



DESERT TORTOISE COUNCIL

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Via email only

Date: December 12, 2023

Attn: Jon Braginton, Contract Planner
County of San Bernardino
Land Use Services Department - Planning Division
385 North Arrowhead Avenue, First Floor
San Bernardino, CA 92415
Jon.Braginton@lus.sbcounty.gov

RE: Desert Breeze Solar Project (SCH# 2022090646, PROJ-2022-00110)

Dear Mr. Braginton,

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.

Both our physical and email addresses are provided above in our letterhead for your use when providing future correspondence to us. When given a choice, we prefer to receive emails for future correspondence, as mail delivered via the U.S. Postal Service may take several days to be delivered. Email is an "environmentally friendlier way" of receiving correspondence and documents rather than "snail mail."

We appreciate this opportunity to provide comments on the above-referenced project. Given the location of the proposed project in habitats known to be occupied by Mojave desert tortoise (*Gopherus agassizii*) (synonymous with Agassiz's desert tortoise), our comments include recommendations intended to enhance protection of this species and its habitat during activities authorized by San Bernardino County (County), which we recommend be added to project terms and conditions in the authorizing document (e.g., right of way grant, etc.) as appropriate. Please accept, carefully review, and include in the relevant project file the Council's following comments and attachments for the proposed project.

The Mojave desert tortoise is among the top 50 species on the list of the world's most endangered tortoises and freshwater turtles. The International Union for Conservation of Nature's (IUCN) Species Survival Commission, Tortoise and Freshwater Turtle Specialist Group, now considers the Mojave desert tortoise to be Critically Endangered (Berry et al. 2021), "... based on population reduction (decreasing density), habitat loss of over 80% over three generations (90 years), including past reductions and predicted future declines, as well as the effects of disease (upper respiratory tract disease/mycoplasmosis). *Gopherus agassizii* (sensu stricto) comprises tortoises in the most well-studied 30% of the larger range; this portion of the original range has seen the most human impacts and is where the largest past population losses have been documented. A recent rigorous rangewide population reassessment of *G. agassizii* (sensu stricto) has demonstrated continued adult population and density declines of about 90% over three generations (two in the past and one ongoing) in four of the five *G. agassizii* recovery units and inadequate recruitment with decreasing percentages of juveniles in all five recovery units."

This status, in part, prompted the Council to join Defenders of Wildlife and Desert Tortoise Preserve Committee (Defenders of Wildlife et al. 2020) to petition the California Fish and Game Commission in March 2020 to elevate the listing of the Mojave desert tortoise from threatened to endangered in California. The decision is still pending at the time of this writing.

Please note that we received an email from you on October 27, 2023 that indicated the deadline for comments had been extended to December 15, 2023.

"Good Morning Ed,

"This is to inform [you] that the attached NOA/NOI for this Project has been updated in regard to a revised 45-day public review period (10/27/23-12/15/23). This is a result of the NOA/NOI originally not being sent out to surrounding property owners within 1,300 feet of the proposed project, which is a requirement by the County when issuing a NOA/NOI for Public Review. Please let me know if you have any questions.

"Thank You,

"Jon [Braginton]"

But I see in the Notice of Availability (NOA)/Notice of Intent (NOI) that the due date is shown as December 10, 2023. So, we trust that the County will work in good faith and consider our comments even if they are several days late. Unless otherwise noted, page numbers given below refer to the Draft Environmental Impact Report (DEIR), prepared Kimley-Horn and Associates, dated September 25, 2023. The Council provided scoping comments on the Desert Breeze Solar Project (Project) on October 27, 2023, which are incorporated by reference and attached.

We find that the DEIR is deficient in its failure to consider most of the recommendations we made in our attached scoping comments, with page numbers referenced in the following bullets.

- On page 3, we specifically asked that the County confer with CDFW and USFWS in preparation of the DEIR, which as given herein, did not apparently occur. We also suggested that Tribal governments/agencies be consulted, which is not apparent in the DEIR.

