25 April 2018

Tom Nievez, Contract Planner
County of San Bernardino, Land Use Services Department
385 N. Arrowhead Avenue, First Floor
San Bernardino, CA 92415
Email: Tom.Nievez@lus.sbcounty.gov


Dear Mr. Nievez,

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 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 Notice of Preparation (NOP) of the Draft Environmental Impact Report (Draft EIR) for the Proposed Daggett Solar Power Facility (Project), dated 26 March 2018. Given the location of the proposed Project in habitats potentially occupied or used by (e.g., movement corridors) Agassiz’s desert tortoise (Gopherus agassizii), our comments pertain to enhancing protection of this species during activities authorized by the County of San Bernardino Land Use Services Department (County).

On page 2 of the NOP, Project Description, third paragraph the County describes “related permits/County approvals” associated with the project. We note that depending on the results of requisite surveys by the California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) (see below), if any evidence of Agassiz’s desert tortoise occurs on any portion of the site, including gen-tie lines and access roads, both federal and state incidental take permits will likely be required. Because the NOP states that there is no federal involvement
in the project and therefore no federal nexus to Section 7 of the Federal Endangered Species Act (FESA), Daggett Solar Power 1, LLC (Proponent) would need to acquire a Section 10(a)(1)(B) incidental take permit from the USFWS. Since Agassiz’s desert tortoise is also listed under the California Endangered Species Act (CESA) as Threatened by the California Fish and Game Commission, a Section 2081 incidental take permit would also need to be acquired from the CDFW.

We note on page 4 that the NOP states, “The EIR will assess the effects of the Project on the environment, identify potentially significant impacts, identify feasible mitigation measures to reduce or eliminate potentially significant environmental impacts, and discuss potentially feasible alternatives to the Project that may accomplish basic Project objectives while lessening or eliminating any potentially significant Project impacts.” For the Draft EIR to fully assess the effects and identify potentially significant impacts, the following surveys would need to be performed to determine the extent of rare plant and animal occurrences within the impact area. Results of the surveys will determine appropriate permits from CDFW and USFWS and associated minimization and mitigation measures, which would then be published in the Draft EIR.

- Prior to conducting surveys, a knowledgeable biologist should perform a records search of the California Natural Diversity Data Base (CNDDB; CDFW 2018) for rare plant and animal species reported from the region. The results of the CNDDB 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. Given the proximity of the site to the City of Barstow, the biological technical report completed for the city’s general plan (Circle Mountain Biological Consultants, Inc. 2014) should be included in the literature reviewed to complete the Draft EIR.

- The project proponent will need to conduct formal protocol surveys for Agassiz’s desert tortoise (USFWS 2017) 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, state and federal incidental take permits would likely be required. Given that the site is located in what appears to be marginal tortoise habitats for year-round occupation, only experienced biologists should perform protocol surveys. We strongly recommend that the County require the biologists performing these surveys to provide their credentials to CDFW and USFWS before the surveys to ensure they are qualified to find tortoise signs in suboptimal habitats. The need for biologists to provide their credentials prior to conducting surveys is described in Chapter 4.3 of the USFWS’ (2009) Desert Tortoise Field Manual.

- To determine the full extent of impacts to tortoises, the Proponent’s biologist should consult with the Palm 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).” Thus, the “action area” would be larger than the footprint of the project. To facilitate
compliance with FESA and CESA, it is imperative that County/Proponent coordinate early with the USFWS and CDFW to determine what the action area is for this project and the full extent of surveys that should be performed.

- It is not clear from the NOP from which direction main access routes would occur. A jurisdictional waters analysis should be performed for all potential impacts to washes, streams, and drainages. As part of the permitting process prior to ground disturbance, a Streambed Alteration Agreement would need to be acquired, if deemed necessary by CDFW, particularly if there is to be access from the north crossing the Mojave River with any route improvements.

- The NOP states that water would come from on-site wells. There should be analysis in the EIR of the impacts of water withdrawal from these wells on the subsurface flows and groundwater that is part of the Mojave River aquifer. This water provides habitat for the fully protected and federal and state endangered Mojave tui chub (*Siphanotes bicolor mohavensis*) with a population located a few miles downstream from the proposed Project. In addition, the water in the Mojave River basin has been adjudicated. Information should be provided in the EIR that demonstrates that the source(s) and uses of water for construction, operation, maintenance, and decommissioning of the proposed Project comply with this adjudication.

