific avoidance, minimization, and mitigation measures to ensure there is no net reduction in the size or viability of the local population. CDFW also recommends that the Lead Agency reviews the listing status of Western Joshua Tree (*Yucca brevifolia*) prior to finalizing the EIR and implements appropriate measures. If the Project, including the Project construction or any Project-related activity during the life of the Project, may result in take of CESA-listed species, CDFW recommends that the Project proponent seeks appropriate authorization prior to Project implementation through an incidental take permit (ITP). Should any CESA-listed plant species be present at the Project site, the Project Proponent shall obtain an incidental take permit for those species prior to the start of Project activities.

### **American Badger and Desert Kit Fox**

American badger is a Species of Special Concern. Desert kit fox is a protected species and may not be taken at any time pursuant to Title 14 of the California Code of Regulations Section 460. Project activities have the potential to take American badger and desert kit fox individuals, and development may result in loss of habitat and/or foraging habitat. CDFW recommends inclusion of pre-construction American Badger and Desert Kit Fox survey and suggests the following measure be included in the environmental document. No more than 30 days prior to the beginning of ground disturbance and/or Project activities, a qualified biologist shall conduct a survey to determine if potential desert kit fox or American badger burrows are present in the Project Area. If potential burrows are located, they shall be monitored by the qualified

biologist. If the burrow is determined to be active, the qualified biologist shall verify there are suitable burrows outside of the Project Area prior to undertaking passive relocation actions. If no suitable burrows are located, artificial burrows shall be created at least 14 days prior to passive relocation. The qualified biologist shall block the entrance of the active burrow with soil, sticks, and debris for 3-5 days to discourage the use of the burrow prior to Project activities. The entrance shall be blocked to an incrementally greater degree over the 3-5-day period. After the qualified biologist has determined there are no active burrows the burrows shall be hand-excavated to prevent re-use. No disturbance of active dens shall take place when juvenile desert kit fox and juvenile American badgers may be present and dependent on parental care. A qualified biologist shall determine appropriate buffers and maintain connectivity to adjacent habitat should natal burrows be present.

### **Wildlife in Pipes and Construction Materials**

Biological Monitor(s) shall visually check all sections of pipe/construction materials for the presence of wildlife sheltering within them prior to the pipe sections being placed in the trench and attached together, or shall have the ends capped while stored on site so as to prevent wildlife from entering. After attachment of the pipe sections to one another, whether in the trench or not, the exposed end(s) of the pipeline shall be capped at the end of each day during construction to prevent wildlife from entering and being trapped within the pipeline.

### **Escape Ramp in Trench**

At the end of each workday, the Biological Monitor(s) shall place an escape ramp at each end of the open trench to allow any animals that may have become entrapped in the trench to climb out overnight. The ramp may be constructed of either dirt fill or wood planking or other suitable material that is placed at an angle no greater than 30 degree.

### **Lake and Streambed Alteration Program**

Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: Substantially divert or obstruct the natural flow of any river, stream or lake; Substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or Deposit debris, waste or other materials that could pass into any river, stream or lake. Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water. Upon receipt of a complete notification, CDFW determines if the proposed Project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake and Streambed Alteration (LSA) Agreement is required. An LSA

Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify your Project that would eliminate or reduce harmful impacts to fish and wildlife resources. CDFW's issuance of an LSA Agreement is a "Project" subject to CEQA (see Pub. Resources Code 21065). To facilitate issuance of an LSA Agreement, if necessary, the DEIR should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with CDFW is recommended, since modification of the proposed Project may be required to avoid or reduce impacts to fish and wildlife resources.

### **Environmental Data**

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB).

### **Filing Fees**

Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CDFW appreciates the opportunity to comment on the NOP to assist the Lead Agency in identifying and mitigating Project impacts on biological resources. Questions regarding this letter should be directed to Dr. Shankar Sharma, Senior Environmental Scientist Specialist of Renewable Energy at [Shankar.Sharma@wildlife.ca.gov](mailto:Shankar.Sharma@wildlife.ca.gov) or (909) 228-3692.

Sincerely,

DocuSigned by:  
*Alisa Ellsworth*  
84FBB8273E4C480...

Alisa Ellsworth  
Environmental Program Manager

ec: State Clearinghouse ([state.clearinghouse@opr.ca.gov](mailto:state.clearinghouse@opr.ca.gov))



THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

April 19, 2021

Mr. Logan Raub  
Colorado River Basin Regional  
Water Quality Control Board  
73-720 Fred Waring Drive, Suite 100  
Palm Desert, CA 92260

**VIA EMAIL**  
Logan.Raub@Waterboards.ca.gov

Dear Mr. Raub:

Notice of Preparation of a Draft Environmental Impact Report  
for the Oberon Renewable Energy Project, Riverside County, California

The Metropolitan Water District of Southern California (Metropolitan) has reviewed the Colorado River Basin Regional Water Quality Control Board's (CRB-RWQCB) Notice of Preparation of a Draft Environmental Impact Report for the Oberon Renewable Energy Project (Project), Riverside County, CA. Metropolitan is pleased to submit comments for consideration to the CRB-RWQCB. Metropolitan provides these comments to ensure that any potential impacts on its facilities in the vicinity of the proposed Project and on Colorado River water resources are adequately addressed in the proposed environmental document.

**Background**

Metropolitan is a public agency and regional water wholesaler. It is comprised of 26 member public agencies serving approximately 19 million people in six counties in southern California. One of Metropolitan's major water supplies is the Colorado River via Metropolitan's Colorado River Aqueduct (CRA). Metropolitan holds an entitlement to water from the Colorado River. The CRA consists of tunnels, open canals and buried pipelines. CRA-related facilities also include above and below ground reservoirs and aquifers, access and patrol roads, communication facilities, and residential housing sites. The CRA, which can deliver up to 1.25 million acre-feet of water annually, extends 242 miles from the Colorado River, through the Mojave Desert and into Lake Mathews. Metropolitan has five pumping plants located along the CRA, which consume approximately 2,400 gigawatt-hours of energy when the CRA is operating at full capacity.

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Concurrent with its construction of the CRA in the mid-1930s, Metropolitan constructed 305 miles of 230 kilovolt (kV) transmission lines that run from the Mead Substation in southern Nevada, extend south, then branch east to Parker, California, and then west along Metropolitan's CRA. Metropolitan's CRA transmission line easements lie on federally owned land, managed by the Bureau of Land Management (BLM). The transmission lines were built for the sole and exclusive purpose of supplying power from the Hoover and Parker projects to the five pumping plants along the CRA.

Metropolitan's ownership and operation of the CRA and its 230 kV transmissions system is vital to its mission to provide Metropolitan's 5,200-square-mile service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

### **Project Understanding**

IP Oberon, LLC (Proponent), a subsidiary of Intersect Power, LLC, proposes to construct, operate, maintain, and decommission a 500 megawatt (MW) solar photovoltaic (PV) electricity generating station, battery energy storage facility, electrical substation, generation intertie (gen-tie) lines and associated access roads on BLM managed land located near Desert Center in Riverside County, California (Project). The Project is known as the Oberon Renewable Energy Project.

The proposed Project covers approximately 4,700 acres of BLM-administered land located north of Interstate 10 (I-10) and adjacent to the community of Lake Tamarisk in Desert Center, California. The lands fall within the California Desert Conservation Planning Area and within the Development Focus Area pursuant to the Desert Renewable Energy Conservation Plan (DRECP) amendment.

The proposed Project would produce up to 500 MW PV generation from an integrated energy facility that would connect to Southern California Edison's (SCE) 500 kV Red Bluff Substation via one new 500 kV gen-tie line. The proposed Project would include a project substation yard approximately 20,000 square feet in size, a battery energy storage facility capable of storing 500 MW of power, and an approximately 3,000-square-foot operations and maintenance (O&M) building and ancillary facilities designed for project security, employee offices, and parts storage. Electrical power for the O&M building and substation would be supplied via a new overhead or underground 12 kV distribution line from the existing SCE distribution system adjacent to the solar facility site.

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The Project Proponent proposes to use a total of up to 700 acre-feet (AF) of water during the construction phase, which is expected to last 15 months. In addition, water would be required during the operations and maintenance phase for panel washing and maintenance, and for substation restroom facilities that would be located adjacent to the O&M building. The estimated water use during this phase is 40 AF annually. Water for construction-related activities and operations is expected to be obtained from either an on-site or off-site groundwater well.

### **Power Generation: Potential Impacts to Metropolitan’s Transmissions System**

Metropolitan appreciates that the proposed Project would increase solar power to California’s grid and provide a new source of flexible supply with the addition of battery storage capabilities. However, Metropolitan requests that the lead agency analyze and assess any potential impacts to Metropolitan’s transmission system. Metropolitan also requests that the lead agency ensure that the California Independent System Operator (CAISO) includes Metropolitan as a Potentially Affected System for this proposed Project in accordance with the CAISO Tariff and Business Practice Manuals for the Generation Interconnection Procedures and be included in any related technical generation interconnection studies.

### **Water Resources: Potential Impacts on Colorado River and Local Water Supplies**

Metropolitan is concerned about the potential impacts of desert projects on Colorado River water supplies. Of immediate concern to California’s Colorado River water users is the accounting surface that extends west along the I-10 Corridor from the Palo Verde Valley into the Chuckwalla Valley. Water is a scarce resource in the desert southwest, and its use should reflect that scarcity. Metropolitan is primarily concerned with the individual and cumulative impacts of any new demands on Colorado River water resources because the water supplies allocated to California are already fully apportioned and utilized.

Should the proposed Project utilize groundwater from on-site wells for its water supply, Metropolitan requests that the lead agency provide an analysis of the utilization of groundwater from on-site wells, as well as a cumulative analysis that includes the impact on the groundwater basin from the surrounding solar facilities. Metropolitan is concerned that any use of groundwater may draw water from a groundwater basin that is hydro-geologically connected to the Colorado River, within an area referred to as the “accounting surface.” The extent of the accounting surface area for the Colorado River was determined by the U.S. Geological Survey (USGS) and U.S. Bureau of Reclamation as part of a proposed rule-making process. *See* Notice of Proposed Rule Regulating the Use of the Lower Colorado River Without an Entitlement, 73 Fed. Reg. 40916 (July 16, 2008) at <http://www.usbr.gov/lc/region/programs/unlawfuluse/FRnotice0708.pdf>; USGS Scientific Investigation Report No. 2008-5113 at <http://pubs.usgs.gov/sir/2008/5113/>. To the extent the proposed Project uses Colorado River water, it must have a documented right to do so.



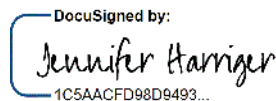
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Mr. Logan Raub  
Page 4  
April 19, 2021

In addition, Metropolitan asks that regulators require as a condition of project approval that project developers monitor groundwater use to ensure that, over the life of the project, that there are no impacts to Colorado River resources. If impacts are detected, the project developer should be required to mitigate and offset such impacts.

We appreciate the opportunity to provide input to your planning process and we look forward to receiving future documentation for this project. For further assistance, please contact Ms. Malinda Stalvey at (213) 217-5545.

Very truly yours,

DocuSigned by:  
  
1C5AACFD98D9493...

Jennifer Harriger  
Unit Manager, Environmental Planning Section

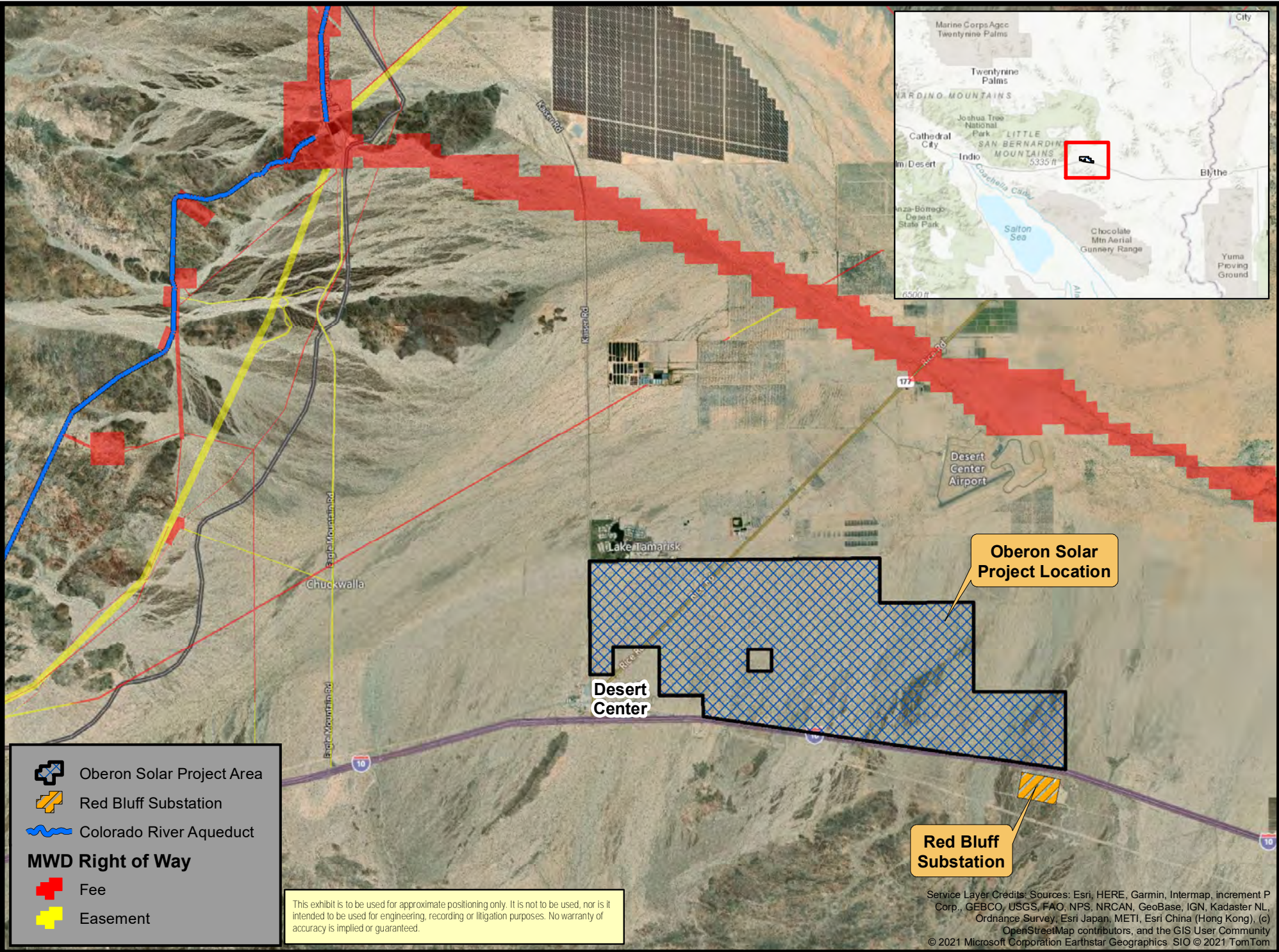
MKS:ds  
SharePoint\Oberon Renewable Energy Project NOP\_Comment Letter

Enclosure:

(1) Location Map



Infrastructure\_Unit\GIS\Geodetics\_and\_Mapping\_Team\Projects\Special\_Requests\Malinda\_Stanley\GIS\Oberon\_Solar\_Project\_Map.mxd [Printed 4/15/2021] Photography Date: Bing Prepared by: Tom Blecher (Geodetics & Mapping Team) Checked by: Malinda Stanley Job#: GIS21\_04-14



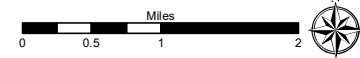
	Oberon Solar Project Area
	Red Bluff Substation
	Colorado River Aqueduct
<b>MWD Right of Way</b>	
	Fee
	Easement

This exhibit is to be used for approximate positioning only. It is not to be used, nor is it intended to be used for engineering, recording or litigation purposes. No warranty of accuracy is implied or guaranteed.

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### Oberon Renewable Energy Project Location Map

Desert Center California







**DESERT TORTOISE COUNCIL**

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**Via email only**

15 April 2021

Contact Person: Logan Raub  
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Moreno Valley, CA 92553  
Email: [aarchuleta@blm.gov](mailto:aarchuleta@blm.gov)

RE: Oberon Renewable Energy Project – Draft Environmental Impact Report

Dear Mr. Raub,

The Desert Tortoise Council (Council) is a non-profit organization comprised of hundreds of professionals and laypersons who share a common concern for wild desert tortoises and a commitment to advancing the public's understanding of desert tortoise species. Established in 1975 to promote conservation of tortoises in the deserts of the southwestern United States and Mexico, the Council routinely provides information and other forms of assistance to individuals, organizations, and regulatory agencies on matters potentially affecting desert tortoises within their geographic ranges.

