



DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO, CALIFORNIA 95814-2922

RECORD OF DECISION

ACTION ID: SPN-2009-00443

APPLICANT: Panoche Valley Solar, LLC

PROJECT NAME: Panoche Valley Solar Project

I have reviewed and evaluated, in light of the overall public interest, the documents and factors concerning the permit application for the Proposed Action, as well as the stated views of interested agencies and the public. In doing so, I have considered the possible consequences of the Proposed Action in accordance with regulations published in 33 Code of Federal Regulations (CFR) Parts 320 through 332 and 40 CFR Part 230.

As described in the Final Environmental Impact Statement (EIS), the Proposed Action is to construct a 247 megawatt (MW) solar facility, electricity collection lines and inverters, operations and maintenance building, roads, fencing, water tanks and water treatment facilities, interconnection facilities, telecommunications upgrades, and compensatory mitigation. The Proposed Action involves the discharge of dredged or fill material into 0.121 acres of waters of the U.S. for the construction of the solar facility, and 0.10 acres of waters of the U.S. for the construction of the proposed compensatory mitigation. As such a Department of the Army permit under Section 404 of the Clean Water Act (CWA) is required for the Proposed Action.

I. Background: See Section 1.3 of the Final EIS for a complete background on the Proposed Action

In April 2010, the applicant submitted to the U.S. Army Corps of Engineers (Corps), San Francisco District (SPN) a pre-construction notification for authorizing the Proposed Action as proposed at that time under Nationwide Permit 12, Utility Line Activities. The applicant submitted an updated application in August 2010. SPN made a preliminary determination that the Proposed Action as proposed may have more than minimal adverse impacts on the environment under the 2007 Nationwide Permit Program and determined that an individual permit would be required. SPN published a public notice on the updated application in December 2010; this update revised the applicant's Proposed Action to conform to the project permitted by San Benito County in its conditional use permitting process.

Due to the potential for significant adverse impacts on aesthetics and Federally-listed threatened and endangered species and potential significant beneficial economic impacts, the SPN determined in 2012 that an EIS should be prepared to analyze the potential impacts. The Federally-listed threatened and/or endangered species of particular concern consist of:

- Blunt-nosed leopard lizard (BNLL, *Gambelia silus*)
- Giant kangaroo rat (GKR, *Dipodomys ingens*)

- San Joaquin kit fox (SJKF, *Vulpes macrotis mutica*)
- California tiger salamander (CTS, *Ambystoma californiense*)

Scoping for the EIS began on July 19, 2012, with publication of a Notice of Intent to Prepare an EIS in the Federal Register (77 FR 42488).

In May 2015, in accordance with 33 CFR, Part 325.8(b)(4), the permit decision for the project as proposed was elevated from SPN to the Corps South Pacific Division (SPD), with technical regulatory support provided by the Corps Sacramento District (SPK).

In September 2015, a Draft EIS was issued by the Corps. A Notice of Availability was published in the Federal Register on September 11, 2015 (80 FR 54786). A public notice for the Draft EIS was issued by SPD and SPN on September 11, 2015. The Draft EIS did not identify any significant environmental effects. Two public meetings on the Draft EIS were held. The first meeting was held on October 6, 2015, at the Veterans Memorial Building in Hollister, California. The second public meeting was held on October 7, 2015, at the Panoche Elementary School in Paicines, California. A total of 43 individuals attended the public meetings, with 19 providing verbal comments. During the Draft EIS public review period, a total of 35 comments were received, including 19 verbal comments provided during the public meetings and 16 written comments.

The Corps issued a Final EIS in December 2015. A Notice of Availability was published in the Federal Register on December 31, 2015 (80 FR 81818). A public notice announcing the Final EIS was issued by SPD and SPN on December 31, 2015. Five comment letters were received on the Final EIS.

II. Project Purpose and Need

a. Purpose: The overall project purpose, as identified in the Final EIS, is to construct an approximately 247 MW solar PV energy generating facility and associated transmission and support facilities in the west-central portion of California's Central Valley (generally encompassing portions of San Benito, Merced, Madera, Fresno, and Kings Counties). The Corps has determined that it is appropriate to include a minimum 247 MW solar facility in the overall project purpose for the following reasons:

1. The construction of a solar facility that is less than 247 MW requires similar infrastructure and telecommunications upgrades as a solar facility that is 247 MW or higher. Therefore, the interconnection costs would be similar, but there would be less revenue for the cost of power, with no appreciable reduction in impacts to waters of the U.S.

2. Since the original proposal, the applicant has reduced the proposed solar facility from 1,000 MW to 420 MW, to 399 MW, to the currently proposed 247 MW facility. Based on the substantial reduction in the proposed size of the facility, as well as the avoidance and minimization that has occurred throughout project development, which has limited WOUS impacts to 0.121 acres, it is not appropriate to require further reductions in the solar facility output.

b. Need: California is committed to the reduction of greenhouse gases through increases in renewable energy generation and reduction in the use of fossil fuels (coal and natural gas). Established in 2002 under Senate Bill 1078, California's Renewables Portfolio Standard (RPS) was accelerated in 2006 under Senate Bill 107 by requiring that 20 percent

of electricity retail sales be served by renewable energy resources by 2010. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08 requiring that "...[a]ll retail sellers of electricity shall serve 33 percent of their load with renewable energy by 2020." The following year, Executive Order S-21-09 directed the California Air Resources Board (CARB), under its Assembly Bill 32 (AB32) authority, to enact regulations to achieve the goal of 33 percent renewables by 2020. Senate Bill X1-2, codifying the 33 percent renewable energy goal by 2020, was signed by Governor Edmund G. Brown, Jr., in April 2011

III. Alternatives Considered: A reasonable range of alternatives were considered in the EIS for the Proposed Action. The EIS also identified those alternatives that were considered but rejected from further analysis. On January 22, 2016, the applicant submitted final information regarding the practicability of alternatives in light of the overall project purpose, which is being utilized in this Record of Decision (ROD) to conduct the alternatives analysis required for compliance with the U.S. Environmental Protection Agency's (USEPA) Section 404(b)(1) Guidelines (404(b)(1) Guidelines).

a. Screening Criteria: Section 2.3.2 of the Final EIS identifies a variety of screening criteria and provides justification for screening criteria to evaluate potential alternatives. In addition to the screening criteria identified in the Final EIS, through the permit process, the Corps has identified additional screening criteria that is appropriate to utilize. All screening criteria used and their justification is as follows:

1. On-Site Screening Criteria:

(a) Overall Project Purpose:

(1) Must result in the construction of a minimum 247 MW solar PV energy generating facility.

Justification: See Section II(a)(1) and (2).

(2) Must be located in the west-central portion of California's Central Valley (generally encompassing portions of San Benito, Merced, Madera, Fresno, and Kings Counties)

Justification: See Chapter 2.3.2, page 2-9 of the Final EIS.

(3) Must be a minimum of 2,000 acres

Justification: See Chapter 2.3.2, page 2-8 of the Final EIS.

(b) Cost: If the alternative would result in unreasonable costs when compared to the costs of similar actions, the alternative will be eliminated. In addition, if the cost of the alternative would be unreasonable for the amount of waters of the U.S. that would be avoided, the alternative will be eliminated.

Justification: As identified in the preamble to the Section 404(b)(1) Guidelines (45 FR 85339), the intent of the 404(b)(1) Guidelines is to consider alternatives which are reasonable in terms of the overall scope/cost of the Proposed Action. The Corps has determined that if the cost of an alternative, when compared to the cost of a similar

action, is unreasonable, the alternative is not practicable. In addition, if the cost of an alternative would be substantially higher than the cost of the Proposed Action, but would result in minimal additional avoidance of waters of the U.S, the alternative is not practicable.

(c) Logistics: If the alternative does not provide for emergency ingress and egress to the project site, it will be eliminated.

Justification: See Chapter 2.3.2, page 2-9 of the Final EIS.

(d) Impacts to waters of the U.S.: If the discharge of dredged or fill material into waters of the U.S would be greater than the Proposed Action, the alternative will be eliminated, unless the alternative would result in other significant adverse environmental consequences.

Justification: See Chapter 2.3.2, page 2-10 of the Final EIS. As identified in the Section 404(b)(1) Guidelines (40 CFR 230.10(a)), "Except as provided under Section 404(b)(2), no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse effects on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences."

(e) Other Significant Adverse Environmental Consequences: If an alternative would result in a discharge into waters of the U.S. that is less than the Proposed Action, but would cause other significant adverse environmental consequences (including impacts on federally-listed threatened or endangered species, air quality, aesthetics, cultural resources, or other resources), the alternative will be eliminated.

Justification: See Chapter 2.3.2, page 2-10 of the Final EIS and Section III(a)(1)(d).

2. Off-Site Screening Criteria:

(a) Overall Project Purpose: See Section III(a)(1)(a).

(b) Available: The site must be available for purchase or long-term lease.