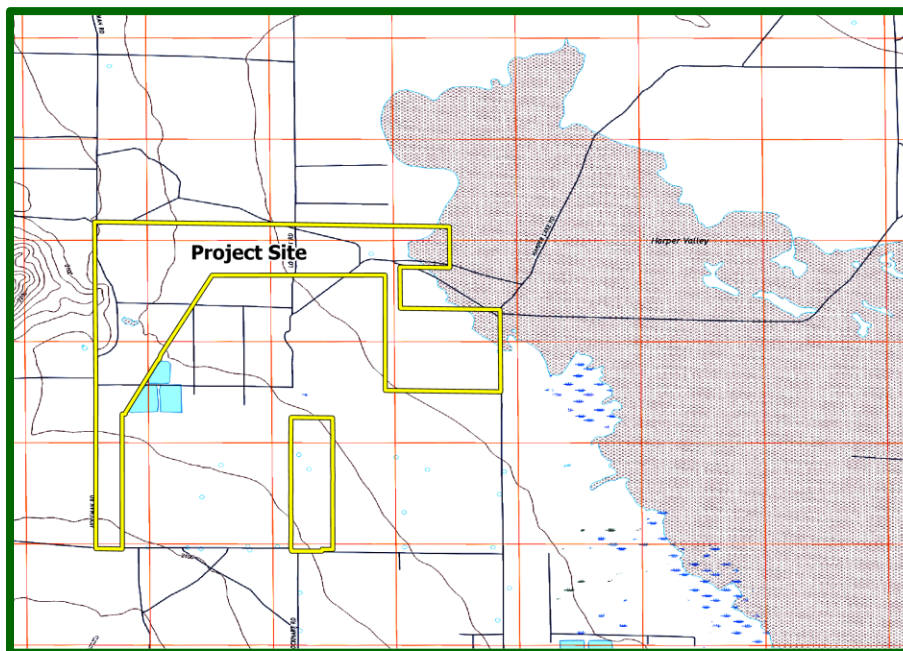
- On pages 4 and 5, we asked that the DEIR analyze roof-top solar, urban solar, and brownfield area alternatives, any one of which could have been mentioned as the Environmentally Superior Alternative, but not one of them is mentioned.
- On page 5, we asked that the DEIR review available monitoring reports to analyze the efficacy of crushing rather than blading the vegetation within the Project footprint. Not only is this analysis lacking, but we also cannot tell from the project description what the proponent plans to do: crush or blade the vegetation?
- On pages 5 through 9, we provided extensive data on the downward tortoise population trends throughout the listed range and particularly in the West Mojave "...so that these or similar data may be included in the DEIR." We note that nothing like this appears in the DEIR, leaving an uninformed public unknowing what the plight of the tortoise is within the affected region surrounding the Project.
- On pages 11 and 12, we asked for an "...economic analysis that provides the total cost of constructing the proposed project versus other alternatives," including "...habitat replacement or restoration costs including the time needed to achieve full replacement, not just acquisition, management, monitoring, and adaptive management costs;" "...a thorough analysis of the status and trend of the tortoise in the action area, tortoise conservation area(s), recovery unit(s), and rangewide," "...a discussion of all likely sources of mortality for the tortoise and degradation and loss of habitat from implementation of solar development including construction, operation and maintenance, decommissioning, and restoration;" and "We also request that separate calculations document how many acres of desert tortoise habitats would be temporarily and permanently impacted both directly and indirectly (e.g., "road effect zone," etc.) by the proposed Project," none of which appears in the DEIR.
- On page 12, we specifically asked that "The DEIR should include effective mitigation for all direct, indirect, and cumulative effects to the tortoise and its habitats," and on pages 13 through 15 provided requests for the following specific management and monitoring plans to be included in the DEIR: Translocation Plan - Translocated Tortoises & Translocation Sites, Tortoise Predators and a Predator Management Plan, Fire Prevention/Management Plans, Habitat Compensation Plan, and Impacts from Proliferation of Nonnative Plant Species and Management Plan, stating on page 13 that "Too often, such plans are alluded to in the draft environmental document and promised later, which does not allow the reviewers to assess their adequacy, which is unacceptable," which accurately characterizes this DEIR.

The FEIR must address the above requests and provide supplemental information or it too, like the DEIR, will continue to be deemed deficient.

The following Project description is given on page 2-2: "Desert Breeze Solar, LLC (Applicant) proposes to develop the Desert Breeze Solar Project (Project), a utility-scale, solar photovoltaic (PV) electricity generation and energy storage facility that would produce up to 130 megawatts (MW) of solar power and include up to 2 gigawatt hours (GWh) of energy storage capacity rate in a battery energy storage system (BESS). Key entitlements to construct and operate the Project include a zoning amendment to change the current zoning designation from Rural Living (RL) to Resource Conservation (RC), as well as two (2) Conditional Use Permits (CUPs). The Project would be developed within an approximately 923-acre Project Site comprised of an 813-acre solar array area (CUP1) and a 110-acre Shared Facilities Area (SFA) (CUP 2)."