We appreciate this opportunity to provide comments on the above-referenced project. Given the location of the proposed project in habitats likely occupied by Mojave desert tortoise (*Gopherus agassizii*) (synonymous with Agassiz's desert tortoise), our comments pertain to enhancing protection of this species during activities authorized by the Bureau of Land Management (BLM). Please accept, carefully review, and include in the relevant project file the Council's following comments and attachments for the proposed project. Additionally, we ask that you respond in an email that you have received this comment letter so we can be sure our concerns have been registered with the appropriate personnel and office for this project.

The notice of preparation (NOP), dated 18 March 2021, does not disclose how many acres of desert tortoise critical habitat would be affected by the proposed project. It is not until Figure 2 at the end of the document that it is revealed that critical habitat would be lost to this development. To our knowledge, the Bureau of Land Management (BLM) has not authorized a single solar project anywhere in California that has resulted in the development of tortoise critical habitat. Although the Desert Renewable Energy Conservation Plan (DRECP) is mentioned in several places, the NOP fails to indicate how much, if any, of the proposed site is in a Development Focused Area (DFA). We expect that the Draft Environmental Impact Report (Draft EIR) will reveal this acreage, particularly whether or not the critical habitat that would be lost to site development would be in a DFA. Although not revealed in the NOP, we understand from a public meeting on the project that 600 acres of critical habitat would be lost if the proposed configuration were adopted, which certainly must be revealed in the environmental documents.

The Council strongly advises BLM against authorizing the unprecedented loss of critical habitat to solar development, even if it is within a designated DFA. The DRECP was structured to locate energy development on lands with impaired habitats while conserving critical habitat. It is counterintuitive that the project would be developed on lands essential to the survival of a species that has declined by as much as 50% throughout much of its range. We also request that there be a new Land Use Plan Amendment (LUPA) that eliminates tortoise critical habitats from DFAs; i.e., that all DFA delineations be removed from all tortoise critical habitat areas.

Page 12 of the NOP indicates that a Draft EIR would be completed. Given that the project would occur primarily on BLM-administered lands, could result in the unprecedented adverse modification of tortoise critical habitat by energy development, and any project of this acreage in the CDCA is unlikely to have been adequately analyzed in the programmatic DRECP, the Council questions why the project's impacts are not being assessed in a combined EIR/EIS (Environmental Impact Statement)? The Council believes that the adverse modification of critical habitat is sufficient to trigger preparation of an EIS.

Whether the Proponent and/or BLM disagree with this conclusion or not, the Draft EIR/EIS must adequately assess the status and trends of desert tortoise populations in the affected region, particularly in adjacent and nearby critical habitats located south of Interstate 10. At a minimum, data analyses in Allison and McLuckie (2018) and USFWS (2014, 2015, and 2017) must be reported in the draft document as baseline information. The Council believes that these status and trend data clearly show why 600 acres of critical habitat should not be sacrificed to this development. We believe that the project has been arbitrarily situated in tortoise critical habitats without regards to both the precedent of that decision if the site is developed and the Proponent's failure to identify alternative, impaired habitats more suitable for this kind of discretionary development.

The Draft EIR/EIS should include a thorough analysis and discussion of the status and trend of the tortoise in the action area, tortoise conservation area, recovery unit, and range wide. Tied to this analysis should be a discussion of all likely sources of mortality for the tortoise and degradation and loss of habitat from implementation of leasing the area for solar development including construction, operation and maintenance, decommissioning, and restoration of the leased lands.

The Draft EIR/EIS should include appropriate mitigation for all direct, indirect, and cumulative effects to the tortoise and its habitats; the mitigation should use the best available science with a commitment to implement the mitigation commensurate to impacts to the tortoise and its habitats. Mitigation should include a fully-developed desert tortoise translocation plan; raven management plan; weed management plan; fire management plan; compensation plan for the degradation and loss of tortoise habitat that includes protection of the acquired, improved, and restored habitat in perpetuity for the tortoise from future development and human use; a plan to protect tortoise translocation area(s) from future development and human use in perpetuity; and habitat restoration plan when the lease is terminated and the proposed project is decommissioned.

These mitigation plans should include an implementation schedule that is tied to key actions of the construction, operation, maintenance, decommissioning, and restoration phases of the project so that mitigation occurs concurrently with or in advance of the impacts. The plans should specify success criteria, include a monitoring plan to collect data to determine whether success criteria have been met, and identify actions that would be required if the mitigation measures do not meet the success criteria.

Page 3 of the NOP indicates “The Project is located on BLM-administered lands in Riverside County just east of Desert Center, California, north of I-10. The Project site and surrounding lands are part of BLM-administered lands designated for renewable energy development. There are solar facilities in the surrounding area in various stages of development, including operational (Desert Sunlight, Desert Harvest, Palen solar projects), currently under construction (Athos project), and under permitting (Arica and Victory Pass solar projects). The Project would operate for a minimum of 35 years and up to 50 or more years. At the end of the Project’s useful life, the Project would be decommissioned and the land returned to its pre-Project contours. Revegetation would be attempted, though revegetation success would be subject to the microclimatic conditions in the area at the time of decommissioning. The Project application covers approximately 4,700 acres project area of BLM-administered land within which fewer than 3,000 acres would be developed with solar panels”

The NOP indicates “The Project gen-tie lines would be constructed with either monopoles, lattice steel structures, or wooden H-frame poles. Gen-tie structures would be on average 120 feet tall, with a maximum height up to approximately 200 feet for dead-end structures near the Red Bluff Substation.” In the raven management plan prepared for this project, we ask that the Proponent choose a pole type least likely to be used by ravens for nesting. For example, the tubular design with insulators on horizontal cross arms is preferable to lattice towers, which should not be used. Additionally, the BLM should require monitoring, nest removal, and depredation permits if tortoise depredation is documented. Additionally, the BLM should require the Proponent to contribute identified funds to the National Fish and Wildlife Foundation’s Raven Management Fund for regional and cumulative impacts.

Page 7 of the NOP indicates that resource surveys should be performed. For the Draft EIR to fully assess the effects and identify potentially significant impacts, the following surveys must be performed to determine the extent of rare plant and animal populations occurring within the impact area. Results of the surveys will determine appropriate permits from California Department of Fish and Wildlife (CDFW) and USFWS and associated minimization and mitigation measures.

- Prior to conducting surveys, a knowledgeable biologist must perform a records search of the California Natural Diversity Data Base (CNDDDB; CDFW 2021) for rare plant and animal species reported from the region. The results of the CNDDDB review would be reported in the Draft EIR with an indication of suitable and occupied habitats for all rare species reported from the region based on performing species specific surveys described below.
- Formal protocol surveys for Mojave desert tortoise (USFWS 2019) must be conducted at the proper times of year. As per this protocol, since the impact area is larger than 500 acres, the surveys must be performed in the time periods of April-May or September-October so that a statistical estimate of tortoise densities can be determined for all impact areas and reported in the Draft EIR. If any tortoise signs are found, formal Section 7 Consultation must occur and a state incidental take permit must be obtained from CDFW prior to ground disturbance. We strongly recommend that the County require that only experienced biologists perform protocol surveys, which means that CDFW and USFWS biologists should review their credentials prior to the surveys.
- To determine the full extent of impacts to tortoises and to facilitate compliance with the federal endangered species act (FESA), qualified biologist(s) should consult with the Palms Springs office of the USFWS to determine the action area for this project. The USFWS defines “action area” in 50 Code of Federal Regulations 402.2 and their Desert Tortoise Field Manual (USFWS 2009) as “all areas to be affected directly or indirectly by proposed development and not merely the immediate area involved in the action (50 CFR §402.02).”
- A jurisdictional waters analysis should be performed for all potential impacts to washes, streams, and drainages. This analysis should be reviewed by the CDFW as part of the permitting process and a Streambed Alteration Agreement acquired, if deemed necessary by CDFW.
- If there are any loose, shifting sands within the impact areas of the panels, along the gen-tie lines, or improved access routes, focused surveys for Mojave fringe-toed lizards (*Uma scoparia*) should be performed (University of California Riverside, Center for Conservation Biology 2005). Results and pertinent mitigation measures, as needed, should be published in the Draft EIR.
- Protocol surveys for western burrowing owl (*Athene cunicularia*) (CDFG 2012) should be completed. Note that the protocol (CDFG 2012) requires that peripheral transects be surveyed at 30-, 60-, 90-, 120-, and 150-meter intervals in all suitable habitats adjacent to the subject property to determine the potential indirect impacts of the project on this species. If burrowing owl sign is found, CDFG (2012) describes appropriate minimization and mitigation measures that would be required.
- There are likely to be special status plant species found in the region of the Project area as determined by a CNDDDB (CDFW 2021) literature review that should be sought during field surveys and their presence/absence discussed in the Draft EIR. Surveys must be completed at the appropriate time of year by qualified biologists (preferably botanists) using the latest acceptable methodologies (CDFG 2009). Any protected plant communities must also be sought and mapped as per CDFW (2010).



Page 9 of the NOP states “Following the completion of major construction, temporarily disturbed areas would be revegetated for the operations phase pursuant to an approved Restoration Plan.” In 2016, the Council completed a best management practices document on desert restoration (Abella and Berry 2016), which is available for the Proponent’s use at the following link: <https://www.dropbox.com/s/hm3acf57sg1zpgo/Abella%20and%20Berry%202016.pdf?dl=0>

The Council supports alternatives to reduce the need for additional solar energy projects in the Mojave Desert. That alternative is rooftop solar. The City of Los Angeles has implemented a rooftop solar Feed-in Tariff (FiT) program, the largest of its kind in America. The FiT program enables the owners of large buildings to install solar panels on their roofs, and sell the power they generate back to utilities for distribution into the power grid. This approach puts the generation of electricity where the demand is greatest, in populated areas. It may also reduce transmission costs, greenhouse gas emissions from constructing energy projects far from the sources of power demand and materials for construction, the number of affected resources in the desert that must be analyzed under the California Environmental Quality Act (CEQA), and mitigation costs. The Draft EIR should include an analysis of where the energy generated by this project would be sent and the needs for energy in those targeted areas that may be satisfied by rooftop solar. We contend that rooftop solar should be analyzed as one of the action alternatives.

In 1976, Congress passed the Federal Land Management Policy Act (FLPMA) and established the California Desert Conservation Plan (BLM 1980, as amended) “to provide for the immediate and future protection and administration of the public lands in the California desert within the framework of a program of multiple uses and sustained yield, and the maintenance of environmental quality.” Congress further declared “the California desert environment is a total ecosystem that is extremely fragile, easily scarred, and slowly healed; the use of all California desert resources [including rare and endangered species of wildlife, plants, and fishes] can and should be provided for in a multiple use and sustained yield management plan to conserve these resources for future generations...”

Congress wrote a lengthy definition of “multiple use” for the management of public lands and their various resource values. The definition included “... the use of some land for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and non-renewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output.”

Congress defined “sustained yield” as the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the public lands consistent with multiple use. The Mojave desert tortoise and its habitats are renewable resources.

The definition of “environmental quality” is a set of properties and characteristics of the environment, either generalized or local, as they impinge on human beings and other organisms. It is a measure of the condition of an environment relative to the requirements of one or more species and or to any human need or purpose. Thus, BLM must consider the quality or condition of the environment of the Mojave desert tortoise with respect to the species’ requirements for persistence and must maintain this habitat quality.

The Council believes that BLM’s management of the Mojave desert tortoise and its habitats in California is not in compliance with FLPMA or the purposes for establishing the CDCA. The large number of non-viable populations and downward trend in population densities for the Mojave desert tortoise in the CDCA are the data that confirm non-compliance with the “immediate and future protection of public lands,” “conserving resources for future generations,” and definitions of multiple use, sustained yield, and environmental quality.

Section 7(a)(1) of the Endangered Species Act states that all federal agencies “...shall... utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species listed pursuant to Section 4 of this Act.” In Section 3 of the FESA, “conserve,” “conserving,” and “conservation” mean “to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition...”

The Council believes that the data above demonstrate that BLM’s management of the Mojave desert tortoise and its habitat under the CDCA Plan and Plan Amendments has not been effective in meeting BLM’s Section 7(a)(1) mandate of carrying out programs for its conservation. To meet its Section 7(a)(1) responsibilities, the BLM needs to adopt and implement the management actions of the one population of the Mojave desert tortoise in California that is increasing. This population is managed by the National Park Service. The NPS’ land management practices are closer to managing areas of land as reserves, which is what the 1994 Recovery Plan (USFWS 1994) described as part of the recovery strategy for the Mojave desert tortoise. While BLM designated Desert Wildlife Management Areas (DWMAs) (the term was replaced by “Tortoise Conservation Areas” or “TCAs” in the DRECP) as one part of the recovery strategy, it did not implement the other parts of the recovery strategy. According to the Recovery Plan, DWMAs were to be managed as reserves; that is, they were areas of land to keep, save, preserve, or protect. BLM did not identify and implement needed recovery actions within each DWMA to manage the DWMAs as protected areas for the Mojave desert tortoise.

In the cumulative effects analysis of the Draft EIR/EIS, please ensure that the Council on Environmental Quality’s (CEQ) “Considering Cumulative Effects under the National Environmental Policy Act” (1997) is followed, including the eight principles, when analyzing cumulative effects of the proposed action to the tortoise and its habitats. CEQ states, “Determining the cumulative environmental consequences of an action requires delineating the cause-and-effect relationships between the multiple actions and the resources, ecosystems, and human communities of concern. The range of actions that must be considered includes not only the project proposal but all connected and similar actions that could contribute to cumulative effects.” The analysis “must

describe the response of the resource to this environmental change.” Cumulative impact analysis should “address the sustainability of resources, ecosystems, and human communities.” For example, the Draft EIR should include data on the estimated number of acres of tortoise habitats and the numbers of tortoises that may be lost to growth-inducing impacts as a result of project development.

We understand that the cumulative impacts analysis in the Draft EIR must follow the Council on Environmental Quality (CEQ) (1997) guidance on how to analyze cumulative environmental consequences, which contains eight principles listed below:

**1. Cumulative effects are caused by the aggregate of past, present, and reasonable future actions.**

The effects of a proposed action on a given resource, ecosystem, and human community, include the present and future effects added to the effects that have taken place in the past. Such cumulative effects must also be added to the effects (past, present, and future) caused by all other actions that affect the same resource.

**2. Cumulative effects are the total effect, including both direct and indirect effects, on a given resource, ecosystem, and human community of all actions taken, no matter who (federal, non-federal, or private) has taken the actions.**

Individual effects from disparate activities may add up or interact to cause additional effects not apparent when looking at the individual effect at one time. The additional effects contributed by actions unrelated to the proposed action must be included in the analysis of cumulative effects.

**3. Cumulative effects need to be analyzed in terms of the specific resource, ecosystem, and human community being affected.**

Environmental effects are often evaluated from the perspective of the proposed action. Analyzing cumulative effects requires focusing on the resources, ecosystem, and human community that may be affected and developing an adequate understanding of how the resources are susceptible to effects.

**4. It is not practical to analyze the cumulative effects of an action on the universe; the list of environmental effects must focus on those that are truly meaningful.**

For cumulative effects analysis to help the decision maker and inform interested parties, it must be limited through scoping to effects that can be evaluated meaningfully. The boundaries for evaluating cumulative effects should be expanded to the point at which the resource is no longer affected significantly or the effects are no longer of interest to the affected parties.

**5. Cumulative effects on a given resource, ecosystem, and human community are rarely aligned with political or administrative boundaries.**

Resources are typically demarcated according to agency responsibilities, county lines, grazing allotments, or other administrative boundaries. Because natural and sociocultural resources are not usually so aligned, each political entity actually manages only a piece of the affected resource or ecosystem. Cumulative effects analysis on natural systems must use natural ecological boundaries and analysis of human communities must use actual sociocultural boundaries to ensure including all effects.

**6. Cumulative effects may result from the accumulation of similar effects or the synergistic interaction of different effects.**

Repeated actions may cause effects to build up through simple addition (more and more of the same type of effect), and the same or different actions may produce effects that interact to produce cumulative effects greater than the sum of the effects.

**7. Cumulative effects may last for many years beyond the life of the action that caused the effects.**

Some actions cause damage lasting far longer than the life of the action itself (e.g., acid mine damage, radioactive waste contamination, species extinctions). Cumulative effects analysis need to apply the best science and forecasting techniques to assess potential catastrophic consequences in the future.

**8. Each affected resource, ecosystem, and human community must be analyzed in terms of its capacity to accommodate additional effects, based on its own time and space parameters.**

Analysts tend to think in terms of how the resource, ecosystem, and human community will be modified given the action's development needs. The most effective cumulative effects analysis focuses on what is needed to ensure long-term productivity or sustainability of the resource.

We appreciate this opportunity to provide input and trust that our comments will help protect tortoises during any authorized project activities. Herein, we ask that the Desert Tortoise Council be identified as an Affected Interest for this and all other **BLM** projects that may affect species of desert tortoises, and that any subsequent environmental documentation for this particular project is provided to us at the contact information listed above. We also ask that you acknowledge receipt of this letter as soon as possible so we can be sure our concerns have been received by the appropriate parties.