- 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). This species is known to occur in aeolian habitats within and adjacent to the Mojave River in the proximity of the Project. If suitable habitat occurs near to or downwind from the proposed Project, the Draft EIR should contain an analysis of effects of the Project on the distribution of aeolian habitats including long-term impacts to sand sources for these habitats. 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. In comparing Figure 2 in the NOP to the latest available Google Earth aerial images (dated 8/29/2014) it appears that most of the Project area was active agriculture in 2014. Assuming that some of these lands may now be fallow, there are likely to be suitable habitats for burrowing owl. 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 at least 10 special status plant species and 1 special plant resource (i.e., Creosote Bush Rings larger than 10 feet in diameter) found in the region of the Project area 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). If the proposed Project would impact these species/plant resources, measures should be included in the DEIR to fully mitigate these impacts. The common and scientific names and status designations of these species are given in the following table:
## Table 1. Special Status Plant Species Reported from Project Area

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>State/Federal/CNPS* Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barstow woolly sunflower</td>
<td>Eriophyllum mohavensis</td>
<td>None/None/List 1B.2*</td>
</tr>
<tr>
<td>Beaver Dam breadroot</td>
<td>Pediomelum castoreum</td>
<td>None/None/List 1B.2</td>
</tr>
<tr>
<td>Chaparral sand-verbena</td>
<td>Abronia villosa var. aurita</td>
<td>None/None/List 1B.1</td>
</tr>
<tr>
<td>Creamy blazing star</td>
<td>Mentzelia tridentata</td>
<td>None/None/List 1B.3</td>
</tr>
<tr>
<td>Creosote Bush Rings &gt; 10 feet</td>
<td>Larrea tridentata</td>
<td>None/None/County Codes**</td>
</tr>
<tr>
<td>Emory’s crucifixion thorn</td>
<td>Castela emoryi</td>
<td>None/None/List 2B.2</td>
</tr>
<tr>
<td>Mojave fish-hook cactus</td>
<td>Sclerocactus polyancistrus</td>
<td>None/None/List 4.2</td>
</tr>
<tr>
<td>Mojave menodora</td>
<td>Menodora spinescens var. mohavensis</td>
<td>None/None/List 1B.2</td>
</tr>
<tr>
<td>Mojave monkeyflower</td>
<td>Mimulus mohavensis</td>
<td>None/None/List 1B.2</td>
</tr>
<tr>
<td>Parish’s phacelia</td>
<td>Phacelia parishii</td>
<td>None/None/List 1B.1</td>
</tr>
<tr>
<td>Spiny-hair blazing star</td>
<td>Mentzelia tricuspis</td>
<td>None/None/List 2B.1</td>
</tr>
</tbody>
</table>

* Status designations are given in California Native Plant Society (2018).

** Creosote Bush Rings greater than 10 feet in diameter are protected by the San Bernardino County Development Code, Chapter 88.01 (Plant Protection and Management); Section 88.01.060 (Desert Native Plant Protection); Section 88.01.060(c) (Regulated Desert Native Plants); and Section 88.01.050 (Tree or Plant Removal Permits).

- CDFG (2010) lists hundreds of plant communities occurring in California, including those that are considered Communities of Highest Inventory Priority, or “CHIPs.” Several known in the Barstow area are Mesquite Thickets and Desert Dunes, both of which occur within and adjacent to the Mojave River. Biologists completing surveys on behalf of the Proponent should document such communities where they occur and indicate how any impacts would be minimized and mitigated. CHIP communities that may occur in the region that should be addressed in the Draft EIR include the following:

- Mesquite Bosque/Mesquite Thickets (Element Number 61.512.00)
- Desert Dunes (Element Number 22.100.00)
- Alkali Sacaton Grassland (Element Number 41.010.00)
- Anderson’s Boxthorn Scrub (Element Number 33.360.00)
- Arrow Weed Thickets (Element Number 63.710.00)
- Arroyo Willow Thickets (Element Number 61.201.00)
- Big Galleta Shrub-Steppe (Element Number 41.030.00)
- Desert Willow Woodland (Element Number 61.550.00)
- Fremont Cottonwood Forest (Element Number 61.130.00)
- Sandbar Willow Thickets (Element Number 61.209.00)
- Spinescale Scrub (Element Number 36.350.00)
- Spiny Hop Sage Scrub (Element Number 33.180.00)
- Winterfat Scrubland (Element Number 36.500.00)

