



State of California – Natural Resources Agency

DEPARTMENT OF FISH AND WILDLIFE

South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201

www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



Via Electronic Mail Only

February 17, 2022

Jocelyn Swain
City of Lancaster
44933 Fern Avenue
Lancaster, CA 93534
JSwain@cityoflanasterca.org



**Subject: Site Plan Review No. 21-07, Mitigated Negative Declaration,
SCH #2021090068, City of Lancaster, Los Angeles County**

Dear Ms. Swain:

The California Department of Fish and Wildlife (CDFW) has reviewed a Mitigated Negative Declaration (MND) from the City of Lancaster (City) for Site Plan Review No. 21-07 (Project). CDFW appreciates the opportunity to provide comments regarding aspects of the Project that could affect fish and wildlife resources and be subject to CDFW's regulatory authority under the Fish and Game Code.

CDFW's Role

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, subdivision (a) & 1802; Pub. Resources Code, § 21070; California Environmental Quality Act (CEQA) Guidelines, § 15386, subdivision (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 State 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, including 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.*), or CESA-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish & G. Code, § 1900 *et seq.*), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

Jocelyn Swain
City of Lancaster
February 17, 2022
Page 2 of 20

Project Description and Summary

Objective: The Antelope Valley Transit Authority (AVTA) has converted their bus fleet to electric vehicles. Therefore, the Project would support the additional electrical demand needed at AVTA bus recharging stations. Specifically, the Project would construct a photovoltaic (PV) solar energy facility across 43 acres comprised of seven undeveloped parcels adjacent to an existing AVTA bus depot. The Project would tie into an existing Southern California Edison grid.

The Project consists of the construction, operation, and eventual decommissioning of a 5.72 megawatt (MW) direct current/4.38 MW alternating current PV solar energy facility. The Project would be constructed as three solar arrays. The first array (northwest meter) would be constructed on a 10-acre parcel northwest of the bus depot. Panels would cover approximately 5 acres and would generate 0.992 MW of power. A small area between the northwest meter and the existing bus depot would be used for future bus parking. The second array (east meter) would be constructed to the northeast of the bus depot on existing AVTA property. The east meter would consist of ground mount solar tracker system of 3,391.47 kilowatt (kW) as well as a battery energy storage system of 2,055kW/8,220-kilowatt hour (kWh). The third array (west meter) would be constructed to the southeast of the bus depot on existing AVTA property. The west meter would consist of ground mount solar tracker system of 1,653.08 kW as well as a battery energy storage system of 1,370kW/5,480kWh. The east meter and west meter together would encompass approximately 22 acres on the five remaining parcels that make up the remaining 33 acres of the Project site.

Panels and associated equipment would be constructed on compacted native soil. Solar panels would be installed on a ground-mounted solar tracker system. Associated infrastructure for the solar arrays would include tracker foundations and racking, power inverters, transformers, electrical enclosures, data metering and monitoring hardware, overhead cable runs, concrete equipment pads, interior access pathways, and perimeter fencing. Access to the north solar array would be from 6th Street West, and 4th Street West would be used to access the other two arrays. An access road would be installed around the perimeter of each array, and internal access roads would be provided for maintenance of panels and equipment.

Once operational, the Project would be monitored remotely. Normal preventative maintenance and routine inspections would occur as necessary for panel washing, vegetation control, and routine maintenance. During the annual routine maintenance inspection, the entire site would be inspected for signs of deterioration or repair needs. Emergency maintenance and repairs would occur immediately after the failure occurs. The estimated lifespan of the solar arrays is 25 years. If it is determined that the facility is no longer needed, the Project would be decommissioned. All equipment would be removed and disposed of in compliance with City requirements and in accordance with applicable local and state regulations. Grading of the Project site would be minimized to the greatest extent practical. The Project site would be restored to preconstruction conditions where feasible in compliance with the City's requirements.

Location: The Project is located on the southeastern corner of the intersection of Avenue L-8 and 6th Street West in the City, east of State Route 14 and west of Sierra Highway.

Jocelyn Swain
City of Lancaster
February 17, 2022
Page 3 of 20

Comments and Recommendations

CDFW offers the comments and recommendations below to assist the City in adequately identifying, avoiding, and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions are also included to improve the environmental document. CDFW recommends the measures or revisions below be included in a science-based monitoring program that contains adaptive management strategies as part of the Project's CEQA mitigation, monitoring, and reporting program (Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15097).

Specific Comments

Comment #1: Impacts on Western Joshua Trees (*Yucca brevifolia*)

Issue: The MND does not provide compensatory mitigation for the Project's impacts on western Joshua tree, a candidate species for listing under CESA. In addition, the MND does not provide sufficient information pertaining to the Project's impact on western Joshua tree.

Specific impacts: The Project would potentially remove up to 56 western Joshua trees and impact an undisclosed acreage of western Joshua tree seedbank. The Project would alter on-site hydrology, which could also impact western Joshua tree and seedbank. In addition, operation and maintenance of the solar energy facility could have indirect impacts on western Joshua tree and seedbank on site and in areas adjacent to the Project site.

Why impact would occur: Take of western Joshua tree is defined as any activity that results in the removal of a western Joshua tree, or any part thereof, or impacts the seedbank surrounding one or more western Joshua trees (CDFW 2022a). Within the Project site, the Project would require vegetation removal, grading, and compacting soils. As a result, the Project would remove western Joshua trees, eliminate and modify habitat, and crush and/or bury living seeds in the soil, rendering living seeds inviable and/or causing them to be killed.

In addition, the Project may alter the hydrology on site. Page 45 of the MND states, "development of the proposed project would increase the amount of surface runoff as a result of impervious surfaces associated the solar facility." Page 45 also states, "once the project is built, water may be used to clean the solar panels on a periodic basis." Changes to on-site hydrology could impact or disturb the root zone of any western Joshua trees preserved on site or immediately adjacent to the Project site. Impacts on the root zone could result in injury or mortality of a western Joshua tree.