Regards,



Edward L. LaRue, Jr., M.S.  
Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson

cc: California State Clearinghouse, [state.clearinghouse@opr.ca.gov](mailto:state.clearinghouse@opr.ca.gov)

**Literature Cited**

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April 19, 2021

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**RE: SCAG Comments on the Notice of Preparation of a Draft Environmental Impact Report for the Oberon Renewable Energy Project [SCAG NO. IGR10358]**

Dear Mr. Raub,

Thank you for submitting the Notice of Preparation of a Draft Environmental Impact Report for the Oberon Renewable Energy Project (“proposed project”) to the Southern California Association of Governments (SCAG) for review and comment. SCAG is responsible for providing informational resources to regionally significant plans, projects, and programs per the California Environmental Quality Act (CEQA) to facilitate the consistency of these projects with SCAG’s adopted regional plans, to be determined by the lead agencies.<sup>1</sup>

Pursuant to Senate Bill (SB) 375, SCAG is the designated Regional Transportation Planning Agency under state law and is responsible for preparation of the Regional Transportation Plan (RTP) including the Sustainable Communities Strategy (SCS). SCAG’s feedback is intended to assist local jurisdictions and project proponents to implement projects that have the potential to contribute to attainment of Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) goals and align with RTP/SCS policies. Finally, SCAG is also the authorized regional agency for Inter-Governmental Review (IGR) of programs proposed for Federal financial assistance and direct Federal development activities, pursuant to Presidential Executive Order 12372.

SCAG staff has reviewed the Notice of Preparation of a Draft Environmental Impact Report for the Oberon Renewable Energy Project in Riverside County. The project proposes to construct, operate, maintain, and decommission a 500-megawatt solar photovoltaic electricity generating station, battery energy storage facility, electrical substation, gen-tie lines and associated access roads on approximately 4,700 acres of BLM-managed land.

**When available, please email environmental documentation to [IGR@scag.ca.gov](mailto:IGR@scag.ca.gov) providing, at a minimum, the full public comment period for review.**

If you have any questions regarding the attached comments, please contact the Inter-Governmental Review (IGR) Program, attn.: Anita Au, Senior Regional Planner, at (213) 236-1874 or [IGR@scag.ca.gov](mailto:IGR@scag.ca.gov). Thank you.

Sincerely,

Rongsheng Luo  
Acting Manager, Compliance and Performance Monitoring

<sup>1</sup>Lead agencies such as local jurisdictions have the sole discretion in determining a local project’s consistency with the 2020 RTP/SCS (Connect SoCal) for the purpose of determining consistency for CEQA.



**COMMENTS ON THE NOTICE OF PREPARATION OF A  
DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE  
OBERON RENEWABLE ENERGY PROJECT [SCAG NO. IGR10358]**

**CONSISTENCY WITH CONNECT SOCIAL**

SCAG provides informational resources to facilitate the consistency of the proposed project with the adopted 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS or Connect SoCal). For the purpose of determining consistency with CEQA, lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency with Connect SoCal.

**CONNECT SOCIAL GOALS**

The SCAG Regional Council fully adopted [Connect SoCal](#) in September 2020. Connect SoCal, also known as the 2020 – 2045 RTP/SCS, builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health. The goals included in Connect SoCal may be pertinent to the proposed project. These goals are meant to provide guidance for considering the proposed project. Among the relevant goals of Connect SoCal are the following:

<b>SCAG CONNECT SOCIAL GOALS</b>	
Goal #1:	<i>Encourage regional economic prosperity and global competitiveness</i>
Goal #2:	<i>Improve mobility, accessibility, reliability and travel safety for people and goods</i>
Goal #3:	<i>Enhance the preservation, security, and resilience of the regional transportation system</i>
Goal #4:	<i>Increase person and goods movement and travel choices within the transportation system</i>
Goal #5:	<i>Reduce greenhouse gas emissions and improve air quality</i>
Goal #6:	<i>Support healthy and equitable communities</i>
Goal #7:	<i>Adapt to a changing climate and support an integrated regional development pattern and transportation network</i>
Goal #8:	<i>Leverage new transportation technologies and data-driven solutions that result in more efficient travel</i>
Goal #9:	<i>Encourage development of diverse housing types in areas that are supported by multiple transportation options</i>
Goal #10:	<i>Promote conservation of natural and agricultural lands and restoration of habitats</i>

For ease of review, we encourage the use of a side-by-side comparison of SCAG goals with discussions of the consistency, non-consistency or non-applicability of the goals and supportive analysis in a table format. Suggested format is as follows:

SCAG CONNECT SOCIAL GOALS	
Goal	Analysis
Goal #1: <i>Encourage regional economic prosperity and global competitiveness</i>	<i>Consistent: Statement as to why; Not-Consistent: Statement as to why; Or Not Applicable: Statement as to why; DEIR page number reference</i>
Goal #2: <i>Improve mobility, accessibility, reliability and travel safety for people and goods</i>	<i>Consistent: Statement as to why; Not-Consistent: Statement as to why; Or Not Applicable: Statement as to why; DEIR page number reference</i>
etc.	etc.

**Connect SoCal Strategies**

To achieve the goals of Connect SoCal, a wide range of land use and transportation strategies are included in the accompanying twenty (20) technical reports. To view Connect SoCal and the accompanying technical reports, please visit the [Connect SoCal webpage](#). Connect SoCal builds upon the progress from previous RTP/SCS cycles and continues to focus on integrated, coordinated, and balanced planning for land use and transportation that helps the SCAG region strive towards a more sustainable region, while meeting statutory requirements pertinent to RTP/SCSs. These strategies within the regional context are provided as guidance for lead agencies such as local jurisdictions when the proposed project is under consideration.

**DEMOGRAPHICS AND GROWTH FORECASTS**

A key, formative step in projecting future population, households, and employment through 2045 for Connect SoCal was the generation of a forecast of regional and county level growth in collaboration with expert demographers and economists on Southern California. From there, jurisdictional level forecasts were ground-truthed by subregions and local agencies, which helped SCAG identify opportunities and barriers to future development. This forecast helps the region understand, in a very general sense, where we are expected to grow, and allows SCAG to focus attention on areas that are experiencing change and may have increased transportation needs. After a year-long engagement effort with all 197 jurisdictions one-on-one, 82 percent of SCAG’s 197 jurisdictions provided feedback on the forecast of future growth for Connect SoCal. SCAG also sought feedback on potential sustainable growth strategies from a broad range of stakeholder groups – including local jurisdictions, county transportation commissions, other partner agencies, industry groups, community-based organizations, and the general public. Connect SoCal utilizes a bottom-up approach in that total projected growth for each jurisdiction reflects feedback received from jurisdiction staff, including city managers, community development/planning directors, and local staff. Growth at the neighborhood level (i.e., transportation analysis zone (TAZ) reflects entitled projects and adheres to current general and specific plan maximum densities as conveyed by jurisdictions (except in cases where entitled projects and development agreements exceed these capacities as calculated by SCAG). Neighborhood level growth projections also feature strategies that help to reduce greenhouse gas emissions (GHG) from automobiles and light trucks to achieve Southern California’s GHG reduction target, approved by the California Air Resources Board (CARB) in accordance with state planning law. Connect SoCal’s Forecasted Development Pattern is utilized for long range modeling purposes and does not supersede actions taken by elected bodies on future development, including entitlements and development agreements. SCAG does not have the authority to implement the plan -- neither through decisions about what type of development is built where, nor what transportation projects are ultimately built, as Connect SoCal is adopted at the jurisdictional level. Achieving a sustained regional outcome depends upon informed and intentional local action. To access jurisdictional level growth estimates and forecasts for years 2016 and 2045, please refer to the [Connect SoCal Demographics and Growth Forecast Technical Report](#). The growth forecasts for the region and applicable jurisdictions are below.

	Adopted SCAG Region Wide Forecasts				Adopted County of Riverside Forecasts			
	Year 2020	Year 2030	Year 2035	Year 2045	Year 2020	Year 2030	Year 2035	Year 2045
Population	19,517,731	20,821,171	21,443,006	22,503,899	2,492,601	2,852,599	2,995,509	3,251,705
Households	6,333,458	6,902,821	7,170,110	7,633,451	784,783	930,216	987,738	1,086,113
Employment	8,695,427	9,303,627	9,566,384	10,048,822	822,826	961,268	1,008,943	1,102,721

## **MITIGATION MEASURES**

SCAG staff recommends that you review the [Final Program Environmental Impact Report](#) (Final PEIR) for Connect SoCal for guidance, as appropriate. SCAG's Regional Council certified the PEIR and adopted the associated Findings of Fact and a Statement of Overriding Considerations (FOF/SOC) and Mitigation Monitoring and Reporting Program (MMRP) on May 7, 2020 and also adopted a PEIR Addendum and amended the MMRP on September 3, 2020 (please see the [PEIR webpage](#) and scroll to the bottom of the page for the PEIR Addendum). The PEIR includes a list of project-level performance standards-based mitigation measures that may be considered for adoption and implementation by lead, responsible, or trustee agencies in the region, as applicable and feasible. Project-level mitigation measures are within responsibility, authority, and/or jurisdiction of project-implementing agency or other public agency serving as lead agency under CEQA in subsequent project- and site- specific design, CEQA review, and decision-making processes, to meet the performance standards for each of the CEQA resource categories.



*Submitted via Electronic Mail*

April 19, 2021

ATTN: Brandon Anderson  
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**RE: Scoping Comments on BLM's Notice of Intent ("NOI") to prepare an Environmental Assessment (EA) and the Colorado River Basin Regional Water Quality Control Board's Notice of Preparation ("NOP") on an Environmental Impact Report (EIR) for the Proposed Oberon (CACA- 58539) Solar Project.**

Dear Mr. Anderson and Mr. Raub,

The Center for Biological Diversity, the Sierra Club, California Native Plant Society, and National Audubon Society (Conservation Organizations) submit these scoping comments on BLM's Notice of Intent ("NOI") to prepare an Environmental Assessment (EA) and the Colorado River Basin Regional Water Quality Control Board's Notice of Preparation ("NOP") on an Environmental Impact Report (EIR) for the Proposed Oberon (CACA- 58539) Solar Project, in compliance with the National Environmental Policy Act of 1969 (NEPA), as amended, and the federal Endangered Species Act (ESA), the California Environmental Quality Act (CEQA) and the California Endangered Species Act (CESA) on the potential impacts of the proposed project.

The Center is a non-profit environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. These scoping comments are submitted on behalf of the Center's 1.7 million staff, members and online activists throughout California and the western United States many of whom live in southern California and enjoy visiting, studying, photographing and hiking in the California Desert Conservation Area, including the areas on and around the proposed project sites.

The Sierra Club is a non-profit corporation of approximately 2.5 million members and supporters dedicated to exploring, enjoying, and protecting the wild places of the earth; to practicing and promoting the responsible use of the earth's ecosystems and resources; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. The Sierra Club and its members utilize the natural, scenic and biological resources of the Southern California desert through their corporate and individual activities including scientific research, planning, education, and recreation.

The California Native Plant Society (CNPS) is a statewide, non-profit organization with more than 10,000 members across 35 chapters. The mission of CNPS is to conserve California native plants and their natural habitats, and to increase the understanding, appreciation, and horticultural use of native plants. CNPS works closely with decision-makers, scientists, and local planners to advocate for well-informed policies, regulations, and land management practices.

For more than a century, Audubon has built a legacy of conservation success by mobilizing the strength of its network of two million members and supporters, 450 local chapters, 41 Audubon centers, 23 state offices, and dedicated professional staff to connect people with nature and the power to protect it. A powerful combination of science, education and policy expertise combine in efforts ranging from protection and restoration of local habitats to the implementation of policies that safeguard birds, other wildlife, and the resources that sustain us all—in the U.S. and across the Americas. The development of renewable energy is a critical component of efforts to reduce greenhouse gas emissions, avoid the worst consequences of global warming, and to assist California in meeting emission reductions. The Conservation Organizations strongly support the development of renewable energy production, and the generation of electricity from solar power with electric storage, in particular. However, like any project, proposed solar power projects should be thoughtfully planned to minimize impacts to the environment. Renewable energy projects should avoid impacts to sensitive species and habitats and should be sited in proximity to the areas of electricity end-use in order to reduce the need for extensive new transmission corridors and the efficiency-loss associated with extended energy transmission. Only by maintaining the highest environmental standards regarding local impacts, and effects on species and habitat, can renewable energy production be truly sustainable.

The Oberon Project is a proposed solar photovoltaic (PV) generating facility with a proposed output of 500 MW photovoltaic solar system which has no energy storage on approximately 4,700 acres with a proposed development footprint of <3,000 acres. It includes 500 MW energy storage facilities. It is located on public lands in Riverside County, CA on lands with the BLM's designated under the Desert Renewable Energy Conservation Plan Amendment (DRECP) as a Development Focus Area. Ancillary facilities including one on-site substation and

switchyard and one 500 kV gen-tie, running approximately 0.5 mile southeast from the solar facility to the existing Red Bluff Substation.

The proposed project does not meet the requirements of the DRECP as described below and therefore the project needs to be revised to comply with the DRECP in order to avoid needing a plan amendment. The BLM must require the project to be redesigned to meet the requirements of the DRECP.

The Energy Production and Utility Corridors section of the California Desert Conservation Area Plan (1980) as amended requires at minimum that the following resource issues be addressed:

- 1) Consistency with the Desert Plan, including designated and proposed planning corridors;
- 2) Protection of air quality;
- 3) Impact on adjacent wilderness and sensitive resources;
- 4) Visual quality;
- 5) Waste disposal;
- 6) Seismic hazards; and
- 7) Regional equity.

Additionally, several other resources are of concern to us and need to be addressed in detail as follow below:

### **Failure to Comply with DRECP**

One of our main concerns is the stated need for a plan amendment for the project because it does not comply with the Conservation Management Actions (CMAs) required by the DRECP. Unacceptable impacts from this project as proposed include, but are not limited to, development in and impacts to microphyll woodlands and wildlife connectivity corridors.

As the U.S. Fish and Wildlife Service notes in its Biological Opinion for the DRECP, “The development focus areas are large enough to provide substantial flexibility for siting projects.” The project needs to take advantage of the substantial flexibility for siting and craft a project that complies with the DRECP in order to quickly move through the permitting process without a plan amendment being needed. Because the proposed project does not conform with the DRECP and would require a plan amendment, the BLM should have rejected this application and required that the initial project proposal conform with DRECP.

#### *Microphyll Woodlands*

Because the currently proposed project is located in an area with extensive microphyll woodlands within the DFA, the LUPA-wide CMAs, which are applicable throughout the DRECP area, include LUPA-BIO-SVF-6 which states:

“Microphyll woodland: impacts to microphyll woodland (see Glossary of Terms) will be avoided, except for minor incursions (see Glossary of Terms).”



(Emphasis added). The Glossary of Terms defines microphyll woodlands as:

**“microphyll woodlands.** Consist of drought-deciduous, small-leaved (microphyllus), mostly leguminous trees. Occurs in bajadas and washes where water availability is somewhat higher than the plains occupied by creosote bush and has been called the “riparian phase” of desert scrub (Webster and Bahre 2001). Composed of the following alliances: desert willow, mesquite, smoke tree, and the blue palo verde-ironwood.”

DRECP BLM LUPA at xviii

And where the Glossary of Terms defines minor incursions as:

**“minor incursion.** Small-scale allowable impacts to sensitive resources, as per specific CMAs, that do not individually or cumulatively compromise the conservation objectives of that resource or rise to a level of significance that warrants development and application of more rigorous CMAs or a DRECP LUPA amendment. Minor incursions may be allowed to prevent or minimize greater resource impacts from an alternative approach to the activity. Not all minor incursions are considered unavoidable impacts.”

DRECP BLM LUPA at xviii

The proposed project map provided at the scoping meeting (see Attachment A) shows large areas of microphyll woodlands being developed in the array areas in yellow, these cannot be considered “minor incursions.” The DEA and DEIR needs to provide a preferred alternative that will comply with all DRECP CMAs including LUPA-BIO-SVF-6 and eliminate all development in microphyll woodlands and the need for a plan amendment.

The map also shows the arrays being developed up to the edges of the mapped microphyll woodlands with no buffer to protect the structure of the washes or impacts to waters of the state. Maintaining microphyll woodlands in the desert is critically important to the health of the ecosystem as a whole and conservation of many plant and wildlife species. For example, the DRECP explains:

Old-growth microphyll woodlands provide the highest amount of aboveground biomass of any plant community in the Sonoran Desert outside of the Colorado River riparian zone and constitute a reservoir for carbon sequestration. The complex physical structure and cover of the woodlands provide essential habitat for neotropical migratory birds crossing the California deserts to reach nesting sites in the Pacific Coast states and Alaska.

