

# **INFORMATION HANDOUT**

**For Contract No. 10-0W1204**

**At 10-SJ-4-R8.3/T14.3**

**Identified by**

**Project ID 1000020428**

## **PERMITS**

California Department of Fish and Wildlife

U.S. Fish and Wildlife Service

United States Army Corps of Engineers

Nationwide 404

## **WATER QUALITY**

California Regional Water Quality Control Board

Central Valley Region

Board Order No. 5B39CR00151 / 5B39CR00151A1

## **AGREEMENTS**

California Department of Fish and Wildlife

Notification No. 1600-2013-0021-3

Woods Irrigation District Utility Agreement

## **ENCROACHMENT PERMITS**

County of San Joaquin Department of Public Works



## Memorandum

Date: June 12, 2013

To: Mr. Frank Meraz  
California Department of Transportation  
855 M Street, Suite 200  
Fresno, CA 93721

From:   
Scott Wilson, Acting Regional Manager  
California Department of Fish and Wildlife – Bay Delta Region, 7329 Silverado Trail, Napa, California 94558

Subject: Incidental Take Permit for 2081-2013-002-03 Bacon Island Rehabilitation Project,  
San Joaquin County

Enclosed you will find two originals of the Incidental Take Permit for the above referenced project, which have been signed by the California Department of Fish and Wildlife (CDFW). Please read the permit carefully, sign the acknowledgement on both copies of the permit, and return one original no later than 30 days from CDFW signature and prior to initiation of ground-disturbing activities to:

Habitat Conservation Planning Branch  
California Department of Fish and Wildlife  
1416 Ninth Street, Suite 1260  
Sacramento, CA 95814

You are advised to keep the other original signature permit in a secure location and distribute copies to appropriate project staff responsible for ensuring compliance with the conditions of the permit. Note that you are required to comply with certain conditions of approval prior to initiation of ground-disturbing activities. Additionally, a copy of the permit must be maintained at the project work site and made available for inspection by CDFW staff when requested.

The permit will not take effect until the signed acknowledgment is received by CDFW. If you wish to discuss these instructions or have questions regarding the permit, please contact Ms. Melissa Escaron, Staff Environmental Scientist, at (925) 786-3045; or Mr. Craig Weightman, Senior Environmental Scientist, at (707) 944-5577.

Enclosures

cc: California Department of Fish and Wildlife  
Ryan Mathis – Habitat Conservation Planning Branch, Sacramento  
Melissa Escaron – Bay Delta Region, Napa  
Craig Weightman – Bay Delta Region, Napa



California Department of Fish and Wildlife  
Bay Delta Region  
7329 SILVERADO TRAIL  
NAPA, CA 94558

California Endangered Species Act  
Incidental Take Permit No. 2081-2013-002-03

**BACON ISLAND REHABILITATION PROJECT**

**Authority:** This California Endangered Species Act (CESA) incidental take permit (ITP) is issued by the California Department of Fish and Wildlife (CDFW) pursuant to Fish and Game Code section 2081, subdivisions (b) and (c), and California Code of Regulations, Title 14, section 783.0 et seq. CESA prohibits the take<sup>1</sup> of any species of wildlife designated by the California Fish and Game Commission as an endangered, threatened, or candidate species.<sup>2</sup> CDFW may authorize the take of any such species by permit if the conditions set forth in Fish and Game Code section 2081, subdivisions (b) and (c) are met. (See Cal. Code Regs., tit. 14, § 783.4).

**Permittee:** California Department of Transportation (Caltrans)  
**Principal Officer:** Frank Meraz, Biology Branch Chief  
**Contact Person:** Dena Gonzalez, (559) 445-6227  
**Mailing Address:** 855 M Street, Suite 200  
Fresno, CA 93721

**Effective Date and Expiration Date of this ITP:**

This ITP shall be executed in duplicate original form and shall become effective once a duplicate original is acknowledged by signature of the Permittee on the last page of this ITP and returned to CDFW's Habitat Conservation Planning Branch at the address listed in the Notices section of this ITP. Unless renewed by CDFW, this ITP's authorization to take the Covered Species shall expire on **December 31, 2017**.

Notwithstanding the expiration date on the take authorization provided by this ITP, Permittee's obligations pursuant to this ITP do not end until CDFW accepts as complete the Permittee's Final Mitigation Report required by Condition of Approval 7.7 of this ITP.

<sup>1</sup> Pursuant to Fish and Game Code section 86, "Take' means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." See also *Environmental Protection Information Center v. California Department of Forestry and Fire Protection* (2008) 44 Cal.4th 459, 507 (for purposes of incidental take permitting under Fish and Game Code section 2081, subdivision (b), "take' ... means to catch, capture or kill").

<sup>2</sup> "The definition of an endangered, threatened, and candidate species for purposes of CESA are found in Fish and Game Code sections 2062, 2067, and 2068, respectively.

**Project Location:**

The Bacon Island Rehabilitation Project (Project) is located between Post Miles 8.1 and 14.3 on State Route 4 and extends 12 miles east of Bacon Island Road to the San Joaquin River bridge approach, within the west of the City of Stockton, San Joaquin County (See Figure 1).

**Project Description:**

Caltrans proposes to repair and overlay pavement and improve associated drainage facilities on State Route 4. Existing shoulders will be widened to the current standard of eight feet and rumble strips will be installed. Drainage facility work is scheduled to be conducted during the non-irrigation season (ditches are dry) and the inactive period for the Covered Species. However, should the schedule shift, this authorization permits work during the active period for the Covered Species, and if water is present within the canals, then a dewater system may be installed. The Permittee may install temporary earthen barriers and piping to divert the water but continue to allow it to flow through the work area. The Woods Irrigation District would then shut off the water for a maximum of two days to allow the contractor to build two temporary earthen dams, one located upstream and the other, downstream. The installed pipe would run through the existing culvert and through both temporary earthen dams. Each dam would be 30 feet long by 6 feet high, by 2 feet deep. The remaining water would then be pumped out of the drainage ditches, ensuring that no wet pockets are left in the corners of the waterways in which prey species for Covered Species might remain. Once the space is dewatered the Permittee will ensure a 15-day drying period. Once the construction work is completed, the Woods Irrigation District will turn off flows to allow the Permittee to remove the temporary earthen dams and piping.

Drainage System 1: Remove existing headwalls and extend box culvert 17 feet to the north and 9 feet to the south to accommodate widened shoulders. Construct new wing walls. Construct new concrete ditch.

Drainage System 2: Replace the existing 84-inch concrete pipe culvert and headwall. Place Rock Slope Protection (RSP) at the inlet and outlet.

Drainage System 3: Extend existing culvert on the south side by 27.2 feet and 10.8 feet on the north side to allow for construction of new shoulders and intersection improvements. Replace head walls and wing walls at new inlet and outlet. Realign existing ditch to the new inlet location.

Drainage System 4: Remove existing 18-inch corrugated steel pipe on Maybeck Road and existing canal gate, and relocate the new inlet of System #3. Realign existing ditch along the southwest quadrant of the Route 4 and Maybeck Road intersection, place RSP.

Drainage System 5: Remove existing 36-inch reinforced corrugated pipe along Route 4 and replace it with 48-inch reinforced corrugated pipe. Construct new headwall and wing walls for the inlet and outlet.

Drainage System 6: Replace existing culvert just north of State Route 4. This system will outlet into north end of Drainage System #5 inlet. Drainage ditches will be filled and realigned on the north side of State Route 4.

Drainage System 7: Replace and extend existing culvert by 66 feet. Realigned Drainage System #7 will connect to the south end of System #5.

Drainage System 8: Extend existing 72-inch by 44-inch concrete box culvert by 13 feet to allow for construction of shoulders, replace existing wing walls.

Project activities will include excavation, grading, filling, concrete work, RSP installation, ditch realignment, paving, clearing and grubbing, trenching, and other activities.

**Covered Species Subject to Take Authorization Provided by this ITP:**

This ITP covers the following species:

Name	CESA Status
1. Giant garter snake ( <i>Thamnophis gigas</i> )	Threatened <sup>3</sup>

This species and only this species is the “Covered Species” for the purposes of this ITP.

**Impacts of the Taking on Covered Species:**

Project activities and their resulting impacts are expected to result in the incidental take of individuals of the Covered Species. The activities described above expected to result in incidental take of individuals of the Covered Species include existing culvert excavation extension, permanent fill of drainage ditches, and installation temporary earthen dams and subsequent dewatering activities (Covered Activities). Covered Activities do not include new ditch creation or activities outside of the banks of the drainage systems. These Covered Activities are the only activities that CDFW is allowing take to be incidental to. CESA defines take as an attempt to hunt, pursue, catch, capture, kill. The Project has the potential to kill Covered Species by vehicular strikes and excavation or crushing by heavy equipment. There is also potential for take resulting from capture of individuals with the purpose of relocating them to safety. This ITP only authorizes take within the top of the banks of the drainage system located within the Project area (collectively, the Project Area).

The Project is expected to cause the permanent loss of 0.44 acres of habitat for the Covered Species, and temporary loss of 0.46 acres of habitat for the Covered Species during the inactive period, October 1 through April 30. Should the anticipated construction schedule shift, this authorization permits work during the active season for the Covered Species. Impacts of the authorized taking also include adverse impacts to the Covered Species related to temporal losses, increased habitat fragmentation and edge effects, and the Project’s incremental

<sup>3</sup> See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(4)(E).

contribution to cumulative impacts (indirect impacts). These impacts include: stress resulting from construction related noise and vibrations, capture and relocation, and long-term effects due to displacement from preferred habitat, increased competition for food and space, and increased vulnerability to predation.

**Incidental Take Authorization of Covered Species:**

This ITP authorizes incidental take of the Covered Species and only the Covered Species. With respect to incidental take of the Covered Species, CDFW authorizes the Permittee, its employees, contractors, and agents to take Covered Species incidentally in carrying out the Covered Activities, subject to the limitations described in this section and the Conditions of Approval identified below. This ITP does not authorize take of Covered Species from activities outside the scope of the Covered Activities, take of Covered Species outside of the Project Area, take of Covered Species resulting from violation of this ITP, or intentional take of Covered Species, except for capture and relocation of Covered Species as authorized by this ITP.

**Conditions of Approval:**

Unless specified otherwise, the following measures apply to all Covered Activities within the Project Area. CDFW's issuance of this ITP and Permittee's authorization to take the Covered Species are subject to Permittee's compliance with and implementation of the following Conditions of Approval:

1. **Legal Compliance:** Permittee shall comply with all applicable federal, state, and local laws in existence on the effective date of this ITP or adopted thereafter.
2. **CEQA Compliance:** Permittee shall implement and adhere to the mitigation measures related to the Covered Species in the Biological Resources section of the Mitigated Negative Declaration (SCH No.: 2002043015) adopted by California Department of Transportation in April 2011 as lead agency for the Project pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.).
3. **LSA Agreement Compliance:** Permittee shall implement and adhere to the mitigation measures and conditions related to the Covered Species in the Lake and Streambed Alteration Agreement (LSAA) (Notification No. 1600-2013-0021-3) for the Project executed by CDFW pursuant to Fish and Game Code section 1600 et seq.
4. **ESA Compliance:** Permittee shall implement and adhere to the terms and conditions related to the Covered Species in the Bacon Island Rehabilitation Project (Biological Opinion No. 81420-2008-F-1284-R001-1) for the Project pursuant to the federal Endangered Species Act. For purposes of this ITP, where the terms and conditions for the Covered Species in the federal authorization are less protective of the Covered Species or otherwise conflict with this ITP, the conditions of approval set forth in this ITP shall control.

5. **ITP Time Frame Compliance:** Permittee shall fully implement and adhere to the conditions of this ITP within the time frames set forth below and as set forth in the Mitigation Monitoring and Reporting Program (MMRP), which is included as Attachment 1 to this ITP.

6. **General Provisions:**

- 6.1. Designated Representative. Before starting Covered Activities, Permittee shall designate a representative (Designated Representative) responsible for communications with CDFW and overseeing compliance with this ITP. Permittee shall notify CDFW in writing before starting Covered Activities of the Designated Representative's name, business address, and contact information, and shall notify CDFW in writing if a substitute Designated Representative is selected or identified at any time during the term of this ITP.
- 6.2. Designated Biologist. Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of a biological monitor (Designated Biologist) at least 30 days before starting Covered Activities. Permittee shall ensure that the Designated Biologist is knowledgeable and experienced in the biology, natural history, collecting and handling, of the Covered Species. The Designated Biologist shall be responsible for monitoring Covered Activities to help minimize and fully mitigate or avoid the incidental take of individual Covered Species and to minimize disturbance of Covered Species' habitat. Permittee shall obtain CDFW approval of the Designated Biologist in writing before starting Covered Activities, and shall also obtain approval in advance in writing if the Designated Biologist must be changed.
- 6.3. Designated Biologist Authority. To ensure compliance with the Conditions of Approval of this ITP, the Designated Biologist shall have authority, through the resident engineer to immediately stop any activity that does not comply with this ITP, and/or to order any reasonable measure to avoid the unauthorized take of an individual of the Covered Species.
- 6.4. Education Program. Permittee shall conduct an education program for all persons employed or otherwise working in the Project Area before performing any work. The program shall consist of a presentation from the Designated Biologist that includes a discussion of the biology and general behavior of the Covered Species, information about the distribution and habitat needs of the Covered Species, sensitivity of the Covered Species to human activities, its status pursuant to CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this ITP. Permittee shall provide interpretation for non-English speaking workers, and the same instruction shall be provided to any new workers before they are authorized to perform work in the Project Area. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures.

- 6.5. Construction Monitoring Notebook. The Designated Biologist shall maintain a construction-monitoring notebook on-site throughout the construction period, which shall include a copy of this ITP with attachments and a list of signatures of all personnel who have successfully completed the education program. Permittee shall ensure a copy of the construction-monitoring notebook is available for review at the Project site upon request by CDFW.
- 6.6. Trash Abatement. Permittee shall initiate a trash abatement program before starting Covered Activities and shall continue the program for the duration of the Project. Permittee shall ensure that trash and food items are contained in animal-proof containers and removed at least once a week to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs.
- 6.7. Dust Control. Permittee shall implement dust control measures during Covered Activities to facilitate visibility for monitoring of the Covered Species by the Designated Biologist. Permittee shall keep the amount of water used to the minimum amount needed, and shall not allow water to form puddles.
- 6.8. Erosion Control Materials. Permittee shall prohibit use of erosion control materials potentially harmful to Covered Species and other species, such as monofilament netting (erosion control matting) or similar material, in potential Covered Species' habitat.
- 6.9. Delineation of Habitat. Permittee shall clearly delineate habitat of the Covered Species within the Project Area with posted signs, posting stakes, flags, or fencing as necessary to minimize the disturbance of Covered Species' habitat.
- 6.10. Project Access. Project-related personnel shall access the Project Area using existing routes, and shall not cross Covered Species' habitat outside of or en route to the Project Area. Permittee shall restrict Project-related vehicle traffic to established roads, staging, and parking areas. Permittee shall ensure that vehicle speeds do not exceed 20 miles per hour to avoid Covered Species on or traversing the roads. If Permittee determines construction of routes for travel are necessary outside of the Project Area, the Designated Representative shall contact CDFW for written approval before carrying out such an activity. CDFW may require an amendment to this ITP, among other reasons, if additional take of Covered Species will occur as a result of the Project modification.
- 6.11. Hazardous Waste. Permittee shall immediately stop and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so. Permittee shall exclude the storage and handling of hazardous materials from the Project Area and shall properly contain and dispose of any unused or leftover hazardous products off-site.

6.12. CDFW Access. Permittee shall provide CDFW staff with reasonable access to the Project, through the Resident Engineer when possible, and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in this ITP.

6.13. Refuse Removal. Upon completion of Covered Activities, Permittee shall remove from the Project Area and properly dispose of all temporary fill and construction refuse, including, but not limited to, broken equipment parts, wrapping material, cords, cables, wire, rope, strapping, twine, buckets, metal or plastic containers, and boxes.

## 7. Monitoring, Notification and Reporting Provisions:

7.1. Notification Before Commencement. The Designated Representative shall notify CDFW 14 calendar days before starting Covered Activities and shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities.

7.2. Notification of Non-compliance. The Designated Representative shall immediately notify CDFW in writing if it determines that the Permittee is not in compliance with any Condition of Approval of this ITP, including but not limited to any actual or anticipated failure to implement measures within the time periods indicated in this ITP and/or the MMRP. The Designated Representative shall report any non-compliance with this ITP to CDFW within 24 hours.

7.3. Compliance Monitoring. The Designated Biologist shall be on-site daily when Covered Activities occur. The Designated Biologist shall conduct compliance inspections to (1) minimize incidental take of the Covered Species; (2) prevent unlawful take of species; (3) check for compliance with all measures of this ITP; (4) check all exclusion zones; and (5) ensure that signs, stakes, and fencing are intact, and that Covered Activities are only occurring in the Project Area. The Designated Representative or Designated Biologist shall prepare daily written observation and inspection records summarizing: oversight activities and compliance inspections, observations of Covered Species and their sign, survey results, and monitoring activities required by this ITP.

7.4. Quarterly Compliance Report. The Designated Representative or Designated Biologist shall compile the observation and inspection records identified in Condition of Approval 7.3 into a Quarterly Compliance Report and submit it to CDFW along with a copy of the MMRP table with notes showing the current implementation status of each mitigation measure. Quarterly Compliance Reports shall be submitted to CDFW's Regional Office at the office listed in the Notices section of this ITP and via e-mail to CDFW's Regional Representative. At the time of this ITP's approval, the CDFW Regional Representative is Melissa Escaron ([melissa.escaron@wildlife.ca.gov](mailto:melissa.escaron@wildlife.ca.gov)). CDFW may at any time increase the timing and number of compliance inspections and reports required under this provision depending upon the results of previous compliance inspections. If CDFW

determines the reporting schedule must be changed, CDFW will notify Permittee in writing of the new reporting schedule.

- 7.5. Annual Status Report. Permittee shall provide CDFW with an Annual Status Report (ASR) no later than January 31 of every year beginning with issuance of this ITP and continuing until CDFW accepts the Final Mitigation Report identified below. Each ASR shall include, at a minimum: (1) a summary of all Quarterly Compliance Reports for that year identified in Condition of Approval 7.4; (2) a general description of the status of the Project Area and Covered Activities, including actual or projected completion dates, if known; (3) a copy of the table in the MMRP with notes showing the current implementation status of each mitigation measure; (4) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating Project impacts; (5) all available information about Project-related incidental take of the Covered Species; and (6) information about other Project impacts on the Covered Species.
- 7.6. CNDDDB Observations. The Designated Biologist shall submit all observations of Covered Species to CDFW's California Natural Diversity Database (CNDDDB) within 60 calendar days of the observation and the Designated Biologist shall include copies of the submitted forms with the next Quarterly Compliance Report or ASR, whichever is submitted first relative to the observation.
- 7.7. Final Mitigation Report. No later than 45 days after completion of all mitigation measures, Permittee shall provide CDFW with a Final Mitigation Report. The Designated Biologist shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a summary of all Quarterly Compliance Reports and all ASRs; (2) a copy of the table in the MMRP with notes showing when each of the mitigation measures was implemented; (3) all available information about Project-related incidental take of the Covered Species; (4) information about other Project impacts on the Covered Species; (5) beginning and ending dates of Covered Activities; (6) an assessment of the effectiveness of this ITP's Conditions of Approval in minimizing and fully mitigating Project impacts of the taking on Covered Species; (7) recommendations on how mitigation measures might be changed to more effectively minimize take and mitigate the impacts of future projects on the Covered Species; and (8) any other pertinent information.
- 7.8. Notification of Take or Injury. Permittee shall immediately notify the Designated Biologist if a Covered Species is taken or injured by a Project-related activity, or if a Covered Species is otherwise found dead or injured within the vicinity of the Project. The Designated Biologist or Designated Representative shall provide initial notification to CDFW by calling the Regional Office at (707) 944-5500 and the CDFW Representative at (925) 786-3045. The initial notification to CDFW shall include information regarding the location, species, and number of animals taken or injured and the ITP Number. Following initial notification, Permittee shall send CDFW a written report within two calendar days. The report shall include the date and time of the finding or incident,

location of the animal or carcass, and if possible provide a photograph, explanation as to cause of take or injury, and any other pertinent information.

**8. Take Minimization Measures:**

The following requirements are intended to ensure the minimization of incidental take of Covered Species in the Project Area during Covered Activities. Permittee shall implement and adhere to the following conditions to minimize take of Covered Species:

- 8.1. If Covered Species are found on the Project site, the Designated Biologist will capture the individual and remove it from the construction zone for immediate release in the closest suitable habitat. The Designated Representative shall immediately notify CDFW of the incident, or no later than noon on the next business day if the incident occurs outside of normal business hours. Notification to CDFW shall be via telephone or email, followed by a written incident report. Notification shall include the date, time, location and circumstances of the incident, the name of the party that actually relocated the animal, and the location (including GPS coordinates) where the animal was moved.
- 8.2. If a Covered Species is injured as a result of Project activities, it shall be immediately taken to a CDFW-approved wildlife rehabilitation or veterinary facility. Permittee shall identify the facility prior to the start of ground- or vegetation-disturbing activities. Permittee shall bear any costs associated with the care or treatment of such injured Covered Species. Permittee shall notify CDFW immediately unless the incident occurs outside of normal business hours. In that event, CDFW shall be notified no later than noon on the next business day. Notification to CDFW shall be via telephone or email, followed by a written incident report. Notification shall include the date, time, location and circumstances of the incident, and the name of the facility where the animal was taken.
- 8.3. Permittee shall clearly delineate potential habitat of Covered Species within the Project area with high visibility Environmentally Sensitive Area (ESA) fencing to minimize the disturbance of habitat. ESA fencing shall be erected as directed by the Designated Biologist, 200 feet from the edge of potential aquatic habitat for the giant garter snake. The Designated Biologist shall monitor for and clear the area of Covered Species during the installation of ESA Fencing.
- 8.4. Aquatic habitat that will be disturbed shall be dewatered and remain dewatered for 15 days prior to the initiation of construction activities. If complete dewatering is not possible, potential Covered Species prey will be removed so that Covered Species are not attracted to the construction area.
- 8.5. Borrow material shall not be collected from the banks of aquatic features, drainage systems, or irrigation ditches.

8.6. Storm Water Pollution Prevention Plan (SWPPP) measures shall be inspected and maintained to minimize sediment transport into sensitive habitat areas during construction. A copy of the SWPPP shall be provided to CDFW upon request.

**9. Habitat Management Land Acquisition and Restoration:**

CDFW has determined that permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to CESA to fully mitigate Project-related impacts of the taking on the Covered Species that will result with implementation of the Covered Activities. This determination is based on factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation.

To meet this requirement, the Permittee shall either purchase 2.7 acres of Covered Species credits from a CDFW-approved mitigation or conservation bank (Condition of Approval 9.2) OR shall provide for both the permanent protection and management of 2.7 acres of Habitat Management (HM) lands pursuant to Condition of Approval 9.3 below and the calculation and deposit of the management funds pursuant to Condition of Approval 9.4 below. Permanent protection and funding for perpetual management of compensatory habitat must be complete before starting Covered Activities, or within 18 months of the effective date of this ITP if Security is provided pursuant to Condition of Approval 10 below for all uncompleted obligations. The Permittee shall also restore on-site 0.46 acres of temporarily impacted Covered Species habitat pursuant to Condition of Approval 9.6 below.

9.1. Cost Estimates. CDFW has estimated the cost of acquisition, protection, and perpetual management of the HM lands and restoration of temporarily disturbed habitat as follows:

- 9.1.1. Land acquisition costs for HM lands identified in Condition of Approval 9.3 below, estimated at \$20,000/acre for 2.7 acres: \$54,000. Land acquisitions costs are estimated using local fair market current value for lands with habitat values meeting mitigation requirements;
- 9.1.2. Start-up costs for HM lands, including initial site protection and enhancement costs as described in Condition of Approval 9.3.5 below, estimated at \$15,000;
- 9.1.3. Interim management period funding as described in Condition of Approval 9.3.6 below, estimated at \$17,000;
- 9.1.4. Long-term management funding as described in Condition of Approval 9.4 below, estimated at \$2,000/acre for 2.7 acres: \$5,400. Long-term management funding is estimated initially for the purpose of providing Security to ensure implementation of HM lands management.

- 9.1.5. Related transaction fees including but not limited to account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW as described in Condition of Approval 9.5, estimated at \$3,000.
- 9.1.6. Restoration of on-site temporary effects to Covered Species habitat as described in Condition of Approval 9.6, calculated at \$10,405/acre for 0.46 acres: \$4,786.
- 9.2. Covered Species Credits. Permittee shall purchase 2.7 acres of Covered Species credits from a CDFW-approved mitigation or conservation bank prior to initiating Covered Activities, or no later than 18 months from the issuance of this ITP if Security is provided pursuant to Condition of Approval 10 below.