Justification: As identified in the 404(b)(1) Guidelines at 40 CFR 230.10(a)(2), an alternative must be available in order to be practicable. In addition, as identified in the preamble to the 404(b)(1) Guidelines (45 FR 85339), "In order for an 'external' alternative to be practicable, it must be reasonably available or obtainable." If the applicant is not able to purchase or enter into a long-term lease agreement for the construction of a solar facility, the site is not considered to be available.

(c) Cost: See Section III(a)(1)(b)

(d) Logistics:

(1) Emergency ingress and egress: See Section III(a)(1)(c)

(2) Timing: The solar facility must be constructed and operational by December 31, 2019

Justification: The applicant has entered into a power purchase agreement with Southern California Edison to deliver 240 MW of renewable power by the year 2019. In order to meet this obligation, the solar facility would need to be operational by 2019. For a solar facility greater than 200 MW, it is typical that planning, permitting, and construction of these solar facilities would take approximately 4-6 years to complete once initiated. Because planning and permitting for the Proposed Action has been in process since 2009, the Corps has determined that extending the processing for approximately 5 additional years (past December 31, 2019) would result in a permit timeline of over 10 years, which would be unreasonable given the limited impacts to waters of the U.S. associated with the proposed action.

(3) The alternative site must be within 2,000 feet of an existing 230 kV transmission line.

Justification: See Chapter 2.3.2, page 2-9 of the Final EIS.

(e) **Impacts to waters of the U.S.:** See Section III(a)(1)(d)

(f) **Other Significant Adverse Environmental Consequences:** See Section III(a)(1)(e)

b. Alternatives Evaluated in the EIS:

1. No Action Alternative

(a) **No Build:** Under this alternative, none of the solar facility features would be constructed. Environmental conditions on the site and off-site areas would remain in the status quo and current land uses would continue.

(b) **No USACE Permit:** Under this alternative, a 247 MW solar generating facility would be constructed within a 2,506-acre footprint. The facility would be similar to the applicant's Proposed Action as described in III(c), but would involve the construction of a free span bridge crossing over Las Aguilas Creek and would avoid impacts to three ephemeral drainages on the eastern side of the site. In order to avoid impacts to three ephemeral drainages on the eastern side of the site, the applicant would install bottomless arch culverts, and five solar arrays currently proposed to be placed in this area would need to either be split into smaller blocks or completely relocated. Because the electricity collection lines and inverters, operations and maintenance building, roads, fencing, water tanks and water treatment facilities, interconnection facilities, and telecommunications upgrades do not result in the discharge of dredged and/or fill material into waters of the U.S., these features would be constructed as described in III(c). Finally, because construction of a solar facility under this alternative would not result in the discharge of dredged and/or fill material into waters of the U.S., the proposed compensatory mitigation would not be conducted. Section 2.4 of the Final EIS provides a complete description of this alternative. This alternative would result in additional impacts to 352 acres of upland habitat for SJKF, GKR, BNLL, and CTS. Based on information provided by the applicant, under this alternative, the installation of a clear span bridge to avoid the discharge of fill material into 0.001 acre of Las Aguilas Creek would result in additional construction costs of between \$1,630,986 and \$1,785,098. In addition, avoidance of the 0.12 acres of three ephemeral drainages on the eastern portion of the site would require additional breakers, disconnect

switches and relays, as well as the installation of bottomless arch culverts, which would result in additional construction costs of between \$2,525,000 and \$2,775,000. Relocation of 5 solar arrays may also result in impacts to up to 65 acres of additional upland habitat for the Federally-listed threatened and/or endangered SJKF, GKR, BNLL, and CTS (total additional impacts of up to 417 acres). The installation of a free span bridge would also result in approximately 3,040 square feet of additional upland impacts to suitable habitat for SJKF, GKR, BNLL, and CTS, and, because the higher profile of this type of bridge, it would be more visible and could serve as a better perch for ravens and raptors feeding on these species than the proposed bridge.

2. Alternative A (Proposed Action): This alternative was identified as the Applicant's Preferred Alternative in the Final EIS, and would involve the discharge of fill material into 0.121 acres of waters of the U.S. for the construction of an approximately 247 MW solar facility on 2,154 acres on the proposed site. In addition, this alternative would result in the discharge of fill material into 0.10 acres of waters of the U.S. for the completion of proposed compensatory mitigation, consisting of the removal of debris in two areas in the off-site conservation lands. Proposed features of this alternative include the construction and/or installation of PV panels and support structures, electricity collection lines and inverters, substation and switching station, operations and maintenance building, roads, fencing, lighting, water tanks and water treatment facilities, erosion control, utilities, interconnection facilities, primary and secondary telecommunication network upgrades, and additional compensatory mitigation, including CTS ponds, livestock exclusion fencing, and debris removal. A complete description of all aspects of the Proposed Action can be found in Section 2.5 of the Final EIS.

3. Alternative B (On-Site Alternative): Under this alternative, all features identified under Alternative A would be constructed, but a multi-span crossing of Las Aguilas Creek would be constructed, instead of the single span crossing proposed under Alternative A. This alternative would result in the discharge of fill material into 0.122 acres of waters of the U.S., 0.001 acre greater than the Proposed Action.

4. Alternative C (Westlands CREZ): The Westlands CREZ site consists of approximately 35,558 acres of Westlands Water District Lands located within Kings County and Fresno County, California, east of Huron, north of Kettleman City, and south-west of Lemoor. This acreage has been retired by the water district due to water shortages and salt buildup in the soil that makes it toxic to crops. The Westlands Water District leases most of the Westlands CREZ site to Westside Holdings, a private investment group, for commercial development of the 24,000-acre Westlands Solar Park. Because a wetland delineation has not been conducted for this site, the specific acreage of waters of the U.S. that exists on this site is not known. However, based on the aerial photographs, National Wetland Inventory, USGS topographic maps, and the National Hydrography Database, there appears to be a concentration of hydrological features, primarily in the form of canals, on the northeastern side of the site. An estimated 71 linear miles of drainages and canals exist on this site, and there appear to be two wetland areas estimated at approximately 20 acres in the center of the property. Because the Westlands CREZ site is over 35,558 acres, of which approximately 24,000 acres is leased to Westside Holdings for future solar development, it is assumed that an approximately 2,000 acre, 247 MW solar facility could be constructed on the site with similar or fewer impacts to waters of the U.S. than the Proposed Action. While information on the Westlands website indicates that this site is available for long-term lease for solar developments of 200 MW or larger, in order to determine availability, the applicant contacted Westside Holdings via telephone on December 2, 2014, and by letter on January

27, 2015. As of January 11, 2016, no response has been received from Westside Holdings. The California Independent System Operator (CAISO), who manages the flow of electricity on high-voltage, long-distance power lines in California reports that substantial transmission upgrades to existing transmission lines near the Westlands CREZ site would not be required in order to deliver up to 800 MW to the electrical grid. Since that report from CAISO, large energy-generating projects have been proposed, which are in the CAISO interconnection queue waiting to interconnect to these transmission lines. Based on information provided by the applicant, a total of 9 projects are currently in the queue, which have a total power output of over 1,500 MW. It is unknown if all of these 9 transmission projects will be able to connect to the existing transmission lines, or if the additional 247 MW that would occur from construction of a solar facility on the Wetlands CREZ site would be able to connect. CAISO has approved the construction of a new high-voltage Gates-Gregg transmission line, which would run through the Westlands CREZ site and accommodate future solar development. This line is projected to begin operations as early as May 2020, or as late as December 2022. No publically available information has been found to determine if Westside Holdings has initiated permitting activities for a solar development on the Westlands CREZ site. A Notice of Preparation for an Environmental Impact Report was issued by Westlands Water District in March 2013, and indicated that the Draft EIR would be issued in 2015. To date, a Draft EIR has not been issued for development of a solar facility on this site, and because planning, permitting, and construction of solar facilities take approximately 4-6 years to complete, it is unlikely that a 247 MW solar facility could be constructed on the Westlands CREZ site by December 31, 2019, assuming the site was available for the applicant to lease.

5. Draft EIS Proposed Action: The Draft EIS analyzed a Proposed Action that is different than the Proposed Action as analyzed in the Final EIS. The Proposed Action analyzed in the Draft EIS consisted of a 247 MW solar facility on 2,506 acres, with a crossing of Panoche Creek and Las Aguilas Creek. This alternative would result in the discharge of fill material into 0.122 acres of waters of the U.S. A complete description of this alternative can be found in Chapter 2.5 of the Draft EIS.

c. Alternatives Considered but Rejected in the EIS: See Section 2.8 of the Final EIS contains information on all alternatives considered but rejected from further analysis in the EIS, consisting of 5 on-site and 7 off-site alternatives.

d. Alternatives Not Evaluated in the EIS: The EIS considered a reasonable range of alternatives to the proposed action that considered the full spectrum of potential impacts to WOUS from 0 – 0.122 acres. After the Final EIS had been published, the applicant provided final information regarding the practicability of three additional on-site alternatives. The Corps considered these additional alternatives, but determined that such consideration did not require a supplement to the Final EIS because the additional alternatives fall within the range of alternatives already considered in the Draft EIS and Final EIS and do not represent a substantial change in the proposed project or the nature of the impacts to the aquatic environment.