(Draft DRECP and EIR/EIS, p. II.3-331)<sup>1</sup> The California State Wildlife Action Plan 2015 includes conservation of desert dry wash woodlands (also called microphyll woodlands)

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<sup>1</sup> See also Mark Dimitt, A Natural History of the Sonoran Desert, 2000 “Dry wash woodlands occupy less than 5%

in the desert region as an important conservation target and has a goal of *increasing* this habitat type by 2025 (*id.* at 5.6-45). The agencies cannot allow destruction of any of this habitat type without undermining the state’s conservation goals. The DRECP requires this important and rare plant community be protected from development even within a DFA.

Wildlife Connectivity Corridors in the DFA

The proposed project site is located in the most-westernly BLM-identified wildlife linkage within the Riverside-East DFA (Attachment B - Appendix D, Figure D-2, Final DRECP 2016 and Attachment C – USFWS’ Biological Opinion). Unfortunately, these two maps do not reflect the same boundaries of the Multispecies Linkages in the DFA, which is confusing. The DEA and DEIR need to identify which Multispecies Linkage is the currently adopted boundary by clearly referencing where it was adopted. Regardless, the project as proposed will construct solar fields, energy storage and the substation within the boundaries of this critical multispecies linkage shown in both maps.

The previously approved Athos project, on private property directly north of the Oberon proposed project, has already blocked part of the linkage. As currently proposed Victory Pass project on public land would effectively block a significant portion of the eastern part of the wildlife linkage. The Oberon proposed project would effectively eliminate the other half of the multispecies wildlife linkage and includes over 600 acres of wildlife habitat that the DRECP identified to be conserved to allow for wildlife passage within the DFA. This is unacceptable.

The proposed project must be reconfigured to avoid intrusion into the multispecies linkage as per LUPA-BIO-13 which states:

“The siting of projects along the edges (i.e. general linkage border) of the biological linkages identified in Appendix D (Figures D-1 and D-2) will be configured (1) to maximize the retention of microphyll woodlands and their constituent vegetation type and inclusion of other physical and biological features conducive to Focus and BLM Special Status Species’ dispersal, and (2) informed by existing available information on modeled focus and BLM Special Status Species habitat and element occurrence data, mapped delineations of vegetation types, and based on available empirical data, including radio telemetry, wildlife tracking sign, and road-kill information. Additionally, projects will be sited and designed to maintain the function of Focus and Special Status Species connectivity and their associated habitats in the following linkage and connectivity areas:

....

- Within a 1.5-mile-wide linkage across Interstate 10 to connect the Chuckwalla Mountains to the Chuckwalla Valley east of Desert Center.

....”

(Emphasis added). Clearly blocking the linkage will not “maintain the function of... connectivity”. As climate change progresses and the DFA is developed, the identified

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of this subsection of the Sonoran desert but support 90% of its bird life.”

multispecies wildlife linkages increase in importance to allow wildlife to move to suitable habitat.

The DEA and DEIR needs to include a preferred alternative that avoids development in the wildlife linkage area in order to comply with LUPA-BIO-13, and maintain connectivity function in the wildlife linkage. While BLM did not expressly state at the scoping meeting that this aspect of the proposed site development would require a plan amendment, the direct and cumulative impacts to the wildlife linkage would clearly violate the DRECP CMAs by undermining the connectivity function of the linkage which is unacceptable.

Rather than consider any plan amendment for this proposed project, BLM must include a preferred alternative that conforms to the DRECP and maintains the protections for microphyll woodlands and maintains the functions of the wildlife linkages that were adopted in the carefully balanced plan.

### **Biological Resources**

Based on the proposed project description, this project is proposed on an ecologically functional desert landscape that may host a suite of rare species. Careful documentation of the current site resources is imperative in order to analyze how best to site the project to avoid and minimize impacts and then to mitigate any unavoidable impacts.

#### ***Biological Surveys and Mapping***

While it appears that some of the biological resources surveys have preceded the scoping input for the project, the Conservation Organizations request that thorough, seasonal surveys be performed for sensitive plant species and vegetation communities, and animal species under the direction and supervision of the BLM and resource agencies such as the US Fish and Wildlife Service and the California Department of Fish and Wildlife. Full disclosure of survey methods and results to the public and other agencies without limitations imposed by the applicant must be implemented to assure full NEPA/CEQA/FESA/CESA compliance.

Confidentiality agreements or non-disclosure agreements regarding environmental resources must not be required of any biologists participating in the surveys in support of the proposed project. Surveys for the plants and plant communities should follow California Native Plant Society (CNPS) and California Department of Fish and Game (CDFG) floristic survey guidelines<sup>2</sup> and should be documented. A full floral inventory of all species encountered needs to be documented and included in the DEAs and the DEIR. Surveys for animals should include an evaluation of the California Wildlife Habitat Relationship System's (CWHR) Habitat Classification Scheme. All rare species (plants or animals) need to be documented with a California Natural Diversity Data Base form and submitted to the California Department of Fish

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<sup>2</sup> [http://cnps.org/wp-content/uploads/2018/03/cnps\\_survey\\_guidelines.pdf](http://cnps.org/wp-content/uploads/2018/03/cnps_survey_guidelines.pdf) ; [https://www.cnps.org/wp-content/uploads/2018/03/guidelines-rare\\_veg\\_mapping.pdf](https://www.cnps.org/wp-content/uploads/2018/03/guidelines-rare_veg_mapping.pdf) ; <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=102342&inline> and <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>

and Game using the CNDDDB Form<sup>3</sup> as per the State’s instructions<sup>4</sup>.

The Conservation Organizations request that the vegetation maps be at a large enough scale to be useful for evaluating the impacts. Vegetation and dune habitat mapping should be at such a scale to provide an accurate accounting of sand transport corridor, wash areas and adjacent habitat types that will be directly or indirectly affected by the proposed activities. A half-acre minimum mapping unit size is recommended, such as has been used for other development projects.

Adequate surveys must be implemented, not just a single season of surveys, in order to evaluate the existing on-site conditions. In this area, both spring and fall vegetation surveys should be implemented. Due to unpredictable precipitation, desert organisms have evolved to survive in these harsh conditions and if surveys are performed at inappropriate times or year or in particularly dry years many plants that are in fact on-site may not be apparent during surveys (ex. annual and herbaceous perennial plants). The project application should be put on hold and not proceed if key surveys have not been completed due to low rainfall or other factors that inhibit plant expression above ground.

### ***Impact Analysis***

The EAs and EIR must evaluate all direct, indirect, and cumulative impacts to sensitive habitats, including impacts associated with impacts to federally designated critical habitat for the threatened Mojave desert tortoise. Much of the desert tortoise critical habitat lies within the designated multispecies wildlife linkage.

A number of rare resources have high potential to occur on this site including:

<i>Common Name</i>	<i>Scientific Name</i>	<i>State/Federal/Other Status</i>
Yuma Ridgway’s rail (formerly Yuma clapper rail)	<i>Rallus obsoletus yumanensis</i> (formerly <i>Rallus longirostris yumanensis</i> )	CE/FP/FE
Desert Tortoise	<i>Gopherus agassizii</i>	CT/FT
Mojave fringe-toed lizard	<i>Uma scoparia</i>	CSC
Couch’s spadefoot	<i>Scaphiopus couchii</i>	CSC
Arizona Bell’s vireo	<i>Vireo bellii arizonae</i>	CE
Burrowing owl	<i>Athene cucularia hypugaea</i>	CSC/BLM SS
LeConte’s thrasher	<i>Toxostoma lecontei</i>	CSC
Crissal thrasher	<i>Toxostoma crissale</i>	CSC
Loggerhead shrike	<i>Lanius ludovicianus</i>	CSC/FSC/MB
Prairie falcon	<i>Falco mexicanus</i>	CSC/MB
Elf owl	<i>Micrathene whitneyi</i>	CE
Gila woodpecker	<i>Melanerpes uropygialis</i>	CE
Gilded flicker	<i>Colaptes chrysoides</i>	CE

<sup>3</sup> [http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB\\_FieldSurveyForm.pdf](http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB_FieldSurveyForm.pdf)

<sup>4</sup> [http://www.dfg.ca.gov/biogeodata/cnddb/submitting\\_data\\_to\\_cnddb.asp](http://www.dfg.ca.gov/biogeodata/cnddb/submitting_data_to_cnddb.asp)

Merlin	<i>Falco columbarius</i>	<i>WL</i>
Mountain plover	<i>Charadrius montanus</i>	<i>CSC</i>
Sonoran yellow warbler	<i>Setophaga petechia sonorana</i>	<i>CSC</i>
Southwestern willow flycatcher	<i>Empidonax trailii extimus</i>	<i>CE/FE</i>
Summer tanager	<i>Piranga rubra</i>	<i>CSC</i>
Vermillion flycatcher	<i>Pyrocephalus rubinus</i>	<i>CSC</i>
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	<i>CE/FT</i>
Yellow-breasted chat	<i>Icteria virens</i>	<i>SSC</i>
Nelson's bighorn sheep	<i>Ovis canadensis nelsonii</i>	<i>Game species</i>
Arizona myotis	<i>Myotis occultus</i>	<i>CSC</i>
California leaf-nosed bat	<i>Macrotus californicus</i>	<i>CSC</i>
Cave myotis	<i>Myotis velifer</i>	<i>CSC</i>
Colorado river cotton rat	<i>Signondon arizonae plenus</i>	<i>CSC</i>
Pallid bat	<i>Antrozous pallidus</i>	<i>CSC</i>
Pocketed free-tailed bat	<i>Nyctinomops femororsaccus</i>	<i>CSC</i>
Western yellow bat	<i>Lasiurus xanthinus</i>	<i>CSC</i>
Bradley's cuckoo wasp	<i>Ceratchrysis bradleyi</i>	
Las Animas colubrine	<i>Colubrina californica</i>	<i>CA RP List 2B.3</i>
Harwood's milkvetch	<i>Astragalus insularis var. harwoodii</i>	<i>CA RP List 2B.2</i>
Alverson's foxtail cactus	<i>Coryphantha alversonii</i>	<i>CA RP List 4.3</i>
Abram's spurge	<i>Euphorbia abramsiana</i>	<i>CA RP List 2B.2</i>
Angel trumpets	<i>Acleisanthes longiflora</i>	<i>CA RP List 2B.3</i>
Bitter hymenoxys	<i>Hymenoxys odorata</i>	<i>CA RP List 2B.1</i>
California ditaxis	<i>Ditaxis serrata var. californica</i>	<i>CA RP List 3.2</i>
California satintail	<i>Imperata brevifolia</i>	<i>CA RP List 2B.1</i>
Desert beardtongue	<i>Penstemon pseudospectabilis ssp. pseudospectabilis</i>	<i>CA RP List 2B.2</i>
Gravel milkvetch	<i>Astragalus sabulonum</i>	<i>CA RP List 2B.2</i>
Harwood's eriastrum	<i>Eriastrum harwoodii</i>	<i>CA RP List 1B.2</i>
Roughstalk witch grass	<i>Panicum hirticaule ssp. hirticaule</i>	<i>CA RP List 2B.1</i>

**State Designation**

CE – State listed as endangered.  
 FP – fully protected species under CESA  
 CT State listed as threatened. Species that although not presently threatened in California with extinction are likely to become endangered in the foreseeable future.  
 CSC California Department of Fish and Game “Species of Special Concern.” Species with declining populations in California.

**Federal Designation**

FE Federally listed as endangered.  
 FT Federally listed as threatened.  
 MB Migratory Bird Treaty Act. of 1918. Protects native birds, eggs, and their nests.  
 BCC U.S. Fish and Wildlife Service Bird of Conservation Concern.  
 BLM SS BLM Sensitive Species.

**Other**

California Native Plant Society (CNPS)  
 1B.1 Plant rare, threatened or endangered in California and elsewhere, and very threatened.  
 1B.2 Plant rare, threatened or endangered in California and fairly threatened in CA.  
 2B.1 Plant rare, threatened or endangered in California, but more common elsewhere, and very threatened in CA  
 2B.2 Plant rare, threatened or endangered in California, but more common elsewhere, and fairly threatened in CA.

2B.3 Plant rare, threatened or endangered in California, but more common elsewhere, and not very threatened in CA. 4.3 Plants of a limited distribution, and not very threatened in CA.
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All of these species have been identified as occurring in the general vicinity of the project site.<sup>5</sup> Therefore, the DEA and the DEIR must adequately address the impacts and propose effective ways to avoid, minimize, and mitigate the impacts to these resources through alternatives including alternative siting and alternative on-site configurations.

### ***Yuma Ridgway's Rail (formerly denoted Yuma Clapper Rail)***

Protected since 1967 as an endangered species, the Yuma Ridgway's rail (*Rallus obsoletus yumanensis*) is a bellwether for the health of desert waterways. It is both a state and federally-listed endangered species and in California is a fully protected species. Despite decades of protection, its numbers continue to decline. Two Yuma Ridgway's rail mortalities have been reported at industrial-scale solar projects built on bird-migration corridors on public and private lands in the California desert. By 2006, only 451 to 968 of these birds remain along the lower Colorado River and the Salton Sea<sup>6</sup>. The proposed project lies within the within the flyway between the Yuma Ridgway rail's two strongholds. Because the PV projects, like the proposed project, appear to be particularly attractive to "waterbirds" (see below section on migratory birds) including the Yuma Ridgway's rail, this proposed project could imperil Yuma Ridgway rails and therefore the EAs and EIR need to evaluate the potential impacts to these highly endangered birds.

### ***Desert Tortoise and Designated Critical Habitat***

The desert tortoise is continuing to decline throughout its range despite being under federal and state Endangered Species Acts protection as threatened<sup>7</sup>. The proposed Oberon project contains federally designated critical habitat and likely has desert tortoise occurring on site. Even though the proposed project is outside desert wildlife management areas (DWMAs) as identified in the Northern and Eastern Colorado Plan<sup>8</sup> and the Desert Renewable Energy Conservation Plan<sup>9</sup>, it still contains approximately 600 acres of critical habitat. The EAs and EIR must clearly address alternative proposals for avoiding and minimizing impacts to the desert tortoise and its federally designated critical habitat. This could be achieved with project redesign to comply with the CMAs mentioned above, because much of the federally designated critical habitat for desert tortoise is located inside the designated multispecies wildlife linkage in the DRECP.

If avoidance of all desert tortoise critical habitat is not possible after redesign to meet the

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<sup>5</sup> CNDDDB 2020 <http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp>

<sup>6</sup> USFWS 2006 [https://ecos.fws.gov/docs/five\\_year\\_review/doc782.pdf](https://ecos.fws.gov/docs/five_year_review/doc782.pdf)

<sup>7</sup> USFWS 2010

[https://www.fws.gov/nevada/desert\\_tortoise/documents/reports/2020/2019\\_DRAFT\\_RangewideMojaveDesertTortoiseMonitoring.pdf](https://www.fws.gov/nevada/desert_tortoise/documents/reports/2020/2019_DRAFT_RangewideMojaveDesertTortoiseMonitoring.pdf)

<sup>8</sup> BLM 2006 <http://www.blm.gov/ca/st/en/fo/cdd/neco.html>

<sup>9</sup> <https://www.blm.gov/programs/planning-and-nepa/plans-in-development/california/desert-renewable-energy-conservation-plan>



DRECP requirements, then mitigation is required at a ratio of at least 5:1 (acquired for mitigation:impacted from the project). Unfortunately, impacts to the multispecies wildlife linkage is not mitigable, because wildlife linkages are specific to their location. By not developing in the multispecies wildlife linkage, most of the desert tortoise critical habitat will also be protected.

Any necessary acquisition of lands for mitigation will be managed in perpetuity for conservation must be included as part of the strategy to mitigate impacts to the tortoise. Mitigation lands should be in federally designated critical habitat within the Colorado Desert Recovery Unit.

Translocation as a long-term strategy for minimizing and mitigating impacts to desert tortoise may be a tool for augmenting conservation of the desert tortoise<sup>10</sup> although it may not be effective in retaining the existing genetic diversity<sup>11</sup>. However, it cannot substitute for other mitigation such as preservation of habitat and providing habitat connectivity. Moreover, to date, translocation does not have a proven track record of success. If translocation of desert tortoise (or for any species) is to be a part of the mitigation strategy, a detailed final plan must be included as part of the DEAs and DEIR. It must include methodologies for determining appropriate conservation area(s) where tortoises may be translocated that are permanently preserved, impacts to existing “host” tortoise populations that occur on the translocation site, when/how the tortoise are to be translocated, how tortoise diseases will be addressed, and requisite monitoring of host and translocated tortoises, etc.. Monitoring of the translocated and existing “host” tortoises needs to occur for a long enough time period that is realistic to evaluate success of the translocation –10 years may be a more realistic minimum for tracking impacts to this long-lived species. Success criteria for translocation must also be clearly identified. Any temporary project site needs to be fenced with tortoise proof fencing during construction and the permanent project sites need to be fenced to prevent tortoise mortality. All associated roads also need to be fenced.