Using Figure 1 in the NOP, the Council has identified proximate Agassiz’s desert tortoise Critical Habitat units in Figure 1 at the end of this letter. These include the Ord-Rodman Critical Habitat Unit located less than one mile south of the proposed Project and the Superior-Cronese Critical Habitat Unit located within several miles north of the Project. It is essential that the Draft EIR analyze potential direct and indirect impacts on these nearby tortoise Critical Habitat units resulting from the proposed Project. In particular, how will the Project facilities be constructed, operated, maintained, and decommissioned to minimize the attraction and subsidization of common ravens (*Corvus corax*) in the region, which would likely affect tortoises in these nearby...
essential habitats? In addition, the DEIR should analyze how construction, operation, maintenance, and decommissioning of the proposed Project would affect the tortoise’s ability to move between the populations in these critical habitat units. Connectivity is crucial for the survival and recovery of the tortoise, and the small size of the Ord-Rodman Critical Habitat Unit places a higher level of concern and importance to ensure connectivity among tortoise populations in other nearby Critical Habitat Units. Mitigation should be included to promote connectivity between the Ord-Rodman and Superior-Cronese Critical Habitat Units.

The Draft EIR must analyze if this new use would result in an increase of common ravens and other predators of the desert tortoise in the region. There may even be a reduction of available resources by converting agricultural lands, particularly if still being irrigated, to solar fields. Future operations must include provisions for monitoring and managing raven predation on tortoises as a result of the proposed action. The monitoring and management plan must include reducing human subsidies for food, water, and sites for nesting, roosting, and perching to address local impacts. The Proponent must contribute to the National Fish and Wildlife Foundation’s Raven Management Fund for regional and cumulative impacts. It is very important that for any of the gen-tie options the Project should use transmission towers that prevent raven nesting. For example, the tubular design with insulators on horizontal cross arms is preferable to lattice towers, which should not be used.

We expect that the Draft EIR will address how the proposed action may contribute to the spread and proliferation of nonnative invasive plant species; how this spread/proliferation would affect the desert tortoise and its habitats (including tortoise nutrition and the frequency and size of human-caused fires); and how the proposed action may affect the likelihood of human-caused fires and the resulting loss of tortoise habitat. We strongly urge the Proponent to develop and implement a management and monitoring plan using this analysis and other relevant data that would reduce the transport to and spread of nonnative seeds and other plant propagules within the Project area, eliminate/reduce the likelihood of human-caused fires, and promote the growth of native herbaceous plants that are nutritious food sources for the tortoise. The plan should integrate vegetation management with fire management and fire response.

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.
Finally, with regard to cumulative effects, the Draft EIR must list and discuss all project impacts within the region including future state, federal, and private actions affecting listed species on state, federal, and private lands. Even though the project is not on public lands managed by the Bureau of Land Management (BLM), we ask that the relationship between this proposed private Project and the Desert Renewable Energy Conservation Plan (DRECP) be analyzed, as the Project area does not appear to be in a designated Development Focused Area (DFA) identified in the final Record of Decision by the BLM for the DRECP (BLM 2016). This analysis should also consider ongoing and future projects in the City of Barstow and its sphere of influence that would result in losses of desert habitats from the region.

We appreciate this opportunity to provide input and trust that our comments will further protect tortoises during authorized project activities. Herein, we ask that the Desert Tortoise Council be identified as an Affected Interest for this and all other County-authorized projects that may affect Agassiz’s desert tortoise, and that any subsequent environmental documentation for this particular project is provided to us at the contact information listed above. As requested in the NOP, my phone number is 760-964-0012.

Regards,

Edward L. LaRue, Jr., M.S.
Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson

Literature Cited


California Department of Fish and Game. 2010. List of Vegetation Alliances and Associations. Vegetation Classification and Mapping Program, California Department of Fish and Game. Sacramento, CA. September 2010.


California Department of Fish and Wildlife (CDFW). 2018. Electronic database of rare plant and animal species reported to The State Resources Agency, Natural Heritage Division, California Natural Diversity Data Base. Sacramento, CA.


Figure 1 from NOP with Council additions

Superior-Cronese Critical Habitat Unit

Proposed Project

Ord-Rodman Critical Habitat Unit