OR:

- 9.3. Habitat Acquisition and Protection. To provide for the acquisition and perpetual protection and management of the HM lands, the Permittee shall:
- 9.3.1. Fee Title/Conservation Easement. Transfer fee title to the HM lands to CDFW pursuant to terms approved in writing by CDFW. Alternatively, CDFW, in its sole discretion, may authorize a governmental entity, special district, non-profit organization, for-profit entity, person, or another entity to hold title to and manage the property provided that the district, organization, entity, or person meets the requirements of Government Code sections 65965-65968, as amended. If CDFW does not hold fee title to the HM lands, CDFW shall act as grantee for a conservation easement over the HM lands or shall, in its sole discretion, approve a non-profit entity, public agency, or Native American tribe to act as grantee for a conservation easement over the HM lands provided that the entity, agency, or tribe meets the requirements of Civil Code section 815.3. If CDFW does not hold the conservation easement, CDFW shall be expressly named in the conservation easement as a third-party beneficiary. The Permittee shall obtain CDFW written approval of any conservation easement before its execution or recordation. No conservation easement shall be approved by CDFW unless it complies with Government Code sections 65965-65968, as amended and includes provisions expressly addressing Government Code sections 65966(j) and 65967(e);
- 9.3.2. HM Lands Approval. Obtain CDFW written approval of the HM lands before acquisition and/or transfer of the land by submitting, at least three months before acquisition and/or transfer of the HM lands, a formal Proposed Lands for Acquisition Form (see Attachment 2B) identifying the land to be purchased or property interest conveyed to an approved entity as mitigation for the Project's impacts on Covered Species;

- 9.3.3. HM Lands Documentation. Provide a recent preliminary title report, initial hazardous materials survey report, and other necessary documents. All documents conveying the HM lands and all conditions of title are subject to the approval of CDFW, and if applicable, the Wildlife Conservation Board and the Department of General Services;
- 9.3.4. Land Manager. Designate both an interim and long-term land manager approved by CDFW. The interim and long-term land managers may, but need not, be the same. The interim and/or long-term land managers may be the landowner or another party. Documents related to land management shall identify both the interim and long-term land managers. Permittee shall notify CDFW of any subsequent changes in the land manager within 30 days of the change. If CDFW will hold fee title to the mitigation land, CDFW will also act as both the interim and long-term land manager unless otherwise specified.
- 9.3.5. Start-up Activities. Provide for the implementation of start-up activities, including the initial site protection and enhancement of HM lands, once the HM lands have been approved by CDFW. Start-up activities include, at a minimum: (1) preparing a final management plan for CDFW approval (see <http://www.dfg.ca.gov/habcon/conplan/mitbank/>); (2) conducting a baseline biological assessment and land survey report within four months of recording or transfer; (3) developing and transferring Geographic Information Systems (GIS) data if applicable; (4) establishing initial fencing; (5) conducting litter removal; (6) conducting initial habitat restoration or enhancement, if applicable; and (7) installing signage;
- 9.3.6. Interim Management (Initial and Capital). Provide for the interim management of the HM lands. The Permittee shall ensure that the interim land manager implements the interim management of the HM lands as described in the final management plan and conservation easement approved by CDFW. The interim management period shall be a minimum of three years from the date of HM land acquisition and protection and full funding of the Endowment and includes expected management following start-up activities. Interim management period activities described in the final management plan shall include fence repair, continuing trash removal, site monitoring, and vegetation and invasive species management. Permittee shall either (1) provide a security to CDFW for the minimum of three years of interim management that the land owner, Permittee, or land manager agrees to manage and pay for at their own expense, (2) establish an escrow account with written instructions approved in advance in writing by CDFW to pay the land manager annually in advance, or (3) establish a short-term enhancement account with CDFW or a CDFW-approved entity for payment to the land manager.

9.4. Endowment Fund. If the Permittee will permanently protect and perpetually manage compensatory habitat as described in Condition of Approval 9.3, the Permittee shall ensure that the HM lands are perpetually managed, maintained, and monitored by the long-term land manager as described in this ITP, the conservation easement, and the final management plan approved by CDFW. After obtaining CDFW approval of the HM lands, Permittee shall provide long-term management funding for the perpetual management of the HM lands by establishing a long-term management fund (Endowment). The Endowment is a sum of money, held in a CDFW-approved fund that provides funds for the perpetual management, maintenance, monitoring, and other activities on the HM lands consistent with the management plan(s) required by Condition of Approval 9.3.5. Endowment as used in this ITP shall refer to the endowment deposit and all interest, dividends, other earnings, additions and appreciation thereon. The Endowment shall be governed by this ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended.

After the interim management period, Permittee shall ensure that the designated long-term land manager implements the management and monitoring of the HM lands according to the final management plan. The long-term land manager shall be obligated to manage and monitor the HM lands in perpetuity to preserve their conservation values in accordance with this ITP, the conservation easement, and the final management plan. Such activities shall be funded through the Endowment.

9.4.1. Identify an Endowment Manager. The Endowment shall be held by the Endowment Manager, which shall be either CDFW or another entity qualified pursuant to Government Code sections 65965-65968, as amended. Permittee shall submit to CDFW a written proposal that includes: (i) the name of the proposed Endowment Manager; (ii) whether the proposed Endowment Manager is a governmental entity, special district, nonprofit organization, community foundation, or congressionally chartered foundation; (iii) whether the proposed Endowment Manager holds the property or an interest in the property for conservation purposes as required by Government Code section 65968(b)(1) or, in the alternative, the basis for finding that the Project qualifies for an exception pursuant to Government Code section 65968(b)(2); and (iv) a copy of the proposed Endowment Manager's certification pursuant to Government Code section 65968(e). Within thirty days of CDFW's receipt of Permittee's written proposal, CDFW shall inform Permittee in writing if it determines the proposal does not satisfy the requirements of Fish and Game Code section 2081(b)(4) and, if so, shall provide Permittee with a written explanation of the reasons for its determination. If CDFW does not provide Permittee with a written determination within the thirty-day period, the proposal shall be deemed consistent with Section 2081(b)(4).;

9.4.2. Calculate the Endowment Funds Deposit. After obtaining CDFW written approval of the HM lands, long-term management plan, and Endowment Manager, Permittee shall prepare a Property Analysis Record (PAR) or PAR-equivalent analysis

(hereinafter "PAR") to calculate the amount of funding necessary to ensure the long-term management of the HM lands (Endowment Deposit Amount). The Permittee shall submit to CDFW for review and approval the results of the PAR before transferring funds to the Endowment Manager.

- 9.4.2.1. Capitalization Rate and Fees. Permittee shall obtain the capitalization rate from the selected Endowment Manager for use in calculating the PAR and adjust for any additional administrative, periodic, or annual fees.
- 9.4.2.2. Endowment Buffers/Assumptions. Permittee shall include in PAR assumptions the following buffers for endowment establishment and use that will substantially ensure long-term viability and security of the Endowment:
  - 9.4.2.2.1. 10 Percent Contingency. A 10 percent contingency shall be added to each endowment calculation to hedge against underestimation of the fund, unanticipated expenditures, inflation, or catastrophic events.
  - 9.4.2.2.2. Three Years Delayed Spending. The endowment shall be established assuming spending will not occur for the first three years after full funding.
  - 9.4.2.2.3. Non-annualized Expenses. For all large capital expenses to occur periodically but not annually such as fence replacement or well replacement, payments shall be withheld from the annual disbursement until the year of anticipated need or upon request to Endowment Manager and CDFW.
- 9.4.3. Transfer Long-term Endowment Funds. Permittee shall transfer the long-term endowment funds to the Endowment Manager upon CDFW approval of the Endowment Deposit Amount identified above. The approved Endowment Manager may pool the Endowment with other endowments for the operation, management, and protection of HM lands for local populations of the Covered Species but shall maintain separate accounting for each Endowment. The Endowment Manager shall, at all times, hold and manage the Endowment in compliance with this ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended.
- 9.5. Reimburse CDFW. Permittee shall reimburse CDFW for all reasonable expenses incurred by CDFW such as transaction fees, account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW.
- 9.6. Restoration of Temporary Impacts. Permittee shall regrade the 0.46 acres of temporarily disturbed areas to match the existing topography and revegetate with hydroseed.

Hydroseed shall not contain invasive exotic plant species. Prohibited exotic plant species include those identified in the California Exotic Pest Plant Council's database, which is accessible at: <http://www.calipc.org/ip/inventory/weedlist.php>.

#### **10. Performance Security**

The Permittee may proceed with Covered Activities only after the Permittee has ensured funding (Security) to complete any activity required by Condition of Approval 9 that has not been completed before Covered Activities begin. Permittee shall provide Security as follows:

- 10.1. Security Amount. The Security shall be in the amount of \$99,186. This amount is based on the cost estimates identified in Condition of Approval 9.1 above.
- 10.2. Security Form. Security Form. The Security shall be in the form of a funding assurance letter signed by the Deputy District Directors of Environmental Planning and Engineering and Project Management, or another form of Security approved in advance in writing by CDFW's Office of the General Counsel or another mechanism approved in advance in writing by CDFW's Office of the General Counsel. The funding assurance letter shall reference the estimated security and provide a commitment to fund the full cost of all ITP measures.
- 10.3. Security Timeline. The Security shall be provided to CDFW before Covered Activities begin or within 30 days after the effective date of this ITP, whichever occurs first.

Even if Security is provided, the Permittee must complete the required acquisition, protection and transfer of all HM lands and record any required conservation easements no later than 18 months from the effective date of this ITP. CDFW may require the Permittee to provide additional HM lands and/or additional funding to ensure the impacts of the taking are minimized and fully mitigated, as required by law, if the Permittee does not complete these requirements within the specified timeframe.

#### **Amendment:**

This ITP may be amended as provided by California Code of Regulations, Title 14, section 783.6, subdivision (c), and other applicable law. This ITP may be amended without the concurrence of the Permittee as required by law, including if CDFW determines that continued implementation of the Project as authorized under this ITP would jeopardize the continued existence of the Covered Species or where Project changes or changed biological conditions necessitate an ITP amendment to ensure that all Project-related impacts of the taking to the Covered Species are minimized and fully mitigated.

#### **Stop-Work Order:**

CDFW may issue Permittee a written stop-work order requiring Permittee to suspend any Covered Activity for an initial period of up to 25 days to prevent or remedy a violation of this ITP, including but not limited to the failure to comply with reporting or monitoring obligations, or to prevent the unauthorized take of any CESA endangered, threatened, or candidate species.

Incidental Take Permit  
No. 2081-2013-002-03  
CALIFORNIA DEPARTMENT OF TRANSPORTATION  
BACON ISLAND REHABILITATION PROJECT

Permittee shall stop work immediately as directed by CDFW upon receipt of any such stop-work order. Upon written notice to Permittee, CDFW may extend any stop-work order issued to Permittee for a period not to exceed 25 additional days. Suspension and revocation of this ITP shall be governed by California Code of Regulations, Title 14, section 783.7, and any other applicable law. Neither the Designated Biologist nor CDFW shall be liable for any costs incurred in complying with stop-work orders.

**Compliance with Other Laws:**

This ITP sets forth CDFW's requirements for the Permittee to implement the Project pursuant to CESA. This ITP does not necessarily create an entitlement to proceed with the Project. Permittee is responsible for complying with all other applicable federal, state, and local law.

**Notices:**

The Permittee shall deliver a fully executed duplicate original ITP by registered first class mail or overnight delivery to the following address:

Habitat Conservation Planning Branch  
California Department of Fish and Wildlife  
Attention: CESA Permitting Program  
1416 Ninth Street, Suite 1260  
Sacramento, CA 95814

Written notices, reports and other communications relating to this ITP shall be delivered to CDFW by registered first class mail at the following address, or at addresses CDFW may subsequently provide the Permittee. Notices, reports, and other communications shall reference the Project name, Permittee, and ITP Number (2081-2013-002-03) in a cover letter and on any other associated documents.

Original cover with attachment(s) to:

Scott Wilson, Acting Regional Manager  
California Department of Fish and Wildlife  
7329 Silverado Trail  
Napa, CA 94599  
Telephone: (707) 944-5500

Unless Permittee is notified otherwise, CDFW's Regional Representative for purposes of addressing issues that arise during implementation of this ITP is:

Melissa Escaron, Staff Environmental Scientist  
California Department of Fish and Wildlife  
7329 Silverado Trail  
Napa, CA 94599  
Telephone: (925) 786-3045  
Email: [melissa.escaron@wildlife.ca.gov](mailto:melissa.escaron@wildlife.ca.gov)

Incidental Take Permit  
No. 2081-2013-002-03  
CALIFORNIA DEPARTMENT OF TRANSPORTATION  
BACON ISLAND REHABILITATION PROJECT

**Compliance with CEQA:**

CDFW's issuance of this ITP is subject to CEQA. CDFW is a responsible agency pursuant to CEQA with respect to this ITP because of prior environmental review of the Project by the lead agency, California Department of Transportation. (See generally Pub. Resources Code, §§ 21067, 21069). The lead agency's prior environmental review of the Project is set forth in the Bacon Island Rehabilitation Project Mitigated Negative Declaration, (State Clearinghouse No. 2002042015) that the California Department of Transportation adopted for the Bacon Island Rehabilitation Project on April 2011. At the time the lead agency adopted the Mitigated Negative Declaration and approved the Project it also adopted various mitigation measures for the Covered Species as conditions of Project approval.

This ITP, along with CDFW's related CEQA findings, which are available as a separate document, provide evidence of CDFW's consideration of the lead agency's Mitigated Negative Declaration for the Project and the environmental effects related to issuance of this ITP [CEQA Guidelines, § 15096, subd. (f)]. CDFW finds that issuance of this ITP will not result in any previously undisclosed potentially significant effects on the environment or a substantial increase in the severity of any potentially significant environmental effects previously disclosed by the lead agency. Furthermore, to the extent the potential for such effects exists, CDFW finds adherence to and implementation of the Conditions of Project Approval adopted by the lead agency, and that adherence to and implementation of the Conditions of Approval imposed by CDFW through the issuance of this ITP, will avoid or reduce to below a level of significance any such potential effects. CDFW consequently finds that issuance of this ITP will not result in any significant, adverse impacts on the environment.

**Findings Pursuant to CESA:**

These findings are intended to document CDFW's compliance with the specific findings requirements set forth in CESA and related regulations. [Fish and Game Code § 2081, subs. (b)-(c); Cal. Code Regs., tit. 14, §§ 783.4, subds, (a)-(b), 783.5, subd. (c)(2)].

CDFW finds based on substantial evidence in the ITP application, the Bacon Island Rehabilitation Project Mitigated Negative Declaration, consultation with California Department of Transportation Biology staff, and the administrative record of proceedings, that issuance of this ITP complies and is consistent with the criteria governing the issuance of ITPs pursuant to CESA:

- (1) Take of Covered Species as defined in this ITP will be incidental to the otherwise lawful activities covered under this ITP;
- (2) Impacts of the taking on Covered Species will be minimized and fully mitigated through the implementation of measures required by this ITP and as described in the MMRP. Measures include: (1) permanent habitat protection; (2) establishment of avoidance zones; (3) worker education; and (4) Monthly Compliance Reports. CDFW evaluated factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation. Based on this evaluation, CDFW

Incidental Take Permit  
No. 2081-2013-002-03  
CALIFORNIA DEPARTMENT OF TRANSPORTATION  
BACON ISLAND REHABILITATION PROJECT

determined that the protection and management in perpetuity of 1.95 acres of compensatory habitat that is contiguous with other protected Covered Species habitat and/or is of higher quality than the habitat being destroyed by the Project, along with the minimization, monitoring, reporting, and funding requirements of this ITP minimizes and fully mitigates the impacts of the taking caused by the Project;

- (3) The take avoidance and mitigation measures required pursuant to the conditions of this ITP and its attachments are roughly proportional in extent to the impacts of the taking authorized by this ITP;
- (4) The measures required by this ITP maintain Permittee's objectives to the greatest extent possible;
- (5) All required measures are capable of successful implementation;
- (6) This ITP is consistent with any regulations adopted pursuant to Fish and Game Code sections 2112 and 2114;
- (7) Permittee has ensured adequate funding to implement the measures required by this ITP as well as for monitoring compliance with, and the effectiveness of, those measures for the Project; and
- (8) Issuance of this ITP will not jeopardize the continued existence of the Covered Species based on the best scientific and other information reasonably available, and this finding includes consideration of the species' capability to survive and reproduce, and any adverse impacts of the taking on those abilities in light of (1) known population trends; (2) known threats to the species; and (3) reasonably foreseeable impacts on the species from other related projects and activities. Moreover, CDFW's finding is based, in part, on CDFW's express authority to amend the terms and conditions of this ITP without concurrence of the Permittee as necessary to avoid jeopardy and as required by law.

**Attachments:**

FIGURE 1	Project Location Map
FIGURE 2	Impact Mapping
ATTACHMENT 1	Mitigation Monitoring and Reporting Program
ATTACHMENT 2B	Proposed Lands for Acquisition Form

ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

on June 12, 2013.

Scott Wilson

Scott Wilson, Acting Regional Manager  
Bay Delta Region

**ACKNOWLEDGMENT**

The undersigned: (1) warrants that he or she is acting as a duly authorized representative of the Permittee, (2) acknowledges receipt of this ITP, and (3) agrees on behalf of the Permittee to comply with all terms and conditions

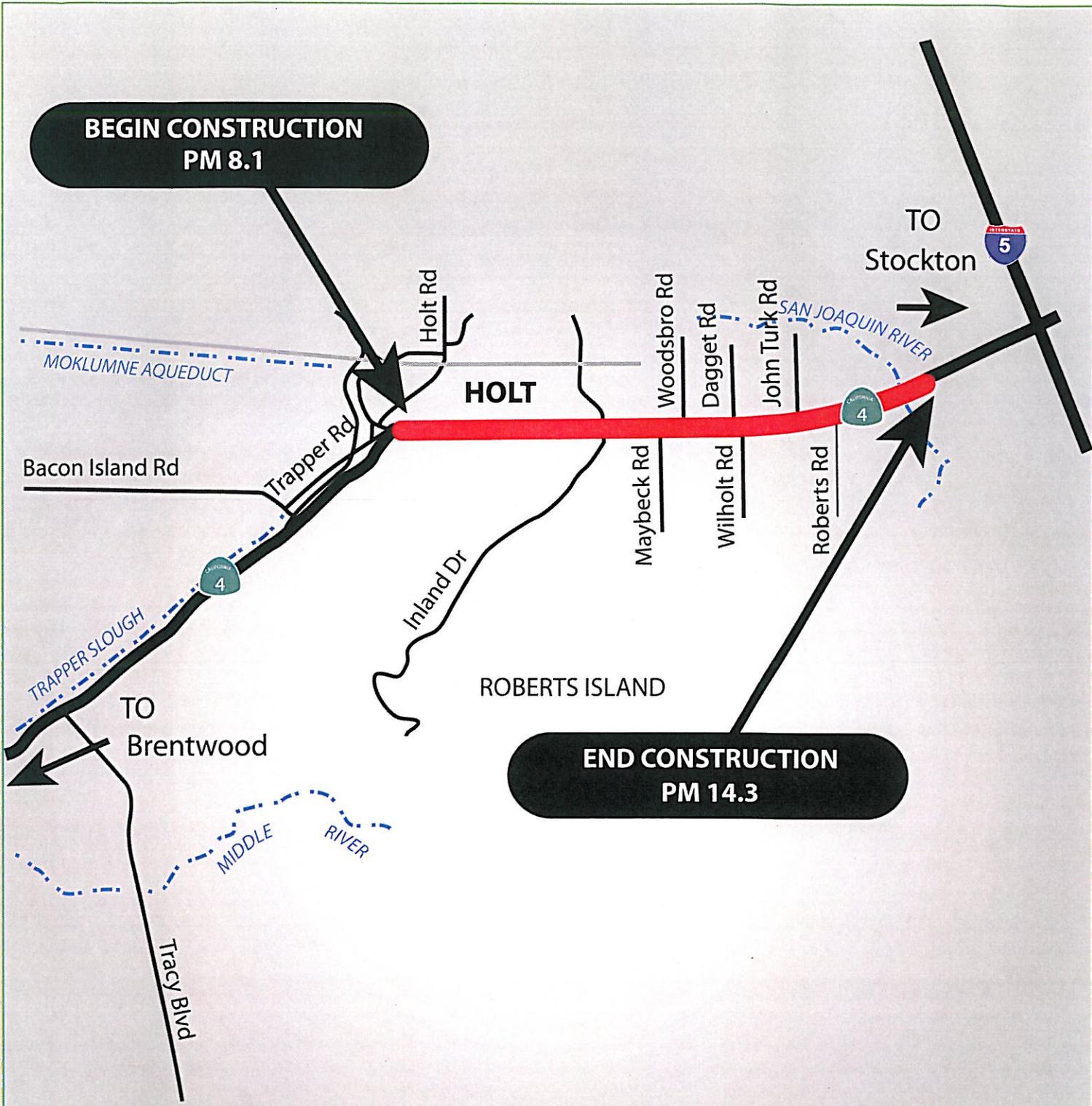
By: Frank Merz

Date: 6/13/2013

Printed Name: FRANK MERZ

Title: SENIOR ENVIRONMENTAL PLANNER

Incidental Take Permit  
No. 2081-2013-002-03  
CALIFORNIA DEPARTMENT OF TRANSPORTATION  
BACON ISLAND REHABILITATION PROJECT



Not to Scale

### Project Location Map

Bacon Island Rehabilitation

EA 10-0W120

PM 8.1/14.3

10-SJ-4



Caltrans

10-283201\_jcl\_eeb

Roberts Island

Roberts Island

Roberts Island

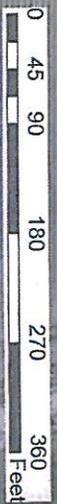
Roberts Island

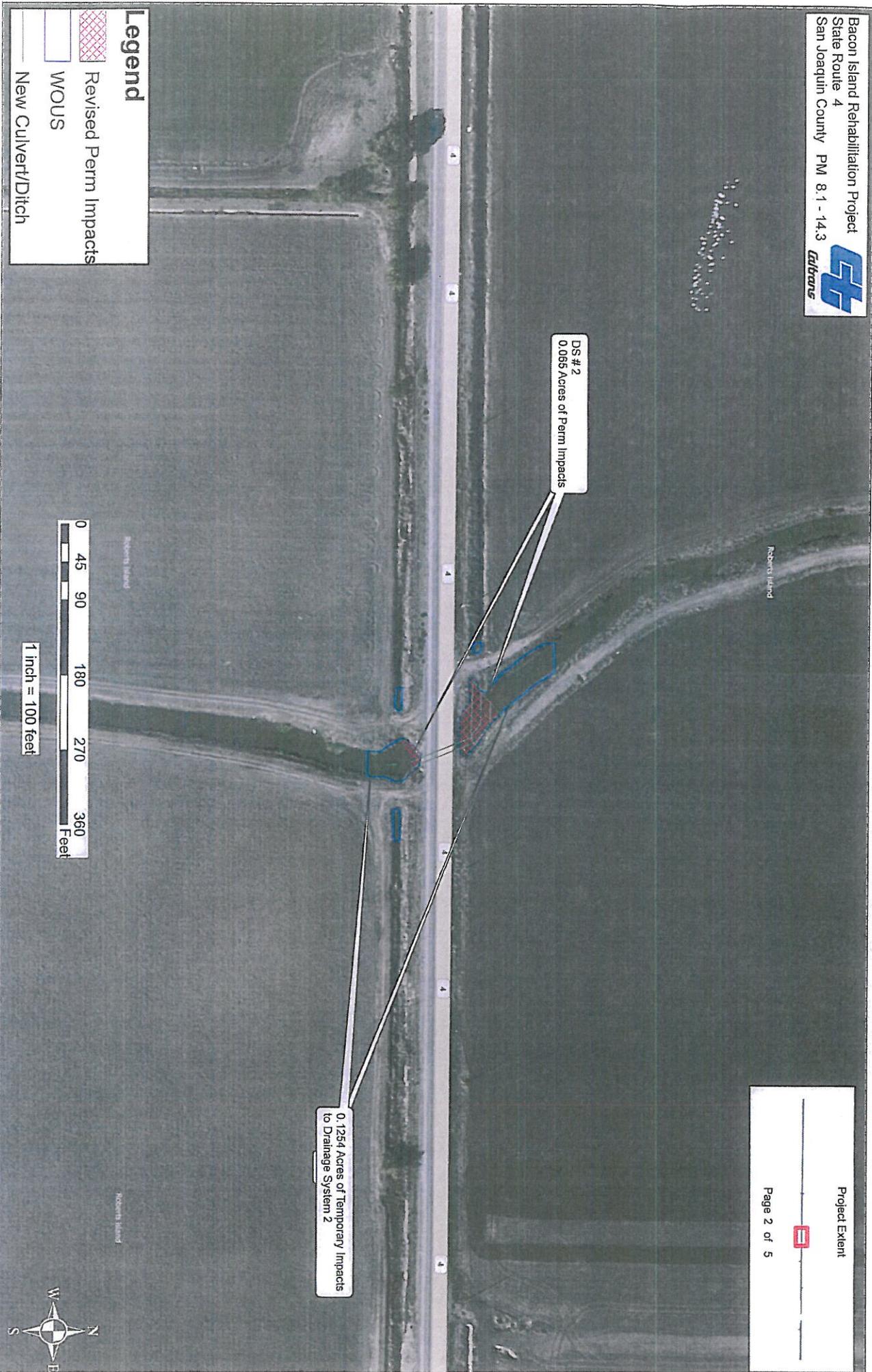
0.0075 Acres of Temporary Impacts  
to Drainage System 1