1. Free-Span Bridge Crossing: This alternative would utilize the free span bridge crossing of Las Aguilas Creek identified in the No Action (No USACE Permit) Alternative, which would have abutments placed approximately 100 feet from the top of bank on either side of the ephemeral stream channel. This structure would span the channel, and would require approach fill at both ends to allow for a minimum of three feet of clearance below the bridge superstructure. The free span bridge is a tall structure with

support structures that have an estimated height of 25 feet. Under this alternative, the remaining construction would be the same as the Proposed Action. This alternative would result in the discharge of fill material into 0.12 acre of waters of the U.S. (0.001 acre fewer than the Proposed Action) and would increase impacts to upland habitat for GKR, BNLL, SJKF, and CTS by 3,040 square feet. Based on information provided by the applicant, under this alternative, the installation of a clear span bridge to avoid the discharge of fill material into 0.001 acre of Las Aguilas Creek would result in additional construction costs of between \$1,785,097 and \$1,939,909, between \$1,630,986 and \$1,785,098 higher than the Proposed Action.

2. Small Blocks Array Scenario 1: Under this alternative, the ephemeral drainages on the eastern portion of the site would not be impacted (as identified in the No Action (No USACE Permit) Alternative, and planned solar arrays would be split into smaller blocks and relocated throughout the site. Under this alternative utilities would be installed through directional drilling beneath the ephemeral drainages, and the number of DC trenching, combiner boxes, and tracker motors would increase. Construction of a single-span crossing of Las Aguilas Creek would be constructed under this alternative. This alternative would result in the discharge of fill material into 0.001 acre of waters of the U.S. (0.12 acre fewer than the Proposed Action). This alternative would result in construction costs of \$2,300,000 to \$2,700,000 more than the Proposed Action, and would avoid only 0.12 acre of ephemeral drainages. In addition, downstream water control features would need to be installed, consisting of rock or concrete weirs, riprap, erosional control blankets, planted vegetation, or other energy dissipaters, to ensure that array foundations and underground cables are not undermined. These structures could impacts upstream flows within the ephemeral drainages, potentially resulting in indirect effects to the avoided ephemeral drainages.

3. Full Block Array Scenario 2: This alternative is similar to the Small Blocks Array Scenario 1, but instead of splitting the solar arrays into smaller blocks, full blocks of arrays, which are each about 13 acres in size (approximately 7,000 PV modules) would be removed from the ephemeral waters on the eastern portion of the site and permanently placed into approximately 65 acres currently proposed to be temporarily impacted and then preserved. This alternative would result in construction costs of from \$2,300,000 to \$2,700,000 more than the Proposed Action in order to avoid 0.12 acres of ephemeral drainages. In addition, this alternative would result in additional upland impacts to 65 acres of suitable habitat for SJKF, GKR, BNLL, and CTS.

e. Determination of Practicable Alternatives: The Corps has determined that the No Build Alternative would not meet the overall project purpose, as it would not allow for the construction of a 247 MW solar facility. The Corps has determined that the No Action (No USACE Permit) alternative is not practicable, as the substantial additional construction costs are not reasonable for the additional avoidance of 0.121 acre of ephemeral drainage, and because of the substantially greater impacts to habitat for Federally-listed threatened and/endangered species when compared to the small loss of WOUS. The Corps has determined that Alternative B is not practicable, as it would result in greater impacts to waters of the U.S. than the Proposed Action. The Corps has determined that Alternative C is not available, based on the lack of response by the owners of this site to two requests for information by the applicant, and the Corps has determined that this alternative is not logistically practicable as, because of the limited planning and permitting activities that have occurred, it is unlikely that construction of a solar facility on this site could be completed by December 31, 2019. The Corps has determined that the free span bridge alternative and the

Small Blocks Array Scenario 1 are not practicable as the substantial additional construction costs are not reasonable for the small additional avoidance of waters of the U.S. In addition, the Corps has determined that the Full Block Array Scenario 2 is not practicable as the substantial additional construction cost is not reasonable for the small additional avoidance of 0.12 acres of waters of the U.S., and because of the potentially substantially greater impacts to suitable habitat for Federally-listed SJKF, GKR, BNLL, and CTS when compared to the small loss of WOUS. The Corps has determined that Alternative A, the Proposed Action, and the Draft EIS Proposed Action are practicable and meet the overall project purpose.

f. Environmentally Preferred Alternative: Because the Draft EIS Proposed Action would have greater impacts to waters of the U.S. and habitat for Federally-listed species, the Corps has determined that the environmentally preferred alternative is Alternative A, the Proposed Action, as described in the Final EIS.

IV. Comments on the Final Environmental Impact Statement: Five comment letters were received on the Final EIS, consisting of: (1) January 12, 2016, email from the cultural resources staff for the Sherwood Valley Band of Pomo Indians (SVBPI); (2) January 31, 2016, letter from The Nature Conservancy (TNC), (3) February 1, 2016, letter from the U.S. Environmental Protection Agency (USEPA), (4) February 1, 2015, letter from the Sierra Club California (SC) and Defenders of Wildlife (DoW), and (5) January 22, 2016, letter from Yocha Dehe Wintun Nation

a. SVBPI: SVBPI stated that the project is not within their aboriginal territories and recommends that the Corps make contact with the nearest tribal groups.

Corps Response: This comment is noted. See Section V(i) for the tribal coordination that has been conducted.

b. TNC: TNC re-iterated their comments on the Draft EIS that that they strongly support development of renewable sources of energy to mitigate the increasing threat of climate change, that the proposed project is in a sensitive location that representing some of the last remnants of San Joaquin Valley grassland habitat, critical for species such as SJKF, GKR, and BNLL, and that while they do not believe that the proposed location is appropriate for a solar facility, they are committed in supporting lower impact and lower conflict solar development in the San Joaquin Valley and San Benito County. TNC acknowledged that between the Draft and Final EIS, the proposed project footprint was reduced, but they believe that the Final EIS is deficient and does not "provide necessary and adequate protections for critically important habitat and threatened and endangered species." TNC further stated that the Proposed Action, as defined in the Final EIS, "does not conform to the interest and public investments in the recovery of the suite of threatened and endangered San Joaquin Valley upland species; converts irreplaceable, high quality habitat; fails to incorporate information related to the multi-year drought; and fails to incorporate recent research, including that which identifies the Panoche Valley as a potential climate change refugia for BNLL and that which documents significant variation in GKR and BNLL across the Panoche Valley and surrounding hills, that is essential to establishing an accurate description of the baseline biological conditions for the proposed Project." Finally, TNC stated that they welcome the opportunity to work with San Benito County, and state and federal agencies, to advance ideas about areas where renewable energy siting can achieve win-win objectives for jobs, energy, the environment and in meeting the needs of

endangered species, wildlife connectivity, and important agricultural and working landscapes.”

Corps Response: The comments from TNC regarding their support of renewable energy and the sensitivity of the proposed project site as critical habitat for SJKF, GKR, and BNLL are noted. As identified in Chapter 3.6 and Response to Comment G1-1, Chapter 6 of the Final EIS, the Corps agrees that the Panoche Valley has rich habitat for sensitive San Joaquin Valley species, and that these species have been in decline throughout their ranges due to increased fragmentation and loss of habitat. As identified in Section III of this ROD, the Corps has evaluated the practicability of alternatives to the proposed location, and has determined that there is no other practicable alternative methods or site, that would have fewer impacts to waters of the U.S., than the proposed project. With regards to the comment by TNC that the Final EIS “fails to incorporate information related to the multi-year drought; and fails to incorporate recent research, including that which identifies the Panoche Valley as a potential climate change refugia for BNLL and that which documents significant variation in GKR and BNLL across the Panoche Valley and surrounding hills,” as identified in Response to Comment G1-3 and G1-4 in Chapter 6 of the Final EIS, the Corps reviewed and evaluated all references provided by TNC, and incorporated relevant information into the Final EIS. The information incorporated into the Final EIS includes information in Chapter 5, *Climate Change*, discussing the effects of climate change on ecosystems, biodiversity, and ecosystem services and water resources. As identified on page 3-236, in Chapter 3.6, “An attempt to isolate drought induced effects on local populations of special status species within the Panoche Valley would require speculation; therefore, an analysis of drought-induced effects is not included within this document. Furthermore, a key focus of the conservation strategy for the project is maintaining intact habitat supporting known populations of special status species, allowing the species to adapt to future climate conditions and/or providing future options for conservation in light of the uncertainty associated with climate change predictions.” Where information and/or studies were identified that provide specific information on drought induced effects on species, these were incorporated into Chapter 3.6, including changes in the Final EIS identifying that BNLL have responded poorly to the recent extended drought, based on unusually low observations in 2014 and 2015, and that climate change poses a credible risk to this species’ persistence across a large portion of its range. In addition, changes were made in the Final EIS identifying that GKR populations maintain a higher level of genetic variation than southern populations, have maintained distinct genetic lineages not found in other populations, and that fewer GKR have been found in 2013 and 2014, which is likely due to drought conditions. The Draft and Final EIS also identifies that habitat loss, fragmentation, and degradation for wildlife species may make them more vulnerable to droughts, and the discussion of cumulative effects in the Final EIS identifies that remaining habitats are highly fragmented, and many are marginal habitats in which species may not persist during catastrophic events, such as drought or floods (Final EIS, p. 3-413). In the discussion of cumulative effects for BNLL, changes to the final EIS were made to identify that cumulative impacts to BNLL may be exacerbated by ongoing drought and climate change (Final EIS p. 3-414).

c. USEPA: USEPA stated that they appreciate the efforts to address their comments in the Final EIS, including the addition of information regarding the impacts of the drought on the local groundwater basin, the inclusion of the USFWS Biological Opinion, identification of additional conservation lands, and updated information on tribal consultation. In addition, USEPA acknowledged that the Proposed Action was changed to further reduce impacts.