On page 2-1, we also read the following statements: “Additionally, the Project proposes improvement of a portion of Harper Lake Road, which is an existing dirt road. Construction activities associated with the road improvement will include grading to widen or level the existing road; importing and compacting materials, such as soil and gravel; and may include paving. The road improvement may extend up to approximately 60 feet wide and approximately 1 mile long from the southeastern corner of Hoffman Road and Harper Lake Road (adjacent to the east of SEGS IX) to the existing secondary access gate.”

We interpret the above information to mean that Harper Lake Road will be used as the primary access to the site. There is an existing tortoise-proof fence along both sides of the road between Highway 58 and the existing solar arrays that is intended to preclude tortoises from the roadway. Please be sure that the integrity of this fence is intact. We read on page 3-19 that as many as 250 construction workers may visit the site, which is a substantial increase in use of Harper Lake Road. Although a previous project proponent was responsible for installing the fence, in order to ensure that take of tortoises inside this fence resulting from this project is avoided, please be sure that the proponent maintains the integrity of this fence. It may also be appropriate for the east side of Harper Lake Road located north of Hoffman Road to be fenced to avoid the take of tortoises associated with this project.



On page 2-4 and 2-5, we appreciate that Alternative 3 was dropped, as it occurs in an area that has been determined to be important to the conservation of the Mohave ground squirrel (*Xerospermophilus mohavensis*) (CDFW 2019, LaRue 2016). As stated on page 2-4, “...however, further evaluation is required on the MGS conservation requirements for the area before it can be opened to renewable energy applications for individual projects” is absolutely true.

Page 4.3-6 states, “The Survey Area is not located within USFWS-designated Critical Habitat or any of the sections noted as critical habitat in the Federal Register for desert tortoise (*Gopherus agassizii*). The Project Site is also located outside of Bureau of Land Management (BLM) Area of

Critical Concern (ACEC) with the Superior-Cronese ACEC **located adjacent to the north** and the Fremont-Kramer ACEC located to the west. The Project Site is within the current range of the desert tortoise” (bold emphasis added). For full disclosure the Final EIR (FEIR) should document the distances from the proposed Project to tortoise Critical Habitat, the Superior-Cronese ACEC, which we assume occurs at the boundary of the Project footprint (e.g., “adjacent to”), and the Fremont-Kramer ACEC. Although not within any of the Tortoise Conservation Areas (TCAs), the proximity is important when considering indirect impacts.

We note in Table 4.3-2: Special Status Species on page 4.3-11 that “Ten live desert tortoises were found within the Survey Area along with fresh scat, tracks, burrows, and skeletal remains.” However, there is no indication that the consulting biologist used the USFWS formula (2019) to estimate densities of tortoises with confidence intervals. Tortoises are notoriously difficult to see, so it is appropriate that density estimates are included in the FEIR.

In the same table on page 4.3-15, we note that “No MGS were observed during the MGS habitat assessment or other biological resources surveys conducted,” which is reiterated on page 4.3-22. We note that MGS are rarely ever observed; that protocol trapping surveys are required to ascertain presence or absence (CDFW 2023). Alternatively, the proponent may forego trapping surveys, assume presence, and acquire a 2081 Incidental Take Permit from the California Department of Fish and Wildlife. We ask that the proponent actually confer with the CDFW and that the FEIR report actual determinations rather than a range of alternatives.

On page 4.3-51, we read “**Mitigation Measure BIO-14** includes best management practices to be implemented during Project grading and construction and decommissioning activities to prevent inadvertent entrapment of species and attraction of predators to the Project Site. Further, it is not anticipated that many individual animals would be taken due to the avoidance measures detailed in **Mitigation Measure BIO-14** and similar measures anticipated to be imposed by USFWS and CDFW.” The document author seems to synonymize “take” with “death.” We note that “take” refers to “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Therefore, ALL tortoises found on the site will be subject to take. This conclusion should be changed to reflect the definition of take in the FEIR.

