

Wright Solar Park Habitat Conservation Plan Draft Environmental Assessment Errata

Changes, corrections, and clarifications have been made to the Wright Solar Park Habitat Conservation Plan (HCP) Draft Environmental Assessment (EA) based on public and agency comment and internal review by the U.S. Fish and Wildlife Service (Service). The changes were made to improve the consistency, clarity, and intent of the information provided in the Draft EA, and to respond to comments on the EA analysis and conservation measures in the HCP. These changes, which are summarized in Table 1, are within the scope and analysis of the Draft EA and do not change the Service's consideration or conclusions regarding the environmental consequences of the proposed action or alternatives.

Refinement of the proposed site layout since publication of the Draft EA and inclusion of a new conservation easement along the west side of the solar array resulted in an overall reduction in the permanent and temporary disturbance footprints of the proposed project. Specifically, the Draft EA specified that 1,400 acres would be developed into power generating facilities within the larger 2,731-acre project site (i.e., permanently disturbed), and that an additional 200 acres would be temporarily disturbed during construction as staging areas and temporary access roads. The refined site layout would limit the permanent disturbance footprint to 1,200 acres and the temporary disturbance footprint to 50 acres (i.e., a reduction in the total disturbance footprint from 1,600 acres to 1,250 acres). The San Joaquin kit fox movement corridor on the west side of the solar array would encompass about 285 acres within a permanent conservation easement. These changes are noted as errata to Chapter 2 of the Draft EA in Table 1, but apply to all (numerous) locations where they are referenced in the Draft EA.

Changes reflected in **bold** in Table 1 represent additions to the text in the Draft EA; changes reflected as ~~strike through~~ represent deletions from the text.

The Draft EA and responses to comments on the Draft EA are available for review in the project record at the Services' office in Sacramento, California, and will be posted on the project website for public review.

Table 1. Revisions to the Draft Environmental Assessment

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2.2.2, Alternative 2, Proposed Action Alternative, Security Fencing and Lighting	2-7	<p>Lighting would be installed for ongoing maintenance and security purposes, and would occur at the switchyard, substation, O&M facility, entry and egress gates, and at strategic locations around the facility. Project lighting will meet the following conditions: All lighting would use amber colored lenses where possible and be shielded and directed downward to minimize the potential for glare or spillover onto adjacent ownerships. Lighting would be used from dusk to dawn and switched lights, which would only be activated when workers are present, would be installed and left in the off position until needed or as code requires, where possible. Security lighting would be set up to use infrared or forward looking infrared radar (FLIR) technology.</p> <ul style="list-style-type: none"> • No lighting will be placed near or oriented toward the 230-kV transmission corridor to avoid affecting wildlife that may use this area for nighttime movement. • Narrow spectrum bulbs will be used to limit the range of species affected by lighting. • All lighting shall be designed so that exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated, and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light sources are shielded to prevent light trespass outside the project boundary and neither the lamp nor the reflector interior surface would be visible from outside the footprint of the facilities. • Light fixtures shall be installed on poles of minimal height or be installed on the buildings. • All lighting shall be of minimum necessary brightness consistent with worker safety • The number of lighting fixtures shall be limited to the minimum required. • All illuminated areas not occupied on a continuous basis shall have switches or motion detectors to light the area only when it is occupied. Any perimeter lighting shall also only be motion activated. • All lighting poles, fixtures, and hoods shall be of dark-colored material.