An aggressive raven prevention plan also needs to be developed as part of the DEA and DEIR and followed during project development and implementation.

In addition, the DEA and DEIR should also incorporate additional alternatives that would avoid impacts to the desert tortoise, for example, by identifying and analyzing *alternative sites* outside of desert tortoise occupied and critical habitat or in areas that have already been severely disturbed by other prior land uses as well as alternative project configurations that would avoid or significantly reduce impacts.

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<sup>10</sup> <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1092&context=usgsstaffpub>

<sup>11</sup> <https://cpb-us-w2.wpmucdn.com/people.uwm.edu/dist/9/244/files/2016/07/MulderTortoiseTranslocationRecruitmentBiolCons2017-2kt1oo6.pdf>

### *Mojave Fringe-toed Lizard*

The DEA and DEIR must identify if the Oberon project lies within or directly adjacent to the critical sand transport corridor<sup>12</sup> which creates dune and stabilized sand flat habitat that is critical for the Mojave fringe-toed lizard (*Uma scoparia*). The sand transport corridor in this general area is extensive, originating in the Pinto Basin of Joshua Tree National Park, moving through the Palen Valley and the Palen/McCoy Valley and extending eastwards to the edge of the agricultural development in the Palo Verde Valley south of Interstate 10. Numerous renewable energy projects have been permitted and some built along this important sand transport corridor feature, leading to our concerns about downwind impacts and the reduction of habitat for the Mojave fringe-toed lizard. The DEA and DEIR need to include a comprehensive analysis of the sand transport corridor and a thorough impact analysis from the proposed projects. Disruption of sand transport corridor functionality upwind affects all downwind resources and disrupts eolian function. Secondly, because sand dune habitat is a rare resource on the landscape because the geological and geographical features that transport sand and form dunes are extremely limited, the species that have evolved to rely on this unique habitat are also quite rare and typically endemic only to dune systems. Impacts to sand transport systems are therefore comparatively greater than impacts to other habitat types because of the uniqueness of the eolian habitat. Impacts are also much more challenging to mitigate because of the limited habitat type and complex eolian requirements that form and maintain the sand transport and dune habitat. We remain very concerned that, coupled with the other projects that are already permitted, inadequate amount of mitigation habitat is available to actually mitigate the impacts, particularly near the Mojave fringe-toed lizards that will be impacted by this project. The proposed project area, indeed the whole of the Riverside-East DFA in the dune/stabilized sand habitat supports the southernmost genetic clade of the Mojave fringe-toed lizard<sup>13</sup>, and therefore impacts and mitigation need to be evaluated based on the uniqueness of the local lizards.

The DEA and DEIR alternatives should all prioritize avoidance and conservation of the sand transport corridor, sand dune and stabilized sand flat areas. Models have been developed to identify conservation areas that are essential to maintain sand transport corridors<sup>14</sup>. These data and models should be incorporated into the analysis of impacts and all key areas that maintain the eolian function of the sand transport corridors should be unavailable for solar development.

Impacts to Mojave fringe-toed lizard in this area have already been significant and any additional impacts must be avoided. Although avoidance of Mojave fringe-toed lizard mortalities was the goal during construction/operation of the another project near the downwind portions of the sand transport - the Colorado River substation - despite speed limits, vehicle escorts and other avoidance measures, significant Mojave fringe-toed lizard mortalities were documented<sup>15</sup>. The EAs and EIR need to require avoidance of all habitat areas and require stronger minimization measures to prevent any additional mortalities to the lizards from the proposed projects.

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12 <http://www.cpuc.ca.gov/environment/info/aspen/dpv2/sfeir/apps/ap3.pdf>

13 Murphy et al. 2006

14 Barrows 1996

15 Helix 2013.

We also note that any facility put in or even adjacent to a sand transport corridor will suffer significant impacts from sand abrasion and require regular clearing of sand from the structures, increasing maintenance and operational costs.

### ***Burrowing Owl***

Burrowing owls are continuing to decline in California. If burrowing owls are identified on the site, at least one alternative should evaluate the reduction of impacts to this rare species by moving the project away from the nesting burrows. Additionally, acquisition lands may be required as part of the mitigation and will need to be managed in perpetuity for conservation. Mitigation lands should be high-quality habitat and, at minimum 5:1 mitigation should be provided of all acres of burrowing owl habitat destroyed. If translocation is proposed as an avoidance measure, active translocation has shown greater success in survival of the owls than passive relocation. Additional measures for avoidance and minimization should also be incorporated into the evaluation of impacts to this species.

### ***Migratory Birds***

The Conservation Organizations are concerned about the effect of this project on migratory birds, both rare and common. Evidence from large PV solar project – Desert Sunlight - and a solar trough project – Genesis, both of which are located within the Riverside-East DFA, documented many water bird mortalities<sup>16</sup>. Indeed, Desert Sunlight reported a state and federally endangered species bird mortality – the Yuma Ridgway rail<sup>17</sup>, even though on-site surveys never identified this species as occurring on the site, nor was habitat present on site. Few if any of the bird species that died on the project sites were recorded as occurring on site in the pre-construction avian surveys. These large solar projects may in fact be attracting migratory birds to them, through the birds mistaking the project infrastructure as water – the “lake effect”<sup>18</sup>. Both BLM and CDFW are member agencies of the Multiagency Avian-Solar Collaborative Working Group<sup>19</sup> and one focus of that group is research into the impacts to avian species from solar projects. While no working group data or reports have been published since 2018, we support using the data to inform avoidance, minimization and mitigation for impacts from these projects. Because large-scale PV projects apparently pose a significant hazard to migratory birds and especially water birds, the EAs and EIR need to discuss these potential impacts and propose alternatives to avoid and minimize the impact, as well as identify and release as part of the EAs and EIR, a robust monitoring scheme to actually collect data.

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16 <http://www.kcet.org/news/rewire/solar/water-birds-turning-up-dead-at-solar-projects-in-desert.html> ; [http://docketpublic.energy.ca.gov/PublicDocuments/09-AFC-08C/TN200657\\_20130930T120056\\_August\\_2013\\_Monthly\\_Compliance\\_Report.pdf](http://docketpublic.energy.ca.gov/PublicDocuments/09-AFC-08C/TN200657_20130930T120056_August_2013_Monthly_Compliance_Report.pdf)

17 <http://www.kcet.org/news/rewire/solar/water-birds-turning-up-dead-at-solar-projects-in-desert.html>

18 <http://www.kcet.org/news/rewire/solar/water-birds-turning-up-dead-at-solar-projects-in-desert.html>

19 <https://blmsolar.anl.gov/program/avian-solar/>

## *Desert Kit Fox and Badgers*

The desert kit fox and badgers are experiencing unprecedented impacts from development of renewable energy projects in their habitat. While amount of acreage of proposed solar energy projects is currently decreased from highs of more than 96,000 acres in January 2013<sup>20</sup>, we remain concerned about the impacts to desert kit foxes and badgers in the context of their great site fidelity, challenges of “passive relocation” where the animals generally go to great effort to return to their on-site territories.

The DEA and DEIR must estimate the number of desert kit fox or badgers on the project sites and analyze impacts to them from the proposed projects. Previous BLM FEIS for a large-scale PV solar project similar to the proposed project includes a much more comprehensive evaluation of desert kit fox occupancy on the project site and requires significantly greater avoidance, minimization and mitigation measures<sup>21</sup>. Measures that should be included in the American Badger and Desert Kit Fox Monitoring and Management Plan include but are not limited to:

- Baseline desert kit fox census and population health survey, by characterizing the demography (e.g., size, structure, and distribution) of the kit fox population on the site and receiving areas, and a testing component in which researchers trap and test a representative subsample of the population for canine distemper, and generally describe animal health on the site and receiving areas.
- Incorporation of the baseline desert kit fox census and health survey findings into a cohesive management strategy that minimizes disease risk to kit fox populations; provides a program for tagging, radio-tracking and monitoring of a subset of displaced kit foxes during the construction phase to understand how displacement affects regional kit fox populations; specifically identifies preconstruction survey methods for kit foxes (and large carnivores e.g., badgers) in the Project area; describes preconstruction and construction-phase relocation methods from the site, including the possibility for passive and active relocation from the site (and outlines identified CDFW permit and MOU requirements for active relocation); coordinates survey findings prior to and during construction to meet the information needs of wildlife health officials in monitoring the health of kit fox populations; and includes contingency measures that would be performed if canine distemper were documented in the Project area or in potential relocation areas, and measures to address potential kit fox reoccupancy of the site
- Implementation of the desert kit fox/badger management plan that includes preconstruction surveys, avoidance of active den complexes and implementation of measures to monitor, minimize and contain any canine distemper outbreaks.

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20 BLM 2012. Solar Apps and Auths

<http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/pa/energy/solar.Par.84447.File.dat/BLM%20Solar%20Apps%20and%20Auths.pdf>

21 BLM 2012. McCoy PA-FEIS Vol. 1 - Chapter 4

[http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/palmsprings/Solar.Par.89379.File.dat/Vol1\\_McCoy%20PA-FEIS.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/palmsprings/Solar.Par.89379.File.dat/Vol1_McCoy%20PA-FEIS.pdf)

- On 10/22/13, the CDFW veterinarians docketed a draft outline of a new desert kit fox program which identifies many concerns about project impacts the desert kit fox<sup>22</sup>. The DEIR identifies likely kit fox and dens on the proposed project site, although it is unclear if these are natal dens (DEIR at 4-88). According to the state, passive relocation or hazing activities conducted in an area experiencing or adjacent to distemper cases may enhance disease transmission and spread by multiple mechanisms. Many unanswered questions remain, and the American badger and Desert kit fox monitoring and management plan (MM BIO-6) must include mechanisms to answer them:
  - Do passively relocated animals re-establish territories adjacent to the solar site?
  - Does this depend on the density or spatial distribution of foxes around a site?
  - Do relocated foxes experience lower survival or different causes of mortality that might need to be addressed through mitigation efforts.
  - Recursion rate – how likely are relocated foxes going to try to get back on site and return to former den areas?
  - What’s the demographic shifts of neighbors?
  - Reproductive impact appears highly negative (n=1 relocated pair this year had den failure; most other dens were successful this year in producing pups).
  - Are artificial dens helpful?
  - What are the longer-term translocation effects?

The answers to these questions are currently unknown to our knowledge, despite projects consistently moving forward for construction and operation. In addition, the State also identifies that the current monitoring is limited in scope and inadequate to address needs and methods and outcomes for relocation are not evaluated systematically or reported. The American badger and Desert kit fox monitoring and management plans must address these issues.

### *Other Rare Species*

The diversity of rare species found across the landscape near and on the Oberon site is impressive and suggests that the proposed project sites are part of a larger ecologically intact and functioning unit<sup>23</sup>. The Agencies must clearly address proposals for avoiding, minimizing and mitigating the impacts to all the rare species that utilize the sites for part or all of their lifecycle.

Acquisition of lands that will be managed in perpetuity for conservation must be included as part of the strategy to avoid, minimize and mitigate impacts to the other species found on site as well. Acquisition is particularly important for these species because the proposed project appears to have little compatibility with any type of on-site conservation of plant communities or wildlife.

For the rare plants, avoidance is preferable because of the general lack of success in transplanting rare plants<sup>24</sup>. If transplantation is to be a part of the mitigation strategy, a detailed

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<sup>22</sup> [http://docketpublic.energy.ca.gov/PublicDocuments/09-AFC-07C/TN200995\\_20131022T141658\\_Exhibit\\_2005\\_CDFW\\_Outline\\_for\\_Proposed\\_Desert\\_Kit\\_Fox\\_Health\\_M.pdf](http://docketpublic.energy.ca.gov/PublicDocuments/09-AFC-07C/TN200995_20131022T141658_Exhibit_2005_CDFW_Outline_for_Proposed_Desert_Kit_Fox_Health_M.pdf)

<sup>23</sup> CNDDDB 2010 <http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp>

<sup>24</sup> Fiedler 1991

final plan must be included as part of the EIS on the methodology for determination of appropriate conservation area where plants may be transplanted, when/how plants are to be transplanted and identification of success criteria for transplantation. Monitoring of the transplanted plants needs to occur for a time period that is realistic to evaluate long-term success of the plants.

### ***Locally Rare Species***

The Conservation Organizations request that the DEA and DEIR also evaluate the impact of the proposed project on locally rare species (not merely federal- and state-listed threatened and endangered species). The preservation of regional and local scales of genetic diversity is very important to maintaining species in perpetuity especially considering global climate change. Therefore, we request that all species found at the edge of their ranges or that occur as disjunct locations be evaluated for impacts by the proposed permitted activities.

### **Water Resources and Water Quality**

The proposed projects appear to potentially impact on-site drainages on the project site. The DEA and DEIR must clarify the impacts to the jurisdictional Waters of U.S. and the Water of the State of California, and surface hydrology across the site. Impacts to waters of the state must be fully analyzed. The project must avoid, minimize and mitigate any impacts to surface waters and surface hydrology. Impacts should be avoided to the greatest extent possible and if impacts remain, they must be minimized and mitigated. In doing so, any reroute of waters and drainage on the site must assure that downstream processes are not impacted.

An evaluation of the effect of water use by the proposed project during construction and operations needs to be detailed and include alternatives and its impact on the Colorado River Basin. Any groundwater pumping proposed for the proposed project (in conjunction with other groundwater issues [pumping, nitrate plume etc.] in the basin) must be analyzed in terms of groundwater resource availability as well as water quality in the basin and surface water resources, and its effect on the native plant and animal species and their habitats need to be included in the DEA and DEIR.

### **Alternatives**

The DEA and DEIR must include a preferred alternative that complies with the DRECP and a robust analysis of other alternatives, including a reduced footprint alternative, an alternative that includes the northern portion of the application area (see Attachment D), a private lands alternative and alternatives using other technologies including distributed generation. The stated objectives of the project by the applicant cannot unreasonably constrain the range of feasible alternatives evaluated in the DEA or DEIR. The Agencies must establish an independent set of objectives that do not unreasonably limit the DEA's and DEIR's analysis of feasible alternatives including alternative sites. At a minimum, alternatives including the no-action alternative, an environmentally preferred alternative which complies with the DRECP, a conservation alternative that avoids all critical habitat, rare sand habitat and other significant



impacts to resources (including cultural resources), and an alternative where power generation is sited adjacent to power consumption need to be included.

### **Other Issues**

The construction, operation and eventual decommissioning of the proposed facilities will also increase greenhouse gas emissions and those emissions should be quantified and off-set. This would include the manufacture and shipping of components of the project and the car and truck trips associated with construction and operations. That GHG analysis should also include the loss of carbon sequestration from the project's disturbance of desert soils, plant communities and other resources. Similarly, such activities will also impact air quality and traffic in the area and these impacts should be disclosed, minimized and mitigated as well. For mobile sources, since consistency with the AQMP will not necessarily achieve the maximum feasible reduction in mobile source greenhouse emissions, the DEA and DEIR should evaluate specific mitigation measures to reduce greenhouse emissions from mobile sources.

#### ***Fire Impacts***

Because the any industrial project increases the potential for human-caused fire to occur on site, fire prevention including best management practices must be addressed and clearly identified in the DEA and DEIR - not only on-site protection of resources, but also preventing fire from moving into the adjacent lands. Fire is incredibly detrimental to desert ecosystems, resulting in degradation of the habitat and if frequently returned results in a type conversion to non-native vegetation<sup>25</sup>.

#### ***Non-Native Plants***

The DEA and DEIR must identify and evaluate impacts to species and ecosystems from invasive exotics species. Many of these species invade disturbed areas, and then spread into wildlands. Fragmentation of intact, ecologically functioning habitat/communities further aides the spread and degradation of habitat and plant communities<sup>26</sup>. These factors for wildland weed invasions are present in the project, and their effect must be evaluated in the DEA and DEIR.

Additionally, landscaping with exotic species is often the vector for introducing invasive exotics into adjacent habitats. Invasive landscape species displace native vegetation, degrade functioning ecosystems, provide little or no habitat for native animals, and increase fire danger and carrying capacity<sup>27</sup> and should be banned from the project site.