0.006 Acres of Perm Impacts

**Legend**

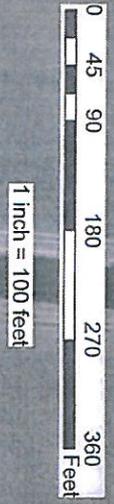
- Revised Perm Impacts
- WOUS
- New Culvert/Ditch





**Legend**

-  Revised Perm Impacts
-  WOUS
-  New Culvert/Ditch





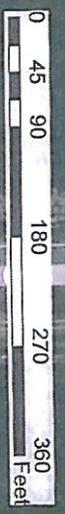
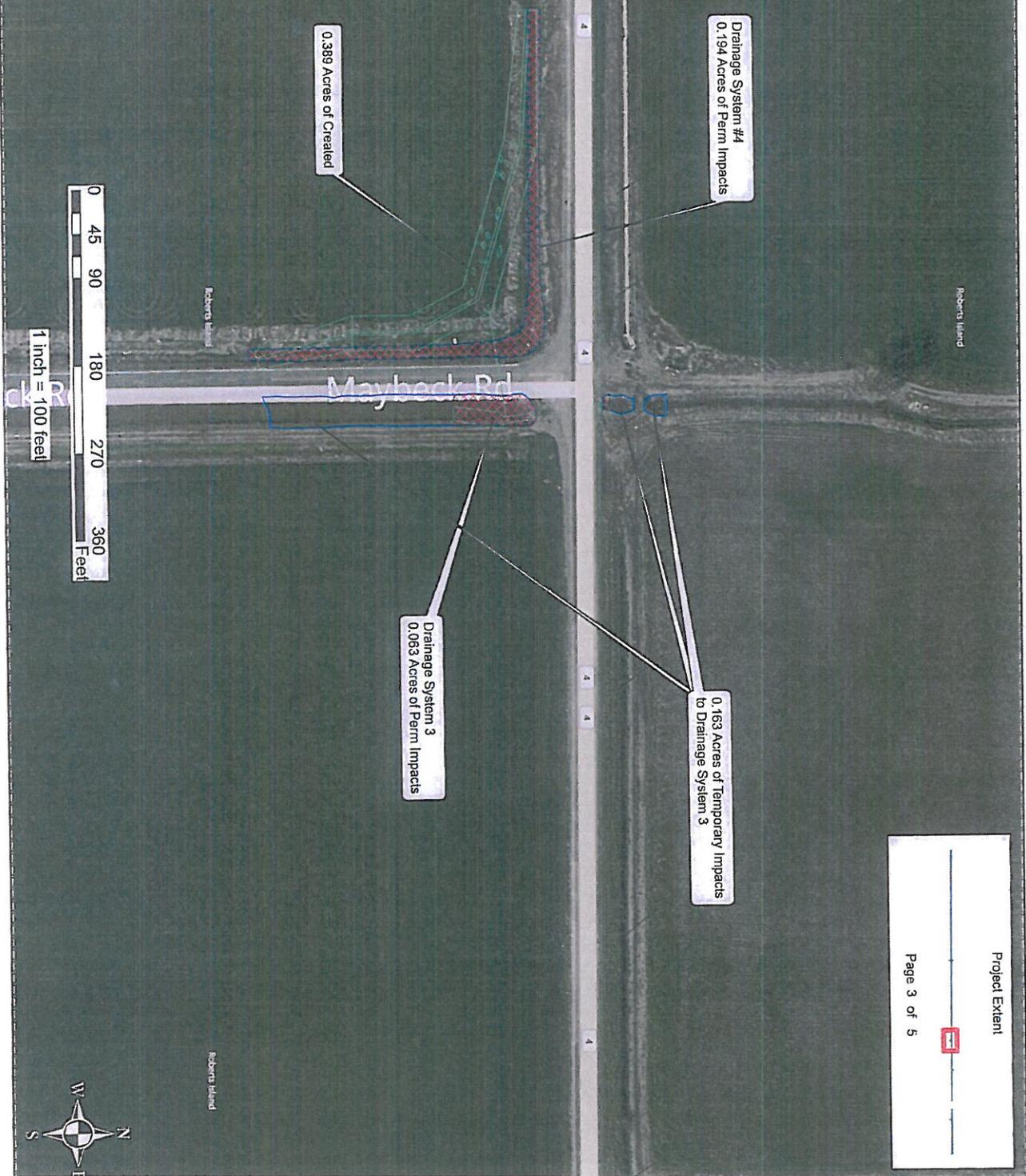
Roberts Island

Roberts Island

Roberts Island

**Legend**

-  Revised Perm Impacts
-  WOUS
-  New Culvert/Ditch



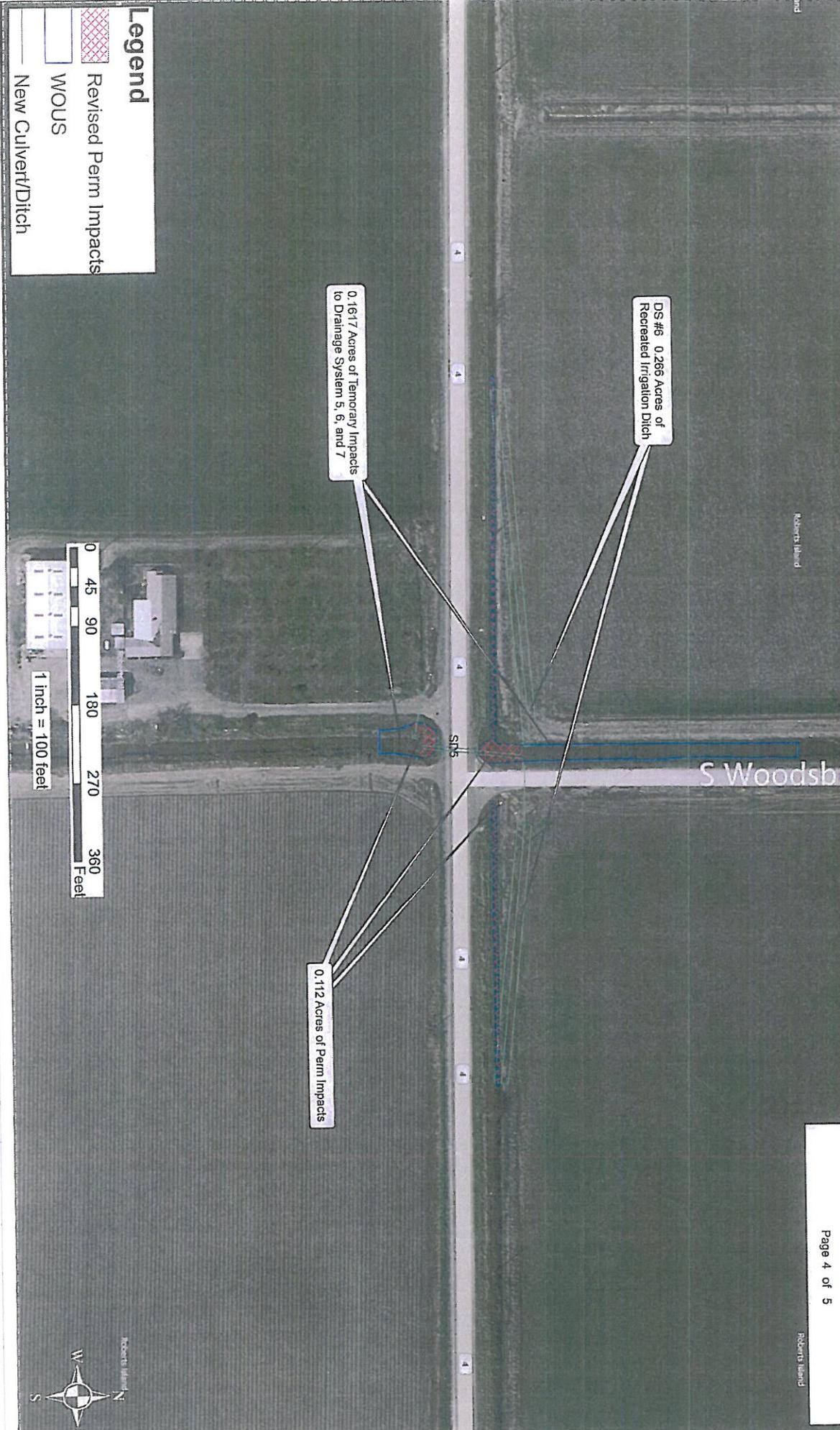
1 inch = 100 feet



Project Extent

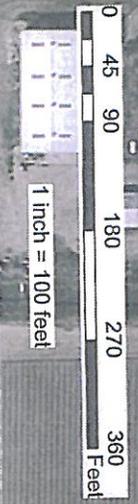


Page 3 of 5



**Legend**

- Revised Perm Impacts
- WOUS
- New Culvert/Ditch



Project Extent

Page 4 of 5



Robert Island

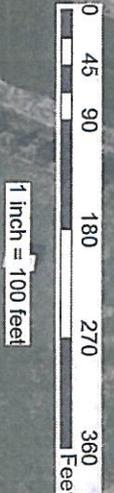
Robert Island

0.0024 Acres of Temporary Impacts to Drainage System 8

0.004 Acres of Perm Impacts

**Legend**

- Revised Perm Impacts
- WOUS
- New Culvert/Ditch



S Dagget

Attachment 1

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE  
MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)  
CALIFORNIA ENDANGERED SPECIES ACT**

**INCIDENTAL TAKE PERMIT NO. 2081-2013-002-03**

**PERMITTEE:** California Department of Transportation

**PROJECT:** Bacon Island Rehabilitation Project

**PURPOSE OF THE MMRP**

The purpose of the MMRP is to ensure that the impact minimization and mitigation measures required by the California Department of Fish and Wildlife (CDFW) for the above-referenced Project are properly implemented, and thereby to ensure compliance with section 2081(b) of the Fish and Game Code and section 21081.6 of the Public Resources Code. A table summarizing the mitigation measures required by CDFW is attached. This table is a tool for use in monitoring and reporting on implementation of mitigation measures, but the descriptions in the table do not supersede the mitigation measures set forth in the California Incidental Take Permit (ITP) and in attachments to the ITP, and the omission of a permit requirement from the attached table does not relieve the Permittee of the obligation to ensure the requirement is performed.

**OBLIGATIONS OF PERMITTEE**

Mitigation measures must be implemented within the time periods indicated in the table that appears below. Permittee has the primary responsibility for monitoring compliance with all mitigation measures and for reporting to CDFW on the progress in implementing those measures. These monitoring and reporting requirements are set forth in the ITP itself and are summarized at the front of the attached table.

**VERIFICATION OF COMPLIANCE, EFFECTIVENESS**

CDFW may, at its sole discretion, verify compliance with any mitigation measure or independently assess the effectiveness of any mitigation measure.

**TABLE OF MITIGATION MEASURES**

The following items are identified for each mitigation measure: Mitigation Measure, Source, Implementation Schedule, Responsible Party, and Status/Date/Initials. The Mitigation Measure column summarizes the mitigation requirements of the ITP. The Source column identifies the ITP condition that sets forth the mitigation measure. The Implementation Schedule column shows the date or phase when each mitigation measure will be implemented. The Responsible Party column identifies the person or agency that is primarily responsible for implementing the mitigation measure. The Status/Date/Initials column shall be completed by the Permittee during preparation of each Status Report and the Final Mitigation Report, and must identify the implementation status of each mitigation measure, the date that status was determined, and the initials of the person determining the status.

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
<b>BEFORE DISTURBING SOIL OR VEGETATION</b>					
1	Designated Representative. Before starting Covered Activities, Permittee shall designate a representative (Designated Representative) responsible for communications with CDFW and overseeing compliance with this ITP. Permittee shall notify CDFW in writing before starting Covered Activities of the Designated Representative's name, business address, and contact information, and shall notify CDFW in writing if a substitute Designated Representative is selected or identified at any time during the term of this ITP.	ITP Condition # 6.1	Before commencing ground- or vegetation-disturbing activities/Entire Project	Permittee	
2	Designated Biologist. Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of a biological monitor (Designated Biologist) at least 30 days before starting Covered Activities. Permittee shall ensure that the Designated Biologist is knowledgeable and experienced in the biology, natural history, collecting and handling, of the Covered Species. The Designated Biologist shall be responsible for monitoring Covered Activities to help minimize and fully mitigate or avoid the incidental take of individual Covered Species and to minimize disturbance of Covered Species' habitat. Permittee shall obtain CDFW approval of the Designated Biologist in writing before starting Covered Activities, and shall also obtain approval in advance in writing if the Designated Biologist must be changed.	ITP Condition # 6.2	Before commencing ground- or vegetation-disturbing activities	Permittee	
3	Designated Biologist Authority. To ensure compliance with the Conditions of Approval of this ITP, the Designated Biologist shall have authority, through the resident engineer to immediately stop any activity that does not comply with this ITP, and/or to order any reasonable measure to avoid the unauthorized take of an individual of the Covered Species.	ITP Condition # 6.3	Before commencing ground- or vegetation-disturbing activities/Entire Project	Permittee	
4	Education Program. Permittee shall conduct an education program for all persons employed or otherwise working in the Project Area before performing any work. The program shall consist of a presentation from the Designated Biologist that includes a discussion of the biology and general behavior of the Covered Species, information about the distribution and habitat needs of the Covered Species, sensitivity of the Covered Species to human activities, its status pursuant to CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this ITP. Permittee shall provide interpretation for non-English speaking workers, and the same instruction shall be provided to any new workers before they are authorized to perform work in the Project Area. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures.	ITP Condition # 6.4	Before commencing ground- or vegetation-disturbing activities/Entire Project	Permittee	
5	Delineation of Habitat. Permittee shall clearly delineate habitat of the Covered Species within the Project Area with posted signs, posting stakes, flags, or fencing as necessary to minimize the disturbance of Covered Species' habitat.	ITP Condition # 6.9	Before commencing ground- or vegetation-disturbing activities/Entire Project	Permittee	

	<b>Mitigation Measure</b>	<b>Source</b>	<b>Implementation Schedule</b>	<b>Responsible Party</b>	<b>Status / Date / Initials</b>
6	<p>Covered Species Credits. Permittee shall purchase 2.7 acres of Covered Species credits from a CDFW-approved mitigation or conservation bank prior to initiating Covered Activities, or no later than 18 months from the issuance of this ITP if Security is provided pursuant to Condition of Approval 10 below.</p> <p>OR:</p> <p>Habitat Acquisition and Protection. To provide for the acquisition and perpetual protection and management of the HM lands, the Permittee shall:</p> <p>Fee Title/Conservation Easement. Transfer fee title to the HM lands to CDFW pursuant to terms approved in writing by CDFW. Alternatively, CDFW, in its sole discretion, may authorize a governmental entity, special district, non-profit organization, for-profit entity, person, or another entity to hold title to and manage the property provided that the district, organization, entity, or person meets the requirements of Government Code sections 65965-65968, as amended. If CDFW does not hold fee title to the HM lands, CDFW shall act as grantee for a conservation easement over the HM lands or shall, in its sole discretion, approve a non-profit entity, public agency, or Native American tribe to act as grantee for a conservation easement over the HM lands provided that the entity, agency, or tribe meets the requirements of Civil Code section 815.3. If CDFW does not hold the conservation easement, CDFW shall be expressly named in the conservation easement as a third-party beneficiary. The Permittee shall obtain CDFW written approval of any conservation easement before its execution or recordation. No conservation easement shall be approved by CDFW unless it complies with Government Code sections 65965-65968, as amended and includes provisions expressly addressing Government Code sections 65966(j) and 65967(e);</p> <p>-HM Lands Approval. Obtain CDFW written approval of the HM lands before acquisition and/or transfer of the land by submitting, at least three months before acquisition and/or transfer of the HM lands, a formal Proposed Lands for Acquisition Form (see Attachment 2B) identifying the land to be purchased or property interest conveyed to an approved entity as mitigation for the Project's impacts on Covered Species;</p> <p>-HM Lands Documentation. Provide a recent preliminary title report, initial hazardous materials survey report, and other necessary documents. All documents conveying the HM lands and all conditions of title are subject to the approval of CDFW, and if applicable, the Wildlife Conservation Board and the Department of General Services;</p> <p>-Land Manager. Designate both an interim and long-term land manager approved by CDFW. The interim and long-term land managers may, but need not, be the same. The interim and/or long-term land managers may be the landowner or another party. Documents related to land management shall identify both the interim and long-term land managers. Permittee shall notify CDFW of any subsequent changes in the land manager within 30 days of the change. If CDFW will hold fee title to the mitigation land, CDFW will also act as both the interim and long-term land manager unless otherwise specified.</p>	ITP Condition # 9.2 OR 9.3	Prior to initiative Covered Activities or within 18 months of the effective date of the ITP.	Permittee	

Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
<p><b>Mitigation Measure</b></p> <p>-Start-up Activities. Provide for the implementation of start-up activities, including the initial site protection and enhancement of HM lands, once the HM lands have been approved by CDFW. Start-up activities include, at a minimum: (1) preparing a final management plan for CDFW approval (see <a href="http://www.dfg.ca.gov/habcom/complan/mitbank/">http://www.dfg.ca.gov/habcom/complan/mitbank/</a>); (2) conducting a baseline biological assessment and land survey report within four months of recording or transfer; (3) developing and transferring Geographic Information Systems (GIS) data if applicable; (4) establishing initial fencing; (5) conducting litter removal; (6) conducting initial habitat restoration or enhancement, if applicable; and (7) installing signage;</p> <p>-Interim Management (Initial and Capital). Provide for the interim management of the HM lands. The Permittee shall ensure that the interim land manager implements the interim management of the HM lands as described in the final management plan and conservation easement approved by CDFW. The interim management period shall be a minimum of three years from the date of HM land acquisition and protection and full funding of the Endowment and includes expected management following start-up activities. Interim management period activities described in the final management plan shall include fence repair, continuing trash removal, site monitoring, and vegetation and invasive species management. Permittee shall either (1) provide a security to CDFW for the minimum of three years of interim management that the land owner, Permittee, or land manager agrees to manage and pay for at their own expense, (2) establish an escrow account with written instructions approved in advance in writing by CDFW to pay the land manager annually in advance, or (3) establish a short-term enhancement account with CDFW or a CDFW-approved entity for payment to the land manager.</p>	<p>ITP Condition # 9.3 continued</p>	<p>Prior to ground disturbing activities or with 18 months of the effective date of the ITP.</p>	<p>Permittee</p>	
<p>7</p> <p>Endowment Fund. If the Permittee will permanently protect and perpetually manage compensatory habitat as described in Condition of Approval 9.3, the Permittee shall ensure that the HM lands are perpetually managed, maintained, and monitored by the long-term land manager as described in this ITP, the conservation easement, and the final management plan approved by CDFW. After obtaining CDFW approval of the HM lands, Permittee shall provide long-term management funding for the perpetual management of the HM lands by establishing a long-term management fund (Endowment). The Endowment is a sum of money, held in a CDFW-approved fund that provides funds for the perpetual management, maintenance, monitoring, and other activities on the HM lands consistent with the management plan(s) required by Condition of Approval 9.3.5. Endowment as used in this ITP shall refer to the endowment deposit and all interest, dividends, other earnings, additions and appreciation thereon. The Endowment shall be governed by this ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended. After the interim management period, Permittee shall ensure that the designated long-term land manager implements the management and monitoring of the HM lands according to the final management plan. The long-term land manager shall be obligated to manage and monitor the HM lands in perpetuity to preserve their conservation values in accordance with this ITP, the conservation easement, and the final management plan. Such activities shall be funded through the Endowment.</p>	<p>ITP Condition # 9.4</p>	<p>Upon CDFW Habitat Mitigation Lands Approval</p>	<p>Permittee</p>	

Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
<p><b>Mitigation Measure</b></p> <p>-The Endowment shall be held by the Endowment Manager, which shall be either CDFW or another entity qualified pursuant to Government Code sections 65965-65968, as amended. Permittee shall submit to CDFW a written proposal that includes: (i) the name of the proposed Endowment Manager; (ii) whether the proposed Endowment Manager is a governmental entity, special district, nonprofit organization, community foundation, or congressionally chartered foundation; (iii) whether the proposed Endowment Manager holds the property or an interest in the property for conservation purposes as required by Government Code section 65968(b)(1) or, in the alternative, the basis for finding that the Project qualifies for an exception pursuant to Government Code section 65968(b)(2); and (iv) a copy of the proposed Endowment Manager's certification pursuant to Government Code section 65968(e). Within thirty days of CDFW's receipt of Permittee's written proposal, CDFW shall inform Permittee in writing if it determines the proposal does not satisfy the requirements of Fish and Game Code section 2081(b)(4) and, if so, shall provide Permittee with a written explanation of the reasons for its determination. If CDFW does not provide Permittee with a written determination within the thirty-day period, the proposal shall be deemed consistent with Section 2081(b)(4).</p> <p>-Calculate the Endowment Funds Deposit. After obtaining CDFW written approval of the HM lands, long-term management plan, and Endowment Manager, Permittee shall prepare a Property Analysis Record (PAR) or PAR-equivalent analysis (hereinafter "PAR") to calculate the amount of funding necessary to ensure the long-term management of the HM lands (Endowment Deposit Amount). The Permittee shall submit to CDFW for review and approval the results of the PAR before transferring funds to the Endowment Manager.</p> <p>-Capitalization Rate and Fees. Permittee shall obtain the capitalization rate from the selected Endowment Manager for use in calculating the PAR and adjust for any additional administrative, periodic, or annual fees.</p> <p>-Endowment Buffers/Assumptions. Permittee shall include in PAR assumptions the following buffers for endowment establishment and use that will substantially ensure long-term viability and security of the Endowment.</p> <p>-10 Percent Contingency. A 10 percent contingency shall be added to each endowment calculation to hedge against underestimation of the fund, unanticipated expenditures, inflation, or catastrophic events.</p> <p>-Three Years Delayed Spending. The endowment shall be established assuming spending will not occur for the first three years after full funding.</p> <p>-Non-annualized Expenses. For all large capital expenses to occur periodically but not annually such as fence replacement or well replacement, payments shall be withheld from the annual disbursement until the year of anticipated need or upon request to Endowment Manager and CDFW.</p> <p>-Transfer Long-term Endowment Funds. Permittee shall transfer the long-term endowment funds to the Endowment Manager upon CDFW approval of the Endowment Deposit Amount identified above. The approved Endowment Manager may pool the Endowment with other endowments for the operation, management, and protection of HM lands for local populations of the Covered Species but shall maintain separate accounting for each Endowment. The Endowment Manager shall, at all times, hold and manage the Endowment in compliance with this ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended.</p>	<p>ITP Condition # 9.4 continued</p>		<p>Permittee</p>	