USEPA also commented that they continue to recommend that the applicant consider siting the project at the Westlands CREZ location. USEPA commented that they appreciate the information regarding climate change effects in the Final EIS, but identified that the Final EIS continues to compare project emissions to statewide emissions of greenhouse gasses (GHG), which they discourage, as it "does not reveal anything beyond the nature of the climate change itself, i.e., the fact that diverse individual sources of emissions each make relatively small additions to global atmospheric GHG concentrations that collectively have a huge impact. Finally, USEPA recommended that all mitigation measures described in the Final EIS be adopted in the Record of Decision and included as conditions in construction contracts and any approvals.

Corps Response: With regard to their comment related to development of the Westland CREZ site, as identified in Section III of this ROD, the Corps has evaluated the practicability of development of a solar facility on the Westlands CREZ site. While available information indicates that future plans for this site are to site one or more solar facilities on the Westlands CREZ site, due to the limited project planning that has occurred, the uncertainty associated with the construction and operation of a solar facility on this site by December 31, 2019, and because the lease holder of the Wetlands CREZ site did not respond to requests from the applicant, the Corps has determined that this site is not a practicable alternative to meet the overall project purpose. With regards to the emissions of greenhouse gasses, as identified in Chapter 3.5 and Response to Comment A-5 of the Final EIS, the proposed project would result in construction emissions of greenhouse gasses would be approximately 22,390 metric tons of carbon dioxide equivalent emissions, while operations and maintenance would result in an estimated 480 metric tons of carbon dioxide equivalent emissions annually. The amount of greenhouse gas emissions from construction and operations and maintenance activities is well below the recommended threshold of 25,000 metric tons of carbon dioxide equivalent emissions annually for quantifying greenhouse emissions in a NEPA analysis (as identified in the December 18, 2014, *Revised Draft Guidance on the Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews*, released by the Council on Environmental Quality), and is below USEPA's reporting limit for greenhouse gas emissions. In addition, the proposed 25,618 acres of conservation lands would contribute to carbon sequestration in perpetuity. Also, by potentially displacing natural gas and other fossil fuels used to produce electricity, PV solar installations reduce generation of carbon dioxide and other greenhouse gases. Finally, changes were made in Chapter 3.5 of the Final EIS, to identify potential effects of climate change on the southwest region, which includes California. With regard to USEPA's comment related to mitigation measures, as identified in Section VI of this ROD, the majority of the mitigation measures identified in the EIS have been incorporated as part of the Proposed Action. In many cases, these mitigation measures are outside of the Corps' responsibility and generally cannot be practicably controlled by the Corps. The mitigation measures identified as part of the Proposed Action in the Final EIS that are within the Corps' responsibility have been adapted to ensure enforceability incorporated into the Special Conditions identified in Section VIII of this ROD. The only additional mitigation measures that are within the Corps' responsibility and can be practicably controlled by the Corps are those related to the Biological Opinion (BO) issued by the U.S. Fish and Wildlife Service, and the Section 401 Water Quality Certification (WQC) issued by the Central Valley Regional Water Quality Control Board. Compliance with the BO and WQC for those activities under the Corps' jurisdiction will be required as a special condition or general condition of the permit, if issued.

d. SC/DoW: SC/DoW stated that they urge the Corps to deny the application and choose the no-action alternative or the off-site Alternative C – Westlands CREZ as the least environmentally damaging practicable alternative, as the project, if sited in the Panoche Valley, will likely drive the endangered GKR to extinction in the Ciervo-Panoche recovery area, permanently foreclosing recovery of this species in California. In addition, SC/DoW stated that the Proposed Action would negatively impact the SJKF, BNLL, and CTS, and would preclude critical recovery opportunities for these species in the only remaining northerly core which is predicted to be their last best refugia under climate change. In addition, SC/DoW stated that they believe sufficient information has been provided to the Corps to demonstrate that the Westlands CREZ site is practicable. SC/DoW stated that because the extension of the Investment Tax Credit (ITC) for qualifying solar projects, there is no longer a need to "rush" the project into construction and therefore the Westland CREZ site is a "very viable, reasonably and practicable alternative to the development of the Project on the highly biologically important and sensitive site in the Panoche Valley." SC/DoW also stated that if the project is approved, it will not comply with CWA, NEPA, and Endangered Species Act (ESA) standards, based on their Draft and Final EIS comment letters, as well as other comment letters submitted on the Draft EIS, including those from USEPA, TNC, and the Bureau of Land Management. Finally, SC/DoW identified that they do not believe the Corps should rely on the Final BO issued by USFWS as the best available science, and that the BO fails to take into account the best available scientific information and new information presented in the Draft EIS meet the threshold that triggers re-initiation of consultation.

Corps Response: The request by SC/DoW to deny the Proposed Action is noted. As identified in Section III of the ROD, the Corps has determined that there are no other practicable locations or methods for accomplishing the proposed work that would result in fewer impacts to waters of the U.S. and meet the overall project purpose. As identified above, the Corps has determined that due to the greater impacts to upland habitat for Federally-listed species, as well as the unreasonable costs that would be associated with avoiding 0.121 acres of waters of the U.S., that the No Action (No USACE Permit) alternative is not practicable. In addition, the Corps has determined that the Westlands CREZ site is not available, based on the lack of response by the owners of this site to two requests for information by the applicant, and that this alternative is not logistically practicable as, because of the limited planning and permitting activities that have occurred, it is unlikely that construction of a solar facility on this site could be completed by December 31, 2019. In response to the comment related to the ITC, the comment by SC/DoW is noted. The Corps did not utilize the ITC in the review of alternatives to the Proposed Action. The Corps disagrees with the statement that issuance of a permit for the Proposed Action would not comply with the CWA, NEPA, or ESA. The Corps has followed all existing regulations and guidance for compliance with Section 404 of the CWA, including NEPA Corps regulations and guidance and the Section 404(b)(1) Guidelines. The applicant has received their required Section 401 WQC from the Central Valley Regional Water Quality Control Board, for compliance with Section 401 of the CWA. In addition, the Corps has followed the requirements of NEPA, the NEPA regulations at 40 CFR 1500, the Corps' NEPA implementing regulations at 33 CFR Part 325, Appendix B and 33 CFR Part 230, as well as applicable guidance, including issuance of the Notice of Intent for Scoping, inviting applicable parties to be cooperating agencies, analysis of a reasonable range of alternatives, issuance of a Notice of Availability for the Draft EIS and Final EIS, and preparation of this record of decision. In addition, the Proposed Action is in compliance with ESA, as on March 8, 2016, the USFWS issued a revised BO, which was completed using the best available scientific information, for the Proposed Action. With regards to the

comment that the Corps should not rely on the USFWS BO, the information provided in the Draft and Final EIS was based on the best available information. As a result of additional information received by the commenters and others on the Draft EIS, the Corps provided additional information in the Final EIS. However, although updates were made in the Final EIS based on the additional information that was received, the Corps has reviewed the additional studies, reports and other references provided and determined that the information does not change the analysis of the effects of the Proposed Action or other alternatives as presented in the Final EIS. After the issuance of the BO by USFWS in October 2015, through continued coordination with the California Department of Fish and Wildlife, the applicant revised the proposed project to reduce the project footprint. As a result of the reduced project footprint, the Corps re-initiated consultation with the USFWS in accordance with 50 CFR 402.16 on January 20, 2016. During the re-initiation process, USFWS considered the best available scientific data, including review of the additional studies, reports, and other references provided by the commenters on the Draft EIS, to determine if these references provided additional information not already considered in the BO. On March 8, 2016, USFWS issued a revised BO for the Proposed Action.

e. Yocha Dehe Wintun Nation: Yocha Dehe Wintun Nation stated that the proposed project site is not within their aboriginal territories.