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<sup>25</sup>[http://www.nps.gov/moja/naturescience/upload/Fire%20congress%202006\\_brooks%20and%20draper\\_extended%20abstract.pdf](http://www.nps.gov/moja/naturescience/upload/Fire%20congress%202006_brooks%20and%20draper_extended%20abstract.pdf)

<sup>26</sup> Bossard et al 2000

<sup>27</sup>[http://dhtlral.gosolarcalifornia.org/sitingcases/genesis\\_solar/documents/others/testimony\\_central\\_biological\\_diversity/exhibits/Exh.%20806.%20Brooks%202000.%20Competition%20between%20alien%20annual%20grasses%20and.pdf](http://dhtlral.gosolarcalifornia.org/sitingcases/genesis_solar/documents/others/testimony_central_biological_diversity/exhibits/Exh.%20806.%20Brooks%202000.%20Competition%20between%20alien%20annual%20grasses%20and.pdf)

## ***Wildlife Movement***

In addition to the concerns stated above about the DRECP-identified multispecies wildlife linkage, recently, the Dingell Act also requires “(C) identify critical wildlife and species migration corridors recommended for preservation; and “(D) include recommendations for ensuring the biological connectivity of public land managed by the Secretary and the Secretary of Defense throughout the California Conservation Area”. This requirement reinforces the importance of preserving the existing multispecies linkage in the proposed project area that has already been identified. The DEA and DEIR must evaluate all direct, indirect, and cumulative impacts to wildlife movement corridors, not only from these proposed projects but also from existing projects that were permitted and constructed prior to the DRECP’s adoption. The analysis should cover movement of large mammals, as well as other taxonomic groups, including small mammals, birds, reptiles, amphibians, invertebrates, and vegetation communities.

## **Cumulative Impacts**

The DEA and DEIR must also include a robust cumulative impact analysis,<sup>28</sup> we urge the BLM to include such an analysis. Because of the number of currently permitted and proposed projects in this project’s vicinity, the region, and the CDCA, a thorough analysis of the cumulative impacts from all these projects as well as other types of project (including the most recent upsurge of illegal marijuana grows) on the resources needs to be included. Because the project sites are within the Riverside East DFA, projects located in the zone have the potential to cumulatively significantly impact the existing biological resources and ecological processes that currently exist within the zone despite the safeguards included in the Desert Renewable Energy Conservation Plan. To date numerous renewable energy projects and associated infrastructure projects have been permitted in the DFA, including the Colorado River substation, Desert Sunlight, Genesis, the Desert Harvest, McCoy, Blythe, Athos, Desert Quartzite solar projects and the Ten West transmission line. Potentially the Crimson project will be finalized soon. Additionally, new proposals of Arica and Victory Pass are currently in the permitting process.

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<sup>28</sup> Cumulative impacts analysis is a part of the BLM’s required NEPA project analysis. *See, e.g.*, 43 C.F.R. §46.30, §46.115. Furthermore, Secretarial Order # 3399 “Department-Wide Approach to the Climate Crisis and Restoring Transparency and Integrity to the Decision-Making Process” (April 16, 2021) expressly states that BLM should continue to apply NEPA in the manner it had before the 2020 changes to the CEQ NEPA regulations:

. . . In order to ensure the effective and efficient implementation of the Department’s policies in analysis conducted pursuant to NEPA, this order requires all Bureaus/Offices to utilize science and enhance opportunities for Tribal and environmental justice community engagement in the NEPA and decision-making process.

a. Applying NEPA. Bureaus/Offices will not apply the 2020 Rule in a manner that would change the application or level of NEPA that would have been applied to a proposed action before the 2020 Rule went into effect on September 14, 2020. Bureaus/Offices will continue to follow the Department’s NEPA regulations at 43 C.F.R. Part 46, Department Manual procedures (516 DM Ch. 1-15), and guidance and instruction from the Office of Environmental Policy and Compliance. If Bureaus/Offices believe that the Department’s NEPA regulations irreconcilably conflict with the 2020 Rule, they will elevate issues to the relevant Assistant Secretary and to CEQ.

(Section 5). [https://www.doi.gov/sites/doi.gov/files/elips/documents/so-3399-508\\_0.pdf](https://www.doi.gov/sites/doi.gov/files/elips/documents/so-3399-508_0.pdf)

While the DFA may be appropriate for some renewable energy development, especially on already disturbed private lands, the DEA and DEIR must evaluate if the cumulative impact from the projects will cause significant unmitigable impacts not only to the DFA but to the surrounding resources including Joshua Tree National Park, which already is impacted by border development on the south, east and west boundaries, as well as BLM's identified Areas of Critical Environmental Concern (ACECs), Wildlife Habitat Management Areas (WHMAs) and federally designated Wilderness.

Thank you for your consideration of these comments. Please add us to the distribution list for the DEA and DEIR and all notices associated with this project.

Sincerely,



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**Attachments:**

**Attachment A:** Land Use Plan Conformance map from BLM scoping meeting

U.S. Department of the Interior  
Bureau of Land Management

## Land Use Plan Conformance

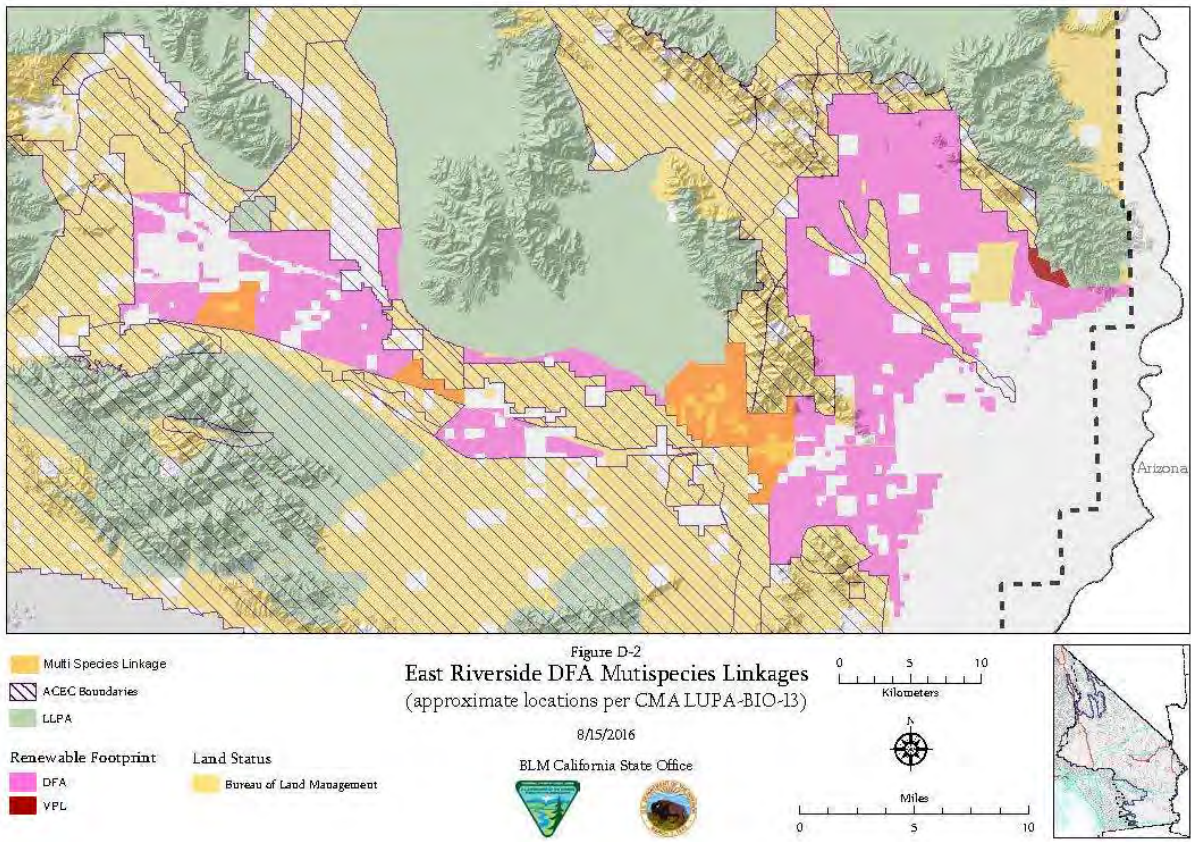
- The proposed project is located within a Development Focus Area
- Proposed project does not avoid all microphyll woodland or buffers as the DRECP prescribes

The map displays the Oberon Solar Project Proposed Action Area, which is outlined in black. It is situated within a yellow-shaded Development Focus Area. The project area includes a fenced solar array (yellow), a future BESS (blue), and a substation and BESS (purple). A proposed 500 kV Gen-Tie Line Corridor (green) and an existing SCE Red Bluff Substation (red) are also shown. The map identifies three Areas of Critical Environmental Concern (ACEC): Chuckwalla ACEC (top left), Alligator Rock ACEC (bottom left), and another Chuckwalla ACEC (bottom right). Other features include a riparian area (green), a BLM Section 368 Corridor (purple), and a Riverside East OFA Multipurpose Linkage (orange). The map also shows land ownership: Bureau of Land Management (tan) and State (light blue). A legend, scale bar (0 to 1 mile), and north arrow are included.

**Oberon Solar Project Proposed Action Area**

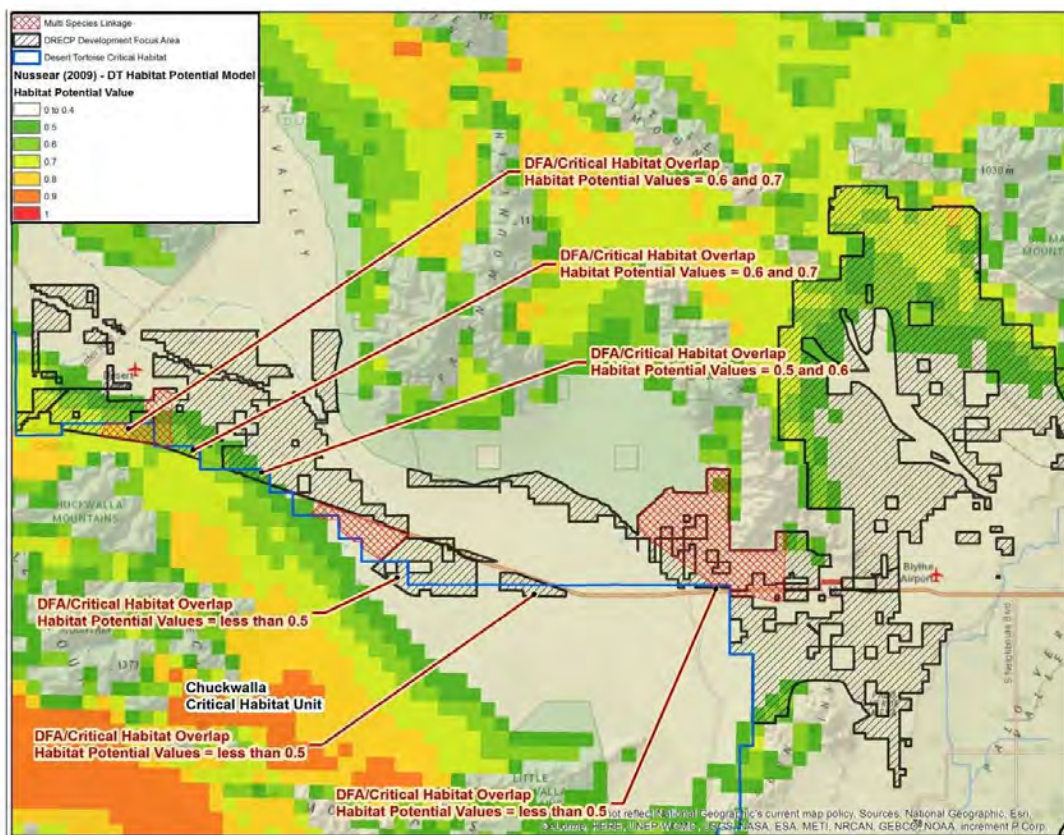


**Attachment B: Riverside-East DFA from Final DRECP 2016, Appendix D, Figure D-2**

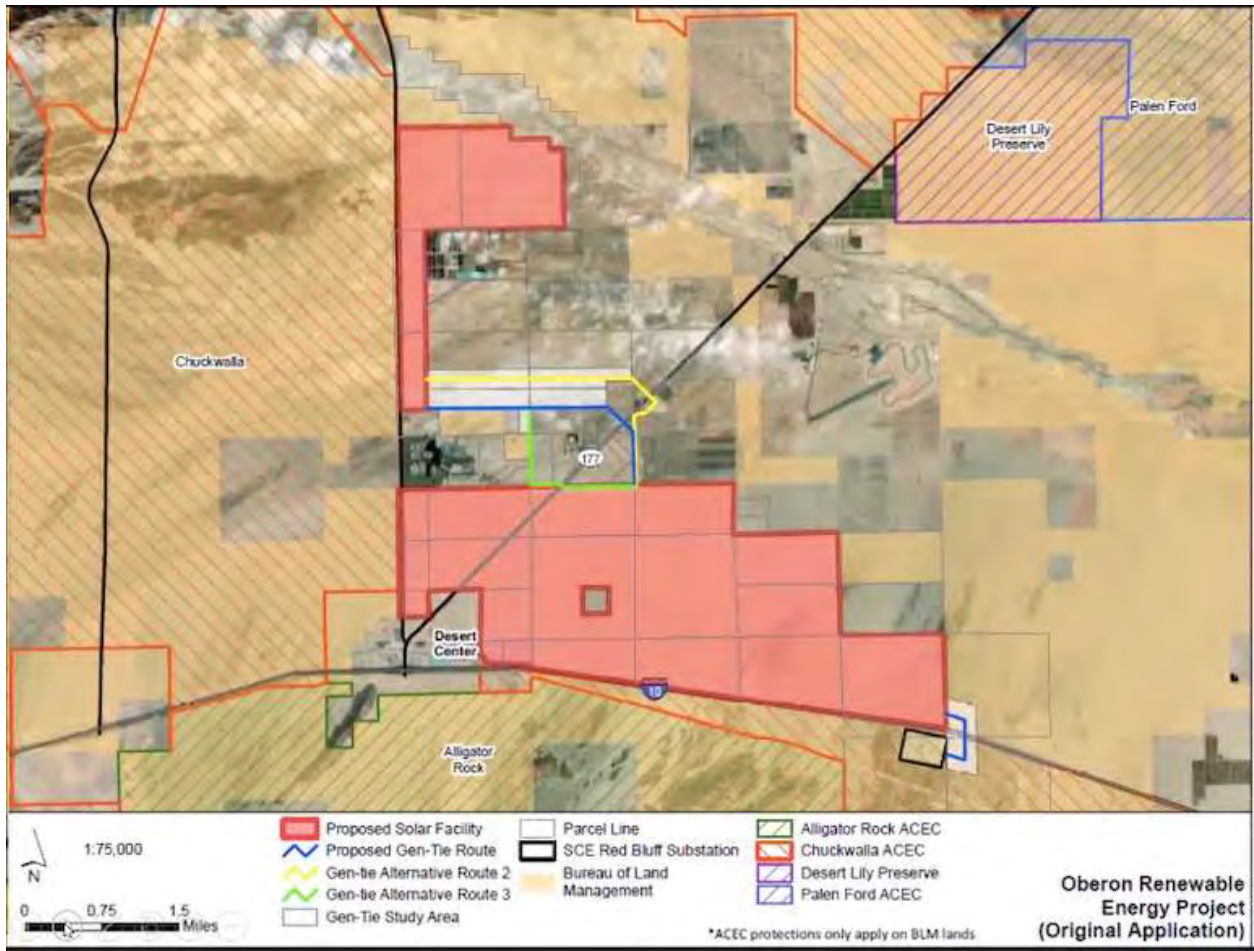




Attachment C: USFWS' Biological Opinion for the DRECP, page 83.



**Attachment D:**





**Western  
Watersheds  
Project**



**Basin and Range Watch**

Logan Raub  
Colorado River Basin Regional Water Quality Control Board  
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Via email: [logan.raub@waterboards.ca.gov](mailto:logan.raub@waterboards.ca.gov)

April 19, 2021

**RE: Scoping Comments on Oberon Solar Project.**

Dear Mr. Anderson,

Intersect Power, LLC, proposes to construct, operate, maintain, and decommission a 500 megawatt (MW) solar photovoltaic electricity generating station, battery energy storage facility, electrical substation, generation intertie (gen-tie) lines and associated access roads on Bureau of Land Management (BLM) managed land in Riverside County, California within the Riverside East Development Focus Area (DFA) in Chuckwalla Valley. The Project is known as the Oberon Renewable Energy Project.

Western Watersheds Project is a non-profit conservation organization with more than 12,000 members and supporters. Our mission is to protect and restore western watersheds and wildlife through education, public policy initiatives, and legal advocacy. We have visited the site of the proposed Oberon Solar Project to record the biodiversity and other public lands resources on this site.

Basin and Range Watch is a 501(c)(3) non-profit working to conserve the deserts of Nevada and California and to educate the public about the diversity of life, culture, and history of the ecosystems and wild lands of the desert. Federal and many state agencies are seeking to open up millions of acres of unspoiled habitat and public land in our region to energy development. Our goal is to identify the problems of energy sprawl and find solutions that will preserve our natural ecosystems, open spaces, and quality of life for local communities. We support energy efficiency, better rooftop solar policy, and distributed generation/storage alternatives, as well as local, state and national planning for wise energy and land use following the principles of conservation biology. We have visited the site of the proposed Yellow Pine Solar Project eight

times. We have taken photos of the region, hikes on the site and have observed unique flora and fauna on the site.