	<b>Mitigation Measure</b>	<b>Source</b>	<b>Implementation Schedule</b>	<b>Responsible Party</b>	<b>Status / Date / Initials</b>
8	Reimburse CDFW. Permittee shall reimburse CDFW for all reasonable expenses incurred by CDFW such as transaction fees, account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW.	ITP Condition # 9.5	Upon completion of CDFW HM Lands review	Permittee	
9	The Security shall be in the amount of \$99,186.	ITP Condition # 10.2	Before Covered Activities begin or within 30 days after the effective date of this ITP	Permittee	
10	Security shall be provided to CDFW before Covered Activities begin or within 30 days after the effective date of this ITP, whichever occurs first.	ITP Condition # 10.3	Before Covered Activities begin or within 30 days after the effective date of this ITP	Permittee	
<b>DURING CONSTRUCTION</b>					
11	Construction Monitoring Notebook. The Designated Biologist shall maintain a construction-monitoring notebook on-site throughout the construction period, which shall include a copy of this ITP with attachments and a list of signatures of all personnel who have successfully completed the education program. Permittee shall ensure a copy of the construction-monitoring notebook is available for review at the Project site upon request by CDFW.	ITP Condition # 6.5	Entire Project	Permittee	
12	Trash Abatement. Permittee shall initiate a trash abatement program before starting Covered Activities and shall continue the program for the duration of the Project. Permittee shall ensure that trash and food items are contained in animal-proof containers and removed at least once a week to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs.	ITP Condition # 6.6	Entire Project	Permittee	
13	Dust Control. Permittee shall implement dust control measures during Covered Activities to facilitate visibility for monitoring of the Covered Species by the Designated Biologist. Permittee shall keep the amount of water used to the minimum amount needed, and shall not allow water to form puddles.	ITP Condition # 6.7	Entire Project	Permittee	
14	Erosion Control Materials. Permittee shall prohibit use of erosion control materials potentially harmful to Covered Species and other species, such as monofilament netting (erosion control matting) or similar material, in potential Covered Species' habitat.	ITP Condition # 6.8	Entire Project	Permittee	
15	Project Access. Project-related personnel shall access the Project Area using existing routes, and shall not cross Covered Species' habitat outside of or en route to the Project Area. Permittee shall restrict Project-related vehicle traffic to established roads, staging, and parking areas. Permittee shall ensure that vehicle speeds do not exceed 20 miles per hour to avoid Covered Species on or traversing the roads. If Permittee determines construction of routes for travel are necessary outside of the Project Area, the Designated Representative shall contact CDFW for written approval before carrying out such an activity. CDFW may require an amendment to this ITP, among other reasons, if additional take of Covered Species will occur as a result of the Project modification.	ITP Condition # 6.10	Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
16	Hazardous Waste. Permittee shall immediately stop and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so. Permittee shall exclude the storage and handling of hazardous materials from the Project Area and shall properly contain and dispose of any unused or leftover hazardous products off-site.	ITP Condition # 6.11	Entire Project	Permittee	
17	CDFW Access. Permittee shall provide CDFW staff with reasonable access to the Project, through the Resident Engineer when possible, and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in this ITP.	ITP Condition # 6.12	Entire Project	Permittee	
18	Notification of Non-compliance. The Designated Representative shall immediately notify CDFW in writing if it determines that the Permittee is not in compliance with any Condition of Approval of this ITP, including but not limited to any actual or anticipated failure to implement measures within the time periods indicated in this ITP and/or the MMRP. The Designated Representative shall report any non-compliance with this ITP to CDFW within 24 hours.	ITP Condition # 7.2	Entire Project	Permittee	
19	Compliance Monitoring. The Designated Biologist shall be on-site daily when Covered Activities occur. The Designated Biologist shall conduct compliance inspections to (1) minimize incidental take of the Covered Species; (2) prevent unlawful take of species; (3) check for compliance with all measures of this ITP; (4) check all exclusion zones; and (5) ensure that signs, stakes, and fencing are intact, and that Covered Activities are only occurring in the Project Area. The Designated Representative or Designated Biologist shall prepare daily written observation and inspection records summarizing: oversight activities and compliance inspections, observations of Covered Species and their sign, survey results, and monitoring activities required by this ITP.	ITP Condition # 7.3	Entire Project	Permittee	
20	Quarterly Compliance Report. The Designated Representative or Designated Biologist shall complete the observation and inspection records identified in Condition of Approval 7.3 into a Quarterly Compliance Report and submit it to CDFW along with a copy of the MMRP table with notes showing the current implementation status of each mitigation measure. Quarterly Compliance Reports shall be submitted to CDFW's Regional Office at the office listed in the Notices section of this ITP and via e-mail to CDFW's Regional Representative. At the time of this ITP's approval, the CDFW Regional Representative is Melissa Escaron (melissa.escaron@wildlife.ca.gov). CDFW may at any time increase the timing and number of compliance inspections and reports required under this provision depending upon the results of previous compliance inspections. If CDFW determines the reporting schedule must be changed, CDFW will notify Permittee in writing of the new reporting schedule.	ITP Condition # 7.4	Entire Project	Permittee	
21	Annual Status Report. Permittee shall provide CDFW with an Annual Status Report (ASR) no later than January 31 of every year beginning with issuance of this ITP and continuing until CDFW accepts the Final Mitigation Report identified below. Each ASR shall include, at a minimum: (1) a summary of all Quarterly Compliance Reports for that year identified in Condition of Approval 7.4; (2) a general description of the status of the Project Area and Covered Activities, including actual or projected completion dates, if known; (3) a copy of the table in the MMRP with notes showing the current implementation status of each mitigation measure; (4) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating Project impacts; (5) all available information about Project-related incidental take of the Covered Species; and (6) information about other Project impacts on the Covered Species.	ITP Condition # 7.5	Entire Project	Permittee	

	<b>Mitigation Measure</b>	<b>Source</b>	<b>Implementation Schedule</b>	<b>Responsible Party</b>	<b>Status / Date / Initials</b>
22	CNDDB Observations. The Designated Biologist shall submit all observations of Covered Species to CDFW's California Natural Diversity Database (CNDDB) within 60 calendar days of the observation and the Designated Biologist shall include copies of the submitted forms with the next Quarterly Compliance Report or ASR, whichever is submitted first relative to the observation.	ITP Condition # 7.6	Entire Project	Permittee	
23	Notification of Take or Injury. Permittee shall immediately notify the Designated Biologist if a Covered Species is taken or injured by a Project-related activity, or if a Covered Species is otherwise found dead or injured within the vicinity of the Project. The Designated Biologist or Designated Representative shall provide initial notification to CDFW by calling the Regional Office at (707) 944-5500 and the CDFW Representative at (925) 786-3045. The initial notification to CDFW shall include information regarding the location, species, and number of animals taken or injured and the ITP Number. Following initial notification, Permittee shall send CDFW a written report within two calendar days. The report shall include the date and time of the finding or incident, location of the animal or carcass, and if possible provide a photograph, explanation as to cause of take or injury, and any other pertinent information.	ITP Condition # 7.8	Entire Project	Permittee	
24	If Covered Species are found on the Project site, the Designated Biologist will capture the individual and remove it from the construction zone for immediate release in the closest suitable habitat. The Designated Representative shall immediately notify CDFW of the incident, or no later than noon on the next business day if the incident occurs outside of normal business hours. Notification to CDFW shall be via telephone or email, followed by a written incident report. Notification shall include the date, time, location and circumstances of the incident, the name of the party that actually relocated the animal, and the location (including GPS coordinates) where the animal was moved.	ITP Condition # 8.1	Entire Project	Permittee	
25	If a Covered Species is injured as a result of Project activities, it shall be immediately taken to a CDFW-approved wildlife rehabilitation or veterinary facility. Permittee shall identify the facility prior to the start of ground- or vegetation-disturbing activities. Permittee shall bear any costs associated with the care or treatment of such injured Covered Species. Permittee shall notify CDFW immediately unless the incident occurs outside of normal business hours. In that event, CDFW shall be notified no later than noon on the next business day. Notification to CDFW shall be via telephone or email, followed by a written incident report. Notification shall include the date, time, location and circumstances of the incident, and the name of the facility where the animal was taken.	ITP Condition # 8.2	Entire Project	Permittee	
26	Aquatic habitat that will be disturbed shall be dewatered and remain dewatered for 15 days prior to the initiation of construction activities. If complete dewatering is not possible, potential Covered Species prey will be removed so that Covered Species are not attracted to the construction area.	ITP Condition # 8.4	Entire Project	Permittee	
27	Borrow material shall not be collected from the banks of aquatic features, drainage systems, or irrigation ditches.	ITP Condition # 8.5	Entire Project	Permittee	
28	Storm Water Pollution Prevention Plan (SWPPP) measures shall be inspected and maintained to minimize sediment transport into sensitive habitat areas during construction. A copy of the SWPPP shall be provided to CDFW upon request.	ITP Condition # 8.6	Entire Project	Permittee	

	<b>Mitigation Measure</b>	<b>Source</b>	<b>Implementation Schedule</b>	<b>Responsible Party</b>	<b>Status / Date / Initials</b>
29	Restoration of Temporary Impacts. Permittee shall regrade the 0.46 acres of temporarily disturbed areas to match the existing topography and revegetate with hydroseed. Hydroseed shall not contain invasive exotic plant species. Prohibited exotic plant species include those identified in the California Exotic Pest Plant Council's database, which is accessible at: <a href="http://www.calipc.org/ip/inventory/weedlist.php">http://www.calipc.org/ip/inventory/weedlist.php</a> .	ITP Condition # 9.6	Prior to Project Completion	Permittee	
<b>POST-CONSTRUCTION</b>					
30	Upon completion of Covered Activities, Permittee shall remove from the Project Area and properly dispose of all [temporary fill] and construction refuse, including, but not limited to, broken equipment parts, wrapping material, cords, cables, wire, rope, strapping, twine, buckets, metal or plastic containers, and boxes.	ITP Condition # 6.13	Post-construction	Permittee	
31	CDFW accepts the Final Mitigation Report as complete.	ITP Condition # 7.7	Post-construction	CDFW	

PROPOSED LANDS FOR ACQUISITION FORM ("PLFAF")

Date: \_\_\_\_\_

TO: Regional Representative  
\_\_\_\_\_  
\_\_\_\_\_

Facsimile: \_\_\_\_\_

FROM: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Applicant proposes that the following parcel of land be considered for approval by the CDFW as suitable for purposes of habitat management lands to replace the adverse environmental impacts of the Project:

<u>Section</u>	<u>Township</u>	<u>Range</u>	<u>Number of Acres</u>
_____	_____	_____	_____

Current Legal Owner(s), include Parcel Number(s):  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Location of Parcel:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

APPROVED \_\_\_ By: \_\_\_\_\_ DATE: \_\_\_\_\_  
REJECTED \_\_\_ \_\_\_\_\_  
Region

Explanation: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



## United States Department of the Interior



### FISH AND WILDLIFE SERVICE

Bay-Delta Fish and Wildlife Office  
650 Capitol Mall, Fifth Floor  
Sacramento, California 95814

IN REPLY REFER TO:

81420-2008-F-1284-R001-1

DEC 13 2010

Mr. Zachary Parker  
Branch Chief, Central Region Biology Branch  
California Department of Transportation, District 6  
2015 East Shields Avenue, Suite A-100  
Fresno, California 93726-5428

Subject: Reinitiation of the Bacon Island Rehabilitation Project, San Joaquin County, California (California Department of Transportation EA 10-28320, 10-SJ-4 PM 8.1/14.3)

Dear Mr. Parker:

This is the U.S. Fish and Wildlife Service's (Service) response to the California Department of Transportation's (Caltrans) request for formal consultation on the proposed Bacon Island Rehabilitation Project (project) in San Joaquin County, California. On April 22, 2008, the Service issued a letter of concurrence to Caltrans determining that this project, combined with the Tracy Boulevard/Trapper Road Curve Improvement Project, State Route 4, was not likely to adversely affect the federally-threatened giant garter snake (*Thamnophis gigas*; GGS) (Service file number 81420-2008-I-1284). However, Caltrans has since determined that construction activities for the project cannot comply with certain avoidance and minimization measures for the GGS that were incorporated into the original project design; therefore, effects to the species and its habitat can no longer remain at an insignificant or discountable level. Caltrans has stated that the Tracy Boulevard/Trapper Road Curve Improvement Project component was completed with adherence to the avoidance and minimization measures. Your letter requesting formal consultation, dated July 28, 2010, was received in this office on August 2, 2010. At issue are new potential effects of the proposed project on the GGS. This document represents the Service's biological opinion on the effects of the proposed project on this listed species. This document has been prepared in accordance with section 7(a)(2) of the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531 *et seq.*) (Act).

The findings and recommendations of this biological opinion (B.O.) are based on: (1) the *Bacon Island Rehabilitation & Tracy Boulevard/Trapper Road Curve Improvement Biological Assessment* (BA), dated February 2008; (2) the Service's April 22, 2008, letter of concurrence; (3) Caltrans' August 2, 2010, consultation request letter, in which were enclosed drainage plans, drainage profiles and details, and a series of aerial maps depicting the drainage systems and acres of impact to GGS habitat; (4) numerous telephone discussions and electronic-mail (e-mail)

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correspondence between Caltrans and the Service, dating from May through November 2010; and (5) other information available to the Service.

### **Consultation History**

*May 3, 2010.* Caltrans telephoned the Service for clarification on how to implement dewatering, one of the standard minimization measures often recommended by the Service for in-water activities. Caltrans stated it would be unable to apply the two week drying period within the GGS active season; this was because the irrigation district was unwilling to turn off the water since it would be a disruption to agriculture. Caltrans also wished to be cautious with its activities since no take for GGS had been exempted from the prohibitions of section 9. Any subsequent dam building or re-routing of water would increase the risk of effects to the GGS as well as possible incidental take. The Service replied to Caltrans explaining the measure further.

*May 4, 2010.* The Service e-mailed additional information to Caltrans regarding the dewatering of potential GGS habitat.

*June 14, 2010.* Caltrans telephoned the Service with updates on the issues arising over the drainages: the inadequate implementation of the current dewatering methods and the inability to keep the waterways dry for the appropriate period. Caltrans understood that it would no longer be possible to maintain the determination that project activities were not likely to adversely affect the GGS.

*June 15, 2010.* Caltrans e-mailed the Service a PowerPoint photo presentation showing the drainages on the project site that were the source of the dewatering problems.

*June 16-17, 2010.* Caltrans telephoned the Service to further discuss the present water issues and how they would affect the GGS; in particular, dam building, diversion, and dewatering. The Service requested a copy of the original BA and also recommended that Caltrans reinitiate consultation, given the proposed changes to the project description and effects to the GGS that would stem from the degree of earthmoving and disturbance arising from the dam building and alternative methods of dewatering.

*June 23, 2010.* The Service received a copy from Caltrans of the original BA, dated from February 2008.

*July 7, 2010.* Caltrans telephoned the Service to discuss the changes to the project and what would be required by the Service for re-initiation of consultation, i.e. drainage plans, updated mapping, compensation details, changes to the project description, and details of the work window.

*July 12, 2010.* Caltrans telephoned the Service to inquire whether the *Programmatic Biological Opinion on the effects of small highway projects on the threatened giant garter snake in Butte, Colusa, Glenn, Sacramento, San Joaquin, Solano, Sutter, Yolo, and Yuba Counties* (Service file number 1-1-03-F-0154) (Programmatic), issued January 24, 2005, could be utilized by this project.

*July 16, 2010.* Caltrans telephoned the Service to say that the contractor was on hold until January 2011. In-water activities would have to occur during the winter months because of the effects to agriculture that would result if the irrigation district turned the water off during the spring and summer seasons. Therefore, Caltrans agreed to further minimize additional effects to the GGS resulting from work during the species' inactive season by increasing its compensation ratio for temporary effects. It also requested to use the northern Sutter Basin Conservation Bank, but the Service stated that the GGS In-Lieu Conservation Fund would be more appropriate.

*August 2, 2010.* The Service received a letter from Caltrans requesting initiation of formal consultation, and appendage of the project to the Programmatic. The letter included drainage design plans and aerial maps.

*September 16 & 21, 2010.* The Service e-mailed Caltrans to relay that it would be more appropriate not to append the project to the Programmatic, given that this document would be undergoing heavy re-assessment; Caltrans agreed.

*October 27, 2010.* The Service e-mailed Caltrans with questions and clarifications regarding the BA and reinitiation letter.

*November 2, 2010.* Caltrans e-mailed its response to the Service's questions and comments.

*November 10, 2010.* The Service e-mailed Caltrans for details on its proposed restoration and re-vegetation plans. Caltrans replied that it would inquire into the specifics of what work it has planned, but that at minimum it would replace topsoil and hydroseed with a native seed mixture.

*November 23, 2010.* The Service e-mailed Caltrans to inform it that utilization of the closest Service-approved conservation bank in the Sacramento Valley was preferable to the usage of the GGS In-Lieu Conservation Fund.

## **BIOLOGICAL OPINION**

### **Description of the Proposed Action**

The following project description is based on information provided by Caltrans in its 2008 BA and 2010 formal letter request for consultation. The project is located on State Route (SR) 4 beginning at post mile (PM) 8.1, approximately 12 miles (mi) east of Bacon Island Road, to PM 14.3, ending at the approach railings of the San Joaquin River Bridge. Its overall purpose is to repair and overlay pavement on the roadway, widen the shoulders, and improve associated drainage facilities. Lighting and left-turn lanes will be added to improve safety conditions, as this segment of SR 4 has a high accident rate due to improper turns and unsafe lane changes. Approximately 22 parcels of land will be affected and Caltrans will also purchase 2.3 ac of new right-of-way (ROW) in which construction of features will occur. Utility relocations will affect an additional 2.4 ac. Construction activities will include:

- Rehabilitation of the existing asphalt-concrete pavement by digging out and repairing damaged areas.

- Widening of the shoulders of three segments of SR 4 that have widths of 3.9 feet (ft). These will be widened to 8 ft to meet current design standards.
- Placement of rumble strips along both shoulders through the project limits.
- Reconstruction of the existing metal-beam guardrail and installation of new guardrails at specified locations.
- Improvement of SR 4 intersections at Inland Drive, Maybeck, Woodsbro, Daggett, Wilholt, John Turk, Whiskey Slough, and Roberts roads. This work will affect approximately 1.9 ac and will include the following:
  - Widening intersections to include left-turn lanes
    - Widening of the Inland Drive intersection with SR 4 on both sides: 197 ft from the centerline of SR 4 and 82 ft on both sides from the centerline of Inland Drive. The SR 4 roadway taper will start and end at a point 656 ft east and west of the centerline of Inland Drive.
    - Widening of the intersections to the north at Whiskey Slough, Woodsbro, Daggett, and John Turk roads, and to the south at Maybeck, Wilholt, and Roberts roads. At Whiskey Slough and Roberts roads, the widening will occur within the existing ROW. The widening will extend 197 ft from the centerline of SR 4 and 82 ft on both sides of the centerline of the intersecting roads. The SR 4 roadway taper will start and end at a point 656 ft east and west of the centerline of the intersecting roads.
  - Providing safety lighting
  - Placing delineators at each intersection and road approach
- Upgrade of drainage culverts at eight irrigation crossings by extending box culverts 33 ft on both sides from the new edge of pavement.

### *Drainage Activities*

In the event that drainage work falls during the GGS active season, water diversion and dewatering would be planned for five of the total eight drainage systems in order for culvert construction activities to commence. These five irrigation crossing locations run perpendicularly to SR 4; the remaining three run parallel to the highway. Due to agricultural needs, it would be unfeasible to remove water flow from the five perpendicularly positioned drainage systems for longer than two days during the May 1 to October 1 GGS active season work window. The recommended two week drying period following dewatering activity, which is necessary for ensuring that neither the GGS nor its prey species is present in dewatered habitat, therefore would not be possible without first exploring a more practicable water diversion methodology. Since the GGS active season coincides with the prime agricultural season when the irrigation district has water flowing to local agricultural lands, Caltrans and the contractor entered negotiations with the Woods Irrigation District (WID) to find an alternative solution. To address

this problem, the contractor would plan to install temporary earthen barriers and piping to divert the water but continue to allow it to flow through the work area. The WID would then shut off the water for a maximum of two days to allow the contractor, at each of the five drainage systems, to build two temporary earthen dams, one located up- and the other, downstream. The installed pipe would run through the existing culvert and through both temporary earthen dams. Each dam would be 30 ft long by six ft high, by two ft deep. The remaining water would then be pumped out of the drainage ditches, ensuring that no wet pockets are left in the corners of the waterways in which prey species for the GGS might lurk. Once this initial ground disturbance is complete, the contractor would ensure the two week drying period is implemented.

The contractor would then clear and grub and work on the removal of the old sections of culvert to be replaced. The water would then be turned off again to allow the contractor to replace the old section of pipe, and once this is complete, it would finish the headwalls, backfill, and install rip-rap where necessary. Once all this is completed, the water would be turned off one last time to allow the contractor to remove the temporary earthen dams and the temporary piping. Water flow would never be turned off for more than a maximum of two days.

Since Caltrans expects that drainage work will in fact fall within the non-irrigation season (and GGS inactive period) when the ditches are dry, the water diversion process involving temporary earthen dams and piping will not be necessary; there will be no need for the WID to shut-off the water flow at all. Yet, the WID will still need to ensure that no flows other than storm-water runoff enter the irrigation canals under construction during the winter season.

#### *Borrow/Fill Material*

Fill material will likely be imported from off-site; however, drainage work material will be taken from existing material on-site. At this stage, Caltrans does not yet know from where the contractor will derive the material off-site, but it will be clean and meet Caltrans' specifications.

#### *Schedule*

Drainage system work is anticipated to commence during the winter months (the non-irrigation season spanning from November 1 – March 15) with an anticipated schedule beginning January 1, 2011. Shoulder and intersection widening in upland areas is expected to take place during the GGS active period (May 1 – October 1). Work taking place outside of potential GGS habitat areas is not expected to be restricted to the GGS active season window.

#### Proposed Avoidance and Minimization Measures

##### *Construction Guidelines*

Caltrans proposes to follow Standard Best Management Practices (BMPs) for the duration of the proposed project. According to the BA and further discussion with Caltrans biologists, Caltrans also proposes to implement the following measures to minimize and avoid impacts to natural resources and special-status species that may occur within the vicinity of the construction area:

1. Chemicals, lubricants, and petroleum products will be closely monitored and precautions will be taken. All equipment will be maintained for leaks of fluids, such as gasoline, oils, or solvents. If any spills occur, cleanup will take place immediately.
2. Staging and refueling areas for equipment will be located a minimum of 150 ft away from any active waterway. Washing of equipment will occur where water used for this purpose cannot flow into any waterway.
3. Any sensitive sites adjacent to the construction activities, within the Caltrans ROW, will be designated as environmentally-sensitive areas (ESA) to prevent accidental and indirect construction-related impacts.
  - a. An ESA will be implemented for a single blue elderberry shrub (*Sambucus mexicana*) situated in the eastern part of the site just west of John Turk Road (PM 13.5), and located at a distance of approximately 394 ft from cut and fill areas.
4. Trees, shrubs, and other vegetation will be removed prior to the nesting season of migratory birds.
5. The contractor will at all times adhere to State Standard Specifications for avoidance of water pollution (Section 7-1.01G). These measures include detailed recommendations for keeping heavy machinery out of the water, limiting the amount of material (excavated or construction materials) that enter the waterway, and maintaining flows at all times. Temporary measures may include, but are not limited to, the use of sediment basins, hay bales, and downstream silt catchment.
6. A Storm Water Pollution Prevention Plan (SWPPP) will be prepared prior to construction to minimize any water quality reductions that could occur from this project.
7. Soil exposure will be minimized through the use of BMPs, ground cover, and stabilization practices. Exposed dust-producing surfaces will be sprinkled daily until wet while avoiding the production of runoff.
  - a. The contractor will conduct periodic maintenance of erosion and sediment control measures.
  - b. All erosion and sediment control measures will be removed after the work area is stabilized or as directed by the Resident Engineer.

#### *Proposed Giant Garter Snake Conservation Measures*

According to the B.A., the Service's 2008 concurrence letter, Caltrans' reinitiation letter, and further discussion with Caltrans biologists, Caltrans proposes to implement the following conservation measures to minimize and avoid effects to potential GGS in and around the irrigation ditches/canals:

1. Designated staging areas for equipment storage, vehicle parking, and other project-related activities will only occur on existing ruderal or paved areas and will be pre-approved by a Service-approved biologist.
2. A Service-approved biologist will conduct a pre-construction survey for GGS within 24 hours of initial ground disturbance (site preparation and grading) and prior to resumption in work activities following a lapse of two weeks or longer.
3. Construction personnel will participate in a worker environmental awareness program approved by the Service. A Service-approved biologist will inform workers about GGS identification, life history, and habitat requirements, the consequences and penalties of listed species take and federal and state laws pertaining to the GGS, the procedures for dealing with a GGS encounter, and the minimization/avoidance measures stated herein.
4. If drainage work takes place during the agricultural and GGS active season, temporary earthen barriers and piping will address the problem of maintaining water flow for agricultural activities while allowing for the dewatering of habitat. Dewatered habitat will remain dry for at least a two-week period before the contractor excavates or fills the habitat, ensuring that no puddle water or wet pockets continue to hold prey species which could detain or attract the GGS to the area.
5. Caltrans will replace affected ditch habitat with created habitat that is of equal or greater quality than that affected. Habitat temporarily affected by project activities will be restored to its original condition; e.g. vegetation removed from irrigation ditches will be replaced; the same hydrology will be recreated.
6. Clearing will be confined to the minimal area necessary within 200 ft of aquatic habitat.
7. No plastic, monofilament, jute, or similar erosion control matting that could entangle the GGS will be used. Substitutions include coconut coir matting, tactified hydro-seeding compounds, or other material approved by the Service.
8. If a live GGS is encountered during construction, the Service will be immediately notified.
  - a. The Service-approved biologist will stop construction activity in the vicinity of the GGS, monitor the area, and allow the GGS to leave on its own. The biologist will stay in the area for the remainder of the workday to ensure the GGS is not harmed and that it leaves the site and does not return. If the GGS does not leave of its own accord within one working day, the Service will be further consulted.
  - b. Only a Service-approved biologist with a valid take permit pursuant to Section 10(a)(1)(A) of the Act, will have the authority to capture and/or relocate any GGS encountered in the action area.
9. The proposed project will result in the permanent loss of a total of 0.006 acres (ac) of GGS habitat and temporary disturbance to 0.644 ac. When there are plans for construction activity to proceed outside of the GGS active season, the Service

recommends extra minimization measures. One such measure applies a higher 3:1 compensation ratio to temporary effects; temporary effects are thus treated as permanent effects. Prior to groundbreaking, Caltrans proposes using a 3:1 compensation ratio for permanent effects (0.006 ac x 3 = 0.018 credits) and a 3:1 ratio for temporary effects (0.644 ac x 3 = 1.932 credits) to purchase a total of 1.95 GGS credits at the closest Service-approved conservation bank, which will likely go to one of the Sacramento Valley-based GGS banks, i.e. Ridge Cut or Sutter Basin.