Finally, the Project would operate an approximately 43-acre 5.72-megawatt solar energy facility. Solar arrays could have indirect effects on western Joshua trees and habitat preserved on site or immediately adjacent to the Project site. Solar arrays could change habitat supporting western Joshua trees, including vegetation characteristics, soil characteristics, and microclimate (e.g., temperature, humidity) (Choi et al. 2020; Graham et al. 2021; Surrone et al. 2017; Tanner et al. 2020). Furthermore, solar arrays could reduce the number of individuals of western Joshua trees recruited from seed by changing microclimate conditions necessary to support the mutualistic relationship between the western Joshua tree and its obligate pollinator, yucca moth (*Tegeticula synthetica*). Lastly, maintenance of the solar energy facility, which would include vegetation control and routine maintenance activities, could impact any western Joshua

Jocelyn Swain
City of Lancaster
February 17, 2022
Page 4 of 20

trees preserved on site or immediately adjacent to the Project site.

Evidence impact would be significant: The western Joshua tree is a species designated as candidate for listing as threatened pursuant to CESA (Fish & G. Code, § 2050 *et seq.*). The western Joshua tree is granted full protection of a threatened species under CESA. Take of any endangered, threatened, candidate species that results from the Project is prohibited, except as authorized by State law (Fish & G. Code, §§ 86, 2062, 2067, 2068, 2080, 2085; Cal. Code Regs., tit. 14, § 786.9). Impacts on western Joshua tree requires a mandatory finding of significance under CEQA (CEQA Guidelines, § 15065). The MND does not provide compensatory mitigation for the Project's significant impact on western Joshua trees. Accordingly, the Project continues to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special status by CDFW.

Furthermore, CEQA requires an adequate and complete effort of full disclosure of a project's significant environmental impacts [CEQA Guidelines, § 15003(i)]. While the MND discloses that the Project would have a significant impact on western Joshua tree, the MND does not adequately disclosed the extent of the Project's direct, indirect, and cumulative effect, either directly or through habitat modifications, on western Joshua tree and seedbank. As a result of insufficient disclosure in the MND, CDFW is unable to discern the extent of the Project's impact on western Joshua trees and seedbank both within the Project site and adjacent to the Project site. It is unclear how and where impacts on western Joshua trees and seedbank would occur, and if any impacts could be avoided or minimized prior to take of western Joshua trees.

Recommended Potentially Feasible Mitigation Measure(s):

Recommendation #1: The City should revise the MND to disclose the Project's significant impact on western Joshua tree by providing the following information:

- 1) The Project's potential impact on western Joshua tree seedbank within the Project site;
- 2) The Project's potential impact on western Joshua trees and seedbank adjacent to the Project site;
- 3) The Project's potential impact on each unique native and non-native natural community supporting western Joshua trees within and adjacent to the Project site;
- 4) The Project's construction, operation, and maintenance activities that could impact western Joshua trees and seedbank within and adjacent to the Project site; and,
- 5) The Project's cumulative impact on western Joshua tree.

Recommendation #2: Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an Incidental Take Permit for the Project unless the Project's CEQA document addresses all the Project's impact on CESA endangered, threatened, and/or candidate species. The Project's CEQA document should also specify a mitigation monitoring and reporting program that will meet the requirements of an Incidental Take Permit. It is important that the take proposed to be authorized by CDFW's Incidental Take Permit be described in detail in the Project's CEQA document D. Also, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for an Incidental Take Permit. However, it is worth noting that mitigation for the Project's impact on a CESA endangered,

Jocelyn Swain
City of Lancaster
February 17, 2022
Page 5 of 20

threatened, and/or candidate species proposed in the Project's CEQA document may not necessarily satisfy mitigation required to obtain an Incidental Take Permit.

Mitigation Measure #1: CDFW concurs with Mitigation Measure #6 in the MND, which would require AVTA to obtain an Incidental Take Permit from CDFW for incidental take of western Joshua trees. AVTA should submit an Incidental Take Permit Application to CDFW that provides the following information (at a minimum):

- 1) An analysis of individual western Joshua trees (clonal and non-clonal) and western Joshua tree seedbank that would be impacted both within the Project site and within 300 feet of the Project site;
- 2) An analysis of the acres of natural communities supporting western Joshua trees that would be impacted both within the Project site and within 300 feet of the Project site provided according to alliance and/or association-based natural communities found in the [Manual of California Vegetation](#) (MCV), second edition (Sawyer et al. 2009);
- 3) A map of the Project's site plan overlaid on location of western Joshua trees and natural communities;
- 4) A discussion of whether solar arrays could impact any western Joshua trees preserved within the Project site and any in-situ western Joshua trees adjacent to the Project site; and,
- 5) A hydrologic analysis of how water would be transported across the Project site and adjacent areas after Project build-out.

Mitigation Measure #2: AVTA should provide compensatory mitigation for the Project's impact on western Joshua trees at no less than 2:1, or as required in an Incidental Take Permit for western Joshua trees issued by CDFW. Mitigation should be higher if the Project will impact a western Joshua tree population that is increasing through seedling recruitment. Mitigation lands provided by AVTA should (at a minimum):

- 1) Support western Joshua trees of similar density, abundance, and age structure;
- 2) Support natural communities of similar native plant species composition, density, structure, and function to habitat that was impacted;
- 3) Support nursery plants for western Joshua tree recruits; and,
- 4) Not be exposed or have the potential to be exposed to disturbances such as OHV activity, illegal access, and encroachment from pending or future development.