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2.2.2, Alternative 2, Proposed Action Alternative, Construction Actions	2-7	<ul style="list-style-type: none"> • Operational exterior lighting shall be limited to the O&M building and the substation, unless other exterior lighting is required by law or code. • Unless determined necessary by Merced County for safety or security reasons, any signs at the entry of the project site shall not be lit (reflective coating is acceptable). • Lighting would be used from dusk to dawn for the project substation to conform to National Electrical Safety Code (NESC) requirements and all applicable Merced County outdoor lighting codes. <p>In total, about 1,600 acres 1,250 acres would be disturbed during construction, including 1,400 acres 1,200 acres that would support solar infrastructure and 200 acres 50 acres that would be temporarily disturbed during construction for staging and access.</p>
2.2.2, Alternative 2, Proposed Action Alternative, Site Access and Construction Staging	2-8	<p>In total, approximately 200 acres 50 acres would be temporarily disturbed during construction.</p>
2.2.2, Alternative 2, Proposed Action Alternative, Site Disturbance, Grading and Compaction	2-8	<p>As noted above, the maximum footprint of the Proposed Action Alternative would be approximately 1,600 acres 1,250 acres, including staging areas and access roads.</p>
2.2.2, Alternative 2, Proposed Action Alternative, Design Features	2-11 through 2-12	<p>The following additional design features shall be included to increase the amount of movement areas for San Joaquin kit fox and to avoid and minimize impacts on the covered species:</p> <ul style="list-style-type: none"> • The solar panels shall be constructed in a layout that is consolidated to the extent feasible, while still meeting the goal of using the existing contours of the land and not resulting in a large amount of earth work. • The battery storage facility shall be placed on the exterior of the panel layout (not in one of the corridors) and will be constructed as close to the panels as possible to reduce the overall footprint of the project. • A buffer that is at least 500 feet wide shall be incorporated into the site layout on the west side of the project area, starting at the toe of the slope, or lands under the control of the applicant, if those lands are further into the project area than the toe of the slope. The buffer will extend into the project area. No solar panels or permanent structures will be placed in the buffer and the portion of the buffer under control of the project applicant will be placed under a conservation easement in perpetuity and managed as low

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2.2.2, Alternative 2, Proposed Action Alternative, Avoidance and Minimization Measures	2-12 through 2-13	<p>grassland suitable for San Joaquin kit fox and associated grassland species.</p> <ul style="list-style-type: none"> • All employees, consultants and contractors, including grazing operators, would receive environmental training prior to the commencement of construction or grazing activities. • To prevent inadvertent entrapment of San Joaquin kit foxes or other animals during construction, all excavated, steep-walled holes or trenches more than 5-foot 2-foot deep shall be covered at the close of each working day by plywood or similar materials. Any covers that are installed would be able to be removed quickly by construction staff should the need arise. If covers require heavy equipment to lift them, some means of inspecting the inside of the hold would be installed (e.g., Plexiglass windows) so that biological monitors can ensure no animals are trapped inside. Holes and trenches less than 5-foot 2 feet may either be covered or provided with escape ramps at a rate of one ramp every 100 feet. Escape ramps may be constructed of earth fill or wooden planks with a slope no steeper than 45 degrees. If wooden planks are used, perpendicular grooves or rungs shall be provided to aid in traction. All holes and trenches, whether covered or uncovered, more than 2 feet deep shall be inspected prior to the start of the construction day, around midday, and at the end of each construction day as they are being covered for the night. These inspections shall occur for trapped animals, regardless of whether or not work is occurring in that area. Before holes or trenches are filled, they shall be thoroughly inspected for trapped animals. Work would shall not continue until trapped animals have moved out of or are removed from the open trench and relocated to a location approved by the Service and California Department of Wildlife (CDFW). • Speed limits within the project site would be limited to 15 mph during the day on project access roads and shall not exceed 10 mph during emergency nighttime work. daylight hours and 10 mph at night. All project-related vehicles and equipment would be restricted to established roads, construction areas, and designated staging areas. • When rodent traps are used inside of facilities only humane traps shall be used and animals shall be relocated and released outside of buildings. • All new sightings of covered species shall be reported to the California Natural Diversity Database (CNDDDB). A copy of the reporting form and a topographic map clearly marked with the location of where species were observed shall also be provided to the Service and CDFW.