10. Should a Service-approved conservation bank become available within San Joaquin County prior to project groundbreaking, and the bank has a service area that appropriately covers the project area and specifically includes the GGS, Caltrans will have the option to purchase 1.95 GGS credits at this bank. Credit sales will be completed at least 60 calendar days prior to the date of initial groundbreaking.

### **Action Area**

The action area is defined in 50 CFR § 402.02, as “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.” The action area for the proposed project is located in the eastern part of the Sacramento-San Joaquin Delta Basin of the Mid-Valley Recovery Unit, one of the four proposed recovery units encompassing the range of the GGS and which is significant towards re-establishing stable sub-populations of the species and connecting these by corridors of suitable habitat. The action area is comprised of the 6.2 mile (mi) segment of highway due to be overlaid with new asphalt concrete; eight road intersections undergoing improvements and widening; numerous artificial irrigation canals used for agriculture that will be affected by shoulder and intersection widening and in-stream culvert work; ruderal habitat within the ROW along SR 4 which will be used for staging as well as in widening work; portions of row and field crop areas to the north and south of the highway and wastewater treatment plant ponds from the City of Stockton wastewater treatment facility that will be acquired as new ROW or used for utility relocation; and several hundred feet downstream of in-water work in the various irrigation canals to account for water quality effects like sedimentation and erosion as a result of construction activities.

Additionally, the action area includes the off-site borrow location, from which fill material will be obtained, but which is not yet identified, as well as the land acreage proposed as compensation area for the habitat affected on-site, which will be preserved through an appropriate off-site Service-approved conservation bank.

### **Analytical Framework for the Jeopardy/No Jeopardy Determination**

In accordance with policy and regulation, the following analysis relies on four components to support the jeopardy/no jeopardy determination for the GGS: (1) the *Status of the Species*, which evaluates the range-wide condition of the GGS, the factors responsible for that condition, and its survival and recovery needs; (2) the *Environmental Baseline*, which evaluates the condition of the GGS in the action area, the factors responsible for that condition, and the role of the action area in the GGS’s survival and recovery; (3) the *Effects of the Action*, which determines the direct and indirect impacts of the proposed Federal action and the effects of any interrelated or interdependent activities on the GGS; and (4) *Cumulative Effects*, which evaluates the effects of future, non-Federal activities in the action area on the GGS.

In accordance with policy and regulation, the jeopardy/no jeopardy determination is made by evaluating the effects of the proposed Federal action in the context of the GGS's current status, taking into account any cumulative effects, to determine if implementation of the proposed action is likely to cause an appreciable reduction in the likelihood of both the survival and recovery of the GGS in the wild.

The following analysis places an emphasis on consideration of the range-wide survival and recovery needs of the GGS and the role of the action area in meeting those needs as the context for evaluating the significance of the effects of the proposed Federal action, combined with cumulative effects, for purposes of making the jeopardy/no jeopardy determination. In short, a non-jeopardy determination is warranted if the proposed action is consistent with maintaining the role of habitat and the GGS population in the action area for the survival and recovery of the species.

### **Status of the Species**

Listing – The Service published a proposal to list the GGS as an endangered species on December 27, 1991 (56 **FR** 67046). The Service reevaluated the status of the GGS before adopting the final rule, which listed it as a threatened species on October 20, 1993 (58 **FR** 54053).

Description – The GGS is one of the largest garter snake species, reaching a total length of approximately 64 inches (in). Females tend to be slightly longer and proportionately heavier than males. Generally, the GGS has a dark dorsal background color with pale dorsal and lateral stripes, although coloration and pattern prominence are geographically and individually variable (Hansen, 1980; Rossman *et al.*, 1996).

Historical and Current Range – GGS formerly occurred throughout the wetlands that were extensive and widely distributed in the Sacramento and San Joaquin Valley floors of California (Fitch, 1940; Hansen and Brode, 1980; Rossman and Stewart, 1987). The historical range of the GGS is thought to have extended from the vicinity of Chico, Butte County, southward to Buena Vista Lake, near Bakersfield, in Kern County (Fitch, 1940; Fox, 1948; Hansen and Brode, 1980; Rossman and Stewart, 1987). Early collecting localities of the GGS coincide with the distribution of large flood basins, particularly riparian marsh or slough habitats and associated tributary streams (Hansen and Brode, 1980). Loss of habitat due to agricultural activities and flood control have extirpated the GGS from the southern one third of its range in former wetlands associated with the historic Buena Vista, Tulare, and Kern lake beds (Hansen, 1980; Hansen and Brode, 1980).

Upon Federal listing in 1993, the Service identified 13 separate populations of GGS, with each population representing a cluster of discrete locality records (Service, 1993a). The 13 populations largely coincide with historical flood basins and tributary streams throughout the Central Valley: (1) Butte Basin, (2) Colusa Basin, (3) Sutter Basin, (4) American Basin, (5) Yolo Basin/Willow Slough, (6) Yolo Basin/Liberty Farms, (7) Sacramento Basin, (8) Badger Creek/Willow Creek, (9) Caldoni Marsh/White Slough, (10) East Stockton--Diverting Canal & Duck Creek, (11) North and South Grasslands, (12) Mendota, and (13) Burrel/Lanare. Population clusters one through four above were associated with rice production areas, especially channels and canals that delivered or drained agricultural irrigation water. These populations

were determined to be extant in 1993. Population clusters at Butte, Sutter, and Colusa Basins (1, 2, and 3) were determined to be not imminently threatened with extirpation. Populations 4 through 13 were determined to be imminently threatened with extirpation. The area covered by these populations (4 through 13) included the San Joaquin Valley, portions of the eastern fringes of the Delta, and the southern Sacramento Valley; an area encompassing about 75 percent of the species' known geographic range (Service, 1993a).

The known range of the GGS has changed little since the time of listing. In 2005, GGS were observed at the City of Chico's wastewater treatment facility, approximately ten miles north of what was previously believed to be the northernmost extent of the species' range (D. Kelly, pers. comm., 2006; E. Hansen, pers. comm., 2006). The southernmost known occurrence is at the Mendota Wildlife Area in Fresno County. No sightings of GGS south of Mendota Wildlife Area within the historic range of the species have been made since the time of listing (Hansen, 2002).

Population Genetics - Recent genetic work on GGS population structure indicates three genetic entities within the species which follow the pattern of subdivision revealed by the GGS's mitochondrial DNA and color pattern variants: north, central, and south (Paquin, 2001; Paquin *et al.*, 2006). Interestingly, evidence of historical gene flow between northern and southern populations exists; however, mitochondrial DNA data reveal that the central population, analogous to the Delta Basin, is genetically isolated from both northern and southern populations. High frequencies of unique mitochondrial DNA haplotypes in the central population increase the conservation value for the Delta Basin, particularly as a source for GGS genetic diversity.

Essential Habitat Components – Endemic to wetlands in the Sacramento and San Joaquin valleys, the GGS inhabits marshes, sloughs, ponds, small lakes, low gradient streams, and other waterways and agricultural wetlands, such as irrigation and drainage canals, rice fields and the adjacent uplands (Service, 1999). Essential habitat components consist of: (1) wetlands with adequate water during the GGS's active season (early-spring through mid-fall) to provide food and cover; (2) emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat during the active season; (3) upland habitat with grassy banks and openings in waterside vegetation for basking; and (4) higher elevation uplands for overwintering habitat with escape cover (vegetation, burrows) and underground refugia (crevices and small mammal burrows) (Hansen, 1988). Summer aquatic habitat is essential because it supports the frogs, tadpoles, and small fish on which the GGS preys. Rice and natural wetlands adjacent to ditches and canals may serve as vital nursery habitat for young GGS and as temporary stopping stations as GGS make their way through systems of ditches and canals.

Females will often give birth in rice fields and newborns will feed on the small prey items that are prevalent in rice fields, but are rare or absent from other permanent aquatic habitat types (E. Hansen, pers. comm., 2008). GGS are typically absent from larger rivers and other bodies of water that support introduced populations of large, predatory fish, and from wetlands with sand, gravel, or rock substrates (Hansen, 1988; Hansen and Brode, 1980; Rossman and Stewart, 1987). Riparian woodlands do not provide suitable habitat because of excessive shade, lack of basking sites, and absence of prey populations (Hansen, 1988).

Foraging Ecology – The GGS is the most aquatic garter snake species and is an active forager, feeding primarily on aquatic prey such as fish and amphibians (Fitch, 1941). Because the

species' historic prey species are either declining, extirpated, or extinct, the predominant food items are now introduced species such as carp (*Cyprinus carpio*), mosquito-fish (*Gambusia affinis*), and larval and sub-adult bullfrogs (*Rana catesbiana*) (Fitch, 1941; Hansen, 1988; Hansen and Brode, 1980, 1993; Rossman *et al.*, 1996).

Reproductive Ecology – The GGS breeding season extends through March and April, and females give birth to live young from late July through early September (Hansen and Hansen, 1990). Although growth rates are variable, young typically more than double in size by one year of age, and sexual maturity averages three years in males and five years for females (Service, 1993a).

Movements and Habitat Use – The GGS is highly aquatic but also occupies a terrestrial niche (Service, 1999; Wylie *et al.*, 2004a). The GGS typically inhabits small mammal burrows and other soil and/or rock crevices during the colder months of winter (*i.e.*, October to April) (Hansen and Brode, 1993; Wylie *et al.*, 1995; Wylie *et al.*, 2003a), and also uses burrows as refuge from extreme heat during its active period (Wylie *et al.*, 1997; Wylie *et al.*, 2004a). While individuals usually remain in close proximity to wetland habitats, the Biological Resource Division of the U.S. Geological Survey (BRD) has documented GGS using burrows as much as 165 feet away from the marsh edge to escape extreme heat, and as far as 820 feet from the edge of marsh habitat for over-wintering habitat (Wylie *et al.*, 1997).

In studies of marked GGS in the Natomas Basin, they moved about 0.25 to 0.5 mile per day (Hansen and Brode, 1993). Total activity, however, varies widely between individuals; individual GGS have been documented to move up to five miles over a few days in response to dewatering of habitat (Wylie *et al.*, 1997) and to use up to more than eight miles of linear aquatic habitat over the course of a few months.

Rice fields have become important habitat for the GGS, particularly associated canals and their banks for both spring and summer active behavior and winter hibernation (Hansen, 2004a; Wylie, 1998b). GGS require water during the active phase of their life cycle in the summer, and this summer aquatic habitat is essential because it supports the frogs, tadpoles, and small fish on which the GGS preys (Paquin *et al.* 2006). While within the rice fields, GGS forage in the shallow water for prey, utilizing rice plants and vegetated berms dividing rice checks for shelter and basking sites (Hansen and Brode, 1993). Telemetry studies also indicate that active GGS use uplands extensively, particularly where vegetative cover exceeds 50 percent in the area (Wylie, 1998b).

Recent studies provide limited information on the use of agricultural wetlands by GGS. Wylie *et al.* (1997) found that GGS densities were highest, and average home range was smallest, in permanent wetlands (Badger Creek, Sacramento County) compared to agricultural wetlands (Gilsizer Slough, Sutter County) or managed marshes (Colusa NWR, Colusa County). However, Wylie *et al.* (2000) reported that in wetlands managed specifically to benefit the GGS, home range estimates were smaller than for those areas lacking comparable management (wetlands managed for waterfowl). Wylie (1998b) also documented 14 captures and recaptures of GGS using natural channels or sloughs in the Grasslands Area in Merced County, compared to four captures and recaptures of GGS using irrigation canals. These observations may indicate that GGS may concentrate in the best habitat when all other surrounding habitat has been eliminated

or highly degraded. It also may indicate that habitat in agricultural wetlands and some managed marshes are meeting some of their biological needs, but not to the fullest extent possible.

Reasons for Decline and Threats to Survival – The current distribution and abundance of the GGS is much reduced from former times (Service, 1999). Prior to reclamation activities beginning in the mid- to late-1800s, about 60 percent of the Sacramento Valley was subject to seasonal overflow flooding providing expansive areas of GGS habitat (Hinds, 1952). Now, less than 10 percent, or about 319,000 acres of the historic 4.5 million ac of Central Valley wetlands remain (U.S. Department of Interior, 1994), of which very little provides habitat suitable for the GGS. Loss of habitat due to agricultural activities and flood control have extirpated the GGS from the southern one-third of its range in former wetlands associated with the historic Buena Vista, Tulare, and Kern lakebeds (Hansen, 1980; Hansen and Brode, 1980).

Valley flood wetlands are now subject to cumulative effects of upstream watershed modifications, water storage and diversion projects, as well as urban and agricultural development. The Central Valley Project (CVP), the largest water management system in California, created an ecosystem altered to such an extent that remaining wetlands depend on highly managed water regimes (U.S. Department of Interior, 1994). Further, the implementation of CVP has resulted in conversion of native habitats to agriculture, and has facilitated urban development through the Central Valley (Service, 1999). For instance, it is estimated that residential and commercial growth in the Central Valley will lead to the loss of more than one million acres by the year 2040 (USGS, 2003). Environmental impacts associated with urbanization include loss of biodiversity and habitat, alteration of natural fire regimes, fragmentation of habitat from road construction, and degradation due to pollutants. Rapidly expanding cities within the GGS's range include Chico, Yuba City, the Sacramento area, Galt, Stockton, Gustine, and Los Banos.

The primary threats to the GGS continue to be habitat loss and degradation. Farmland lost to urbanization includes land that is presently cultivated in rice. The relatively abundant populations of GGS in the Sacramento Valley may reflect the expansion of available habitat that is provided from rice cultivation. Dependence of populations on rice cultivation leaves the GGS vulnerable to wide-scale habitat loss in the event of changes in crop type (e.g., grapes, fruit or nut producing orchards, or annual row crops such as wheat, tomatoes or cotton) to those less water intensive or land fallowing (Paquin *et al.*, 2006) and to changes in precipitation patterns and water availability and timing associated with climate change (CDWR, 2008). Unlike flood irrigated rice fields, other agricultural cropping systems do not hold sufficient water for long enough time periods to create artificial, temporary wetlands. GGS in the San Joaquin Valley are threatened by a lack of summer surface water in wetlands and fields, and the age structure of populations in this part of the range has been found to be senescing with very few if any young individual GGS being found during trapping surveys conducted over the last five years (Hansen, 2008a). Availability of clean summer water is especially important for young GGS to survive and grow (E. Hansen, pers. comm., 2008).

Ongoing maintenance of aquatic habitats for flood control and agricultural purposes eliminates or prevents the establishment of habitat characteristics required by GGS (Hansen, 1988). Such practices can fragment and isolate available habitat, prevent dispersal of the GGS among habitat units, and adversely affect the availability of the GGS's food items (Hansen, 1988; Brode and Hansen, 1992). For example, tilling, grading, harvesting and mowing may kill or injure

individuals (Wylie *et al.*, 1997). Biocides applied to control aquatic vegetation reduce cover for the GGS and may harm prey species (Wylie *et al.*, 1995). Rodent control threatens GGS upland aestivation habitat (Wylie *et al.*, 1995). Restriction of suitable habitat to water canals bordered by roadways and levee tops renders GGS vulnerable to vehicular mortality (Wylie *et al.*, 1997). Rolled erosion control products, which are frequently used as temporary berms to control and collect soil eroding from constriction sites, can entangle and kill the GGS (Stuart *et al.*, 2001; Barton and Kinkead, 2005). Livestock grazing along the edges of water sources degrades water quality and can contribute to the elimination and reduction of available quality GGS habitat (Hansen, 1988; E. Hansen, pers. comm., 2006), and GGS have been observed to avoid areas that are grazed (Hansen, 2003). Fluctuation in rice and agricultural production affects stability and availability of habitat (Paquin *et al.*, 2006; Wylie and Casazza, 2001; Wylie *et al.*, 2003c, 2004).

Other land use practices also currently threaten the survival of the GGS. Recreational activities, such as fishing, may disturb GGS and disrupt thermoregulation and foraging activities (E. Hansen, pers. comm., 2006). While large areas of seemingly suitable GGS habitat exist in the form of duck clubs and waterfowl management areas, water management of these areas typically does not provide the summer water needed by the species (Beam and Menges, 1997; Dickert, 2005; Paquin *et al.*, 2006).

Nonnative predators, including introduced predatory game fish, bullfrogs (*Rana catesbiana*), and domestic cats, can threaten GGS populations (Dickert, 2003; Hansen, 1986; Service, 1993a; Wylie *et al.*, 1995; Wylie *et al.*, 2003b). Predation by native species upon the GGS has not been well documented. Anecdotal information includes observations of hawks (*Buteo* sp.), herons (*Ardea herodias*), and river otters (*Ludra canadensis*) preying upon the GGS. According to Rossman *et al.* (1996), GGS may be important prey for several vertebrate predators including jays (*Cyanocitta cristata*) and crows (*Corvus brachyrhynchos*), carnivorous fish, and small mammals. Small native mammalian predators are likely to include raccoons (*Procyon lotor*), skunks (*Mephitis mephitis*), opossums (*Didelphis virginiana*), and foxes. Anthropogenic (human-caused) changes in ecosystem dynamics and reductions in suitable habitat for GGS may favor and subsidize these predator populations. The result may be an increase in predation pressure upon the GGS (Service, 2006a). Many areas supporting the GGS have been documented to have abundant predators; however, predation does not seem to be a limiting factor in areas that provide abundant cover, high concentrations of prey items, and connectivity to a permanent water source (Hansen and Brode, 1993; Wylie *et al.*, 1995).

The disappearance of GGS from much of the west side of the San Joaquin Valley was approximately contemporaneous with the expansion of subsurface drainage systems in this area, providing circumstantial evidence that the resulting contamination of ditches and sloughs with drainwater constituents (principally selenium) may have contributed to the demise of GGS populations. Dietary uptake is the principle route of toxic exposure to selenium in wildlife, including the GGS (Beckon *et al.*, 2003). Many open ditches in the northern San Joaquin Valley carry subsurface drainwater with elevated concentrations of selenium, and green sunfish (*Lepomis cyanellus*) have been found to have concentrations of selenium within the range of concentrations associated with adverse effects on predator aquatic reptiles (Hopkins *et al.*, 2002; Saiki, 1998). Studies on the effects of selenium on the GGS suggest that those with high selenium loads in their internal organs can transfer potentially toxic quantities of selenium to their eggs (Hopkins *et al.*, 2004) and also demonstrate higher rates of metabolic activity than uncontaminated individuals (Hopkins *et al.*, 1999).

Climate Change – Global warming increases the frequency of extreme weather events, such as heat waves, droughts, and storms (International Panel on Climate Change (IPCC), 2001, 2007; California Climate Action Team, 2006; Lenihan *et al.*, 2003). At present, there is no quantitative analysis of how ongoing climate change is currently affecting the GGS in the San Joaquin Valley. Although predictions of future climatic conditions for smaller sub-regions in California remain uncertain (Christensen *et al.*, 2007; Field *et al.*, 2007; Moser *et al.*, 2009), daily minimum and maximum temperatures have begun to change (Moser *et al.*, 2009), and inter-annual precipitation variability has already begun to increase (Kelly and Goulden, 2008; Loarie *et al.*, 2008). Across the mid-latitudes of the northern hemisphere, spring plant green-up has advanced by almost two weeks and animals in many areas are responding to such changes by breeding earlier and shifting their ranges (see review in Field *et al.*, 2007). As the global climate warms, terrestrial habitats are moving northward and upward, but in the future, range contractions are more likely than simple northward or upslope shifts. Since climate change threatens to disrupt annual weather patterns, it may result in a loss of habitat and/or prey, and/or increased numbers of predators, parasites, and diseases. Where populations are isolated or fragmented, a changing climate may result in local extinction, with range shifts precluded by lack of habitat.

Status with Respect to Recovery – The draft recovery plan for the GGS subdivides its range into four proposed recovery units (Service, 1999): (1) Sacramento Valley Recovery Unit; (2) Mid-Valley Recovery Unit; (3) San Joaquin Valley Recovery Unit; and (4) South Valley Recovery Unit.

The Sacramento Valley Unit at the northern end of the species' range contains sub-populations in the Butte Basin, Colusa Basin, and Sutter Basin (Service, 1999; Service, 2006a). Protected GGS habitat is located on State refuges and refuges of the Sacramento National Wildlife Refuge (NWR) Complex in the Colusa and Sutter Basins. Suitable GGS habitat is also found in low gradient streams and along waterways associated with rice farming. This northernmost recovery unit is known to support relatively large, stable sub-populations of GGS (Wylie *et al.*, 1995; Wylie *et al.*, 1997; Wylie *et al.*, 2002a; Wylie *et al.*, 2003a; Wylie *et al.*, 2004). Habitat corridors connecting subpopulations, however, are either not present or not protected, and are threatened by urban encroachment.

The Mid-Valley Unit includes sub-populations in the American, Yolo, and Delta Basins (Service, 1999; Service, 2006a). The status of Mid-Valley sub-populations is very uncertain; each is small, highly fragmented, and located on isolated patches of limited quality habitat that is increasingly threatened by urbanization (E. Hansen, 2002, 2004a; Service, 1993a; Wylie, 2003; Wylie and Martin, 2004; Wylie *et al.*, 2005; G. Wylie, pers. comm., 2006).

The San Joaquin Valley Unit, which includes sub-populations in the San Joaquin Basin, formerly supported large GGS populations, but numbers have severely declined, and recent survey efforts indicate numbers are extremely low compared to Sacramento Valley sub-populations (Dickert, 2002, 2003; Hansen, 1988; Williams and Wunderlich, 2003; Wylie, 1998a). The GGS currently occurs in the northern and central San Joaquin Basin within the Grassland Wetlands of Merced County and the Mendota Wildlife Area of Fresno County; however, these sub-populations remain small, fragmented, and unstable, and are probably decreasing (Dickert, 2003, 2005; G. Wylie, pers. comm., 2006).

The South Valley Unit included sub-populations in the Tulare Basin, however, agricultural and flood control activities are presumed to have extirpated the GGS from the Tulare Basin (Hansen, 1995). Comprehensive surveys for this area are lacking and where habitat remains, the GGS may be present. Wylie and Amarello (2008) surveyed locations in the Tulare Basin in 2006 including Buena Vista Lake, Fresno Slough, Kern Refuge, Kings River and North Kings River. No GGS were detected at any of the locations sampled. Wylie and Amarello noted that suitable habitat does exist in Kern NWR so that reintroduction may be considered feasible in the future should summer water supplies (incremental Level 4) be secured.

Since 1995, BRD has studied GGS sub-populations at the Sacramento, Delevan, and Colusa NWRs and in the Colusa Basin Drain within the Colusa Basin, at Gilsizer Slough within the Sutter Basin, at the Badger Creek area of the Cosumnes River Preserve within the Badger Creek/Willow Creek area of the Delta Basin, and in the Natomas Basin within the American Basin (Hansen, 2003, 2004b; Wylie, 1998a, 1998b, 2003; Wylie *et al.*, 1995; Wylie *et al.*, 2002; Wylie *et al.*, 2003a, 2004; Wylie *et al.*, 2003c, 2004). These areas contain the largest extant GGS sub-populations. Outside of protected areas, however, GGS are still subject to all threats identified in the final rule. The other sub-populations are distributed discontinuously in small, isolated patches, and are vulnerable to extirpation by stochastic environmental, demographic, and genetic processes (Goodman, 1987).

The revised draft recovery criteria require multiple, stable sub-populations within each of the four recovery units, with sub-populations well-connected by corridors of suitable habitat. This entails that corridors of suitable habitat between existing GGS sub-populations be maintained or created to enhance sub-population interchange to offset threats to the species (Service, 2003). Currently, only the Sacramento Valley Recovery Unit is known to support relatively large, stable GGS populations. Habitat corridors connecting sub-populations, even in the Sacramento Valley Recovery Unit, are either not present or not protected. Overall, the future availability of habitat in the form of canals, ditches, and flooded fields are subject to market-driven crop choices, agricultural practices, and urban development, and thus are uncertain and unpredictable.

Summary of the Five-Year Review – The abundance and distribution of GGS have not changed significantly since the time of listing. Although some individuals have been rediscovered in several southern populations that were thought to be extirpated, these populations remain in danger of extirpation because their numbers remain very low and the habitat is of low quality. By far, the most serious threats continue to be loss and fragmentation of habitat from urban and agricultural development and loss of habitat associated with changes in rice production. Activities, such as water management, that are associated with habitat loss are also of particular concern, because they exacerbate the losses from development and from loss of rice production. The remaining threats (such as from introduced predators, roads, erosion control) are secondary to such habitat loss although fragmentation could become a critical issue in the GGS's survival should large scale habitat changes occur. Populations range-wide are largely isolated from one another and from remaining suitable habitat. Without hydrologic links to suitable habitat during periods of drought, flooding, or diminished habitat quality, the GGS's status will decline.