Corps Response: This comment is noted.

V. Consideration of Applicable Laws and Policies

a. National Environmental Policy Act (NEPA): The Proposed Action is in compliance with NEPA. The EIS was completed to evaluate a reasonable range of alternatives and the direct, indirect, and cumulative effects associated with 4 on-site and 1 off-site alternative, including the "no action" alternative. The Corps followed the NEPA process identified in 40 CFR Parts 1500 - 1508, 33 CFR Part 230, and 33 CFR Part 325, Appendix B, including noticing and timeline requirements, to produce an EIS that discloses to the public the probable impacts of each alternative, taking into account mitigation. The EIS is being utilized to make a permit decision on the Proposed Action.

b. Section 401 of the CWA: The Proposed Action is in compliance with Section 401 of the CWA. The Water Quality Certificate (WQC) was received on October 15, 2015 and is included in Appendix A. Pursuant to 33 U.S.C. 1341(d), special conditions of the Section 401 WQC are as a special condition of any DA permit.

c. ESA of 1973: The Proposed Action is in compliance with Section 7 of ESA. Chapter 3.6 of the Final EIS identifies the impacts of the Proposed Action on Federally-listed threatened and/or endangered species. On October 5, 2015, USFWS issued a Biological Opinion (BO) (USFWS #08EVEN00-2015-F-0328) for proposed impacts to SJKF, GKR, BNLL, and CTS, and concurred with the Corps' determination that the Proposed Action may affect, but is not likely to adversely affect the Federally-listed California condor (*Gymnogyps californianus*), vernal pool tadpole shrimp (*Lepidurus packardii*), Conservancy fairy shrimp (*Branchinecta conservation*), longhorn fairy shrimp (*Branchinecta longiatenna*), and vernal pool fairy shrimp (*Branchinecta lynchi*). As a result of the reduced project footprint, the Corps re-initiated consultation with the USFWS in accordance with 50 CFR 402.16 on January 20, 2016, only for proposed adverse effects to SJKF, GKR, BNLL, and CTS. The modified Proposed Action did not affect the Corps' "may affect, but is not likely to adversely affect" determination for the Federally-listed California condor (*Gymnogyps californianus*),

vernal pool tadpole shrimp (*Lepidurus packardii*), Conservancy fairy shrimp (*Branchinecta conservation*), longhorn fairy shrimp (*Branchinecta longiatenna*), and vernal pool fairy shrimp (*Branchinecta lynchi*). On March 8, 2016, the USFWS issued a new BO (USFWS 08EVEN00-2016-F-0245) Appendix A contains the BO. A special condition will be placed on the permit, if issued, requiring that the applicant comply with all terms and conditions of the BO for impacts to species related to the Corps' jurisdiction.

d. Fish and Wildlife Coordination Act (FWCA): The Proposed Action is in compliance with the FWCA. Chapter 3.6 of the Final EIS identifies the impacts of the Proposed Action on fish and wildlife species. The USFWS was a cooperating agency on the Draft EIS and the Corps has worked with the USFWS on the Proposed Action, including meetings to obtain input on the Proposed Action. USFWS did not provide comments on the Draft EIS specifically related to compliance with the Fish and Wildlife Coordination Act.

e. Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA): The Proposed Action is in compliance with the MSFCMA. The waters of the U.S. on the proposed site are not located in or near essential fish habitat.

f. Section 106 of the National Historic Preservation Act (NHPA): The Proposed Action is in compliance with Section 106 of the NHPA. Chapter 3.7 of the Final EIS identifies impacts of the Proposed Action on cultural resources. The Corps has determined that the Proposed Action would have no effect or no adverse effect to resources listed on or eligible for listing on the National Register of Historic Places. The State Historic Preservation Officer concurred with this determination on October 12, 2015. However, due to the potential for buried resources, the Corps has determined that a special condition will be placed on the permit, if issued, requiring that an archaeological monitor be present on the site during all initial grading activities.

g. Section 176(C) of the Clean Air Act (CAA) General Conformity Rule Review: The Proposed Action has been analyzed for conformity applicability pursuant to regulations implementing Section 176(c) of the Clean Air Act. The Corps has determined that direct emissions from the proposed activities that require a DA permit will not exceed de minimis levels of a criteria pollutant or its precursors and are exempted by 40 CFR 93.153. Any later indirect emissions are generally not within the Corps' continuing program responsibility and generally cannot be practicably controlled by the Corps. For these reasons, a conformity determination is not required for this action.

h. Executive Order 11988: Floodplain Management: Portions of the proposed site are located within the Federal Emergency Management Agency (FEMA) mapped 100-year floodplain of an unnamed ephemeral wash, Las Aguilas Creek, and Panoche Creek. As identified in Chapter 3.9 of the Final EIS, with the exception of six acres associated with an emergency access road and an associated drainage crossing of Las Aguilas Creek, the Proposed Action would be located outside of the 100-year floodplain. In addition, approximately 2.16 acres of the PG&E transmission line fall into a 100-year floodplain, although no ground disturbing activities would occur in these areas. As identified in the Final EIS, the Proposed Action would have an adverse effect on the floodplain, but impacts have been minimized to the maximum extent practicable, and there are no other feasible mitigation measures available to further reduce impacts. As identified in Section III of this ROD, there are no practicable alternatives that would further reduce impacts to the floodplain and there are no practicable alternatives to developing within the floodplain. San Benito County has required the implementation of the mitigation measures identified in

Chapter 3.9 of the Final EIS for impacts to the 100-year floodplain, and has approved these floodplain impacts. The Proposed Action is in compliance with Executive Order 11988.

i. Executive Order 13175: Consultation with Indian Tribes, Alaska Natives, and Native Hawaiians: The Proposed Action is in compliance with Executive Order 13175. The Corps sent letters to Native American Tribes and individuals identified by the Native American Heritage Commission on July 27, 2012 and February 19, 2015. Follow-up telephone calls and/or emails were made on June 25, 2015. The only comments received were from the Amah Matsun Tribal Band. Section 3.7.5 of the Final EIS contains a complete description of all Native American coordination.

j. Executive Order 12898: Environmental Justice: The Proposed Action is in compliance with Executive Order 12898. See Chapter 3.12 of the Final EIS. The Proposed Action is not expected to negatively impact any community, and therefore is not expected to cause disproportionately high and adverse impacts to minority or low-income communities.

VI. Consideration of Mitigation Measures: The EIS included a number of mitigation measures proposed as part of the Proposed Action to reduce or offset impacts that fall outside of the Corps responsibility and generally cannot be practicably controlled by the Corps, such as those associated with traffic, air quality, and noise. Many of the mitigation measures are requirements of San Benito County, the local land use agency. As such, these mitigation measures are enforced by San Benito County and not the Corps.

The Corps requires mitigation measures to reduce or offset impacts to waters of the U.S. as special conditions of each DA permit issued. These special conditions are identified in Section VIII, and take into account the compensatory mitigation proposed by the applicant, as identified in Section 3.6 of the Final EIS, and also include additional conditions that avoid, minimize, and compensate for effects to waters of the U.S., and those that ensure compliance with Section 7 of the ESA, Section 106 of NHPA, and Section 401 of the CWA.

VII: Compliance with 404(b)(1) Guidelines

a. Restrictions on Discharge:

Yes No Based on the discussion in Section 4.0, are there available, practicable alternatives having less adverse impact on the aquatic ecosystem and without other significant adverse environmental consequences that do not involve discharges into "waters of the U.S." or at other locations within these waters?

Yes No If the project is in a special aquatic site and is not water dependent, has the applicant clearly demonstrated that there are no practicable alternative sites available?

Will the discharge:

Yes No Violate state water quality standards?

Yes No Violate toxic effluent standards under Section 307 of the CWA?

Yes No Jeopardize endangered or threatened species or their critical habitat?

Yes No Violate standards set by the Department of Commerce to protect marine sanctuaries?

Evaluation of the information in Section 6 above indicates that the proposed discharge material meets testing exclusion criteria for the following reason(s):

based on the above information, the material is not a carrier of contaminants.

the levels of contaminants are substantially similar at the extraction and disposal sites and the discharge is not likely to result in degradation of the disposal site and pollutants will not be transported to less contaminated areas.

acceptable constraints are available and will be implemented to reduce contamination to acceptable levels within the disposal site and prevent contaminants from being transported beyond the boundaries of the disposal site.

Will the discharge contribute to significant degradation of "waters of the U.S." through adverse impacts to:

Yes No Human health or welfare, through pollution of municipal water supplies, fish, shellfish, wildlife and/or special aquatic sites?

Yes No Life stages of aquatic life and/or wildlife?

Yes No Diversity, productivity, and stability of the aquatic life and other wildlife? Or wildlife habitat or loss of the capacity of wetlands to assimilate nutrients, purify water or reduce wave energy?

Yes No Recreational, aesthetic and economic values?