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Table 2-1, California tiger salamander – Construction, O&M and Decommissioning of Solar Park	2-14	<ul style="list-style-type: none"> • Metal flashing shall be installed Install tightly woven exclusion fencing between the work area and alkali vernal pools to prevent California tiger salamander from entering the work area. Determine the specific location of the fencing in consultation with the Service and CDFW. • Rodenticide, herbicide, and pesticide use is prohibited. Limit herbicide applications to areas where mowing is not possible (e.g., around buildings and against poles and other infrastructure).

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Table 2-1, Blunt-nosed leopard lizard – Construction, O&M and Decommissioning of Solar Park	2-14	<ul style="list-style-type: none"> • Conduct preconstruction surveys of suitable blunt-nosed leopard lizard habitat according to Service protocols the most recent agency-approved protocol (i.e., CDFW protocol unless the Service develops survey protocols for this species during the permit term). If an occupied burrow is located, contact the Service and CDFW and follow removal and relocation protocols in consultation with the wildlife agencies. Submit results of preconstruction survey to the Service and CDFW for review and approval. No ground-disturbing maintenance activities shall occur in or adjacent to areas where blunt-nosed leopard lizard have been detected until a Service- and CDFW-approved avoidance and monitoring plan is in place. • No monofilament plastic or soil strengthening agents, geo fabrics, and dust suppression products that would adversely affect these species will be used for erosion control. Only natural fiber, biodegradable meshes shall be used in erosion control mats, blankets, and straw or fiber wattles, and these features shall be installed in such a way as to prevent entrapment of special-status reptiles or amphibians while maintaining access to potential breeding habitat. The specific erosion control agents shall be approved by CDFW prior to use. • Between April 1 and September 30, mowing is allowed only when temperatures are below 75 degrees Fahrenheit (F), measured 1-2 centimeter (cm) above the ground in the sun, to avoid optimal activity temperatures (i.e., 77F-95F measured 1-2 cm above the ground [California Department of Fish and Game 2004]) for blunt nosed leopard lizard. During the active season for blunt-nosed leopard lizards (generally starting April 15, but any time of year with temperatures of 77 degrees Fahrenheit as measured 2 centimeters above the ground), prior to any planned ground-disturbing construction, O&M, or decommissioning activities, such as the regarding of project site roads, a biologist with experience in surveying for blunt-nosed leopard lizard shall assess site conditions for supporting the species.
Table 2-1, Blunt-nosed leopard lizard – Construction, O&M and Decommissioning of Solar Park	2-15	Rodenticide, herbicide , and pesticide use is prohibited. Limit herbicide applications to areas where mowing is not possible (e.g., around buildings and against poles and other infrastructure).
Table 2-1, San Joaquin kit fox – Construction, O&M and Decommissioning of Solar Park	2-15	Rodenticide, herbicide , and pesticide use is prohibited. Limit herbicide applications to areas where mowing is not possible (e.g., around buildings and against poles and other infrastructure).