### **1. Desert Tortoise Critical Habitat Needs To Be Avoided**

The applicant is seeking to construct an industrial energy facility and solar field in approximately 600 acres of US Fish and Wildlife Service-designated Critical Habitat for the Federally Threatened Agassiz's desert tortoise on the north side of Interstate-10 in Chuckwalla Valley.

When questioned about this unprecedented overlap, the applicant's contractor Aspen Environmental stated that the consulting company Ironwood Consulting was looking at the "value" of this tortoise habitat. Our field visits indicate this is excellent desert tortoise habitat, as it is on a slightly higher rise close to the adjacent Chuckwalla Mountains on the south side of the highway. The Critical Habitat site contains numerous washes flowing out of the nearby Chuckwalla Mountains, with desert ironwood trees (*Olneya tesota*)—the seed pods of which are a favored food item for tortoises. In addition, the presence of native grasses such as big galleta (*Hilaria rigida*) are another indicator of good tortoise habitat and a favored adult tortoise forage. During rainy years, spring wildflower displays here are excellent, providing more sources of tortoise forage species. The current extreme drought in the southwestern deserts will bias any surveys in spring 2021, and will only show a snapshot of poor forage conditions on this usually biodiverse Colorado Desert ecosystem.

Simply eyeing a map of GIS layer will not be able to show the "value" of tortoise habitat, and tortoises often prefer habitats that to the untrained human eye appear low in value.

Building a large solar field inside and on top of a 600-acre block of Critical Habitat would set an example for future solar developers to disregard this important land management designation, one of the best tools for conserving the California Desert from further encroachment and disturbance. A precedent should not be set.

Therefore, we request that a LUPA be included in the EIS to amend the DRECP and remove the existing overlaps of the DFA with all Critical Habitat units. This defect in the DFA boundary should be fixed during this federal action opportunity, sooner, rather than later.





Large washes pour out of the Chuckwalla Mountains, containing palo verde, desert ironwood, and smoke tree microphyll habitat. Desert tortoise Critical Habitat south of I-10.



Washes coming out of the Chuckwalla Mountains with ocotillo, ironwood, and palo verde. Desert tortoise Critical Habitat south of I-10.

**2. All Microphyll Woodland Should Be Avoided**

We have walked this area, and the southern portion of the project site is a higher alluvial fan pouring off the Chuckwalla Mountains to the south, and slopes downward to the north towards Palen Dry lake. We have seen a high diversity of plants along these washes, including desert ironwood (*Olneya tesota*), Blue palo verde (*Parkinsonia florida*), and Smoke tree (*Psoralea argyrea*).

The applicant, in seeking a large-scale 500-MW solar project, cannot respect the DRECP directives, and is seeking to build on more than 70 acres of this sensitive habitat that is protected by CMAs. The applicant is proposing to build sections of solar field between Dry Desert Wash habitats containing microphyll species, but overlaps others and does not properly buffer the solar fields from the edges of these washes. The applicant will need to use heavy machinery including masticators, to remove large microphyll trees, in addition to mowing machinery. These significant impacts to microphyll habitats will trigger a plan amendment because of the inability of the project to comply with CMAs calling for avoidance of microphyll woodland.

This is unacceptable. That any renewable energy developer, miner, rancher, off-road racer, road-builder or other public lands user could come along in the future and desire to encroach into designated conservation lands by asking BLM to amend the DRECP would defeat



the entire purpose of the DRECP, which took years of planning and balancing multiple uses and resource protections. The DRECP already has hundreds of thousands of acres of designated Development Focus Areas streamlined for solar project siting, and the applicant should seek other sites which do not necessitate a plan amendment in order to violate CMAs.



Photo showing the sloping fan coming off the Chuckwalla Mountains, looking northwards. This is in the area of the project, slightly to the east, and north of I-10. The wash has a dense growth of big galleta grass, creosote, cheesebush, and bursage, and is excellent desert tortoise habitat.



Big galleta grass along wash near the Oberon Solar Project site, Chuckwalla valley looking northeast towards Palen Dry lake in the distance. This is north of I-10.



A desert ironwood tree along a wash near the project site, Chuckwalla valley looking north. This is north of the I-10.





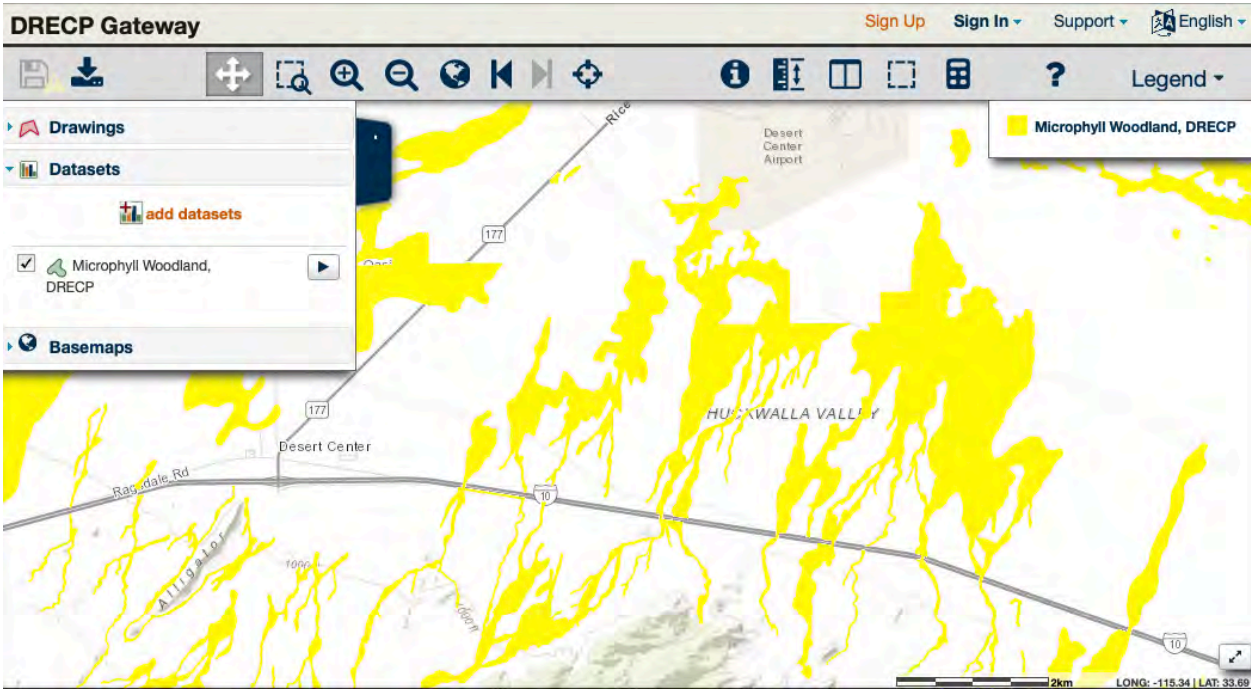
Sunset view of microphyll woodland along washes in the vicinity of the project site, with desert ironwood.



Big galleta grass, palo verde, and ironwood trees along a wash north of I-10 in the vicinity of the project site.



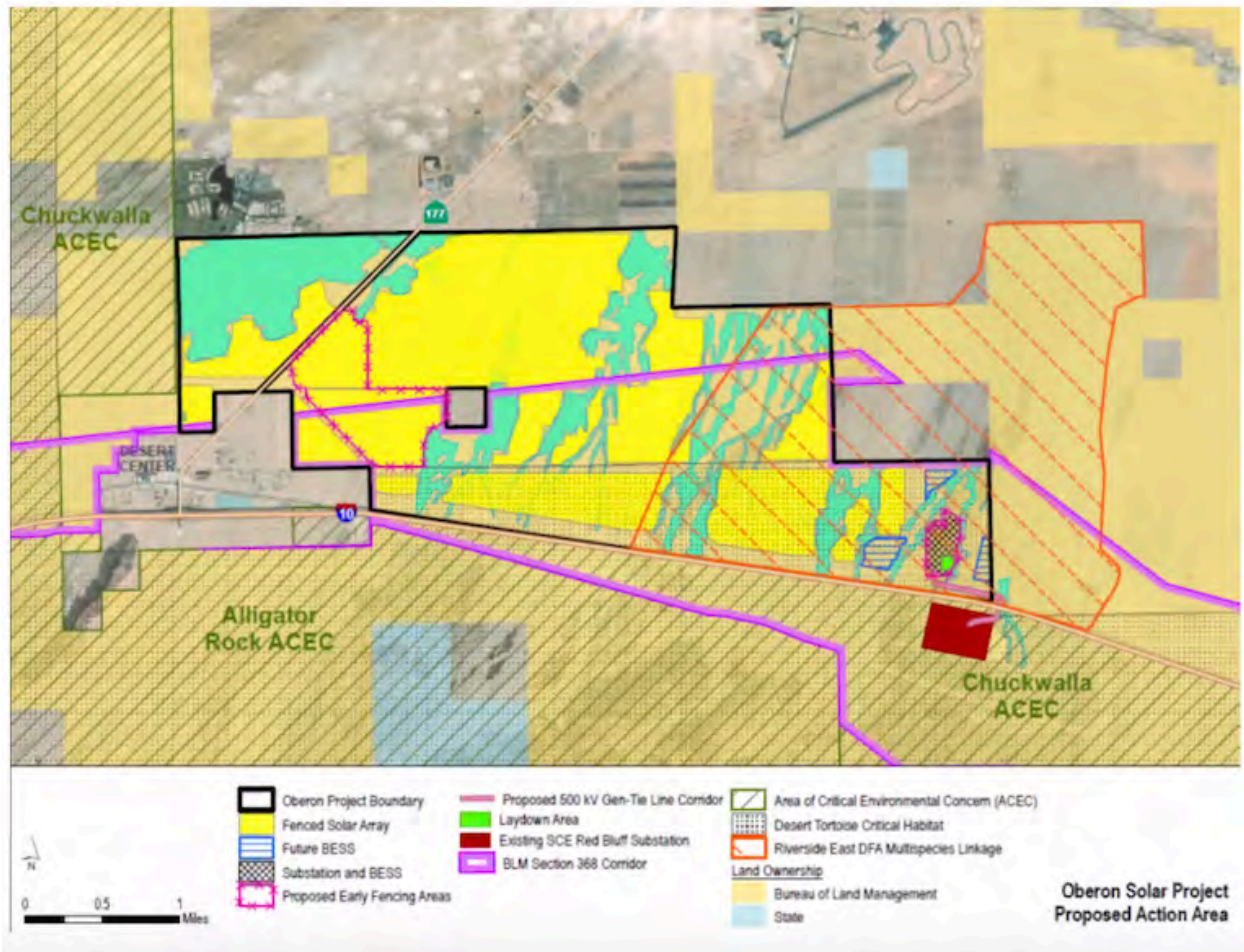
Desert gold blooming in the lower parts of Chuckwalla Valley south of Palen Dry Lake, after a rainy winter and spring. Looking westward towards Desert Center.



DRECP databasin map of microphyll woodland showing washes flowing downslope and northward from the Chuckwalla Mountains, through the proposed Oberon project site.



A discussion of how connectivity of wash plant communities needs to be included, because the solar field would block flow of flood waters in washes, potentially cutting off water-dependent microphyll woodland and killing patches on the other side of the proposed solar fields. This area receives monsoonal summer thunderstorms that are at times heavy, with flash floods flowing down washes into basin playas. Analysis of stormwater runoff needs to be undertaken related to the connectivity of microphyll habitats in ephemeral washes.



Map shown at the BLM Zoom scoping meeting on April 13, showing proposed solar fields cutting off wash flow from connecting washes coming off the Chuckwalla Mountains to the south—overlapping and even preferring tortoise Critical Habitat and multispecies linkage.

All microphyll areas and wash habitats need to be avoided, and a buffer of 200 feet around microphyll habitats so that edge-effects of development, ground disturbance, and invasive weed expansion do not impact wash habitats. The washes often change course over the years as distributaries shift in unpredictable but natural ways. This needs analysis.

### 3. A Stormwater Plan Needs To Be Developed

Because the Chuckwalla Valley experiences large flash floods from summer thunderstorms and rain events at other times, sending debris down mountain canyons and across

alluvial fans, a careful stormwater plan is needed, As shown in the maps, portions of the solar field are built in washes containing microphyll woodland, and these may be subject to breakage of solar panels and fences, and floodwaters potentially spreading facility debris outside of the Right of Way.

Groundwater pollution from these events should be monitored.



Sheet flood event in 2012 after a large rain event, which swept through the Genesis Solar Energy Project

#### **4. Groundwater Pumping Should Be Analyzed**

Any wells sunk for construction water, dust control water, and panel wash water should be analyzed for direct and cumulative impacts to regional aquifers which may have a connection with the Colorado River.

#### **5. The Multispecies Wildlife Corridor Should Be Avoided**

The Riverside East DFA Multispecies Wildlife Linkage should be discussed in detail with overview maps discussing what landscape blocks are being connected, between which mountain ranges regionally, and which species depend on this linkage for genetic connectivity and dispersal.

All I-10 underpasses should be mapped, and impacts of the solar project analyzed. Desert tortoises and other wildlife, including desert bighorn sheep, have been photographed in camera trap surveys as using freeway underpasses. This connectivity should be maintained in both the wildlife corridor and Critical Habitat.

This corridor should also be analyzed for use by **Burro deer** (*Odocoileus hemionus eremicus*), a Colorado Desert, California endemic. Solar fields next to washes and microphyll



habitats may inhibit the movement of these uncommon desert deer, which favor ironwood thickets.

## **6. Sand Transport Corridors Should Be Analyzed**

Maps, impacts of fences and sand piling up on fences, and impacts to the sensitive species Mojave fringe-toed lizard (*Uma scoparia*) should be analyzed. Cumulative impacts to this sand endemic lizard have been considerable in the Chuckwalla Valley, with the construction of the Desert Sunlight Solar Farm, Desert Harvest Solar Project, Palen Solar Project, Genesis Solar Energy Project, Blythe Solar Project, McCoy Solar Project, and proposed Crimson Solar Project, Arica and Victory Solar Projects, and Desert Quartzite Solar Project, along with new transmission and substation infrastructure.

The cumulative significant impacts of these developments on removing fringe-toed lizard habitat, disturbance and blockage of sand flows, and the increase of invasive weeds, needs to be analyzed, as this group of populations could be a new undescribed taxon when finer genetic studies are undertaken in the future.

## **7. Avian-Solar Impacts Should Be Analyzed**

As other large-scale solar projects in the DFA have resulted in the mortality due to “lake-effect” impacts, resulting in collisions, this important concern should be fully analyzed and mitigation measures enumerated, including those not tiered to in the DRECP. This is a growing concern with waterbirds that fly across the desert from the Salton Sea and Gulf of California, to Colorado River water bodies.

## **8. Purpose and Need Statement**

The purpose and need statement should prioritize protecting microphyll woodlands, wildlife connectivity corridors, and tortoise habitat, and minimize the need for large-scale solar projects on public lands.

## **9. Alternatives**

The No Action alternative is justified by successful and increasing Distributed Energy Resources being deployed at greater rates in the built environment, including rooftop solar, parking lot shade structures, distributed battery storage, microgrids, solar gardens, energy conservation and energy efficiency. These inefficient, remote, utility-scale solar projects with huge transmission costs, are no longer needed on high-value lands with natural resource conflicts on public lands.

A reduced-footprint alternative needs to be analyzed. The applicant will still be able to gain a PPA and take advantage of federal incentives with a 200 or 300 MW solar project that avoids all microphyll woodland, tortoise Critical Habitat, and the wildlife connectivity corridor.

## **10. Visual Resources Should Be Adequately Analyzed**

Adequate KOPs should be photographed close to the edge of the solar project area, not at a distance as is often done. KOPs from nearby Wilderness Areas should be included, as well as night-time visual impact assessments that could harm night-sky viewing. A KOP from Joshua Tree National Park should also be included.

### **11. Transmission Gen-Tie Line**

The proposed Project would produce up to 500 MW solar photovoltaic generation and integrated energy storage facility located near Desert Center, California that would interconnect to Southern California Edison's (SCE) 500 kilovolt (kV) Red Bluff Substation via one new 500 kV gen-tie line.

All impacts to tortoise, Mojave fringe-toed lizard, rare plants, microphyll woodland, and avian collisions should be analyzed for this very large gen-tie line. Discussion of how raven nesting will be prevented should be discussed in the EA.