Mitigation Measure #3: AVTA should protect mitigation lands in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands pursuant to Assembly Bill 1094 (2012). Assembly Bill 1094 amended Government Code sections 65965-65968. Under Government Code section 65967(c), the lead agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A mitigation plan should include measures to protect the targeted habitat values in perpetuity from direct and indirect negative impacts. Issues that should be addressed include but are not limited to the following: protection from any future development and zone changes; restrictions on access; proposed land dedications; control of illegal dumping; water pollution; and, increased human intrusion. A conservation easement and endowment funds

Jocelyn Swain
City of Lancaster
February 17, 2022
Page 6 of 20

should be fully acquired, established, transferred, or otherwise executed prior to impacts on western Joshua trees.

Comment #2: Impacts on Streams

Issue: The Project may impact Amargosa Creek and an unnamed drainage.

Specific impacts: The Project may impact the bed, bank, and channel of a water course as a result of construction and activities that would expose soil surfaces to erosion, remove vegetation, and compact soils.

Why impact would occur: According to page 30 in the MND, “two drainages are present at the site. Amargosa Creek that trends south to north is on the western side of the site. An unnamed drainage is on the eastern side of the site.” According to the Project’s site plan provided in Figures 4 and 5, AVTA proposes a setback of 48 feet from Amargosa Creek to avoid impacts on Amargosa Creek and 100-year floodplain. The MND concludes there would be no impacts on Amargosa Creek and the unnamed drainage because “the layout for the proposed solar project avoids disturbing or placing any project features in Amargosa Creek or the unnamed drainage.” However, the Project may still impact Amargosa Creek and the unnamed drainage.

First, the entire Project site would need to be leveled. This would consist of grubbing, clearing vegetation, compacting dirt, backfilling, and grading. According to Table 2 in the MND, these activities would be performed using large equipment such as a skid steer, motor grader, auger, forklift, trencher, crane, and backhoe. Page 37 in the MND states that grubbing and clearing much of the vegetation on site would expose soils to erosion from wind and rain events. Ground-disturbing activities could result in sediment input into Amargosa Creek and the unnamed drainage. Vegetation removal adjacent to Amargosa Creek and the unnamed drainage may destabilize the soil surface, resulting in stream bank erosion and sediment, debris, and pollutant input into streams. Vehicle and foot traffic adjacent to streams could disturb the soil surface that could also contribute to stream bank erosion and sediment input.

Second, the Project’s delineation of Amargosa Creek shows the watercourse as a single-thread feature. According to the U.S. Fish and Wildlife Service’s (USFWS) [National Wetlands Inventory](#), Amargosa Creek has multiple braided channels (USFWS 2021). The Project’s delineation of Amargosa Creek and the MND does not show or discuss any potential networks of subordinate features that may occur within the bounds of a single, larger channel containing Amargosa Creek. These subordinate features may be highly varied, transient, and active or relict stream processes and forms. Based on the USFWS’s map of Amargosa Creek, the Project could be placing solar arrays and perimeter fencing within the bounds of a single, larger channel containing Amargosa Creek. Therefore, the Project could result in impacts not previously identified without a more thorough analysis of the dryland stream processes occurring within the Project site.

Third, the Project proposes a perimeter fence that may still be within the 100-year floodplain or immediately adjacent to the floodplain. During a 100-year flood event, the fence and solar panel arrays (e.g., mounts, pads, piles) may lead to scouring. This could impact Amargosa Creek by increasing erosion, increasing sediment input, and disturbing vegetation along Amargosa Creek. In addition, the perimeter fence could be placed where there is vegetation adjacent to both watercourses.

Jocelyn Swain
City of Lancaster
February 17, 2022
Page 7 of 20

Fourth, according to Figure 2, a bus parking expansion area is proposed to be located adjacent to Amargosa Creek. Construction of the bus parking expansion area resulting in ground disturbance could impact Amargosa Creek by increasing erosion and sediment input. These impacts could also occur during operation of the bus parking expansion area.

Finally, page 31 of the MND states, "the layout for the proposed solar project avoids disturbing or placing any project features in Amargosa Creek or the unnamed drainage. Access to the site during construction and operation by emergency responders would not require crossing either drainage (Figure 6) and, therefore, no impacts would occur." The MND does not provide any effective or enforceable avoidance measures that the Project would implement during construction to avoid any disturbance to Amargosa Creek or the unnamed drainage, as well as associated natural plant communities. Crossing Amargosa Creek, either by foot traffic or vehicles, could result in erosion and loose sediment that could impair bed, bank, and channel of the watercourse. Foot traffic, vehicles, and operation of large equipment could trample and disturb vegetation associated with the watercourse.

Evidence impacts would be significant: CDFW exercises its regulatory authority as provided by Fish and Game Code section 1600 et seq. to conserve fish and wildlife resources which includes rivers, streams, or lakes and associated natural communities. Fish and Game Code section 1602 requires any person, state or local governmental agency, or public utility to notify CDFW prior to beginning any activity that may do one or more of the following:

- Divert or obstruct the natural flow of any river, stream, or lake¹;
- Change the bed, channel, or bank of any river, stream, or lake;
- Use material from any river, stream, or lake; or,
- Deposit or dispose of material into any river, stream, or lake.

CDFW requires a Lake and Streambed Alteration (LSA) Notification when a project activity may substantially adversely affect fish and wildlife resources. The Project could result in reasonably foreseeable impacts on streams. Accordingly, the Project may have a significant impact on streams. The MND does not provide measures to mitigate for potentially significant impacts. Accordingly, the Project has a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on fish and wildlife resources, including rivers, streams, or lakes and associated natural communities identified by CDFW.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #4: Antelope Valley Transit Authority should notify CDFW pursuant to Fish and Game Code 1602 prior to the City issuing any construction permits, ground disturbing activities, and vegetation clearing.

Please visit CDFW's [Lake and Streambed Alteration Program](#) webpage for information about LSA Notification and online submittal through the Environmental Permit Information Management System (EPIMS) Permitting Portal (CDFW 2022b).