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2.2.2, Alternative 2, Proposed Action Alternative, Habitat Preservation and Management	2-18	<p>To offset the permanent loss and degradation of approximately 1,400 acres 1,250 acres of habitat and temporary disturbance of an additional 200 acres 50 acres within the project site, the Proposed Action Alternative would include management of habitat onsite, outside of the project footprint, and conservation of approximately 2,450 acres of grazed grasslands southeast of the project site (Figure 1-2). In addition, the applicant would establish a permanent buffer along the western edge of the project site. This buffer would be on the flat part of the valley and would be revegetated and managed in a low grassland condition to increase prey availability and natural denning opportunities, and to provide a movement corridor past the project site. The buffer, which would encompass approximately 285 acres, would be placed under a conservation easement and protected in perpetuity.</p>
EC-4, Avoid and minimize impacts on nesting birds.	2-19	<p>The following measures will be implemented to ensure that the Proposed Action Alternative does not significantly affect nesting bird species.</p> <ul style="list-style-type: none"> <li data-bbox="909 688 1818 776">• Remove suitable nesting habitat (trees and ground vegetation) during the non-breeding season (generally September 1–January 31 September 16 through December 31). <li data-bbox="909 786 1860 873">• To the extent feasible, avoid construction activities in or near suitable or occupied nesting habitat during the breeding season (generally February 1–August 31 January 1 through September 15). <li data-bbox="909 883 1860 1192">• If construction activities (including vegetation removal, clearing, and grading) will occur during the nesting season for migratory birds, a qualified biologist will conduct preconstruction nesting bird surveys within 14 days no more than 10 days prior to construction activities within a given work area. Suitable habitat within the construction area and areas within a 500-foot buffer will be surveyed for tree-nesting raptors, and a 50-foot buffer will be surveyed for all other bird species. The initial survey should be conducted at least 14 days no more than 10 days prior to construction to allow sufficient time to develop an avoidance strategy if nests are identified. A final survey should be conducted within 24 hours of ground-disturbing activities. <li data-bbox="909 1201 1860 1380">• If an active nest is identified near a given work area and work cannot be conducted outside the nesting season (February 1–August 31 January 1 through September 15), a no-activity zone will be established around the nest by a biologist with avian experience in coordination with the Service. Fencing and/or flagging will be used to delineate the no-activity zone. To minimize the potential to affect the reproductive success of the nesting pair, the extent of the no-activity

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Figure 2-1	2-25	<p>zone will be based on the distance of the activity to the nest, the type and extent of the proposed activity, the duration and timing of the activity, the sensitivity and habituation of the species, and the dissimilarity of the proposed activity to background activities. The no-activity zone will be large enough to avoid nest abandonment and will be between 50 and 1,000 feet from the nest, or as otherwise required by the Service.</p> <ul style="list-style-type: none"> • All hollow vertical tubes, such as solar mount poles and chain link fence poles will be capped upon installation to prevent the entrapment of migratory birds. <p>Figure 2-1 in the Draft EA is replaced with the attached (revised) Figure 2-1 which depicts the new buffer provided on the west side of the project site to allow for San Joaquin kit fox movement.</p>
3.2.2, Agricultural Resources, Proposed Action Alternative, Conversion of Important Farmland to Nonagricultural uses	3.2-5	<p>Mitigation Measure AG-1: Enter into a Community Solar Benefits Agreement</p> <p>In order to compensate for the direct and indirect loss of agricultural employment, reductions in tax revenues, and harm to the commercial viability of agriculture in Merced County associated with the long-term conversion of approximately 1,388 acres of cropland, the applicant will enter into a Community Solar Benefits Agreement with Merced County, as required by the County, that provides for direct compensation directly compensates Merced County for accrued losses over the lifetime of the solar facility.</p>
3.3.2, Biological Resources, Environmental Setting, Special-Status Species	3.3-12	<p><u>Migratory Birds</u></p> <p>The project site is in a region of the northern San Joaquin Valley that is dominated by agricultural production. This region also supports the largest remaining block of wetlands in California’s Central Valley containing 70,000 acres of private wetlands and associated grasslands, and surrounding 53,000 acres of state and federal lands (U.S. Fish and Wildlife Service 2014). These wetlands and associated grasslands, which include two national wildlife refuges and four state wildlife areas, comprise over 160,000 acres and are collectively known as the Grasslands Ecological Area (U.S. Fish and Wildlife Service 2014). The National Audubon Society has recognized the Grasslands Ecological Area as an Important Bird Area for wintering waterfowl and the Western Hemisphere Shorebird Reserve Network has identified the Grasslands Ecological Area as being of international importance to shorebirds (National Audubon Society 2013, Western Hemisphere Shorebird Reserve Network 2009). The Grasslands Ecological Area supports one-half million migratory ducks, geese, and swans each year between November and February</p>