### **12. Battery Storage Facility**

According to the BLM eplanning website, the project would include a battery, flywheel, or other similar storage system capable of storing up to 500 MW of power. If provided, the storage system would consist of battery, flywheel banks, or other similar storage technology housed in electrical enclosures and buried electrical cable. The battery system would be concentrated near the Project switching station on approximately 20 acres in the southeastern area of the Project site.<sup>1</sup>

During a BLM Zoom scoping meeting on April 13, 2021, I asked whether Lithium-ion battery banks would be used for storage, and how they would be cooled in a hot low desert where summer temperatures typically reach 118-120 degrees F? Lithium-ion batteries require a controlled temperature be maintained in a very narrow range in order to maintain function, efficiency, and avoid fires. The applicant responded that Lithium battery units would be cooled with HVAC systems in containers, and that the containers would be painted white. Using air-conditioning to cool the battery containers will be inefficient, and probably a parasitic load off the grid. Plans for fires should be developed and warnings to local communities. This should be analyzed in the EIS.

### **13. Mowing and Traditional Methods of Site Construction Need to Be Analyzed**

The applicant during a BLM Zoom scoping meeting stated that about half of the project is proposed to be mowed, and would then have wildlife-permeable fencing during operation. This should be mapped, and discussion of which areas are going to be developed using traditional disk and roll grading methods.

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<sup>1</sup> <https://eplanning.blm.gov/eplanning-ui/project/2001226/510>



Photo showing the “drive and crush” method of construction at Sunshine Valley Solar Project in Amargosa valley, Nevada, a newer method which is supposed to be “less impactful” than traditional construction methods. We do not think this is a low-impact method, but highly degrades and destroys Mojave Desert habitats, biological soil crusts, crushes animal burrows, releases Carbon sequestered in roots and caliche soils, causes air quality problems, erosion, and pollinator disruption. These areas are subsequently mowed to keep the vegetation down. This extreme surface disturbance often results in invasive weed increase. This all needs analysis.

#### **14. The Inefficiency of This Utility-scale Solar Project Should Be Analyzed**

In addition to poor efficiency of the project to cool Lithium battery containers, the applicant stated that to avoid large washes of microphyll, the project would be crammed into around 2,700 acres between the dry wash habitats, yet maintain a 500 MW rating. I asked how this would be accomplished? The applicant answered that the solar panels would be squeezed together more than usual, and this would result in overlap and shading of panels during the morning and afternoon hours. 500 MW would only be produced at peak time of day when the sun is overhead.

This is also unacceptable, to use high-value Colorado Desert ecosystems as places to build highly inefficient large-scale solar projects, as if these public lands are a renewable

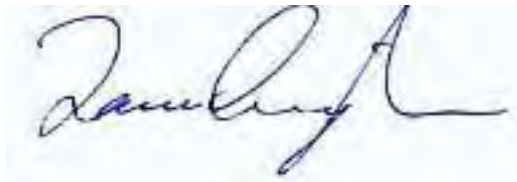
resource themselves—there is not enough land in the California Desert to achieve a 100% RPS, and lands should be maximized for resource conservation and the most efficient use for energy production. This argues for a much more efficient Distributed Energy Resource alternative and No Action, where rooftop and parking lot solar in a distributed urban environment could best maximize efficiencies of land use, and battery cooling in already air-conditioned structures, or coastal cities where summer temperatures would not result in parasitic loads simply to cool batteries.

### **15. Cultural Impacts Should Be Better Analyzed**

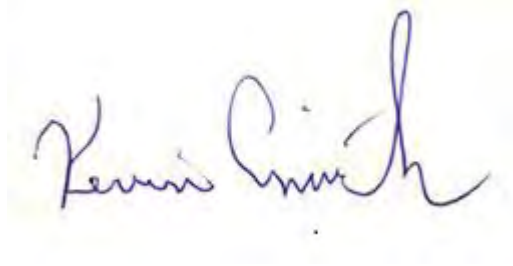
The DRECP did not analyze significant impacts to many regional cultural resources and concerns by local rural communities, including those of People of Color, low income communities in the desert, and native tribal cultural landscapes. This needs much broader outreach and analysis.

Thank you for considering these comments. Western Watersheds Project and Basin and Range Watch thank you for this opportunity to assist the regional water board by providing scoping comments for this project. Please keep Western Watersheds Project and Basin and Range Watch informed of all further substantive stages in this and related CEQA processes and documents by contacting us at [lcunningham@westernwatersheds.org](mailto:lcunningham@westernwatersheds.org) and [atomicquailranch@gmail.com](mailto:atomicquailranch@gmail.com).

Sincerely,

A handwritten signature in blue ink, appearing to read 'Laura Cunningham', is centered on a light blue background.

Laura Cunningham  
California Director  
Western Watersheds Project  
Cima CA 92323  
Mailing: P.O. Box 70  
Beatty NV 89003  
775-513-1280  
[lcunningham@westernwatersheds.org](mailto:lcunningham@westernwatersheds.org)

A handwritten signature in blue ink that reads "Kevin Emmerich". The signature is written in a cursive style with a large initial 'K' and 'E'.

Kevin Emmerich  
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# COLORADO RIVER INDIAN TRIBES

## *Colorado River Indian Reservation*

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TELEPHONE (928) 669-9211  
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*Via Email Only*

April 20, 2021

Brandon Anderson  
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Email: BLM\_CA\_PS\_OberonSolar@blm.gov

Logan Raub  
Colorado River Basin Regional Water Quality Control Board  
c/o Aspen Environmental Group  
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San Francisco, CA 94104  
Email: Logan.Raub@waterboards.ca.gov

**RE: NEPA and CEQA Scoping Comments of the Colorado River Indian Tribes on the Proposed Oberon Renewable Energy Project and California Desert Conservation Area Plan Amendment**

Dear Mr. Anderson and Mr. Raub:

On behalf of the Colorado River Indian Tribes (CRIT or the Tribes), I write to respond to BLM's March 18, 2021 press release soliciting scoping comments on the agency's NEPA review of the proposed Oberon Renewable Energy Project and California Desert Conservation Area ("CDCA") Plan Amendment (together, "Project"). I also write to respond to the Colorado River Basin RWQCB's ("RWQCB") notice of preparation soliciting comments on the agency's CEQA review of the proposed Oberon Renewable Energy Project ("Project"). The Project consists of a 500 megawatt solar PV electricity generating station and battery energy storage facility capable of storing up to 500 megawatts of power, 120,000 square foot substation, an operation and maintenance building approximately 3,000 square feet in size, a 500 kV gen-tie line connecting the Project to the SCE Red Bluff Substation, a 12 kV distribution line, and associated access roads. The Project would be located within the ancestral territory of members of the Tribes.

As a preliminary matter, the Colorado River Indian Tribes are a federally recognized Indian tribe comprised of over 4,440 members belonging to the Mohave, Chemehuevi, Hopi and Navajo Tribes. The almost 300,000-acre Colorado River Indian Reservation sits astride the Colorado River between Blythe, California and Parker, Arizona. The ancestral homelands of the



Tribes' members, however, extend far beyond the Reservation boundaries. Significant portions of public and private lands in California, Arizona, and Nevada were occupied by the ancestors of the Tribes' Mohave and Chemehuevi members since time immemorial. These landscapes remain imbued with substantial cultural, spiritual, and religious significance for the Tribes' current members and future generations. For this reason, we have a strong interest in ensuring that potential cultural resource and other environmental impacts associated with the proposed Project are adequately considered and mitigated.

The Colorado River Indian Tribes adopted a government-to-government consultation policy in May 2017, which CRIT attached to its October 8, 2020 comments on the Project. As stated therein, agency acknowledgment of the policy is required before an agency schedules a government-to-government consultation meeting with the Tribal Council. To date, the BLM Palm Springs Office has not acknowledged the policy. For this reason, any communication between BLM and the Tribes regarding this Project continues to be for informational purposes only. The Tribes likewise request that the RWQCB review and acknowledge the policy.

#### **I. The Project is Likely to Significantly Impact Cultural Resources.**

Because of the Tribes' past, present, and future connection to the land on which the Project is proposed, CRIT has concerns about the Project's potential for significant cultural resource impacts. Specifically, CRIT is concerned about the construction and ground disturbance required to install the PV panels and mounting systems, as well as the onsite substations to connect to the adjacent switchyard. The project area spans 4,700 acres and includes a nearly a mile-long gen-tie line. This Project has the potential to significantly impact cultural resources in the Area of Potential Effects (APE) as well as the surrounding landscape.

The Oberon Renewable Energy Project is one of dozens of energy projects either approved or under consideration by BLM, state, and local agencies in the area. The collective impact of this transformation of the desert has had, and will continue to have, considerable adverse impacts on the Tribes and the cultural, spiritual, and religious practices of CRIT members. CRIT continues to be concerned that federal and state governments intend to approve all energy projects, no matter what the cost to affected tribes, native plants and animals, and the desert ecosystem as a whole. The disturbance of new lands to these projects is likely to result in disturbance of additional cultural resources and, thus, raises concerns.

Specifically, the Tribes are troubled by the Project's potential to remove, damage, or destroy cultural resources and artifacts. These resources are sacred and finite. According to the belief system of CRIT's Mohave members, the disturbance of any cultural resources affiliated with their ancestors is taboo, and thus considered a severe cultural harm. The federal and state environmental review must include a thorough Class III survey of the site and consideration of the potential for buried cultural resources. Likewise, the associated environmental review must consider mechanism to reduce this cultural harm, including avoidance of sites and resources and tribal reburial of both archaeological and non-archaeological resources.

## **II. BLM Must Broadly Consider Impacts to Cultural Resources**

CRIT is concerned about the cultural harm that will result from both the unearthing and destruction of prehistoric archaeological resources and the Project's impacts on other cultural resources. In preparing EISs and EIRs for other solar energy facilities in the region, BLM, state, and local agencies have artificially constrained the definition of "cultural resources," thereby undermining the accuracy and quality of subsequent analysis. In particular, BLM has been reticent about identifying Traditional Cultural Properties and Landscapes within the region, thereby under-analyzing the impacts of these projects. These resources could include viewsheds and landscapes, plants and animals used in and/or central to cultural and religious practices and creation stories, and religious and customary practices (e.g., hunting and gathering, religious ceremonies, and trail-walking). By using an expansive definition of cultural resources for this Project, BLM can ensure that impacts to a host of important tangible and intangible resources are properly considered.

Likewise, the RWQCB must consult with the Tribes to thoroughly consider the potential for Tribal Cultural Resources as defined in AB 52.

## **III. The Potential for Significant Cultural Resource Impacts Requires BLM to Complete A Full Environmental Impact Statement Review**

Throughout its scoping meeting materials and proposed timelines for the Project, BLM appears to have pre-determined that only an Environmental Assessment is needed for the Project. BLM's presentation slides outlining "public participation opportunities" and "next steps" lists "Review Environmental Assessment (EA) and unsigned Finding of No Significant Impact (FONSI)." BLM's pre-determination that the Project will have no significant impacts violates NEPA and ignores the facts on the ground. Where an agency desires to collect sufficient evidence and conduct analysis to determine whether a project will have significant impacts, an EA may be an appropriate vehicle for doing so. *See* BLM Departmental Manual, 516 DM 11, § 11.7(A)(1). It is only after that analysis is complete that BLM decides whether to prepare a full Environmental Impact Statement (EIS) or to issue a FONSI. *Id.* At this point, without having undertaken any of its environmental review, BLM cannot know that a FONSI is the appropriate choice. The agency must be open to either possibility, depending on the EA analysis. Indeed, given that the Project is sited on Tribal members' ancestral territory and that other nearby projects have had significant cultural resource impacts, it is very likely that this Project will have significant cultural resource impacts as well. If so—or if there are any other significant environmental impacts from the Project—a full EIS will be warranted. 516 DM 11, § 11.7(E).

## **IV. BLM Must Ensure that Potential Impacts to Known and Unknown Cultural Artifacts Are Analyzed and Avoided.**

Given CRIT's ongoing experience with utility-scale solar development on land near its Reservation, the Tribes are concerned about the Project's likely impact on both known and unknown archaeological resources. Many of these cultural artifacts are intimately linked to current CRIT members, who consider their disturbance and/or damage to be a significant cultural

harm. While cremation sites are of unique importance to the Tribes, other types of artifacts, including groundstones, ceramics, and lithics, are also held sacred.

As a result, all cultural resources should be fully surveyed, inventoried, and evaluated in a manner that does not harm the resources or remove them from the site prior to preparation of the EA or EIS so that the environmental analysis fully and adequately takes cultural resource impacts into account, including through ethnographic studies. BLM and the RWQCB should also ensure that cultural resource mitigation and treatment plans are in place prior to any ground disturbing activities at the sites. Indeed, NEPA requires lead agencies to identify the “environmental impacts of the proposed action” and “[m]eans to mitigate adverse environmental impacts.” *See, e.g.*, NEPA Regulations § 1502.16. Likewise, CEQA requires that agencies “identify the significant effects on the environment of a project” and “mitigate or avoid the significant effects on the environment.” *See, e.g.*, Pub. Res. Code § 21002.1.

In addition, BLM and the RWQCB should ensure that all other mitigation measures are developed to ensure maximum protection for cultural resources. Avoidance of cultural resources—even if they are ineligible for listing on the national or state registers—should be the priority. The agencies also should ensure that tribal monitors are used during all activities that have the potential to impact cultural resources, including but not limited to mowing, grading, and excavation. The presence of tribal monitors will help ensure that all resources of value to the Tribes are recognized and treated with appropriate respect. Furthermore, the mitigation measures should allow for in-situ or adjacent reburial of prehistoric cultural resources, if such resources are located in the project area and cannot be avoided. In the past, BLM has, without providing any reason for doing so, required solar companies to destroy cultural resources instead of opting for reburial. Reburial is an effective, culturally sensitive, and lawful mechanism for addressing some of the Project’s potential harms. *See* 40 C.F.R. § 1508.1(s) (defining mitigation to include actions to “reduc[e] or eliminat[e] the impact . . . by preservation”). Such measures help ensure that the footprint of the ancestors of Tribal members are not erased during construction.

#### **V. The EA or EIS Must Adequately Consider Cumulative Impacts to Cultural Resources.**

The agencies should also analyze cumulative impacts to cultural resources. As CRIT has explained, the collective and continual destruction and removal of cultural resources from the Tribes’ ancestral lands due to energy projects has already caused tremendous spiritual harm to CRIT members. In addition to triggering extensive cultural resource removal, these energy projects are often sited in a way that severs the connectivity between cultural resource sites—a connectivity that is vital to the traditional value of these cultural resources. In considering the potential cultural resources impacts of the Oberon Renewable Energy Project and amendments to the CDCA Plan, BLM must analyze those impacts in light of other past, present, and reasonably foreseeable future actions impacting cultural resources in this region. BLM must also describe the methodology used to assess cumulative impacts and list out the other projects considered in analyzing cumulative impacts.

**VI. Conclusion.**

Thank you for considering these comments. To best understand how these comments are taken into account in draft environmental review, we request that BLM and the RWQCB provide written responses to our concerns, either in a letter to the Tribe and/or in the documents. Please copy the Tribes' Attorney General Rebecca A. Loudbear, at rloudbear@critdoj.com, Deputy Attorney General Antoinette Flora, at aflora@critdoj.com and THPO Director Bryan Etsitty, at betsitty@crit-nsn.gov, on all correspondence to the Tribes.

Respectfully,



Amelia Flores  
Chairwoman, Colorado River Indian Tribes

cc: CRIT Tribal Council  
Rebecca A. Loudbear, CRIT Attorney General  
Bryan Etsitty, Director, Tribal Historic Preservation Office

## Email: Oberon Renewable Energy Project

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**From:** Christina Stuart <[cmstuart84@gmail.com](mailto:cmstuart84@gmail.com)>

**Sent:** Sunday, April 18, 2021 8:55 PM

**To:** Raub, Logan@Waterboards <[Logan.Raub@waterboards.ca.gov](mailto:Logan.Raub@waterboards.ca.gov)>

**Subject:** Oberon Renewable Energy Project Public Scoping Comment

The proponent proposes to construct, operate, maintain, and decommission a 500 MW solar PV electricity generation station. The EA needs to analyze the impacts to the environment from decommissioning the solar panels. How will the solar panels be decommissioned? Where will the solar panels go? If they will be recycled, what percentage of each panel can and will be recycled? For the portions of the panels not being recycled, will they end up in a landfill or shipped to another country? If the solar panels (in whole or non-recycled parts) will end up in landfills, the EA needs to describe what type of materials (cadmium, lead, other hazardous materials, etc.) would be sent to these landfills and analyze the impacts to the environment from disposing of the solar panels in landfills.

Decommissioning is part of this project and the EA should disclose ALL impacts to the environment from disposing of the solar panels, even if these impacts occur in another state or another country. It is easier for companies to dispose of solar panels in other states because other states do not treat solar panels as hazardous waste. I think it is important for the EA to disclose exactly how the solar panels will be disposed of, where they will be disposed, and any impacts this disposal will have on the environment.

Thank you,  
C. Stuart