¹ "Any river, stream, or lake" includes those that are dry for periods of time (ephemeral/episodic) as well as those that flow year-round (perennial). 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 water body.

Jocelyn Swain
City of Lancaster
February 17, 2022
Page 8 of 20

Mitigation Measure #5: AVTA's notification to CDFW should provide the following information and analyses:

- 1) Linear feet of streams and area of associated vegetation that would be impacted²;
- 2) Whether the Project would result in impacts on Amargosa Creek downstream from the Project site;
- 3) A hydrological evaluation of the 100-year flood event under existing conditions and Project build-out conditions to provide information on how water and sediment is conveyed through the Project site;
- 4) A scour analysis demonstrating that stream banks, bed, and channel would not erode and be impaired (e.g., aggrade, incised) as a result of the Project;
- 5) A discussion as to why the chosen setback distance of 48 feet from Amargosa Creek is adequate to avoid impacts on Amargosa Creek, subordinate features, floodplain, and associated vegetation; and,
- 6) A complete description of routine maintenance activities that may be required for the life of the Project.

Mitigation Measure #6: AVTA should provide compensatory mitigation for impacts on streams and associated plant communities at no less than 2:1 or per requirements in an LSA Notification or LSA Agreement issued by CDFW. Mitigation should occur where a stream supports desert plant communities impacted by the Project and within the same watershed.

Recommendation #3: CDFW's issuance of an LSA Agreement for a project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document from the City for the Project. To minimize additional requirements by CDFW pursuant to Fish and Game Code section 1600 et seq. and/or under CEQA, the Project's CEQA document should fully identify the Project's potential impacts on stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA Agreement. As such, CDFW recommends the City consider CDFW's comments and revise the MND by incorporating the mitigation measures and revisions recommended in this letter into the Project's final environmental document.

To compensate for any on- and off-site impacts to aquatic and riparian resources, additional mitigation conditioned in any LSA Agreement may include the following: erosion and pollution control measures, avoidance of resources, protective measures for downstream resources, on- and/or off-site habitat creation, enhancement, or restoration, and/or protection, and management of mitigation lands in perpetuity.

Comment #3: Inadequate Disclosure of Adequacy of Biological Impact Fee

Issue: The MND does not provide sufficient information for CDFW to evaluate the adequacy of the Biological Impact Fee to offset the cumulative loss of biological resources in the Antelope Valley.

² Plant community names should be provided based on vegetation association and/or alliance per the [Manual of California Vegetation](#), second edition (Sawyer et al. 2009).

Jocelyn Swain
 City of Lancaster
 February 17, 2022
 Page 9 of 20

Specific Impacts: The Project would develop approximately 43 acres of undeveloped land. This would result in permanent loss of habitat currently supporting western Joshua trees and Sensitive Natural Communities (e.g., *Yucca brevifolia* Woodland Alliance), and potentially supporting Mohave ground squirrel and burrowing owls.

Why impacts would occur: According to page 31 in the MND, the Project's cumulative impacts on biological resources in the Antelope Valley would be mitigated through payment of a \$770/acre Biological Impact Fee. The Biological Impact Fee would "offset the cumulative loss of biological resources in the Antelope Valley as a result of development." The MND concludes that "no impacts would occur" with payment of the Biological Impact Fee. The MND does not explain or make a connection as to why payment of the Biological Impact Fee is adequate to offset Project impacts so that the Project would not have a cumulative impact on biological resources in the Antelope Valley. The MND does not discuss or provide the following information:

- 1) Whether the Biological Impact Fee is going towards an established program;
- 2) How that program is designed to (and will) mitigate the effects at issue at a level meaningful for purposes of CEQA;
- 3) What the Biological Impact Fee would acquire. It is unclear if the Biological Impact Fee would be used to acquire land for preservation, enhancement, and/or restoration purposes, or if the Biological Impact Fee would be used to purchase credits at a mitigation bank, or none of the above;
- 4) What biological resources would the Biological Impact Fee protect/conserve;
- 5) Why the Biological Impact Fee is appropriate for mitigating cumulative loss of biological resources in the Antelope Valley;
- 6) How \$770/acre is sufficient to purchase land or credits at a mitigation bank;
- 7) Where the City may acquire land or purchase credits at a mitigation bank so that the Biological Impact Fee would offset Project impacts on biological resources in the Antelope Valley;
- 8) When the City would use the Biological Impact Fee. Mitigation payment does not equate to mitigation if the funds are not being used. Also, temporal impacts on biological resources may occur as long as the City fails to implement its proposed mitigation;
- 9) How the City would commit the Project to paying the Biological Impact Fee. For example, when would the City require payment from AVTA, how long would AVTA have to pay the fee, and what mechanisms would the City implement to ensure the fee is paid? Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally binding instruments (CEQA Guidelines, § 15126.4).
- 10) What performance measures the proposed mitigation would achieve (CEQA Guidelines, § 15126.4);
- 11) What type(s) of potential action(s) that can feasibly achieve those performance standards (CEQA Guidelines, § 15126.4); and,
- 12) How the Biological Impact Fee would be adequate such that the Project would not have a cumulative impact on biological resources in the Antelope Valley.