Yes No Will all appropriate and practicable steps be taken to minimize adverse impacts of the discharge on the aquatic ecosystem? Does the proposal include satisfactory compensatory mitigation for losses of aquatic resources?

b. Factual Determinations:

1. Physical Substrate Determination: Chapters 3.8, *Geology and Soils* of the Final EIS identifies the nature and degree of effect that the Proposed Action will have, individually and cumulatively, on the characteristics of the substrate at the disposal site for development of the Proposed Action. Avoidance and preservation of waters of the U.S. and the surrounding uplands on the site and the Special Conditions identified in Section VIII would minimize effects to the substrate.

2. Water circulation, fluctuation, and salinity determinations: Chapters 3.6, *Biological Resources* and 3.9, *Hydrology and Water Quality* of the Final EIS identify the nature and degree of effect that the Proposed Action will have, individually and cumulatively on water, current patterns, circulation including downstream flows, and normal water fluctuation for development of the Proposed Action. The avoidance and preservation waters of the U.S., additional upland buffers, and the requirements of the Special Conditions identified in Section VIII would minimize effects to water circulation, fluctuation, and salinity.

3. Suspended particulate/turbidity determinations: Chapters 3.6, *Biological Resources* and 3.9, *Hydrology and Water Quality* of the Final EIS identify the nature and degree of effect that the Proposed Action will have, individually and cumulatively, in terms of potential changes and concentrations of suspended particulate/turbidity in the vicinity of the disposal site for the Proposed Action. Avoidance and preservation of waters of the U.S. and the surrounding uplands on the site, adherence to the Section 401 Water Quality Certification and National Pollutant Discharge Elimination System (NPDES) permit, and the Special Conditions identified in Section VIII would minimize effects from suspended particulates and turbidity.

4. Contaminant determinations: Chapters 3.6, *Biological Resources*, 3.8, *Geology and Soils*, 3.9, *Hydrology and Water Quality*, and 3.14, *Public Health and Safety, Including Hazardous Materials*, of the Final EIS identify the degree to which the material proposed for discharge will introduce, relocate, or increase contaminants for the Proposed Action. No known contaminants occur on the site, and imported fill material would be obtained from an existing commercial source. In addition, Special Condition 16 requires that only clean and non-toxic fill material shall be used, which would ensure that imported material does not contain contaminants, thereby minimizing effects.

5. Aquatic ecosystem and organism determinations: Chapter 3.6, *Biological Resources*, of the Final EIS, identifies the nature and degree of effect that the Proposed Action will have on the aquatic ecosystem, individually and cumulatively. Avoidance and preservation of waters of the U.S. and the surrounding uplands on the site, the required compensatory mitigation identified in Special Condition 1, and the other Special Conditions identified in Section VIII would minimize effects and ensure no net loss of aquatic resource functions and services.

6. Proposed disposal site determination: Because development of the Proposed Action would affect ephemeral drainages that would be dry during construction, as required in Special Condition 17, no effects to the mixing zone would occur.

7. Determination of cumulative effects on the aquatic ecosystem: Chapters 3.6, *Biological Resources*, and 3.8, *Hydrology and Water Quality* of the Final EIS identify the cumulative effects of development of the Proposed Action on the aquatic ecosystem. The compensatory mitigation in Special Condition 1 ensures no net loss of aquatic resource functions and services. The avoidance and preservation of waters of the U.S., mitigation measures incorporate as part of the proposed action, and the Special Conditions would ensure that cumulative effects on the aquatic ecosystem are minimized to the maximum extent practicable.

8. Determination of secondary effects on the aquatic ecosystem: Chapters 3.6, *Biological Resources*, and 3.8, *Hydrology and Water Quality* of the Final EIS identify the secondary (indirect) effects of development of the Proposed Action the aquatic ecosystem. Avoidance and preservation of waters of the U.S. and the surrounding uplands on the site and the Special Conditions identified in Section VIII would minimize effects

VIII. Special Conditions: The following special conditions will be included in the DA permit to ensure the Proposed Action is not contrary to the public interest and complies with the 404 (b)(1) Guidelines:

1. To mitigate for the loss of 0.121 acres of waters of the United States you shall complete the compensatory mitigation as shown and described in the September 2015 *Wetlands Mitigation and Monitoring Plan for Impacts to Waters and Habitats, Panoche Valley Solar Facility, San Benito County, California* (MMP) document. The required compensatory mitigation consists of the following:

a. Enhance 0.39 acres of ephemeral drainages on the Valadeao Ranch Conservation Lands and Silver Creek Ranch Conservation Lands through the removal of debris from 9 locations.

b. Create 0.40 acres of ponds that contain suitable breeding habitat for California Tiger Salamander at 3 locations on the Valadeao Ranch Conservation Lands.

c. Enhance 5.81 acres of Panoche Creek through the installation of 0.35 miles of livestock exclusion fencing on the Silver Creek Ranch Conservation Lands.

Rationale: *This special condition is necessary to ensure successful compensatory mitigation for the unavoidable losses of waters of the U.S. due to the construction of the Proposed Action. (33 CFR 320.4(r)(1); 33 CFR 325.4(a)(3); 33 CFR 332, 40 CFR 230).*

2. You shall complete construction of any compensatory mitigation required by Special Condition 1 of this permit within 365 days of commencement of construction within waters of the U.S. In addition, you shall notify the Corps in writing at least 10 calendar days prior to initiation of construction of the required compensatory mitigation and within 10 calendar days following completion of the required compensatory mitigation.

Rationale: *This special condition is necessary to ensure avoidance and minimization of impacts to waters of the U.S. as well as ensure successful compensatory mitigation for the unavoidable losses of waters of the U.S. due to the construction of the Proposed Action. (33 CFR 320.4(r)(1); 33 CFR 325.4(a)(3); 33 CFR 332.4(c)(7), 40 CFR 230).*

3. To assure success of created, enhanced, and preserved waters of the United States, you shall monitor the compensatory mitigation required in Special Condition 1(a) for five years and the compensatory mitigation required in Special Condition 1(b) and 1(c) for ten years, or until the performance standards described in the approved MMP are met, whichever is greater. This period shall commence upon completion of the required compensatory mitigation. If the compensatory mitigation is not meeting the required performance standards at any time, the Corps may determine that the compensatory mitigation is not in compliance with the conditions of this permit and require additional remedial actions, including alternative compensatory mitigation. Additionally, you shall demonstrate continued success of the compensatory mitigation, without human intervention, for three consecutive years after the performance standards have been met, which may run concurrently with the 5 and 10 year monitoring periods required for the compensatory mitigation. The compensatory mitigation will not be deemed successful until this criterion has been met.

a. You shall submit annual monitoring reports to the Corps by December 31 for each year of the monitoring period and for each additional year, if remediation is required. You shall submit an additional monitoring report at the end of the three-year period demonstrating continued success of the compensatory mitigation without human intervention. The annual reports shall follow the format identified in the *Final 2015 Regional*

Compensatory Mitigation and Monitoring Guidelines for the South Pacific Division, which can be found online at <http://www.spd.usace.army.mil/Portals/13/docs/regulatory/mitigation/MitMon.pdf>, unless these guidelines are superseded, in which case the reports shall follow the format required at that time.

b. Your responsibility to complete the required compensatory mitigation as set forth in Special Condition 1 will not be considered fulfilled until you have demonstrated mitigation success and have received written verification from the U.S. Army Corps of Engineers.

Rationale: *This special condition is necessary to ensure the Proposed Action is meeting the required performance standards and to determine if measures are necessary to ensure that the compensatory mitigation is accomplishing its objectives. (33 CFR 320.4(r)(1); 33 CFR 325.4(a)(3); 33 CFR 332.6, 40 CFR 230).*

4. You shall employ a biological monitor familiar with waters of the United States to continuously monitor construction activities in the vicinity of waters of the U.S. to ensure against unauthorized activity during construction. The monitor shall be on-site during all construction activities within 100-feet of preserved avoided waters of the U.S., and for all compensatory mitigation activities required under Special Condition 1.

Rationale: *This special condition is necessary to ensure avoidance and minimization of impacts to waters of the U.S. and to ensure that construction activities do not impact any avoided or preserved waters of the U.S. (33 CFR 320.4(r)(1), 33 CFR 325.4(a)(3), 33 CFR 332, 40 CFR 230).*

5. Prior to initiation of construction activities within waters of the U.S., you shall establish a 205.9 acre preserve of the waters of the U.S. enhanced and created as required by Special Condition 1, on the Valadeao Ranch and Silver Creek Ranch sites, as identified in Table B of the MMP. The preserve shall be established in accordance with the requirements of Special Conditions 6, 7, and 8 and shall be maintained in perpetuity in accordance with the MMP. The purpose of this preserve is to ensure that functions of the aquatic environment are protected.