As given above, the DEIR fails to divulge the proximities of tortoise Critical Habitat and ACECs are to the subject property. We note that Section 4.3.5 Impacts and Mitigation Measures fails to mention or analyze indirect, cumulative, and synergistic impacts to tortoises in adjacent areas. Nor does a baseline inventory and survey that extends to only a 50-foot buffer around the project allow the County and resource agencies to know how many tortoises in adjacent areas may be subject to take associated with indirect impacts. The FEIR needs to be substantially revised to fully document likely indirect, cumulative, and synergistic impacts resulting from project development.

The mitigation measures referenced at the bottom of page 4.3-50 and top of page 4.3-51 must be supplemented in the FEIR to include tortoise translocation procedures, fire management and fire prevention plans, weed abatement plan, minimization of impacts to water quality and use from the local aquifer, a predator management plan (not only common ravens, but also coyotes and American badgers), and how and for how long residual impacts, particularly of displaced tortoises, will be monitored.

To focus on only one of these issues, that of tortoise translocation, the County and proponent need to address the following questions in the FEIR: How many tortoises will be displaced by the proposed project? How long will translocated tortoises be monitored? Will the monitoring report show how many of those tortoises lived and died after translocation and over time? Are there any degraded habitats or barren areas that may impair success of the translocation? Are there incompatible human uses in the new translocation area that need to be eliminated or managed to protect newly-translocated tortoises? Were those translocation areas sufficiently isolated that displaced tortoises were protected by existing or enhanced land management? How will the proponent minimize predation of translocated tortoises and avoid adverse climatic conditions, such as low winter rainfall conditions that may exacerbate translocation success? Were tortoises translocated to a site where they would be protected from threats (e.g., off-highway vehicles, future development, etc.)?

The impacts to adjacent areas were not considered especially with respect to wildlife linkages/movement corridors/wildlife population connectivity with a focus on the tortoise and MGS. To assist the County with this resource issue, we provide the following information for use in the analysis in the FEIR.

Mojave desert tortoise linkage habitat: In 2021, Averill-Murray et al. published a paper on connectivity of Mojave desert tortoise populations and linkage habitat. The authors emphasized that “[m]aintaining an ecological network for the Mojave desert tortoise, with a system of core habitats (TCAs = Tortoise Conservation Areas) connected by linkages, is necessary to support demographically viable populations and long-term gene flow within and between TCAs.”

“Ignoring minor or temporary disturbance on the landscape could result in a cumulatively large impact that is not explicitly acknowledged (Goble 2009); therefore, understanding and quantifying all surface disturbance on a given landscape is prudent.” Furthermore, “habitat linkages among TCAs must be **wide enough** [emphasis added] to sustain multiple home ranges or local clusters of resident tortoises (Beier et al. 2008; Morafka 1994), while accounting for edge effects, in order to sustain regional tortoise populations.” Consequently, effective linkage habitats are not long narrow corridors. Any development within them has an edge effect (i.e., indirect impact) that extends from all sides into the linkage habitat further narrowing or impeding the use of the linkage habitat, depending on the extent of the edge effect.

Averill-Murray et al. (2021) further notes that “To help maintain tortoise inhabitation and permeability across all other non-conservation-designated tortoise habitat, all surface disturbance could be limited to less than 5-percent development per square kilometer because the 5-percent threshold for development is the point at which tortoise occupation drops precipitously (Carter et al. 2020).” They caution that the upper threshold of 5 percent development per square kilometer may not maintain population sizes needed for demographic or functional connectivity; therefore, development thresholds should be lower than 5 percent.

The lifetime home range for the Mojave desert tortoise is more than 1.5 square miles (3.9 square kilometers) of habitat (Berry 1986) and, as previously mentioned, may make periodic forays of more than 7 miles (11 kilometers) at a time (Berry 1986).

We add that the fundamentals of conservation biology include the need for gene flow between populations to maintain genetic diversity; this enables a species to more likely survive, especially during climate change, which enables biodiversity. Thus, linkage habitats are important as they provide connectivity among wildlife populations to maintain viability and biodiversity. Governor Newsome issued Executive Order N-82-20 to combat biodiversity and the climate crisis. The executive order seeks to restore and protect biodiversity in California.

The scientific literature, CDFW, and USFWS should be consulted to determine whether there are linkages that have been identified as important to any special status species including the tortoise and MGS. Once identified, if any linkage occurs in the project area, the County should analyze whether the additional development would affect the effectiveness of the linkage habitat for that species. For example, CDFW (2019) has identified linkages for the Mohave ground squirrel in their Mohave Ground Squirrel Conservation Strategy. Without this information and analysis, it is not possible to make a conclusion about the impacts of the proposed project on the effectiveness of the linkage habitat with the addition of the proposed project.