Evidence impacts would be significant: The basic purpose of an environmental document is to provide public agencies and the public in general with detailed information about the effect a proposed project is likely to have on the environment, and ways and manners in which the significant effects of such a project might be minimized (Pub. Resources Code, §§ 21002.1, 21061). The MND is insufficient as an informational document because it fails to discuss the

Jocelyn Swain
City of Lancaster
February 17, 2022
Page 10 of 20

ways and manners in which the Biological Impact Fee would mitigate for the Project's cumulative impacts on biological resources in the Antelope Valley. Mitigation measures should be adequately discussed and the basis for setting a particular measure should be identified [CEQA Guidelines, § 15126.4(a)(1)(B)]. The MND does not provide enough information to facilitate meaningful public review and comment on the appropriateness of the Biological Impact Fee at mitigating for impacts on biological resources

This Project may have a significant effect on the environment because the Project may reduce habitat for rare plants or wildlife; cause rare plants or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; and substantially reduce the number or restrict the range of an endangered, rare, or threatened species [CEQA Guidelines, § 15065(a)(1)]. Furthermore, the Project may contribute to the ongoing loss of sensitive, special status, threatened, and/or endangered plants, wildlife, and natural communities in the Antelope Valley. The Project may have possible environmental effects that are cumulatively considerable [CEQA Guidelines, § 15065(a)(3)]. The City is acknowledging that the Project would contribute to the cumulative loss of biological resource in the Antelope Valley because the City is proposing a Biological Impact Fee as compensatory mitigation. The Biological Impact Fee may be inadequate mitigation absent commitment, specific performance standards, and actions to achieve performance standards. Inadequate avoidance and mitigation measures will result in the Project continuing to have a substantial adverse direct and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by CDFW or USFWS.

Recommended Potentially Feasible Mitigation Measure(s):

Recommendation #4: CDFW recommends the City revise the MND to provide adequate, complete, and good-faith disclosure of information that would address the following in relation to the Project:

- 1) Whether the Biological Impact Fee is going towards an established program;
- 2) How the Biological Impact Fee/program is designed to (and will) mitigate the effects at issue at a level meaningful for purposes of CEQA;
- 3) What the Biological Impact Fee would acquire;
- 4) What biological resources would the Biological Impact Fee protect/conserve;
- 5) Why the Biological Impact Fee is appropriate for mitigating the cumulative loss of biological resources in the Antelope Valley;
- 6) Why the Biological Impact Fee is sufficient to purchase land or credits at a mitigation bank;
- 7) Where land would be acquired or where the mitigation bank is located;
- 8) When the Biological Impact Fee would be used; and,
- 9) How the Biological Impact Fee would be adequate such that the Project would not have a cumulative impact on biological resources in the Antelope Valley.

The MND should provide any technical data, maps, plot plans, diagrams, and similar relevant information in addressing these concerns (CEQA Guidelines, § 15147).

Recommendation #5: The MND should include a discussion describing commitment to mitigation via the Biological Impact Fee. For example, the MND should provide specifics as to

Jocelyn Swain
City of Lancaster
February 17, 2022
Page 11 of 20

when AVTA would pay the Biological Impact Fee; what mechanisms the City would implement to ensure the Biological Impact Fee is paid; and when and where the Biological Impact Fee would be used to offset the Project's impacts. Also, the MND should provide specific performance standards as well as actions to achieve those performance standards.

Additional Comments and Recommendations

Recommendation #6: Page 5-1 of Appendix B Biological Reconnaissance Survey states, "[...], MGS [Mohave ground squirrel] are likely absent from the site, and while no further survey work for this species is recommended, MGS are recommended to be included in the ITP [Incidental Take Permit] sought for WJT [western Joshua tree]." CDFW concurs with Mitigation Measure #5, which would require AVTA to obtain an Incidental Take Permit from CDFW for MGS (*Xerospermophilus mohavensis*) prior to the City issuing any construction-related permits. Consistent with Recommendation #1 under Comment #1, CDFW recommends the City revise the MND to disclose the Project's significant impact on MGS as a result of habitat loss and fragmentation both within the Project site and adjacent to the Project site.

Recommendation #7: The Project would require significant ground and soil disturbance. Wildlife may be trapped or crushed by large equipment during Project construction. Accordingly, AVTA should have a CDFW-approved biologist be on site to prevent injury and mortality of wildlife of low mobility. Wildlife should be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to suitable habitat adjacent to the Project site (at least 200 feet off site). A CDFW-approved biologist should be on site daily during initial ground and habitat disturbing activities and vegetation removal. Then, the qualified biologist should be on site weekly or bi-weekly (once every two weeks) for the remainder of Project until the cessation of all ground disturbing activities to ensure that no wildlife is harmed.

Recommendation #8: CDFW recommends that any fencing used during and after the Project be constructed with materials that are not harmful to wildlife. Prohibited materials should include, but are not limited to, spikes, glass, razor, or barbed wire. Use of chain link and steel stake fence should be avoided or minimized as this type of fencing can injure wildlife or create barriers to wildlife dispersal. All hollow posts and pipes should be capped to prevent wildlife entrapment and mortality. These structures mimic the natural cavities preferred by various bird species and other wildlife for shelter, nesting, and roosting. Raptor's talons can become entrapped within the bolt holes of metal fence stakes resulting in mortality. Metal fence stakes used on the Project site should be plugged with bolts or other plugging materials to avoid this hazard. Fences should not have any slack that may cause wildlife entanglement.

Recommendation #9: CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database [i.e., CNDDDB] which may be used to make subsequent or supplemental environmental determinations [Pub. Resources Code, § 21003, subd. (e)]. Information on special status species should be submitted to the CNDDDB by completing and submitting [CNDDDB Field Survey Forms](#) (CDFW 2022c). Information on special status native plant populations and sensitive natural communities, the [Combined Rapid Assessment and Relevé Form](#) should be completed and submitted to CDFW's Vegetation Classification and Mapping Program (CDFW 2022d).

Recommendation #10: CDFW recommends the City condition the Project's MND to include mitigation measures recommended in this letter. CDFW provides comments to assist the City in

Jocelyn Swain
City of Lancaster
February 17, 2022
Page 12 of 20

developing mitigation measures that are specific, detailed (i.e., responsible party, timing, specific actions, location), and clear for a measure to be fully enforceable and implemented successfully via a mitigation monitoring and/or reporting program (CEQA Guidelines, § 15097; Pub. Resources Code, § 21081.6). The City is welcome to coordinate with CDFW to further review and refine the Project's mitigation measures. Per Public Resources Code section 21081.6(a)(1), CDFW has provided the City with a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation and Monitoring Reporting Plan (MMRP; Attachment A).