## **Environmental Baseline**

### Status of the Giant Garter Snake in the Vicinity of the Action Area

The action area is located within the wider Sacramento-San Joaquin Delta Basin (Delta); GGS sub-populations there comprise the Mid-Valley Recovery Unit. Delta subpopulations of GGS have suffered severe declines and possible extirpations over the last two decades. No GGS occurrences have been recorded within the Holt and Stockton West United States Geological Survey (USGS) 7.5-minute quadrangles within which lies the project's action area. Six CNDDDB occurrences (2010) have been recorded within the Lodi South, Terminous, Bouldin Island, and Stockton East USGS 7.5-minute quadrangles which buffer the two quadrangles in which the action area lies. The closest documented occurrences were found in 1976 approximately 5.7 mi northeast of the east end of the project alignment, located in the Stockton diverting canal, and in 1996 approximately 8.2 mi northwest of the west end of the project alignment, on the north side of the Columbia cut near the Middle River. Waterways and associated wetlands provide vital permanent aquatic and upland habitat for GGS in areas with otherwise limited habitat. The recovery strategy for the species includes maintenance and/or creation of habitat corridors between existing sub-populations to enhance population interchange and offset threats to the species (Service, 2003). The irrigation canals within the action area can be considered a corridor for the GGS to pass through while traveling to suitable habitat outside of the action area.

Given the frequency of survey efforts that have been conducted over the years, a very low number of individual GGS have been documented. Although habitat has been lost or degraded throughout the Central Valley, there have been many recent sightings of GGS in the Sacramento Valley while there have been few recent sightings within the San Joaquin Valley and on a smaller scale within the Delta. For this project, Caltrans conducted GGS habitat assessment and protocol level surveys on November 6, 2000, March 20, 2001, April 17, 2001, and May 11, 2001. While potential GGS habitat was identified by Caltrans in nine locations within the footprint, no individuals were discovered within the project site. The irrigation canals provide suitable aquatic habitat as well as emergent vegetation for foraging and basking. However, this potential habitat could also be considered disturbed; row crop fields to the north and south of SR 4 and the intersecting irrigation canals that circulate water within the fields experience consistent flux due to farming activities and clearance of vegetation along the waterways.

### Factors Affecting the Giant Garter Snake within the Vicinity of the Action Area

The status of one of the known GGS populations in closest proximity to the action area, the Caldoni Marsh/White Slough population, has been, and continues to be, impacted by past and contemporaneous Federal, State, private, and other human activities and natural factors. The small numbers of GGS found in the surrounding lands, likely reflect the continued degradation of wetland habitat and the abundance of invasive predators such as bullfrogs. Low numbers of GGS in the San Joaquin Valley in general, place these populations at high risk of extinction (Service, 2006a). The Five-Year Review of the GGS found that by far one of the most serious threats to the species continues to be loss and fragmentation of habitat from urban and agricultural development. However, factors in addition to habitat loss are likely contributing to the decline. Threats affect GGS within otherwise suitable habitat and include interrupted water supply and poor water quality (Hansen, 1996); this is particularly relevant in regards to the

network of irrigation canals/ditches in the Delta. Water management activities that are associated with habitat loss are of particular concern because they compound the losses from development. Because populations in the Delta and elsewhere in its range are largely isolated from one another and from remaining suitable habitat, without hydrologic links to suitable habitat during periods of drought, flooding, or diminished habitat quality, the GGS's status will decline further (Service, 2006a).

Five unrelated Federal actions have occurred within the action area and adjacent regions, affecting the environmental baseline of the species: *Daggett Road and Burlington Northern Santa Fe Railroad Grade Separation Project* (Service File # 81420-2009-F-1158), *Daggett Road Ditch Relocation Project* (Service File number 81420-2009-F-0643), *Daggett Road/SR 4 Improvement Project* (Service File # 81420-2008-F-0410), *Tracy Boulevard/Trapper Road Curve Improvement Project* (Service File # 81420-2008-I-1284), and the *San Joaquin Flood Protection Project 2008 Repair Sites* (Service File # 81420-2009-I-0895). These projects have been subject to prior section 7 consultation and these actions have resulted in direct effects to GGS and suitable habitat within and adjacent to the action area.

### **Effects of the Proposed Action**

The proposed project is likely to result in a number of adverse effects to the GGS when drainage facilities are altered and upgraded during culvert work, when shoulder segments are widened, and when intersections are improved and widened to include left-turn lanes. The intersections at Maybeck and Woodsbro Roads along SR 4 are of particular note because they are in close proximity to two of the drainage systems under construction. Because in-water drainage work is most likely slated to commence during the winter months (non-irrigation season), the irrigation canals likely will be relatively dry and thus the irrigation district will have no need to shut-off the water flow, which is otherwise kept steady during the irrigation season. Therefore, implementation of the proposed water diversion techniques prior to dewatering (i.e. temporary earthen dam-building and pipe installation performed during the concurrent irrigation and GGS active seasons), would also no longer be necessary. It follows that in the absence of the water diversion process, effects to the GGS and its aquatic habitat would be far less intrusive.

Construction activities will result in a permanent loss of 0.006 ac of GGS aquatic habitat and temporary disturbance to 0.644 ac of aquatic habitat. Once work is completed, irrigation canals that are temporarily disturbed will be restored to conditions of equal value and function that existed prior to the disturbance.

During the GGS inactive period (between approximately October 2 and April 30), additional effects to the species are likely to occur. Increased risk is posed to the GGS during this overwintering period, because at this time of year, the species cannot thermo-regulate as effectively, and has a low resulting body temperature; this impairs rapid movement, and hence the ability to relocate quickly to avoid danger. Additionally, individuals move to hibernacula during this season, occupying underground burrows or crevices, where they are more susceptible to ground disturbance and overland construction work. Consequently, continued personnel foot traffic, in addition to equipment and machinery presence, could lead to harassment, injury, or mortality of GGS individuals as a result of vehicle hits or being unearthed from their burrows. In part to minimize the impact of these additional dangers to the GGS, Caltrans has agreed to compensate

for effects likely to occur outside of the active season by increasing the compensation ratio to 3:1 to apply to temporarily disturbed habitat.

As a result of permanent and temporary effects, harassment or harm of GGS individuals is likely to occur to those GGS present in the construction area when activities begin or when they enter the action area once activities are underway. It is possible that GGS could be harmed, harassed, or injured if they become trapped in construction materials like stored pipes or become stuck in excavated holes. Preventative action can be taken by checking for trapped individuals prior to the start of each work day and by covering materials and holes at the end of each work day.

Trash left daily during construction activities could attract predators to the work site, which could in turn also harm, harass, or kill the GGS. For example, scavenger species, such as raccoons and skunks, are attracted to trash as food items and could prey opportunistically upon the GGS once within the action area. Garbage left in ditches or in vegetation along the banks could pollute the waterways, and possibly even lead to individuals becoming entangled in trash items. Stockpiled debris left behind could end up polluting the waterways or cluttering bank and upland habitat. Erosion and sediment control measures left in place too long or left behind at a site could affect the waterways and also any GGS individuals present. Plastic erosion control matting should not be used, so as to not risk entangling the GGS.

In the BA, according to Caltrans' 2006 discussion with the channel maintenance supervisor for the San Joaquin County Department of Public Works, it is a regular practice for County maintenance crews to apply rodenticides in the form of poisoned grain and gas cartridges to the irrigation canal banks. This could have the effect of not only directly poisoning GGS individuals if they happen to ingest these items, but also of indirectly affecting the species by eliminating occurrences of underground rodent burrows and retreats; the GGS is dependent on such burrows for shelter during its inactive period and for thermoregulation. The County additionally employs a vegetation abatement program for weed eradication through herbicide application. This could also have the result of indirectly affecting the GGS by reducing the prey base; as dead plants get swept into the irrigation ditches and start decomposing, this decreases the dissolved oxygen levels in the water, thus suffocating prey species.

Effects could also result from the interrelated activity of obtaining fill/borrow materials. Depending on when and from where the contractor derives the fill material necessary for building the new roadway, this mining action could adversely affect the GGS. Because Caltrans does not yet know the details pertaining to the fill, potential fill locations will be identified only after the biological opinion for this project has been issued. If fill is taken from a location(s) where the listed species might occur and if taking that fill is likely to impact waterways, or occur outside the GGS active period, further harm and harassment to the species could result.

Caltrans proposes to minimize both permanent and temporary effects to the GGS and its habitat by purchasing credits at the closest Service-approved GGS-based conservation bank. Caltrans' compensation measures will help lead to preservation and enhancement of suitable GGS habitat and will contribute to protecting and managing the habitat for the conservation of the species in perpetuity. The protected land will provide habitat commensurate with, or better than, habitat lost as a result of the project, ensuring that the GGS can continue to breed, feed, shelter, and meet all its life cycle functions. This land will also help maintain the geographic distribution of the species and will contribute to the recovery of the species by increasing the amount of habitat

that is secure from development threats and other factors that threaten the species that can be addressed by habitat protection and management.

### **Cumulative Effects**

Cumulative effects include the effects of future State, Tribal, local, or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed project are not considered in this section, because they require separate consultation pursuant to section 7 of the Act.

The Service is not aware of any non-Federal developments currently planned in or around the SR-4 action area that would directly remove or disturb further GGS habitat.

### **Conclusion**

After reviewing the current status of the GGS, the environmental baseline for the action area, the effects of the proposed Bacon Island Rehabilitation Project, and the cumulative effects, it is the Service's biological opinion that the project, as proposed, is not likely to jeopardize the continued existence of the GGS. We base this determination on the fact that the number of GGS likely to be taken is low, minimized in part by water quality BMPs, re-vegetation work, and the compensation of lost and disturbed habitat. The extent of take, in addition to effects to the GGS and its habitat, is such that it is anticipated to be minimal in regards to the rangewide population within this portion of the Delta.

## **INCIDENTAL TAKE STATEMENT**

Section 9(a)(1) of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened fish and wildlife species without special exemption. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harass is defined by the Service as an intentional or negligent act or omission which creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Harm is defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by impairing behavioral patterns including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with this Incidental Take Statement.

The measures described below are non-discretionary, and must be implemented by Caltrans so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, in order for the exemption in section 7(o)(2) to apply. Caltrans has a continuing duty to regulate the activity covered by this incidental take statement. If Caltrans (1) fails to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, and/or (2) fails to retain oversight to ensure

compliance with these Terms and Conditions, the protective coverage of section 7(o)(2) may lapse.

### **Amount or Extent of Take**

The Service anticipates that incidental take of the GGS will be difficult to detect because the species is cryptically colored, secretive, and aversive to human activities, and often retreats into burrows, soil crevices, or vegetative cover. Most close-range observations represent chance encounters that are difficult to predict. Thus, it is problematic to quantify an exact number of GGS individuals that are anticipated to be taken as a result of the proposed action. In instances when take calculations are difficult to accurately calculate, the Service may estimate take in numbers of individuals per acre of permanently lost or degraded habitat as a result of the project action, as these impacts reflect a significant biological effect to the species. Therefore, the Service anticipates take incidental to this project as all GGS inhabiting, utilizing, or moving through the 0.65 ac of suitable habitat that will be affected (0.006 ac permanently lost and 0.644 ac temporarily disturbed). Upon implementation of the following *Reasonable and Prudent Measures*, incidental take for this project within this acreage in the forms of harm, harassment, injury, or mortality of the GGS, deriving from increased personnel foot traffic, equipment/vehicle presence, and in-water culvert work outside of the GGS's active period; road widening work; bankside vegetation removal; and handling of trash, debris, erosion control, and fill material, are hereby exempt from the prohibitions described under section 9 of the Act.

### **Effect of the Take**

The Service has determined that this level of anticipated take is not likely to jeopardize the continued existence of the GGS.

### **Reasonable and Prudent Measures**

The following reasonable and prudent measures are necessary and appropriate to minimize the adverse effects of the project on the GGS:

1. All of the conservation measures proposed in the BA, the *Project Description*, and as supplemented and modified below, must be fully implemented.
2. Pollution, trash, and excess materials must be treated in a manner so as to minimize the potential for take of the GGS.
3. Appropriate measures regarding usage of borrow and fill materials must be undertaken, so as to minimize the potential for take of the GGS.

### **Terms and Conditions**

In order to be exempt from the prohibitions of section 9 of the Act, Caltrans, as well as any contractor acting on its behalf, must comply with the following terms and conditions, which implement the reasonable and prudent measures described above. These Terms and Conditions are nondiscretionary.

The following Terms and Conditions implement Reasonable and Prudent Measure one:

1. The Service-approved biologist shall have oversight over implementation of all the measures described in this biological opinion and he/she shall have the authority to stop project activities, through communication with the Caltrans Resident Engineer, if any of the requirements associated with these measures are not being fulfilled. Any stop work requests due to take of listed species shall be communicated to the Service and California Department of Fish and Game (CDFG) within one day.
2. The Service-approved biologist and/or the Contractor shall check for GGS under any equipment such as vehicles and stored pipes before the start of work each day. He/she shall check all excavated, steep-walled holes or trenches greater than six inches deep for the GGS and these shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals.

The following Terms and Conditions implement Reasonable and Prudent Measure two:

1. To minimize both pollution to GGS habitat and opportunistic predator effects to the GGS, Caltrans shall require that garbage be removed daily from the project site and disposed of off-site. All litter, debris, and unused materials, shall be removed from the staging areas at the end of each day in order to keep predators and scavengers away.
2. Following completion of construction activities, all construction debris/stockpiled materials from the project site shall be removed and, wherever, feasible, disturbed areas shall be restored to pre-project conditions.

The following Term and Condition implements Reasonable and Prudent Measure three:

1. Since use of borrow/fill material is planned, Caltrans shall require documentation from the contractor that aggregate, fill, and/or borrow material provided for the project is obtained in compliance with the Act. Evidence of compliance with the Act shall be demonstrated by providing the Resident Engineer with any one of the following:
  - c. A letter from the Service stating use of the borrow pit area shall not result in the incidental take of listed species;
  - d. An incidental take permit for contractor-related activities issued by the Service pursuant to section 10(a)(1)(B) of the Act;
  - e. A biological opinion or a letter concurring with a 'not likely to adversely affect' determination issued by the Service to Caltrans.
  - f. Contractor submittal of information to the Caltrans Resident Engineer indicating compliance with the State Mining and Reclamation Act (SMARA) and providing the County land use permits and California Environmental Quality Act (CEQA) clearance.

- g. Report to the Service where the fill/burrow materials will be taken from, once it is identified.

### Reporting Requirements

1. Before construction starts on this project, the Service shall be provided with the final documents related to protection of conservation acres, including but not limited to, proof of credit purchase at the nearest Service-approved conservation bank.
2. A post-construction report detailing compliance with the project design criteria described under the *Description of the Proposed Action* section of this biological opinion shall be provided to the Service within 30 calendar days of completion of the project. The report shall include: (1) dates of project groundbreaking and completion; (2) pertinent information concerning the success of the project in meeting compensation and other conservation measures; (3) an explanation of failure to meet such measures, if any; (4) known project effects on the GGS, if any; (5) occurrences of incidental take of the GGS, and; (6) any other pertinent information.
3. New sightings of GGS or any other sensitive animal species shall be reported to the CDFG's CNDDDB. A copy of the reporting form and a topographic map clearly marked with the location in which the animals were observed also should be provided to the Service.

### Disposition of Individuals Taken

In the case of injured and/or dead GGS, the Service shall be notified within one day and the animals shall only be handled by a Service-approved, permitted biologist. Injured GGS shall be cared for by a licensed veterinarian or other qualified person. In the case of a dead animal, the individual animal shall be preserved, as appropriate, and held in a secure location until instructions are received from the Service regarding the disposition of the specimen or until the Service takes custody of the specimen. Caltrans must report to the Service within one calendar day any information about take or suspected take of federally-listed species not authorized in this opinion. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal. The Service contacts are Mr. Daniel Russell, Deputy Assistant Field Supervisor, Endangered Species Program, Sacramento, at (916) 414-6600; Jennifer Norris, Assistant Field Supervisor of the San Francisco Bay-Delta Office, at (916) 930-5633 or [jennifer\\_norris@fws.gov](mailto:jennifer_norris@fws.gov); and Mr. Daniel Crum, the Resident Agent-in-Charge of the Service's Law Enforcement Division at (916) 414-6660. The CDFG contact is Mr. Paul Hoffman, Wildlife Biologist, at (530) 934-9309.

Any contractor or employee who, during routine operations and maintenance activities inadvertently kills or injures a listed wildlife species must immediately report the incident to his representative at his contracting/employment firm or to Caltrans. This representative must contact the Service within one calendar day in the case of a federally-listed species and contact the CDFG in the case of a dead or injured State-listed species.

## CONSERVATION RECOMMENDATIONS

Conservation recommendations are suggestions of the Service regarding discretionary measures to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, or regarding the development of new information. These measures may serve to minimize or avoid further adverse effects of a proposed action on listed, proposed, or candidate species, or on designated critical habitat. They may also serve as suggestions on how action agencies can assist species conservation in furtherance of their responsibilities under section 7(a)(1) of the Act, or recommend studies improving an understanding of a species' biology or ecology. Wherever possible, conservation recommendations should be tied to tasks identified in recovery plans. The Service is providing you with the following conservation recommendations:

1. It is recommended that Caltrans incorporate culverts, tunnels, and other underpass and/or overpass designs on roadways to facilitate safe passage for the GGS, as well as for other wildlife species.
2. It is recommended that Caltrans help support the development of a centralized website where GGS research scientists can upload mark numbers and associated data for each individual, and make it available to the scientific community.
3. It is recommended that Caltrans collaborate with the San Joaquin County Department of Public Works to limit its rodenticide and herbicide application programs on the banks of the irrigation canals.

In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

## RE-INITIATION—CLOSING STATEMENT

This concludes the formal consultation for the Bacon Island Rehabilitation Project. As provided in 50 CFR §402.16 and in the *Terms and Conditions* of this biological opinion, re-initiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending re-initiation; otherwise, the project will be out of compliance with this biological opinion.

Mr. Zachary Parker

24

Please contact Jen Schofield or Michael Welsh at (916) 414-6630 if you have questions regarding this biological opinion. The Service wishes to thank you for your continued efforts and dedication to the conservation of America's wildlife resources.

Sincerely,

A handwritten signature in cursive script, appearing to read "J. Norris".

Jennifer Norris  
Assistant Field Supervisor

cc:

Mr. Dan Gifford, CDFG, Rancho Cordova, California

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#### PERSONAL COMMUNICATIONS

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

REPLY TO  
ATTENTION OF

May 1, 2013

Regulatory Division (SPK-2007-02208)

State of California  
Department of Transportation  
Attn: Ms. Grace Magsayo  
855 M Street, Suite 200  
Fresno, California 93721

Dear Ms. Magsayo:

We are responding to your January 23, 2013, request for a Department of the Army Nationwide Permit (NWP) verification for the State Route 4 (SR4) Bacon Island Rehabilitation Project. On February 22, 2013, we determined that your Pre-construction Notification (PCN) was incomplete and requested additional information. On April 23, 2013, we received additional information to complete your PCN. We reviewed the additional information and determined your PCN was complete on April 23, 2013.

This approximately 15-acre project involves activities, including discharges of dredged or fill material, in waters of the United States to construct improvements to SR4, including shoulder widening and the addition of five left turn lanes. The project is located on SR4 near Trapper Slough, Section 21, Township 2 North, Range 6 East, Mount Diablo Meridian, Latitude 37.926754°, Longitude -121.387923°, San Joaquin County, California.

Based on available information, we concur with the amount and location of waters on the site as depicted on the enclosed April 23, 2013, *State Route 4 Bacon Island Rehabilitation Project Delineation of Waters* drawings prepared by Ms. Dena Gonzalez of the California Department of Transportation (Caltrans). The approximately 0.979 acre of seasonal drainages present within the survey area are potential waters of the United States regulated under Section 404 of the Clean Water Act. A copy of our RGL 08-02 Preliminary Jurisdictional Determination Form for the study area is enclosed. Prior to commencing construction, please sign and return a copy of the completed form to this office.

We understand that Caltrans is the National Environmental Policy Act (NEPA) lead Federal agency for this project, and as such, shall ensure compliance with NEPA and all other applicable Federal Laws. As lead Federal agency, Caltrans must include this office in all future consultation and coordination activities involving compliance with the Endangered Species Act and the National Historic Preservation Act, as they pertain to the activities verified by this letter, so that we may consult as appropriate or designate Caltrans to consult on our behalf.

Based on the information you provided, the proposed activity, resulting in the permanent loss

of approximately 0.444 acre of seasonal drainages and temporary impacts to approximately 0.082 acre of seasonal drainages, is authorized by Nationwide Permit Number 14, Linear Transportation Projects. However, until Section 401 Water Quality Certification for the activity has been issued or waived, our authorization is denied without prejudice. Once you have provided us evidence of water quality certification, the activity is authorized and the work may proceed subject to the conditions of certification and the Nationwide Permit. Your work must comply with the following General Conditions listed on the enclosed *Nationwide Permit Summary* sheet, the regional Conditions listed on the enclosed *Final Sacramento District Regional Conditions for California, excluding the Lake Tahoe Basin*, and the following special conditions:

#### Special Conditions

1. To mitigate for the loss of 0.288 acre of seasonal drainages, you shall construct 0.266 acre of seasonal drainages and 0.389 acre of hard-armored seasonal drainages on-site, as depicted on pages D-2 and D-3 of the *Drainage Plan* document.
2. To mitigate for the loss of the remaining 0.156 acre of seasonal drainages, you shall submit a check in the amount of \$23,400.00 (\$150,000.00 per acre x 0.156 acre) payable to the National Fish and Wildlife Foundation (NFWF). In order to ensure the proper location of future mitigation, the *San Joaquin Delta* Hydrologic Unit Code 18040003 must be indicated on the check. Prior to initiation of any construction activities within waters of the U.S., you shall submit a payment receipt to this office demonstrating that the check has been deposited in NFWF's Sacramento District Wetlands Conservation Fund.
3. This permit is contingent upon you applying for and being issued a Section 401 Water Quality Certification. Evidence of a water quality certification must be submitted to this office, prior to commencing work in potential waters of the U.S. All terms and conditions of the Section 401 Water Quality Certification are expressly incorporated as conditions of this permit.
4. This Corps permit does not authorize you to take an endangered species, in particular Giant garter snake (*Thamnophis gigas*), or 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 Fish and Wildlife Service Biological Opinion (81420-2008-F-1284-R001-1, dated December 13, 2010), 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, which terms and conditions are incorporated by reference in this permit. 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.

5. To ensure your project complies with the Federal Endangered Species Act, 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 (Number 81420-2008-I-1284, dated April 22, 2008). If you are unable to implement any of the proposed measures, you must immediately notify the Corps and the U.S. Fish and Wildlife Service so we may consult as appropriate, prior to initiating the work, in accordance with Federal law.

6. Excavated materials from the permit area shall not be stockpiled or disposed of outside the permit area. Disposal and stockpile areas must be reviewed and approved by this office prior to commencement of construction activities. Plans, maps and/or drawings may be submitted electronically to [regulatory-info@usace.army.mil](mailto:regulatory-info@usace.army.mil)." Please refer to identification number SPK-2007-02208 in any such submittals.

7. You shall follow specifications and standards described in the Storm Water Pollution Prevention Plan (SWPPP) and/or Water Pollution Control Plan (WPCP), to prevent erosion and sedimentation during and after construction. Construction work within waters of the U. S. shall be performed when the flows are at their seasonal low or when they have ceased and the areas are dry, typically late summer through early fall.

8. You shall notify this office of any proposed modifications to the project, including revisions to any of the work plans or documents cited in this authorization, for review and approval prior to construction work associated with the proposed modification(s).

9. If any of the above conditions are violated or unauthorized activities occur, you shall stop work immediately and notify this office. You shall provide us with a detailed description of the unauthorized activity(s), photo documentation, and any measures taken to remedy the violation.

You must sign the enclosed Compliance Certification and return it to this office within 30 days after completion of the authorized work.

This verification is valid until March 18, 2017, when the existing Nationwide Permits are scheduled to be modified, reissued, or revoked. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant NWP is modified, reissued or revoked, you will have twelve (12) months from the date of the modification, reissuance or revocation of the NWP to complete the activity under the present terms and conditions. Failure to comply with the General and Regional Conditions of this Nationwide Permit, or the project-specific Special Conditions of this authorization, may result in the suspension or revocation of your authorization.

We would appreciate your feedback. At your earliest convenience, please tell us how we are doing by completing the customer survey on our website under *Customer Service Survey*.

Please refer to identification number SPK-2007-02208 in any correspondence concerning this project. If you have any questions, please contact Jason Deters at our California South Branch Office, 1325 J Street, Room 1350, Sacramento, California 95814-2922, email [Jason.Deters@usace.army.mil](mailto:Jason.Deters@usace.army.mil), or telephone 916-557-7152. For more information regarding our program, please visit our website at [www.spk.usace.army.mil/Missions/Regulatory.aspx](http://www.spk.usace.army.mil/Missions/Regulatory.aspx).

