

EXECUTIVE SUMMARY

Maricopa Sun, LLC (Project Administrator) obtained approval from the County of Kern for the Maricopa Sun Solar Complex, a renewable energy solar project (Project) that included: 1) a General Plan Amendment (GPA) to the Circulation Element (GPA 5, Map 158 and GPA 1, Map 159) to eliminate section and midsection line arterial and collector road reservations; 2) a Conditional Use Permit (CUP) (Map 158 and Map 159) to allow the construction and operation of a solar electrical generating facility in an A (Agricultural) zone; 3) cancellation of Williamson Act land use contracts; and 4) recordation of Tentative Parcel Maps (TPMs) 11967 and 11968 (County of Kern 2010b). The Project involves the construction and operation of solar photovoltaic (PV) power generating facilities in the central west portion of unincorporated Kern County. Complete buildout of the Project will produce up to 700 megawatts (MW) of electricity.

The Project will be constructed by various third party solar developers (Developers) on private properties currently owned by affiliates of Maricopa Sun, LLC. The lands may be sold or leased to such Developers. Maricopa Sun, LLC will administer the activities performed by the Developers within the Project lands in accordance with the terms and conditions described in this Section 10(a)(1)(B) Habitat Conservation Plan (HCP) (Maricopa Sun, LLC HCP; also known as “MSHCP”). Also, as a component of MSHCP compliance, the Project Administrator (in cooperation with the Developers) will place the Solar Sites into conservation easements, effective once building/grading permits have been obtained at the start of solar development. The conservation easements will initially be operated as solar facilities and will transition to conservation lands to be managed as habitat for Covered Species once the solar facilities are decommissioned (after a maximum permit term of 35 years).

In 2011, an Environmental Impact Report (EIR) for the Maricopa Sun Solar Complex was adopted by Kern County. The EIR identified and evaluated potential environmental impacts associated with implementation of the proposed project. The analysis concluded that pursuant to Sections 15126.2 and 15355 of the California Environmental Quality Act (CEQA), impacts to biological resources would be significant and unavoidable following project compliance with all regulatory, statutory, and mitigation measures. This finding was based on the following: 1) although the project site is mostly devoid of special-status plant and animal species, after the project implementation, growth of natural vegetation on site may encourage special-status species to take advantage of newly formed habitat; 2) solar operations could result in the loss of those species and their habitat; and 3) considered alone, the loss of species and their habitat would not be significant; however, with other renewable energy projects being proposed throughout Kern County, there will be a significant cumulative impact (County of Kern, 2010b). The proposed project would result in take of federally listed species; therefore, incidental take authorization through the Section 10 process of the Federal Endangered Species Act (FESA) is necessary.

The purpose of this MSHCP is to outline a conservation strategy that Maricopa Sun, LLC and its affiliates will implement to minimize, avoid, and mitigate, to the maximum extent practicable, the incidental take of species that are currently listed or are likely to become listed by the United States Fish and Wildlife Service (USFWS) during the life of the project, and that may be subject to “take” as defined by the FESA. This MSHCP has been prepared to obtain incidental take

authorization under Section 10 of the FESA and Section 2081 of the California Endangered Species Act (CESA) for the proposed Covered Activities.

The MSHCP contains content as required by Section 10 of the FESA and its implementing regulations, as follows:

- An assessment of impacts likely to result from the proposed taking of one or more federally listed species.
- Measures undertaken to avoid, minimize, mitigate, and monitor impacts; the funding that will be made available to implement such measures; and the procedures to address unforeseen or extraordinary circumstances.
- Alternative actions to the taking that were analyzed, and the reasons why such alternatives were not adopted.
- Additional measures that the USFWS may require as necessary or appropriate.

Activities included in the MSHCP (Covered Activities) allow for: (1) pre-construction, construction, operations and maintenance, and decommissioning activities within Solar Sites; (2) management and maintenance activities associated with Movement Corridors and Conservation Sites, including monitoring and reporting activities; and (3) activities associated with implementation of the conservation program specified in this MSHCP. For the purposes of this MSHCP, the activities and their impacts described here represent the maximum scenario. It is anticipated that actual realized activities and their impacts will be less than have been indicated here.

Project Description

The Maricopa Sun Solar Complex will include: a series of PV panels, inverters, transformers, circuit breakers, metering equipment, switchgear, protective relays, and larger transformers to step up the voltage to match the voltage of the transmission grid at the interconnection point, transmission lines, and operations and maintenance buildings adjacent to the solar field. The Project will also include one or more meteorological monitoring stations to track insulation temperature, wind direction, and speed.