Although we note on page 4.3-60 in BIO-3 that a "...CDFW- and USFWS-approved Desert Tortoise Relocation Plan shall be submitted to the County prior to initiating Project construction activities," we note that the proponent already knows that at least 10 tortoises occur on the site and question why that plan has not already been completed and does not appear in an appendix to the DEIR. Absent the draft plan, the concerned public, including the Council, is unable to review the plan and provide constructive feedback. We therefore expect to see the Desert Tortoise Relocation Plan as an appendix to the FEIR.

With regards to MGS, we read the following statement on page 4.3-51: "Therefore, while no MGS were observed or detected during the surveys, development of the Project would potentially impact individuals and remove approximately 418.54 acres of suitable habitat for the MGS such that impacts to the MGS population and its habitat would be potentially significant." We disagree with this conclusion, knowing that MGS occupy all of the vegetation types within the Project footprint except for barren areas and playa surfaces (BLM 2005). We see in Table 4.3-1 that barren areas comprise 23 acres and playa surfaces comprise 12 acres. So, we conclude that 826 acres (861 minus 35 acres), not 418 acres, would be lost to full development of the Project, and that take of MGS is more than likely to occur. The above information also needs to be applied to BIO-9, which reiterates that compensation would be only for 418.54 acres rather than the full extent of suitable, potentially occupied habitat. The FEIR needs to rectify this erroneous conclusion wherever it occurs in the DEIR.

With regards to the following statement on page 4.3-51, "...purchase credits in a mitigation bank equivalent to at least a 1:1 replacement," the Project proponent can expect the CDFW to require a minimum of 3:1 habitat replacement. This observation also applies to compensation for tortoises impacts described for BIO-5 on page 4.3-60/61 and BIO-9 on page 4.3-61/62. It is not apparent from these naïve statements (e.g., that only 418 acres of the Project area comprise suitable MGS habitat) that the proponent or County have consulted with either the USFWS or CDFW prior to completing the DEIR. This conclusion is supported by the absence of these agencies from Section 8.1 of the DEIR. Whereas consultation may not be a requirement, we recommend that the proponent actually consults with these two agencies and report factual determinations in the FEIR, like what the actual compensation ratio will be for both tortoises and MGS, rather than speculate as is currently done in the DEIR.

We disagree with the conclusion at the top of page 4.3-52, “Therefore, removal of the suitable habitat as a result of the Project would not result in a significant impact [to the MGS] related to the loss of vegetation communities.” Absent a formal protocol trapping survey, the proponent must assume presence of the MGS, and impacts to a State-listed species constitute a significant impact. This erroneous conclusion needs to be retracted or revised in the FEIR.

With regards to BIO-4 on page 4.3-60, the FEIR should clarify that “...a onetime fee not to exceed \$150 and no less than \$105 per disturbed acre” should be applied to all 861 acres, for a total amount of between \$129,150 and \$90,405 to reflect the maximum and minimum per-acre costs. We also note that the USFWS has failed to revise its 2010 cost estimates to account for current financial conditions, so the maximum per-acre fee should be applied to the project, for ALL acres, not just a subset as was suggested for MGS compensation on page 4.3-51 described above.

Further, with regards to BIO-4, we expect to see the Raven Management Plan attached to the FEIR. Like the tortoise translocation plan described above, the public does not have an opportunity to review and comment on plans that do not yet exist.

Finally, we ask that the County reorganize the platform for providing documents associated with the FEIR. For example, the DEIR indicates that Appendix D includes a Biological Resources Assessment, indicating on page vi that it is “Provided under separate cover.” However, the only available documents at the County’s website (<https://ceqanet.opr.ca.gov/2022090646/2>) are the DEIR and NOP; no appendices are provided. Please be sure that the platform makes ALL related environmental documentation available to the concerned public.

We appreciate this opportunity to provide the above comments and trust they will help protect tortoises during any resulting authorized activities. Herein, we reiterate that the Desert Tortoise Council wants to be identified as an Affected Interest for this and all other projects funded, authorized, or carried out by San Bernardino County that may affect desert tortoises, and that any subsequent environmental documentation for this project is provided to us at the contact information listed above. 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.

Respectfully,



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

cc.

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Literature Cited

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