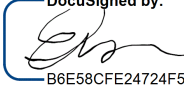
Filing Fees

The Project, as proposed, could have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the City of Lancaster 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 & Game Code, § 711.4; Pub. Resources Code, § 21089).

Conclusion

We appreciate the opportunity to comment on the Project to assist the City of Lancaster in adequately analyzing and minimizing/mitigating impacts to biological resources. CDFW requests an opportunity to review and comment on any response that the City of Lancaster has to our comments and to receive notification of any forthcoming hearing date(s) for the Project [CEQA Guidelines, § 15073(e)]. If you have any questions or comments regarding this letter, please contact Ruby Kwan-Davis, Senior Environmental Scientist (Specialist), at Ruby.Kwan-Davis@wildlife.ca.gov or (562) 619-2230.

Sincerely,

DocuSigned by:

B0E58CFE24724F5...

Erinn Wilson-Olgin
Environmental Program Manager I
South Coast Region

ec: CDFW

Erinn Wilson-Olgin, Los Alamitos – Erinn.Wilson-Olgin@wildlife.ca.gov
Victoria Tang, Los Alamitos – Victoria.Tang@wildlife.ca.gov
Ruby Kwan-Davis, Los Alamitos – Ruby.Kwan-Davis@wildlife.ca.gov
Felicia Silva, Los Alamitos – Felicia.Silva@wildlife.ca.gov
Julisa Portugal, Los Alamitos – Julisa.Portugal@wildlife.ca.gov
Frederic (Fritz) Rieman, Los Alamitos – Frederic.Rieman@wildlife.ca.gov
Thompson Banez, Los Alamitos – Thompson.Banez@wildlife.ca.gov
Cindy Hailey, San Diego – Cindy.Hailey@wildlife.ca.gov
CEQA Program Coordinator, Sacramento – CEQACommentLetters@wildlife.ca.gov
State Clearinghouse, Office of Planning and Research – State.Clearinghouse@opr.ca.gov

Jocelyn Swain
City of Lancaster
February 17, 2022
Page 13 of 20

References:

- [CDFWa] California Department of Fish and Wildlife. 2022. Trimming of western Joshua trees and removal of dead western Joshua trees. What is “Take”? Available from: <https://wildlife.ca.gov/Conservation/CESA/WJT>
- [CDFWb] California Department of Fish and Wildlife. 2022. Lake and Streambed Alteration Program. Available from: <https://wildlife.ca.gov/Conservation/LSA>
- [CDFWc] California Department of Fish and Wildlife. 2022. Submitting Data to the CNDDDB. Available from: <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>
- [CDFWd] California Department of Fish and Wildlife. 2022. Natural Communities — Submitting Information. Available from: <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities/Submit>
- Choi, C. S., Cagle, A. E., Macknick, J., Bloom, D. E., Caplan, J. S., & Ravi, S. 2020. Effects of Revegetation on Soil Physical and Chemical Properties in Solar Photovoltaic Infrastructure. *Frontiers in Environmental Science*, 8(August), 1–9. <https://doi.org/10.3389/fenvs.2020.00140>
- Graham, M., Ates, S., Melathopoulos, A. P., Moldenke, A. R., DeBano, S. J., Best, L. R., & Higgins, C. W. (2021). Partial shading by solar panels delays bloom, increases floral abundance during the late-season for pollinators in a dryland, agrivoltaic ecosystem. *Scientific Reports*, 11(1), 1–13. <https://doi.org/10.1038/s41598-021-86756-4>
- Sawyer, J. O., Keeler-Wolf, T., and Evens J.M. 2009. A Manual of California Vegetation, 2nd ed. ISBN 978-0-943460-49-9.
- Suuronen, A., Muñoz-Escobar, C., Lensu, A., Kuitunen, M., Guajardo Celis, N., Espinoza Astudillo, P., Ferrú, M., Taucare-Ríos, A., Miranda, M., & Kukkonen, J. V. K. (2017). The Influence of Solar Power Plants on Microclimatic Conditions and the Biotic Community in Chilean Desert Environments. *Environmental Management*, 60(4), 630–642. <https://doi.org/10.1007/s00267-017-0906-4>
- Tanner, K. E., Moore-O’Leary, K. A., Parker, I. M., Pavlik, B. M., & Hernandez, R. R. (2020). Simulated solar panels create altered microhabitats in desert landforms. *Ecosphere*, 11(4). <https://doi.org/10.1002/ecs2.3089>
- [USFWS] U.S. Fish and Wildlife Service. Wetlands Mapper. [Accessed 3 Feb 2022] Available from: <https://www.fws.gov/wetlands/data/mapper.html>
- Vyverberg, K. 2010. A Review of Stream Processes and Forms in Dryland Watersheds. California Department of Fish and Game. Available from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=25779>



State of California – Natural Resources Agency
 DEPARTMENT OF FISH AND WILDLIFE
 South Coast Region
 3883 Ruffin Road
 San Diego, CA 92123
 (858) 467-4201
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