Rationale: *This special condition is necessary to ensure avoidance and minimization of impacts to waters of the U.S., ensure successful compensatory mitigation for the unavoidable losses of waters of the U.S. due to the construction of the Proposed Action, and to ensure that the functions of the aquatic environment are protected. (33 CFR 320.4(r)(1); 33 CFR 325.4(a)(3); 33 CFR 332, 40 CFR 230).*

6. You shall place created, enhanced, and preserved waters of the U.S., and any required vegetative buffers preserved as required in Special Condition 5 into a separate "preserve" parcel prior to initiation of construction activities within waters of the U.S. Permanent legal protection shall be recorded for all preserve parcels as required by Special Conditions 7 and 8, following the Corps' approval of the legal instrument.

a. To ensure compliance with this condition, the MMP identified in Special Condition 1 is incorporated by reference as a condition of this authorization, and shall be implemented, except as modified by the following special conditions.

b. You shall not construct any roads, utility lines, outfalls, trails, benches, firebreaks or other structure, and shall not conduct any grading, mowing, grazing, planting, discing, pesticide use, burning, or other activities within the on-site and off-site mitigation, preservation, and avoidance areas, unless specifically identified in the MMP or without specific, advance written approval from the Corps. You shall not construct any outfalls that flow toward the preserve without prior approval of the Corps. If approved, outfalls shall be designed such that they do not contribute to erosion of upland areas or stream channels within the preserve.

c. To prevent unauthorized fills and unforeseen impacts to avoided or adjacent waters, you shall install fencing and appropriate signage around either: (1) the 205.9 acre preserve area required under Special Conditions 1 and 5, or (2) the entirety of the 10,772 acre Valadeao Ranch Conservation Land property and the 10,890 acre Silver Creek Ranch Conservation Land Property, unless this office provides written agreement that fencing in specifically identified areas is not appropriate and/or practicable due to land management activities, topography, or other appropriate reasons. You shall ensure that any required fencing allows unrestricted visibility to discourage vandalism, destruction or disturbance, as well as enable wildlife passage. Examples of appropriate fencing include post-and-cable, barbed wire, chain-link, wrought iron or similar type. You shall place the signage at all access points into the preserved, enhanced and created waters and ensure signage contains the Corps identification number (SPN-2009-00443), contact information for the preserve manager and a statement that the site is a wetland preserve.

Rationale: *This special condition is necessary to ensure avoidance and minimization of impacts to waters of the U.S. (33 CFR 320.4(r)(1), 33 CFR 325.4(a)(3), 33 CFR 332(k)(iv), 40 CFR 230).*

7. You shall implement the following financial assurance and other measures to ensure long-term viability of the preservation, creation and enhancement areas:

a. Establish a fully-funded endowment to provide for maintenance and monitoring of the preservation, creation, and enhancement areas required under Special Condition 5. Information on the proposed endowment holder and the proposed endowment agreement shall be provided to the Corps for approval prior to establishment. Proof that the endowment is fully-funded shall be provided no more than 180 days following initiation of construction activities within waters of the U.S.

b. Designate an appropriate conservation-oriented third-party entity to function as preserve manager and to hold the required conservation easements. Information on the proposed conservation easement holder shall be provided to the Corps for approval prior to designation. Designation of the third-party entity shall be completed prior to initiation of construction activities in waters of the U.S.

c. Record permanent conservation easements maintaining all mitigation, preservation, and avoidance areas as wetland preserve and wildlife habitat in perpetuity. Copies of the proposed conservation easement language shall be provided to the Corps of Engineers for approval prior to recordation. Recordation of the permanent conservation easement shall be completed and the recorded conservation easement shall be submitted to the Corps no later than 10 days prior to initiation of construction activities in waters of the U.S.

Rationale: *This special condition is necessary to ensure avoidance and minimization of impacts to waters of the U.S. as well as ensure successful compensatory mitigation for the unavoidable losses of waters of the U.S. due to the construction of the Proposed Action. (33 CFR 320.4(r)(1); 33 CFR 325.4(a)(3); 33 CFR 332, 40 CFR 230).*

8. The conservation easement required by Special Condition 7 above shall contain language stating that (a) the Grantee shall not assign its rights or obligations under the required conservation easement except to an organization/individual qualified to hold such interests under the applicable laws and committed to holding this easement exclusively for conservation purposes; and, (b) the Corps shall be notified in writing of any intention to reassign the conservation easement to a new grantee and shall approve the selection of the grantee; and, (c) the new grantee shall accept the assignment in writing and a copy of this acceptance shall be provided to the Corps. In the event the conservation easement is assigned, it shall then be re-recorded and indexed in the same manner as any other instrument affecting title to real property. A copy of the newly recorded conservation easement shall be furnished to the Corps within 90 days of recordation.

Rationale: *This special condition is necessary to ensure protection of the creation/preservation/restoration mitigation areas for the unavoidable losses of waters of the U.S. due to the construction of the Proposed Action. (33 CFR 320.4(r)(1); 33 CFR 325.4(a)(3); 33 CFR 332).*

9. To assure completion and success of the compensatory mitigation required in Special Condition 1, and in accordance with 33 CFR Part 332.3(n), you shall post two performance bonds in the amount of \$677,040, and \$297,036, for a total of \$974,076, with a Federally-approved surety for the approximate cost of wetland construction and monitoring. Following the successful completion of construction of the compensatory mitigation required in Special Condition 1, the performance bond in the amount of \$297,036 may be released. The \$677,040 performance bond shall not be released until this office has determined in writing that all mitigation success criteria identified in the MMP have been met. You shall provide proof of posting of the performance bond to this office prior to the initiation of construction activities in waters of the U.S.

If at any time during the construction or monitoring period of the mitigation creation activities it is determined by the Corps that the success of mitigation construction or performance standards outlined in the approved mitigation plan is not met, this office will determine if you shall:

a. Provide to the Corps for approval, a remediation plan to ensure that the mitigation creation meets the performance criteria, or;

b. Utilize the performance bond funds to conduct mitigation creation, as approved by the Corps, at the same site or an alternative site.

Rationale: *This special condition is necessary to ensure a high level of confidence that the compensatory mitigation will be successfully completed (33 CFR 320.4(r)(1); 33 CFR 325.4(a)(3); 33 CFR 332).*

10. Prior to initiation of any construction activities within waters of the U.S., you shall employ construction best management practices (BMPs) within 50-feet of all on-site waters of the U.S. to be avoided, as well as adjacent to all waters of the U.S. adjacent to the

compensatory mitigation construction areas required in Special Condition 1. Methods shall include the use of appropriate measures to intercept and capture sediment prior to entering waters of the U.S., as well as erosion control measures along the perimeter of all work areas to prevent the displacement of fill material. All BMPs shall be in place prior to initiation of any construction activities for that phase and shall remain until construction activities are completed. You shall maintain erosion control methods until all on-site soils are stabilized. You shall submit a description of and photo-documentation of your BMPs to our office with information required in Special Condition 1.

Rationale: *This condition is necessary to minimize adverse effects to water quality from construction activities to the maximum extent practicable (33 CFR 320.3(a), 33 CFR 320.4(d), 33 CFR 325.4(a)(3)).*

11. This Corps permit does not authorize you to take an endangered species, in particular giant kangaroo rat (*Dipodomys ingens*), San Joaquin kit fox (*Vulpes macrotis mutica*), blunt-nosed leopard lizard (*Gambelia silus*), and California tiger salamander (*Ambystoma californiense*), or destroy or adversely modify designated critical habitat. In order to legally take a listed species, you must have separate authorization under the Endangered Species Act (e.g., an Endangered Species Act Section 10 permit, or a Biological Opinion under Endangered Species Act Section 7, with "incidental take" provisions with which you must comply). The enclosed U.S. Fish and Wildlife Service Biological Opinion (Number 08EVEN00-2016-F-0245, dated March 8, 2016), contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the Biological Opinion. Your authorization under this Corps permit is conditional upon your compliance with all of the mandatory terms and conditions associated with "incidental take" of the attached Biological Opinion, related to the Corps' jurisdiction, which terms and conditions are incorporated by reference in this permit. The Corps' jurisdiction over the Proposed Action is limited to construction activities within the 0.121 acres of waters of the U.S. that would be filled, upland areas adjacent to the waters of the U.S. that would be filled, as well as upland access and staging areas. Failure to comply with the terms and conditions associated with incidental take of the Biological Opinion, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your Corps permit. The U. S. Fish and Wildlife Service is the appropriate authority to determine compliance with the terms and conditions of its Biological Opinion, and with the Endangered Species Act. You must comply with all conditions of this Biological Opinion, including those ascribed to the Corps.

Rationale: *This condition is necessary to ensure compliance with Section 7 of the ESA for impacts to threatened and/or endangered species (16 USC 1531 et seq.; 50 CFR 402; 33 CFR 320.4(j)(4); 33 CFR 325.2(b)(5); 33 CFR 325.4(a)(1)).*

12. To ensure your project complies with the Federal Endangered Species Act for affects to the Federally-listed California condor (*Gymnogyps californianus*), vernal pool tadpole shrimp (*Lepidurus packardii*), Conservancy fairy shrimp (*Branchinecta conservation*), longhorn fairy shrimp (*Branchinecta longiatenna*), and vernal pool fairy shrimp (*Branchinecta lynchi*), you must implement all of the mitigating measures proposed as part of your project description, which are identified in the enclosed U.S. Fish and Wildlife Service letter of concurrence (08EVEN00-2016-F-0245, dated March 8, 2016). If you are unable to implement any of the proposed measures, you must immediately notify the Corps, the U.S.