Sincerely,



Kathleen A. Dadey, Ph.D  
Chief, California South Branch

Enclosures

Copies Furnished without enclosures

Mr. Thomas Leeman, United States Fish and Wildlife Service, Endangered Species Division, 2800 Cottage Way, Suite W2605, Sacramento, California 95825-3901

Mr. Scott Wilson, California Department of Fish and Wildlife, Region 3 – Bay Delta Region, 7329 Silverado Trail, Napa, California 94558

Ms. Debra Mahnke, California Regional Water Quality Control Board, Central Valley Region, Fresno Branch Office, 1985 E Street, Suite 200, Fresno, California 93706

Mr. Jason Brush, Supervisor, Wetland Regulatory Office, U.S. Environmental Protection Agency, Region IX, Wetlands Regulatory Office (WTR-8), 75 Hawthorne Street, San Francisco, California, 94105-3901

Mr. Frank Meraz, Department of Transportation, District 6, 855 M Street, Suite 200, Fresno, California 93721

# COMPLIANCE CERTIFICATION

**Permit File Name:** State Route 4 (SR4) Bacon Island Rehabilitation Project

**Permit File Number:** SPK-2007-02208

**Nationwide Permit Number:** 14 – Linear Transportation Projects

**Permittee:** Ms. Grace Magsayo  
California Department of Transportation  
855 M Street, Suite 200  
Fresno, California 93721

**County:** San Joaquin

**Date of Verification:** May 1, 2013

Within 30 days after completion of the activity authorized by this permit, sign this certification and return it to the following address:

U.S. Army Corps of Engineers  
Sacramento District  
1325 J Street, Room 1350  
Sacramento, California 95814-2922  
*DLL-CESPK-RD-Compliance@usace.army.mil*

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with the terms and conditions of the permit your authorization may be suspended, modified, or revoked. If you have any questions about this certification, please contact the Corps of Engineers.

\* \* \* \* \*

*I hereby certify that the work authorized by the above-referenced permit, including all the required mitigation, was completed in accordance with the terms and conditions of the permit verification.*

\_\_\_\_\_  
Signature of Permittee

\_\_\_\_\_  
Date



U S Army Corps of  
Engineers  
Sacramento District

# Nationwide Permit Summary

33 CFR Part 330; Issuance of Nationwide  
Permits – March 19, 2012

**14. Linear Transportation Projects.** Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

**Notification:** The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 31.) (Sections 10 and 404)

**Note:** Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

## A. Regional Conditions

### 1. Regional Conditions for California, excluding the Tahoe Basin

<http://www.spk.usace.army.mil/organizations/cespk-co/regulatory/nwp/2012-nwps/2012-NWP-RC-CA.pdf>

### 2. Regional Conditions for Nevada, including the Tahoe Basin

<http://www.spk.usace.army.mil/organizations/cespk-co/regulatory/nwp/2012-nwps/2012-NWP-RC-NV.pdf>

### 3. Regional Conditions for Utah

<http://www.spk.usace.army.mil/organizations/cespk-co/regulatory/nwp/2012-nwps/2012-NWP-RC-UT.pdf>

### 4. Regional Conditions for Colorado.

<http://www.spk.usace.army.mil/organizations/cespk-co/regulatory/nwp/2012-nwps/2012-NWP-RC-CO.pdf>

## B. Nationwide Permit General Conditions

**Note:** To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR §§ 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR § 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

### 1. Navigation.

(a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters,

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[www.flickr.com/photos/sacramentodistrict](http://www.flickr.com/photos/sacramentodistrict)

the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

- 2. **Aquatic Life Movements.** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.
- 3. **Spawning Areas.** Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
- 4. **Migratory Bird Breeding Areas.** Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
- 5. **Shellfish Beds.** No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.
- 6. **Suitable Material.** No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).
- 7. **Water Supply Intakes.** No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
- 8. **Adverse Effects From Impoundments.** If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
- 9. **Management of Water Flows.** To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).
- 10. **Fills Within 100-Year Floodplains.** The activity must comply with applicable FEMA-approved state or local floodplain management requirements.
- 11. **Equipment.** Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
- 12. **Soil Erosion and Sediment Controls.** Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.
- 13. **Removal of Temporary Fills.** Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
- 14. **Proper Maintenance.** Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.
- 15. **Single and Complete Project.** The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.
- 16. **Wild and Scenic Rivers.** No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).
- 17. **Tribal Rights.** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
- 18. **Endangered Species.**
  - (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.
  - (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to

demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps’ determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have “no effect” on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the U.S. FWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take” means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.noaa.gov/fisheries.html> respectively.

19. **Migratory Birds and Bald and Golden Eagles.** The permittee is responsible for obtaining any “take” permits required under the U.S. Fish and Wildlife Service’s regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such “take” permits are required for a particular activity.

20. **Historic Properties.**

(a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified

historic properties on which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

**21. Discovery of Previously Unknown Remains and Artifacts.** If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

**22. Designated Critical Resource Waters.** Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or

ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NHPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NHPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NHPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

**23. Mitigation.** The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment.

(2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

- (3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) – (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).
- (4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.
- (5) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.
- (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment.
- (e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.
- (f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.
- (g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.
- (h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.
- 24. Safety of Impoundment Structures.** To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.
- 25. Water Quality.** Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.
- 26. Coastal Zone Management.** In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.
- 27. Regional and Case-By-Case Conditions.** The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

**28. Use of Multiple Nationwide Permits.** The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

**29. Transfer of Nationwide Permit Verifications.** If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

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(Transferee)

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(Date)

**30. Compliance Certification.** Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. The success of any required permittee responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;
- (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and
- (c) The signature of the permittee certifying the completion of the work and mitigation.

**31. Pre-Construction Notification.**

(a) **Timing.** Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification

(PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer’s receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is “no effect” on listed species or “no potential to cause effects” on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee’s right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2)..

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

- (1) Name, address and telephone numbers of the prospective permittee;
- (2) Location of the proposed project;

(3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the United States expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(4) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(5) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property

may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) Form of Pre-Construction Notification: the standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(d) Agency Coordination:

(1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

(2) For all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of intermittent and ephemeral stream bed, and for all NWP 48 activities that require pre-construction notification, the district engineer will immediately provide (e.g., via email, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where

there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(4) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

### C. District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. For a linear project, this determination will include an evaluation of the individual crossings to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to intermittent or ephemeral streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51 or 52, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in minimal adverse effects. When making minimal effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

2. If the proposed activity requires a PCN and will result in a loss of greater than 1/10- acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining

whether the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

3. If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (a) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (c) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period, with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

### D. Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWP's do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWP's do not grant any property rights or exclusive privileges.
4. NWP's do not authorize any injury to the property or rights of others.
5. NWP's do not authorize interference with any existing or proposed Federal project.

#### E. Definitions

**Best management practices (BMPs):** Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

**Compensatory mitigation:** The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved. Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

**Direct effects:** Effects that are caused by the activity and occur at the same time and place.

**Discharge:** The term "discharge" means any discharge of dredged or fill material.

**Enhancement:** The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

**Ephemeral stream:** An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

**Establishment (creation):** The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

**High Tide Line:** The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by

strong winds such as those accompanying a hurricane or other intense storm.

**Historic Property:** Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

**Independent utility:** A test to determine what constitutes a single and complete non-linear project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

**Indirect effects:** Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

**Intermittent stream:** An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

**Loss of waters of the United States:** Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the linear feet of stream bed that is filled or excavated. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities eligible for exemptions under Section 404(f) of the Clean Water Act are not considered when calculating the loss of waters of the United States.

**Non-tidal wetland:** A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. The definition of a wetland can be found at 33 CFR 328.3(b). Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

**Open water:** For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of standing or flowing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of “open waters” include rivers, streams, lakes, and ponds.

**Ordinary High Water Mark:** An ordinary high water mark is a line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas (see 33 CFR 328.3(e)).

**Perennial stream:** A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

**Practicable:** Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

**Pre-construction notification:** A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

**Preservation:** The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

**Re-establishment:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

**Rehabilitation:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

**Restoration:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

**Riffle and pool complex:** Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

**Riparian areas:** Riparian areas are lands adjacent to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

**Shellfish seeding:** The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

**Single and complete linear project:** A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term “single and complete project” is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

**Single and complete non-linear project:** For non-linear projects, the term “single and complete project” is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of “independent utility”). Single and complete non-linear projects may not be “piecemealed” to avoid the limits in an NWP authorization.

**Stormwater management:** Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

**Stormwater management facilities:** Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

**Stream bed:** The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

**Stream channelization:** The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States. Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

**Tidal wetland:** A tidal wetland is a wetland (i.e., water of the United States) that is inundated by tidal waters. The definitions of a wetland and tidal waters can be found at 33 CFR 328.3(b) and 33 CFR 328.3(f), respectively. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line, which is defined at 33 CFR 328.3(d).

**Vegetated shallows:** Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

**Waterbody:** For purposes of the NWP, a waterbody is a jurisdictional water of the United States. If a jurisdictional wetland is adjacent – meaning bordering, contiguous, or neighboring – to a waterbody determined to be a water of the United States under 33 CFR 328.3(a)(1)-(6), that waterbody and its adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)). Examples of “waterbodies” include streams, rivers, lakes, ponds, and wetlands.

**Sacramento District Nationwide Permit Regional Conditions for California,  
excluding the Lake Tahoe Basin**

1.\* When pre-construction notification (PCN) is required, the permittee shall notify the U.S. Army Corps of Engineers, Sacramento District (Corps) in accordance with General Condition 31 using either the South Pacific Division Preconstruction Notification (PCN) Checklist or a signed application form (ENG Form 4345) with an attachment providing information on compliance with all of the General and Regional Conditions. In addition, the PCN shall include:

a. A written statement describing how the activity has been designed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States;

b. Drawings, including plan and cross-section views, clearly depicting the location, size and dimensions of the proposed activity, as well as the location of delineated waters of the U.S. on the site. The drawings shall contain a title block, legend and scale, amount (in cubic yards) and area (in acres) of fill in Corps jurisdiction, including both permanent and temporary fills/structures. The ordinary high water mark or, if tidal waters, the mean high water mark and high tide line, should be shown (in feet), based on National Geodetic Vertical Datum (NGVD) or other appropriate referenced elevation. All drawings for activities located within the boundaries of the Los Angeles District shall comply with the September 15, 2010 Special Public Notice: *Map and Drawing Standards for the Los Angeles District Regulatory Division*, (available on the Los Angeles District Regulatory Division website at: [www.spl.usace.army.mil/regulatory/](http://www.spl.usace.army.mil/regulatory/)); and

c. Numbered and dated pre-project color photographs showing a representative sample of waters proposed to be impacted on the site, and all waters of the U.S. proposed to be avoided on and immediately adjacent to the activities site. The compass angle and position of each photograph shall be identified on the plan-view drawing(s) required in subpart b of this Regional Condition.

2. For all Nationwide Permits (NWP), the permittee shall submit a PCN in accordance with General Condition 31 and Regional Condition 1, in the following circumstances:

a. For all activities that would result in the discharge of fill material into any vernal pool;

b. For any activity in the Primary and Secondary Zones of the Legal Delta, the Sacramento River, the San Joaquin River, and the immediate tributaries of these waters;

c. For all crossings of perennial waters and intermittent waters;

d. For all activities proposed within 100 feet of the point of discharge of a known natural spring source, which is any location where ground water emanates from a point in the ground excluding seeps or other discharges which lack a defined channel; and

e.\* For all activities located in areas designated as Essential Fish Habitat (EFH) by the Pacific Fishery Management Council (i.e., all tidally influenced areas - Federal Register dated March 12, 2007 (72 FR 11092)), in which case the PCN shall include an EFH assessment and extent of proposed impacts to EFH. Examples of EFH habitat assessments can be found at: <http://www.swr.noaa.gov/efh.htm>.

3. The permittee shall record the NWP verification with the Registrar of Deeds or other appropriate official charged with the responsibility for maintaining records of title to or interest in real property for areas (1) designated to be preserved as part of compensatory mitigation for authorized impacts, including any associated covenants or restrictions, or (2) where boat ramps or docks, marinas, piers, and permanently moored vessels will be constructed or placed in or adjacent to navigable waters. The recordation shall also include a map showing the surveyed location of the preserved area or authorized structure.

**Sacramento District Nationwide Permit Regional Conditions for California,  
excluding the Lake Tahoe Basin**

4. For all waters of the U.S. proposed to be avoided on a site, unless determined to be impracticable by the Corps, the permittee shall:

- a. Establish and maintain, in perpetuity, a preserve containing all avoided waters of the U.S. to ensure that the functions of the aquatic environment are protected;
- b. Place all avoided waters of the U.S. and any upland buffers into a separate parcel prior to discharging dredge or fill material into waters of the U.S., and
- c. Establish permanent legal protection for all preserve parcels, following Corps approval of the legal instrument;

If the Corps determines that it is impracticable to require permanent preservation of the avoided waters, additional mitigation may be required in order to compensate for indirect impacts to the waters of the U.S.

5. For all temporary fills, the PCN shall include a description of the proposed temporary fill, including the type and amount of material to be placed, the area proposed to be impacted, and the proposed plan for restoration of the temporary fill area to pre-activities contours and conditions, including a plan for the revegetation of the temporary fill area, if necessary. In addition, the PCN shall include the reason(s) why avoidance of temporary impacts is not practicable.

In addition, for all activities resulting in temporary fill within waters of the U.S., the permittee shall:

- a. Utilize material consisting of clean and washed gravel. For temporary fills within waters of the U.S. supporting anadromous fisheries, spawning quality gravel shall be used, where practicable, as determined by the Corps, after consultation with appropriate Federal and state fish and wildlife agencies;
- b. Place a horizontal marker (e.g. fabric, certified weed free straw, etc.) to delineate the existing ground elevation of the waters temporarily filled during construction; and
- c. Remove all temporary fill within 30 days following completion of construction activities.

6. In addition to the requirements of General Condition 2, unless determined to be impracticable by the Corps, the following criteria shall apply to all road crossings:

- a.\* For all activities in waters of the U.S. that are suitable habitat for Federally-listed fish species, the permittee shall design all road crossings to ensure that the passage and/or spawning of fish is not hindered. In these areas, the permittee shall employ bridge designs that span the stream or river, including pier- or pile-supported spans, or designs that use a bottomless arch culvert with a natural stream bed;
- b. Road crossings shall be designed to ensure that no more than minor impacts would occur to fish and wildlife passage or expected high flows, following the criteria listed in Regional Condition 6(a). Culverted crossings that do not utilize a bottomless arch culvert with a natural stream bed may be authorized for waters that do not contain suitable habitat for Federally listed fish species, if it can be demonstrated and is specifically determined by the Corps, that such crossing will result in no more than minor impacts to fish and wildlife passage or expected high flows;

- c. No construction activities shall occur within standing or flowing waters. For ephemeral or intermittent streams, this may be accomplished through construction during the dry season. In perennial

**Sacramento District Nationwide Permit Regional Conditions for California,  
excluding the Lake Tahoe Basin**

streams, this may be accomplished through dewatering of the work area. Any proposed dewatering plans must be approved, in writing, by the Corps prior to commencement of construction activities; and

d. All bank stabilization activities associated with a road crossing shall comply with Regional Condition 19.

In no case shall stream crossings result in a reduction in the pre-construction bankfull width or depth of perennial streams or negatively alter the flood control capacity of perennial streams.

7.\* For activities in which the Corps designates another Federal agency as the lead for compliance with Section 7 of the Endangered Species Act (ESA) of 1973 as amended, pursuant to 50 CFR Part 402.07, Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act (EFH), pursuant to 50 CFR 600.920(b) and/or Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, pursuant to 36 CFR 800.2(a)(2), the lead Federal agency shall provide all relevant documentation to the Corps demonstrating any previous consultation efforts, as it pertains to the Corps Regulatory permit area (for Section 7 and EFH compliance) and the Corps Regulatory area of potential effect (APE) (for Section 106 compliance). For activities requiring a PCN, this information shall be submitted with the PCN. If the Corps does not designate another Federal agency as the lead for ESA, EFH and/or NHPA, the Corps will initiate consultation for compliance, as appropriate.

8. For all NWP's which require a PCN, the permittee shall submit the following additional information with the compliance certificate required under General Condition 30:

a. As-built drawings of the work conducted on the project site and any on-site and/or off-site compensatory mitigation, preservation, and/or avoidance area(s). The as-builts shall include 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 permit drawings. The drawing shall show all areas of ground disturbance, wetland impacts, structures, and the boundaries of any on-site and/or off-site mitigation or avoidance areas. Please note that any deviations from the work as authorized, which result in additional impacts to waters of the U.S., must be coordinated with the appropriate Corps office prior to impacts; and

b. Numbered and dated post-construction color photographs of the work conducted within a representative sample of the impacted waters of the U.S., and within all avoided waters of the U.S. on and immediately adjacent to the proposed activities area. The compass angle and position of all photographs shall be similar to the pre-construction color photographs required in Regional Condition 1(c) and shall be identified on the plan-view drawing(s) required in subpart a of this Regional Condition.

9. For all activities requiring permittee responsible mitigation, the permittee shall develop and submit to the Corps for review and approval, a final comprehensive mitigation and monitoring plan for all permittee responsible mitigation prior to commencement of construction activities within waters of the U.S. The plan shall include the mitigation location and design drawings, vegetation plans, including target species to be planted, and final success criteria, presented in the format of the *Sacramento District's Habitat Mitigation and Monitoring Proposal Guidelines*, dated December 30, 2004, and in compliance with the requirements of 33 CFR 332.

10.\* The permittee shall complete the construction of any compensatory mitigation required by special condition(s) of the NWP verification before or concurrent with commencement of construction of the authorized activity, except when specifically determined to be impracticable by the Corps. When mitigation involves use of a mitigation bank or in-lieu fee program, the permittee shall submit proof of payment to the Corps prior to commencement of construction of the authorized activity.

**Sacramento District Nationwide Permit Regional Conditions for California,  
excluding the Lake Tahoe Basin**

- 11.** The permittee is responsible for all authorized work and ensuring that all contractors and workers are made aware and adhere to the terms and conditions of the permit authorization. The permittee shall ensure that a copy of the permit authorization and associated drawings are available and visible for quick reference at the site until all construction activities are completed.
- 12.** The permittee shall clearly identify the limits of disturbance in the field with highly visible markers (e.g. construction fencing, flagging, silt barriers, etc.) prior to commencement of construction activities within waters of the U.S. The permittee shall maintain such identification properly until construction is completed and the soils have been stabilized. The permittee is prohibited from any activity (e.g. equipment usage or materials storage) that impacts waters of the U.S. outside of the permit limits (as shown on the permit drawings).
- 13.** For all activities in which a PCN is required, the permittee shall notify the appropriate district office of the start date for the authorized work within 10 days prior to initiation of construction activities.
- 14.** The permittee shall allow Corps representatives to inspect the authorized activity and any mitigation areas at any time deemed necessary to determine compliance with the terms and conditions of the NWP verification. The permittee will be notified in advance of an inspection.
- 15.** For all activities located in the Mather Core Recovery Area in Sacramento County, as identified in the U.S. Fish and Wildlife Service's *Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon* dated December 15, 2005, NWPs 14, 18, 23, 29, 39, 40, 42, 43 and 44 are revoked from use in vernal pools that may contain habitat for Federally-listed threatened and/or endangered vernal pool species.
- 16.** For activities located in the Primary or Secondary Zone of the Legal Delta, NWPs 29 and 39 are revoked.
- 17.** For all activities within the Secondary Zone of the Legal Delta, the permittee shall conduct compensatory mitigation for unavoidable impacts within the Secondary Zone of the Legal Delta.
- 18.** For NWP 12: Permittees shall ensure the construction of utility lines does not result in the draining of any water of the U.S., including wetlands. This may be accomplished through the use of clay blocks, bentonite, or other suitable material (as approved by the Corps) to seal the trench. For utility line trenches, during construction, the permittee shall remove and stockpile, separately, the top 6 – 12 inches of topsoil. Following installation of the utility line(s), the permittee shall replace the stockpiled topsoil on top and seed the area with native vegetation. The permittee shall submit a PCN for utility line activities in the following circumstances:
  - a. The utility line crossing would result in a discharge of dredged and/or fill material into perennial waters, intermittent waters, wetlands, mudflats, vegetated shallows, riffle and pool complexes, sanctuaries and refuges or coral reefs;
  - b. The utility line activity would result in a discharge of dredged and/or fill material into greater than 100 linear feet of ephemeral waters of the U.S.;
  - c. The utility line installation would include the construction of a temporary or permanent access road, substation or foundation within waters of the U.S.; or

**Sacramento District Nationwide Permit Regional Conditions for California,  
excluding the Lake Tahoe Basin**

d. The proposed activity would not involve the restoration of all utility line trenches to pre-project contours and conditions within 30 days following completion of construction activities.

**19.** For NWP 13 and 14: All bank stabilization activities shall involve either the sole use of native vegetation or other bioengineered design techniques (e.g. willow plantings, root wads, large woody debris, etc.), or a combination of hard-armoring (e.g. rip-rap) and native vegetation or bioengineered design techniques, unless specifically determined to be impracticable by the Corps. The permittee shall submit a PCN for any bank stabilization activity that involves hard-armoring or the placement of any non-vegetated or non-bioengineered technique below the ordinary high water mark or, if tidal waters, the high tide line of waters of the U.S. The request to utilize non-vegetated techniques must include information on why the sole use of vegetated techniques is not practicable.

**20.** For NWP 23: The permittee shall submit a PCN for all activities proposed for this NWP, in accordance with General Condition 31 and Regional Condition 1. The PCN shall include a copy of the signed Categorical Exclusion document and final agency determinations regarding compliance with ESA, EFH and NHPA, in accordance with General Conditions 18 and 20 and Regional Condition 7.

**21.** For NWP 27: The permittee shall submit a PCN for aquatic habitat restoration, establishment, and enhancement activities in the following circumstances:

a. The restoration, establishment or enhancement activity would result in a discharge of dredged and/or fill material into perennial waters, intermittent waters, wetlands, mudflats, vegetated shallows, riffle and pool complexes, sanctuaries and refuges or coral reefs; or

b. The restoration, establishment or enhancement activity would result in a discharge of dredged and/or fill material into greater than 100 linear feet of ephemeral waters of the U.S.

**22.** For NWPs 29 and 39: The channelization or relocation of intermittent or perennial drainages is not authorized, except when, as determined by the Corps, the relocation would result in a net increase in functions of the aquatic ecosystem within the watershed.

**23.\*** Any requests to waive the 300 linear foot limitation for intermittent and ephemeral streams for NWPs 21, 29, 39, 40, 42, 43, 44, 50, 51 and 52, or to waive the 500 linear foot limitation along the bank for NWP 13, must include the following:

a. A narrative description of the stream. This should include known information on: volume and duration of flow; the approximate length, width, and depth of the waterbody and characteristics observed associated with an Ordinary High Water Mark (e.g. bed and bank, wrack line or scour marks); a description of the adjacent vegetation community and a statement regarding the wetland status of the adjacent areas (i.e. wetland, non-wetland); surrounding land use; water quality; issues related to cumulative impacts in the watershed, and; any other relevant information;

b. An analysis of the proposed impacts to the waterbody, in accordance with General Condition 31 and Regional Condition 1;

c. Measures taken to avoid and minimize losses to waters of the U.S., including other methods of constructing the proposed activity(s); and

d. A compensatory mitigation plan describing how the unavoidable losses are proposed to be offset, in accordance with 33 CFR 332.

**Sacramento District Nationwide Permit Regional Conditions for California,  
excluding the Lake Tahoe Basin**

- 24.** For NWP 29, 39, 40, 42, and 43: The permittee shall establish and maintain upland vegetated buffers in perpetuity, unless specifically determined to be impracticable by the Corps, next to all preserved open waters, streams and wetlands including created, restored, enhanced or preserved waters of the U.S., consistent with General Condition 23(f). Except in unusual circumstances, as determined by the Corps, vegetated buffers shall be at least 50 feet in width.
- 25.** For NWP 46: The discharge shall not cause the loss of greater than 0.5 acres of waters of the United States or the loss of more than 300 linear feet of ditch, unless specifically waived in writing by the Corps.
- 26.** All NWPs except 3, 6, 20, 27, 32, and 38 are revoked for activities in histosols, fens, bogs and peatlands and in wetlands contiguous with fens. Fens are defined as slope wetlands with a histic epipedon that are hydrologically supported by groundwater. Fens are normally saturated throughout the growing season, although they may not be during drought conditions. For NWPs 3, 6, 20, 27, 32, and 38, the permittee shall submit a PCN to the Corps in accordance with General Condition 31 and Regional Condition 1. This condition does not apply to NWPs 1, 2, 8, 9, 10, 11, 24, 28, 35 or 36, as these NWPs either apply to Section 10 only activities or do not authorize impacts to special aquatic sites.