Attachment A: Draft Mitigation and Monitoring Reporting Plan

Biological Resources (BIO)			
Mitigation Measure (MM) or Recommendation (REC)		Timing	Responsible Party
MM-BIO-1 – Impacts on Western Joshua Tree – CESA ITP	<p>AVTA shall obtain an Incidental Take Permit from the California Department of Fish and Wildlife for all Joshua trees on the site which would be impacted or removed during the construction and operation of the proposed project prior to the issuance of any construction related permits.</p> <p>AVTA shall submit an Incidental Take Permit Application to CDFW that provides the following information (at a minimum):</p> <ol style="list-style-type: none"> 1) An analysis of individual western Joshua trees (clonal and non-clonal) and western Joshua tree seedbank that would be impacted both within the Project site and within 300 feet of the Project site; 2) An analysis of the acres of natural communities supporting western Joshua trees that would be impacted both within the Project site and within 300 feet of the Project site provided according to alliance and/or association-based natural communities found in the Manual of California Vegetation (MCV), second edition; 3) A map of the Project's site plan overlaid on location of western Joshua trees and natural communities; 4) A discussion of whether solar arrays could impact any western Joshua trees preserved within the Project site and any in-situ western Joshua trees adjacent to the Project site; and, 5) A hydrologic analysis of how water would be transported 	<p>Prior to the City issuing construction related permits</p>	<p>City of Lancaster (City) – issuing construction-related permits</p> <p>Antelope Valley Transit Authority (AVTA) – obtaining an Incidental Take Permit from CDFW</p>

Jocelyn Swain
 City of Lancaster
 February 17, 2022
 Page 15 of 20

	across the Project site and adjacent areas after Project build-out.		
MM-BIO-2 – Impacts on Western Joshua Tree – Compensatory Mitigation	<p>AVTA shall provide compensatory mitigation for the Project’s impact on western Joshua trees at no less than 2:1, or as required in an Incidental Take Permit for western Joshua trees issued by CDFW. Mitigation shall be higher if the Project will impact a western Joshua tree population that is increasing through seedling recruitment.</p> <p>Mitigation lands provided by AVTA shall (at a minimum):</p> <ol style="list-style-type: none"> 1) Support western Joshua trees of similar density, abundance, and age structure; 2) Support natural communities of similar native plant species composition, density, structure, and function to habitat that was impacted; 3) Support nursery plants for western Joshua tree recruits; and, 4) Not be exposed or have the potential to be exposed to disturbances such as OHV activity, illegal access, and encroachment from pending or future development. 	Prior to the City issuing construction related permits	<p>City – issuing construction-related permits</p> <p>AVTA – obtaining an Incidental Take Permit from CDFW</p>
MM-BIO-3 – Impacts on Western Joshua Tree – Compensatory Mitigation	<p>AVTA shall protect mitigation lands in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands pursuant to Assembly Bill 1094 (2012). An appropriate non-wasting endowment shall be provided for the long-term management of mitigation lands. A mitigation plan shall include measures to protect the targeted habitat values in perpetuity from direct and indirect negative impacts. Issues that shall be addressed include but are not limited to the following: protection from any future development and zone changes; restrictions on access; proposed land dedications; control of illegal dumping; water pollution; and, increased human intrusion. A conservation easement and endowment funds shall</p>	Prior to impacts on western Joshua trees	<p>AVTA – obtaining an Incidental Take Permit from CDFW</p>

Jocelyn Swain
 City of Lancaster
 February 17, 2022
 Page 16 of 20

	be fully acquired, established, transferred, or otherwise executed prior to impacts on western Joshua trees.		
MM-BIO-4 – Impacts on Aquatic Resources – Fish and Game Code Section 1602 Notification	AVTA shall notify CDFW pursuant to Fish and Game Code section 1602 prior to the City issuing any construction permits, ground disturbing activities, and vegetation clearing.	Prior to the City issuing construction related permits, ground disturbing activities, and vegetation clearing.	City – issuing construction-related permits AVTA – notifying CDFW pursuant to Fish and Game Code section 1602
MM-BIO-5 – Impacts on Aquatic Resources – Fish and Game Code Section 1602 Notification	AVTA’s notification to CDFW shall provide the following information and analyses: 1) Linear feet of streams and area of associated vegetation that would be impacted; 2) Whether the Project would result in impacts on Amargosa Creek downstream from the Project site; 3) A hydrological evaluation of the 100-year flood event under existing conditions and Project build-out conditions to provide information on how water and sediment is conveyed through the Project site; 4) A scour analysis demonstrating that stream banks, bed, and channel would not erode and be impaired (e.g., aggrade, incised) as a result of the Project; 5) A discussion as to why the chosen setback distance of 48 feet from Amargosa Creek is adequate to avoid impacts on Amargosa Creek, subordinate features, floodplain, and associated vegetation; and, 6) A complete description of routine maintenance activities that may be required for the life of the Project.	Prior to the City issuing construction related permits, ground disturbing activities, and vegetation clearing.	City – issuing construction-related permits AVTA – notifying CDFW pursuant to Fish and Game Code section 1602

Jocelyn Swain
 City of Lancaster
 February 17, 2022
 Page 17 of 20

<p>MM-BIO-6 – Impacts on Aquatic Resources-Compensatory Mitigation</p>	<p>AVTA shall provide compensatory mitigation for impacts on streams and associated plant communities at no less than 2:1 or per requirements in an LSA Notification or LSA Agreement issued by CDFW. Mitigation should occur where a stream supports desert plant communities impacted by the Project and within the same watershed.</p>	<p>Prior to the City issuing construction related permits, ground disturbing activities, and vegetation clearing.</p>	<p>City – issuing construction-related permits</p> <p>AVTA – notifying CDFW pursuant to Fish and Game Code section 1602</p>
<p>REC-1 – Western Joshua Tree Impacts</p>	<p>The City should revise the MND to disclose the Project’s significant impact on western Joshua tree by providing the following information:</p> <ol style="list-style-type: none"> 1) The Project’s potential impact on western Joshua tree seedbank within the Project site; 2) The Project’s potential impact on western Joshua trees and seedbank adjacent to the Project site; 3) The Project’s potential impact on each unique native and non-native natural community supporting western Joshua trees within and adjacent to the Project site; 4) The Project’s construction, operation, and maintenance activities that could impact western Joshua trees and seedbank within and adjacent to the Project site; and, 5) The Project’s cumulative impact on western Joshua tree. 	<p>Prior to finalizing CEQA document</p>	<p>City</p>
<p>REC-2 – Western Joshua Tree Take Authorization</p>	<p>The Project’s MND should address all the Project’s impact on CESA endangered, threatened, and/or candidate species. The Project’s MND should also specify a mitigation monitoring and reporting program that will meet the requirements of an Incidental Take Permit. The take proposed to be authorized by CDFW’s Incidental Take Permit should be described in detail in the Project’s MND. Also, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for an Incidental Take Permit.</p>	<p>Prior to finalizing CEQA document</p>	<p>City of Lancaster</p>