Fish and Wildlife Office, and the National Marine Fisheries Service so we may consult as appropriate, prior to initiating the work, in accordance with Federal law.

Rationale: *This condition is necessary to ensure compliance with Section 7 of the ESA (16 USC 1531 et seq; 50 CFR 402; 33 CFR 320.4(j)(4); 33 CFR 325.2(b)(5); 33 CFR 325.4(a)(1)).*

13. You shall notify this office of the start and completion dates for the authorized work within 5 calendar days prior to the initiation of construction activities within waters of the U.S., and 10 calendar days following completion of construction activities.

Rationale: *This condition is necessary to assist the Corps in scheduling compliance inspections to ensure compliance with the permit and applicable conditions (33 CFR 325.4, 33 CFR 326).*

14. You are responsible for all work authorized herein and ensuring that all contractors and workers are made aware of and adhere to the terms and conditions of this permit. You shall ensure that a hard copy of the permit and associated drawings are available for quick reference at the site until all construction activities are completed.

Rationale: *This condition is necessary to ensure that all workers on site are aware of the terms and conditions of the permit in order to ensure compliance with the permit and applicable conditions (33 CFR 325.4, 33 CFR 326).*

15. Prior to the initiation of construction activities authorized under this permit and required under Special Condition 1, you shall clearly identify the limits of all construction areas. The markers shall be of a material, and placed in a manner, that prevents construction equipment from entering any waters of the U.S. that are to be avoided. You shall properly maintain such identification until construction has been completed and soils have been stabilized. You are prohibited from undertaking any activity (e.g. equipment usage or materials storage) that affects waters of the U.S. outside of the permit limits.

Rationale: *This condition is necessary to ensure the construction activities do not occur outside of the project area, which could cause adverse effects to the aquatic ecosystem (33 CFR 325.4(a)(3)).*

16. You shall use only clean and non-toxic fill material for this action. The fill material shall be free from items such as trash, debris, automotive parts, asphalt, construction materials, concrete with exposed reinforcement bars, and soils contaminated with any toxic substance, in toxic amounts in accordance with Section 307 of the CWA.

Rationale: *This condition is necessary to ensure that contaminated material is not placed within waters of the U.S. (33 CFR 325.4(a)(3), 40 CFR 230).*

17. All construction activities in waters of the U.S. authorized by this permit and/or required by Special Condition 1, shall be conducted when the project area is naturally dewatered, or is dewatered in accordance with a Corps approved dewatering plan. Any proposed dewatering plan shall be submitted to, and specifically approved by the Corps, in writing, prior to initiation of construction activities in waters of the U.S. proposed to be dewatered. No work shall be conducted in flowing waters.

Rationale: *This condition is necessary to minimize downstream effects to the aquatic environment from suspended sediments and turbidity to the maximum extent practicable. (33 CFR 320.3(a), 33 CFR 320.4(d), 33 CFR 325.4(a)(3), 40 CFR 230).*

18. You shall employ a qualified archeologist, meeting the Secretary of Interior's Professional Qualifications Standards for Archeology (48 FR 44738-39), to monitor all initial ground-disturbing activities, including excavation, grading, etc. The monitor shall be present during all initial ground-disturbing activities and shall examine sidewalls and dirt piles as appropriate. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit and/or required by Special Condition 1, you shall immediately cease activities in waters of the U.S. and notify the Corps of what you have found. The Corps will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

Rationale: *Due to the potential for buried cultural resources in the project area, this conditions is necessary to ensure compliance with Section 106 of the National Historic Preservation Act (16 USC 470, 33 CFR 320.3(g); 33 CFR 325.2(b)(3); 33 CFR 325, Appendix C; 36 CFR 800).*

19. Within 60 days following completion of the authorized work or at the expiration of the construction window of this permit, whichever occurs first, you shall submit as-built drawings and a description of the work conducted on the site and the compensatory mitigation areas required under Special Condition 1. The drawings shall include the following:

- a. The Department of the Army Permit number.
- b. A plan view drawing of the location of the authorized work footprint (as shown on the permit drawings) with an overlay of the work as constructed in the same scale as the attached permit drawings. The drawing should show all "earth disturbance," impacts to waters of the U.S., structures, and the boundaries of any on-site and/or off-site mitigation or avoidance areas. The drawings shall contain, at a minimum, 1-foot topographic contours of the entire site.
- c. Ground photographs of the completed work. The camera positions and view-angles of the ground photographs shall be identified on a map, aerial photograph, or plan-view drawing.
- d. A description and list of all deviations between the work as authorized by this permit and the work as constructed. Clearly indicate on the as-built drawings the location of any deviations that have been listed.

Rationale: *This condition is necessary to ensure compliance with the permit and applicable conditions and to ensure that the proposed work and final restoration work has been conducted in accordance with the permit and all applicable conditions. (33 USC 1344(a), 33 USC 401 et. seq., 33 CFR 320.4(r)(1), 33 CFR 325.4(a)(3); 33 CFR 326).*

IX. Public Interest Review

a. The relative extent of the public and private need for the proposed work has been considered: The Proposed Action is intended to meet a local and regional demand for energy, as well as local and state needs for greenhouse gas reduction.

b. The practicability of using reasonable alternative locations and/or methods to accomplish the objective of the proposed structure or work has been evaluated: The Corps has determined that there are no practicable alternate locations that would accomplish the purpose of the proposed work. The Corps has also determined that there are no practicable alternative methods to accomplish the purpose of the proposed work that would have fewer direct or indirect effects than the modified Proposed Action as described in the Final EIS. Alternative A (Proposed Action) represents the LEDPA, as described in Section III(e).

c. The extent and permanence of the beneficial and/or detrimental effects that the proposed structures or work may have on the public and private uses which the area is suited has been reviewed: The Proposed Action would result in the placement of fill material into 0.121 acres of waters of the U.S., resulting in a permanent adverse effects to these waters. Additionally, the Proposed Action would result in temporary and permanent, less than significant adverse effects to aesthetics, agricultural resources, biological resources (including vegetation, wildlife, and special status species), geology and soils, hydrology, and water quality. The Proposed Action would also result in temporary, less than significant adverse effects to air quality and climate change, and permanent, less than significant beneficial effects to air quality and climate change. In addition, the Proposed Action would result in temporary and permanent less than significant beneficial effects to economics for San Benito County, the applicant, and the general public.

X. Findings

a. The evaluation of the Proposed Action and alternatives was done in accordance with all applicable laws, executive orders, regulations, and agency regulations. The EIS and supporting documents are adequate and contain sufficient information to make a reasoned permit decision.

b. The selected alternative is Alternative A (Proposed Action), with appropriate and practicable mitigation measures to minimize environmental harm and potential adverse impacts of the discharges on the aquatic ecosystem and the human environment. The Proposed Action, as mitigated by these conditions, is considered the environmentally preferred alternative under NEPA.

c. The discharge complies with the Section 404(b)(1) guidelines, and the Proposed Action is considered the least environmentally damaging practicable alternative, with the inclusion of appropriate and practicable general and special conditions in the permit to minimize pollution or adverse effects to the affected ecosystem.

d. Issuance of a Department of the Army permit, with the inclusion of special conditions on the permit, as prescribed by regulations published in 33 CFR Parts 320 to 330, and 40 CFR Part 320 is not contrary to the public interest.

e. The compensatory mitigation identified in Section VIII was determined using the *South Pacific Division Mitigation Ratio Setting Checklist*, and is sufficient to ensure no net

loss of aquatic resource functions and services for effects to waters of the U.S. associated with the Proposed Action. The required compensatory mitigation deviates from the order of options presented in 33 CFR 332.3(b)(2) – (6), as there are no mitigation bank or in-lieu fee programs available that include the Proposed Action in their service area. Therefore, the required compensatory mitigation is permittee-responsible establishment and enhancement using a watershed approach.

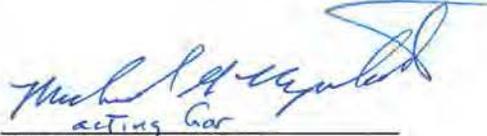
PREPARED BY:



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Sacramento District

9 March 2016
Date

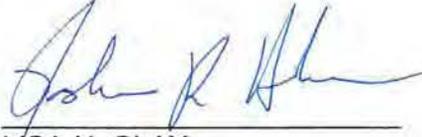
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8 march 2016
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LISA H. CLAY
Office of Counsel
Sacramento District

9 March 2016
Date

APPROVED BY:



R. MARK TOY
Brigadier General, USA
Commanding

14 MAR 2016
Date