The project sites are primarily comprised of undeveloped and vacant agricultural land, and have minimal relief. Surrounding land uses are both active and inactive agricultural land. Surrounding land use designations include intensive and extensive agriculture designations, lands designated as flood hazard areas, lands designated for public facilities; lands designated for the protection of important watershed recharge areas or wildlife habitat, or having value as a buffer between resource areas and urban areas, and lands designated for industrial uses.

The lands included in the MSHCP (Permit Area) encompass 5,784.3 acres, which are described as follows:

Permit Area: The Permit Area is the gross acreage of all parcels, which includes those parcels that will be developed into solar facilities (Solar Sites) and those that will be set aside as conservation areas (Conservation Sites). The Permit Area includes all existing public easements,

movement corridors, setbacks, the Solar Development Footprints, and the Conservation Sites. The Permit Area totals 5,784.3 acres.

Solar Sites: The portion of the Project that will be developed as the “Maricopa Sun Solar Complex.” The Solar Sites encompass 3,798.2 acres, all of which will be placed in conservation easements upon obtaining building/grading permits for solar facilities.

Solar Development Footprints: Those portions of the Solar Sites that will be developed into solar facilities. The Solar Development Footprints include a reduced area from the Solar Sites because of mandatory setbacks from existing roadways, setbacks from native habitat, the presence of wildlife Movement Corridors, and other necessary reductions in acreage. The Solar Development Footprints encompass 3,700.5 acres.

Movement Corridors: Corridors located along specified perimeters of Solar Sites that will be enhanced to facilitate the movement of wildlife species. The Movement Corridors encompass 33.8 acres.

Conservation Sites: These are parcels that will remain in their native state and/or be enhanced to provide habitat for species. These lands will be permanently conserved as mitigation for the Project’s impacts to biological species. These sites encompass 1,894.4 acres.

Construction of the first solar development for the Maricopa Sun Solar Complex is planned to begin immediately after procurement of all permits (which includes this MSHCP) and approval of required plans. Construction of solar facilities on all Solar Sites is anticipated to be completed over an 8- to 10-year period from the commencement of the initial development. Unknown constraints could extend the development phase to a 10- to 15-year period. It is anticipated that development of each individual solar facility within the Maricopa Sun Solar Complex will take 9 to 18 months, depending on the size of the solar facility, weather conditions, labor and equipment availability, and time of year. The operational life of each solar facility is anticipated to span a period of up to 25 years, during which time, routine operations and maintenance activities and repairs will be implemented. Decommissioning will occur prior to expiration of the MSHCP.

Biological Goals and Objectives

The biological goals and objectives for the MSHCP are required as part of the USFWS’s five-point policy initiative designed to clarify the elements of an HCP program as they relate to: measurable biological goals, adaptive management, monitoring, permit duration, and public participation. An HCP must include biological goals and objectives that set out specific measurable targets that the plan is intended to meet. These targets are based on the best scientific information available, and are used to guide conservation strategies for species covered by the plan.

The goals and objectives developed for each of the Covered Species are similar, as are the rationale for their importance as part of the conservation strategy. The Project’s primary

biological goals are to preserve Covered Species and provide Covered Species habitat within the Permit Area by:

1. Increasing the ability of San Joaquin kit fox to disperse through the Permit Area and providing habitat within the region;
2. Preserving existing populations of the Tipton kangaroo rat within the Permit Area and, providing habitat for the Tipton kangaroo rat within the Permit Area;
3. Preserving existing populations of the Nelson's antelope squirrel within the Permit Area and providing habitat for the Nelson's antelope squirrel within the Permit Area;
4. Preserving existing populations of the western burrowing owl within the Permit Area and, providing habitat for the western burrowing owl within the Permit Area; and
5. Providing habitat for the blunt-nosed leopard lizard within the Permit Area.

Conservation

The establishment of conservation easements on conservation lands and the initiation of management actions on those lands will be phased to coincide with the development of Solar Sites. Phasing of the establishment of the conservation easements will be accomplished such that each solar development will be offset with compensation obligations prior to initiation of development.

Habitat management, enhancement, and monitoring activities will be conducted during all phases of the Project and will be conducted on Solar Sites and Conservation Sites. Assurance of compliance with the MSHCP will be achieved through biological and Project monitoring carried out by a USFWS (and CDFW) approved, third-party biological monitor (Monitoring Agent). Conditions of Project approval and mitigation measures for the Project allow for mineral rights interests to be served by reserving a maximum of 5 separate 10-acre drilling site areas per 640 acres, and allowing for routes of ingress and egress thereto. The locations of the drilling islands have not yet been identified. Activities associated with the exploration and/or development of potential future drilling sites for the purposes of oil and gas exploration and production by mineral rights owners will be subject to separate incidental take authorization and environmental review, and are not covered by this MSHCP.