Jocelyn Swain
 City of Lancaster
 February 17, 2022
 Page 18 of 20

<p>REC-3 – 1602 Notification</p>	<p>To minimize additional requirements by CDFW pursuant to Fish and Game Code section 1600 et seq. and/or under CEQA, the Project's MND should fully identify the Project's potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA Agreement. As such, CDFW recommends the City consider CDFW's comments and revise the MND by incorporating the mitigation measures and revisions recommended in this letter into the Project's final environmental document.</p>	<p>Prior to finalizing CEQA document</p>	<p>City of Lancaster</p>
<p>REC-4 – Biological Impact Fee</p>	<p>The City should revise the MND to provide adequate, complete, and good-faith disclosure of information that would address the following in relation to the Project:</p> <ol style="list-style-type: none"> 1) Whether the Biological Impact Fee is going towards an established program; 2) How the Biological Impact Fee/program is designed to (and will) mitigate the effects at issue at a level meaningful for purposes of CEQA; 3) What the Biological Impact Fee would acquire; 4) What biological resources would the Biological Impact Fee protect/conserve; 5) Why the Biological Impact Fee is appropriate for mitigating the cumulative loss of biological resources in the Antelope Valley; 6) Why the Biological Impact Fee is sufficient to purchase land or credits at a mitigation bank; 7) Where land would be acquired or where the mitigation bank is located; 8) When the Biological Impact Fee would be used; and, 9) How the Biological Impact Fee would be adequate such that the Project would not have a cumulative impact on biological resources in the Antelope Valley. <p>The MND should provide any technical data, maps, plot plans, diagrams, and similar relevant information in addressing these concerns.</p>	<p>Prior to finalizing CEQA document</p>	<p>City of Lancaster</p>

Jocelyn Swain
 City of Lancaster
 February 17, 2022
 Page 19 of 20

REC-5 – Biological Impact Fee	The MND should include a discussion describing commitment to mitigation via the Biological Impact Fee. For example, the MND should provide specifics as to when AVTA would pay the Biological Impact Fee; what mechanisms the City would implement to ensure the Biological Impact Fee is paid; and when and where the Biological Impact Fee would be used to offset the Project’s impacts. Also, the MND should provide specific performance standards as well as actions to achieve those performance standards.	Prior to finalizing CEQA document	City of Lancaster
REC-6 – Mohave Ground Squirrel Take Authorization	CDFW concurs with Mitigation Measure #5 which would require AVTA to obtain an Incidental Take Permit from CDFW for Mohave ground squirrel prior to the City issuing any construction-related permits. The City should revise the MND to disclose the Project’s significant impact on Mohave ground squirrel as a result of habitat loss and fragmentation both within the Project site and adjacent to the Project site.	Prior to finalizing CEQA document Prior to the City issuing construction related permits	City – finalizing CEQA document/ issuing construction-related permits AVTA – obtaining an Incidental Take Permit from CDFW
REC-7 – Biological Monitor	AVTA should have a CDFW-approved biologist be on site to prevent injury and mortality of wildlife of low mobility. Wildlife should be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to suitable habitat adjacent to the Project site (at least 200 feet off site). A CDFW-approved biologist should be on site daily during initial ground and habitat disturbing activities and vegetation removal. Then, the qualified biologist should be on site weekly or bi-weekly (once every two weeks) for the remainder of Project until the cessation of all ground disturbing activities to ensure that no wildlife is harmed.	On site daily during initial ground and habitat disturbing activities and vegetation removal Weekly or bi-weekly after	AVTA

Jocelyn Swain
 City of Lancaster
 February 17, 2022
 Page 20 of 20

<p>REC-8 – Construction Fencing</p>	<p>Any fencing used during and after the Project should be constructed with materials that are not harmful to wildlife. Prohibited materials should include, but are not limited to, spikes, glass, razor, or barbed wire. Use of chain link and steel stake fence should be avoided or minimized. All hollow posts and pipes should be capped to prevent wildlife entrapment and mortality. Metal fence stakes used on the Project site should be plugged with bolts or other plugging materials to avoid this hazard. Fences should not have any slack that may cause wildlife entanglement.</p>	<p>During Project construction and activities</p>	<p>AVTA</p>
<p>REC-9 – Submitting Data for Sensitive and Special Status Species and Natural Communities</p>	<p>CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database [i.e., CNDDDB] which may be used to make subsequent or supplemental environmental determinations [Pub. Resources Code, § 21003, subd. (e)]. Information on special status species should be submitted to the CNDDDB by completing and submitting CNDDDB Field Survey Forms. Information on special status native plant populations and sensitive natural communities, the Combined Rapid Assessment and Relevé Form should be completed and submitted to CDFW's Vegetation Classification and Mapping Program.</p>	<p>Prior to finalizing the Project's CEQA document</p>	<p>City</p>
<p>REC-10 – Mitigation and Monitoring Reporting Plan</p>	<p>The City should revise the MND's Biological Resources Mitigation Measures for the Project and condition the environmental document to include mitigation measures recommended in CDFW's comment letter.</p>	<p>Prior to finalizing the Project's CEQA document</p>	<p>City</p>