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3.3.2, Biological Resources, Proposed Action Alternative, San Joaquin Kit Fox – Operation-Related Impacts	3.3-31	<p>(National Audubon Society 2013). This area also supports breeding and wintering tricolored blackbirds, wintering sandhill cranes, wintering white-faced Ibis, and serves as a major stopover area for shorebirds each fall, winter, and spring (National Audubon Society 2013). Nearly 50% of all the shorebirds in California’s Central Valley are found in the Grasslands Ecological Area during mid-April, the peak of spring migration (Western Hemisphere Shorebird Reserve Network 2009).</p> <p>The project site is approximately 6–10 miles west and southwest of the Grasslands Ecological Area and does not provide similar wetland habitat and only very limited foraging opportunities for waterfowl and shorebirds. Waterfowl typically forage in flooded or moist habitats, including agricultural habitats such as rice, corn, or post-harvest flooded fields (Central Valley Joint Venture 2006:49). The project site provides very limited habitat for shorebirds due to the lack extensive emergent wetlands (e.g., managed wetlands), seasonal wetlands, shallow flooded habitat (e.g., evaporation and sewage ponds), and flooded agricultural lands (e.g., rice, post-harvest flooded fields) that shorebirds in the Central Valley typically use (Shuford et al. 1998:231, Hickey et al. 2003:38).</p> <p>Use of rodenticides, herbicides, and pesticides would be prohibited on the project site, and the use of herbicides would be limited to areas where mowing is not possible (e.g., within fenced areas around buildings and beneath solar panels).</p>

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3.3.2, Biological Resources, Proposed Action Alternative, California Tiger Salamander – Operation-Related Impacts	3.3-33	Finally, the use of rodenticides, herbicides , and pesticides would be prohibited on the project site, and herbicide applications would be limited to areas where mowing is not possible.
3.3.2, Biological Resources, Proposed Action Alternative, Blunt-Nosed Leopard Lizard – Operation-Related Impacts	3.3-35	The use of rodenticides, herbicides , and pesticides would be prohibited within the project site, and herbicide applications would be limited to areas where mowing is not possible.
3.3.2, Biological Resources, Proposed Action Alternative, Special-Status Invertebrates	3.3-36	<p><u>Mitigation Measure BIO-1: Protect elderberry shrub</u></p> <p>The following measures will be implemented prior to and during construction to ensure that the construction activities would not have a significant impact on valley elderberry longhorn beetle.</p> <ul style="list-style-type: none"> • Avoid removal Removal of the elderberry shrub on the project site is prohibited. • Orange Construction barrier fencing, sized to prevent San Joaquin kit fox and other sensitive species from becoming entrapped in fence openings, will be placed along a perimeter 100 feet from the dripline of the elderberry shrub.

O&M = operations and maintenance.
 kV = kilovolt.
 Service = U.S. Fish and Wildlife Service.
 EA = environmental assessment.

References

- Central Valley Joint Venture. 2006. *Central Valley Joint Venture Plan – Conserving Bird Habitat*. U.S. Fish and Wildlife Service, Sacramento, CA.
- Hickey, C., W. D. Shuford, G. W. Page, and S. Warnock. 2003. *The Southern Pacific Shorebird Conservation Plan: A Strategy for Supporting California’s Central Valley and Coastal Shorebird Populations*. Version 1.1. PRBO Conservation Science, Stinson Beach, CA.
- National Audubon Society. 2013. *Important Bird Areas*. Available: <http://netapp.audubon.org/iba/Site/173>. Accessed: September 11, 2014.
- Shuford, W. D., G. W. Page, and J. E. Kjelson. 1998. Patterns and Dynamics of Shorebird Use of California’s Central Valley. *The Condor* 100, No. 2.
- U.S. Fish and Wildlife Service. 2014. *Grasslands Wildlife Management Area*. Available: <http://www.fws.gov/refuges/profiles/index.cfm?id=81653>. Accessed: September 11, 2014.
- Western Hemisphere Shorebird Reserve Network. 2009. *The Grasslands*. Available: <http://www.whsrn.org/site-profile/grasslands>. Accessed: September 11, 2014.