Impacts and Benefits

Take resulting from direct adverse effects of project activities has the potential to occur during all phases of the Project. Direct adverse effects are those effects that result in the direct loss of habitat or direct lethal take of individuals of Covered Species. Implementation of specific minimization and avoidance measures will greatly reduce or eliminate the risk of the potential for take to occur due to direct adverse effects of Covered Activities. Nevertheless, there is a risk of direct adverse effects, including lethal take to occur as a result of some Covered Activities.

Complete development of the Maricopa Sun Solar Complex will result in the loss of 3,798.2 acres of potential habitat for all Covered Species. The project lands (Solar Sites, Movement Corridors, and Conservation Sites) are, with few exceptions, currently in a farm-ready, disked state, and provide poor to no habitat for any of the Covered Species. The potential exists that the project lands could return to a more natural state once disking has ceased, and could therefore support Covered Species at a distribution and level of abundance that does not currently exist.

The Project will ultimately lead to an improvement in habitat for Covered Species on all project lands (5,692.6 acres), occurring at various intervals over the course of the 35-year HCP timeframe, or after decommissioning. Habitat enhancements and management for Covered Species will begin immediately on the conservation lands. The Solar Sites will not be managed for Covered Species during the life of a solar project, and Covered Activities occurring on the Solar Sites are assumed to result in take of Covered Species. Minimization and avoidance measures will be implemented throughout the 35-year MSHCP permit term to reduce or eliminate the potential for lethal take of Covered Species to the extent possible.

Monitoring

Three specific types of monitoring will be conducted in association with the MSHCP:

- Compliance monitoring, which tracks the permit holder's compliance with the requirements specified in the HCP and permit;
- Effects monitoring, which tracks the effects of the Covered Activities on Covered Species; and
- Effectiveness monitoring, which tracks the progress of the conservation strategy in meeting the biological goals and objectives of the HCP.

A geo-database will be created to ensure that all monitoring is properly implemented. The database will be populated with relevant information as tasks are completed, including the results of surveys and studies. Information gleaned from queries of the database will help guide the adaptive management process.

Reporting

Reporting for the Project will include reporting on compliance with the avoidance and minimization measures incorporated into the HCP, reporting to document the effects of the HCP on Covered Species, and reporting to document the effectiveness of the HCP. Compliance monitoring during the pre-construction, construction, operations and maintenance, and decommissioning phases will be ongoing at a level commensurate with project activities.

Implementation

The MSHCP will be implemented under a Section 10(a)(1)(B) permit issued by the USFWS to the Project Administrator. The permit term will be 35 years, and will encompass Covered Activities up to and including the decommissioning process of the solar facilities. Assurance of compliance with the MSHCP will be achieved through biological and project monitoring.

Alternatives

Section 10(a)(2)(A) of the FESA requires applicants to consider alternative actions to the take of federally-listed species and explain the reasons why those alternatives were not selected. The following alternatives were considered and rejected for the reasons described:

No Action – the Project would not occur. An ITP would not be issued, because there would be no potential for take of Covered Species. Conversely, there would be no conservation benefit, because the Conservation Management Plan would not be implemented.

Reduced Permit Area – The Permit Area would be reduced from 5,784.3 acres to 3,682 acres by removing selected Project Sites. This alternative would result in fewer adverse effects to Covered Species; however, less land would be permanently conserved and managed for the benefit of wildlife, and the energy production goals of the Project would not be met.

Gravel Site – The ground surface of the Solar Development Footprints would be covered with gravel. The presence of gravel on the Solar Development Footprints would greatly reduce the potential habitat value of these lands after decommissioning, greatly increase the costs of habitat enhancement and management, and greatly reduce any conservation benefits that could otherwise be realized.

Costs

Operations and maintenance, and decommissioning activities and costs will vary widely by project and construction schedules of the independent solar developers and their subcontractors (Developers) within the Maricopa Sun Solar Complex.

Extensive financial analyses of projected costs to implement the Project have been performed. The general cost categories for which estimates have been developed are: land acquisition, program administration, easement agreements, and an endowment agreement. Generally, Developers will be responsible for the costs to implement the MSHCP (i.e., those associated with monitoring, and those associated with implementation of the habitat conservation plans).