Bacon Island Rehabilitation Project  
State Route 4  
San Joaquin County PM 8.1 - 14.3

Project Extent  
Page 1 of 5

Roberts Island

Roberts Island

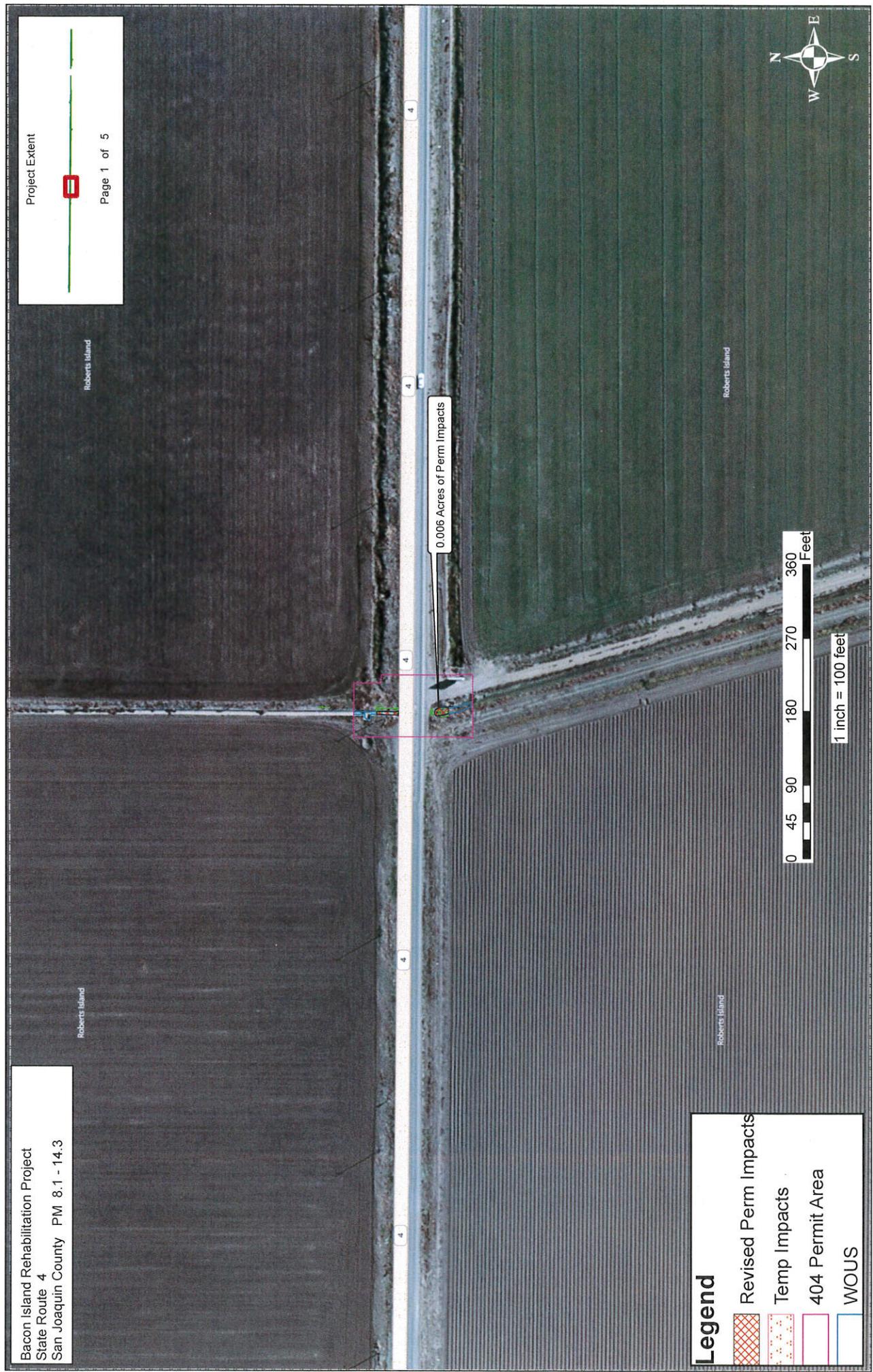
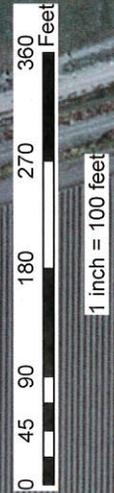
Roberts Island

Roberts Island

0.006 Acres of Perm Impacts

**Legend**

- Revised Perm Impacts
- Temp Impacts
- 404 Permit Area
- WOUS

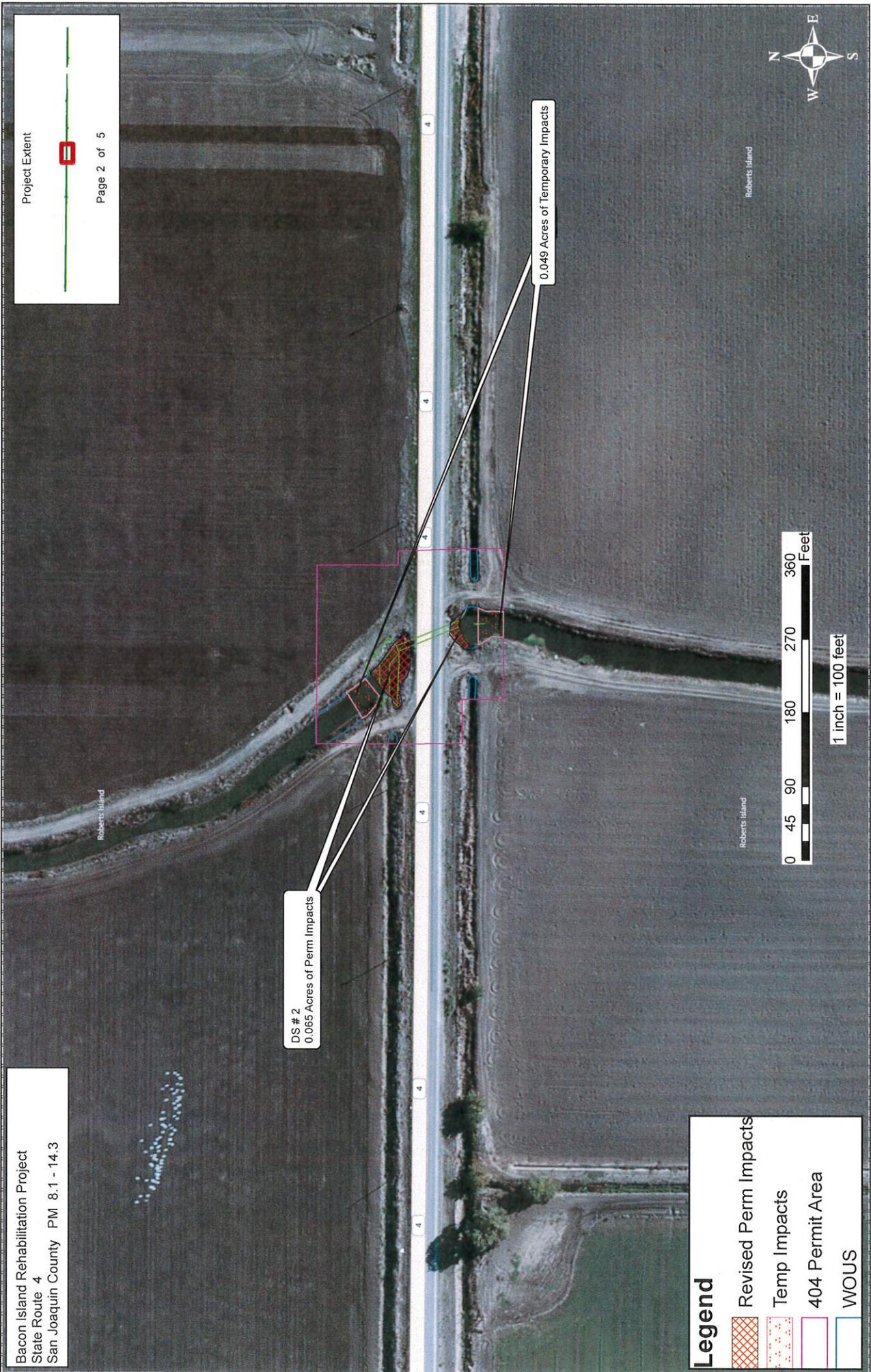


Bacon Island Rehabilitation Project  
State Route 4  
San Joaquin County PM 8.1 - 14.3

Project Extent



Page 2 of 5



DS # 2  
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0.049 Acres of Temporary Impacts

**Legend**

-  Revised Perm Impacts
-  Temp Impacts
-  404 Permit Area
-  WOUS

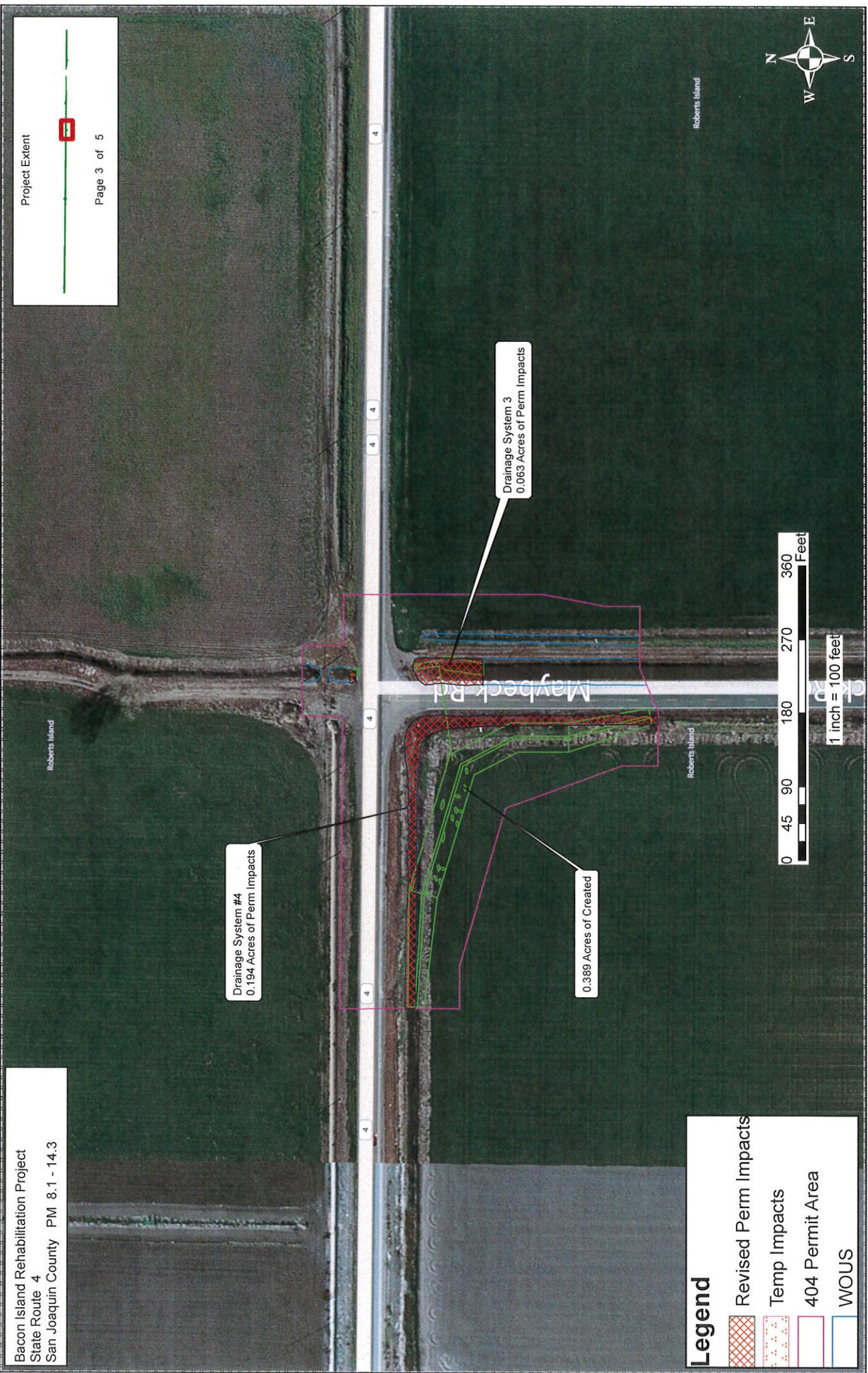


1 inch = 100 feet



Roberts Island

Roberts Island



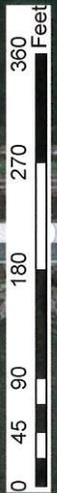
**Legend**

- Revised Perm Impacts
- Temp Impacts
- 404 Permit Area
- WOUS

Drainage System #4  
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Drainage System 3  
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0.389 Acres of Created



1 inch = 100 feet



Roberts Island

Roberts Island

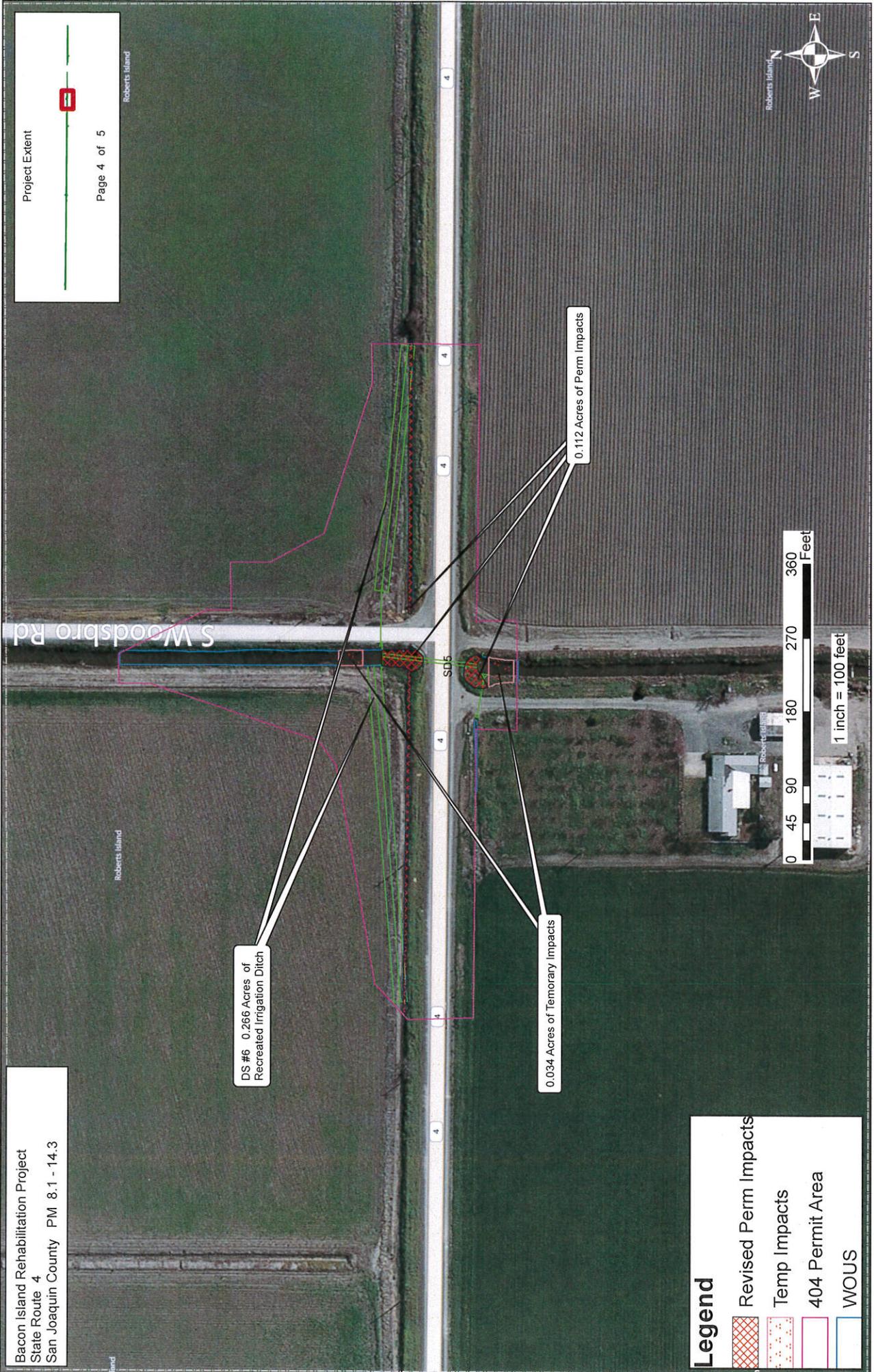
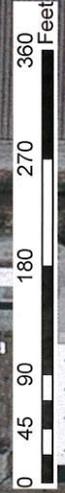
DS #6 0.256 Acres of  
Recreated Irrigation Ditch

0.034 Acres of Temporary Impacts

0.112 Acres of Perm Impacts

**Legend**

- Revised Perm Impacts
- Temp Impacts
- 404 Permit Area
- WOUS



Bacon Island Rehabilitation Project  
State Route 4  
San Joaquin County PM 8.1 - 14.3

Project Extent

Page 5 of 5



**Legend**

-  Revised Perm Impacts
-  Temp Impacts
-  404 Permit Area
-  WOUS

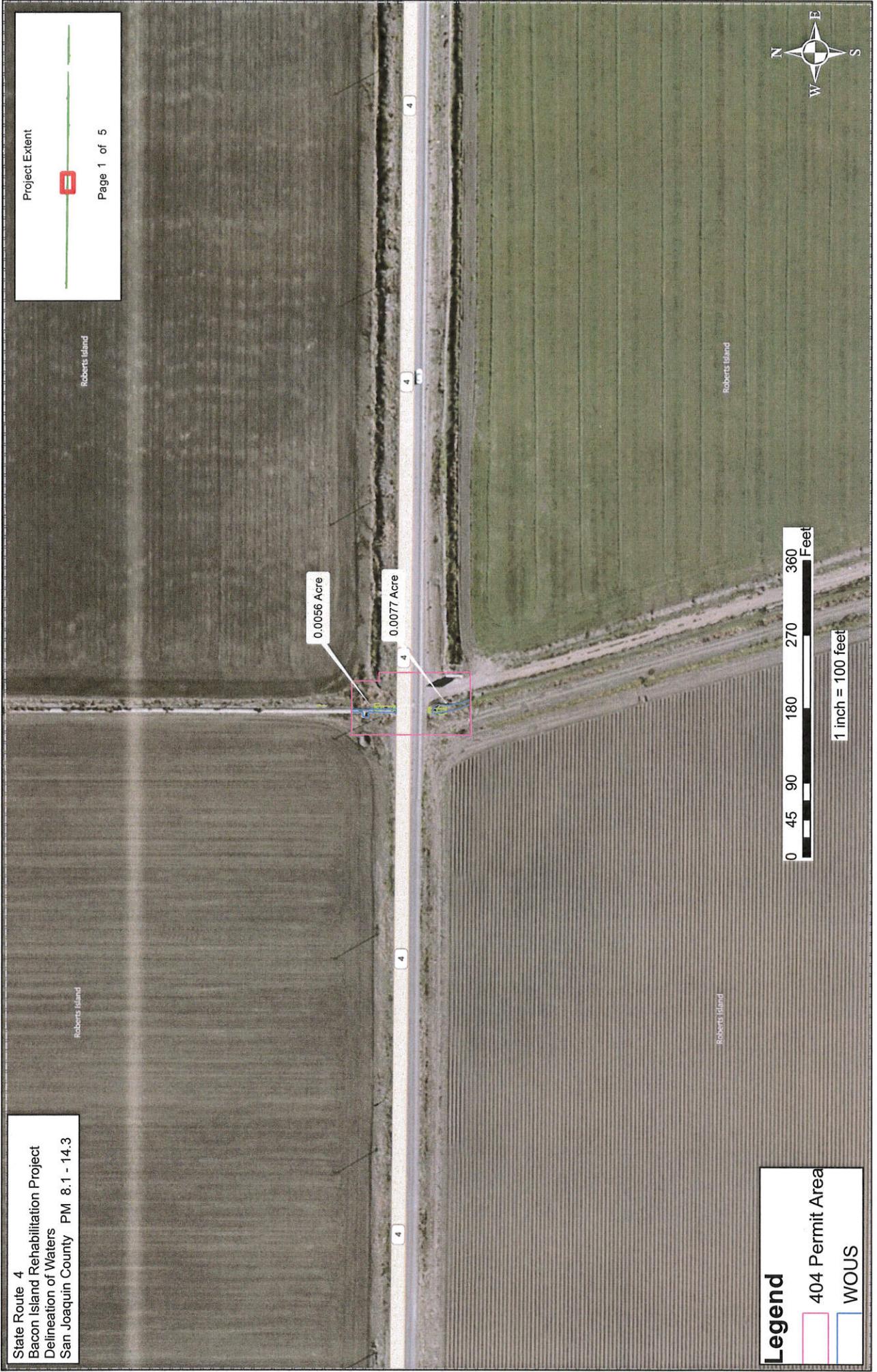


State Route 4  
Bacon Island Rehabilitation Project  
Delineation of Waters  
San Joaquin County PM 8.1 - 14.3

Project Extent

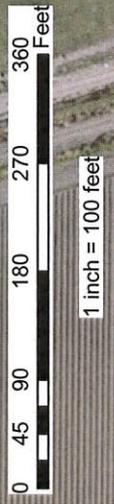


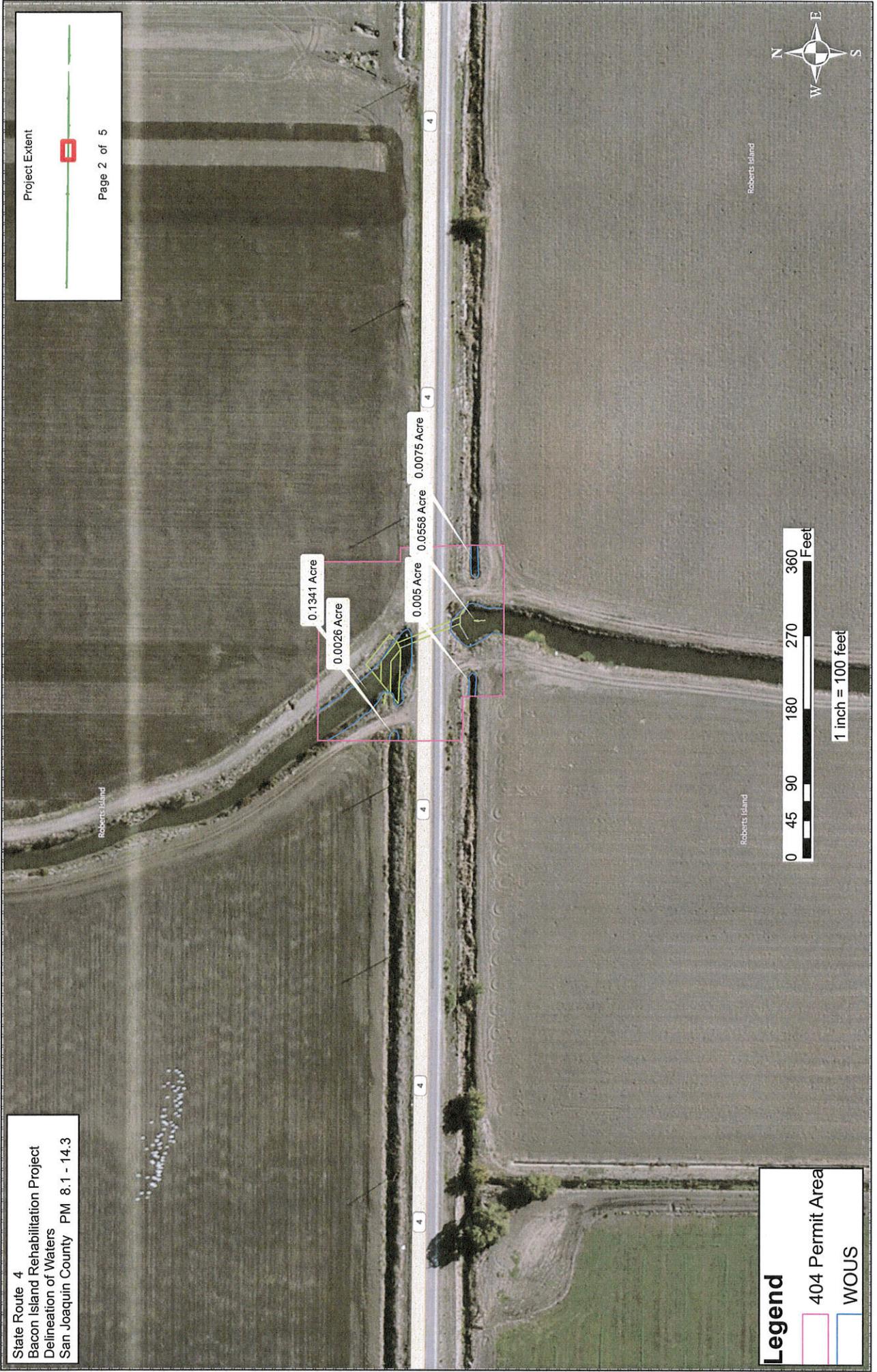
Page 1 of 5



**Legend**

- 404 Permit Area
- WOUS



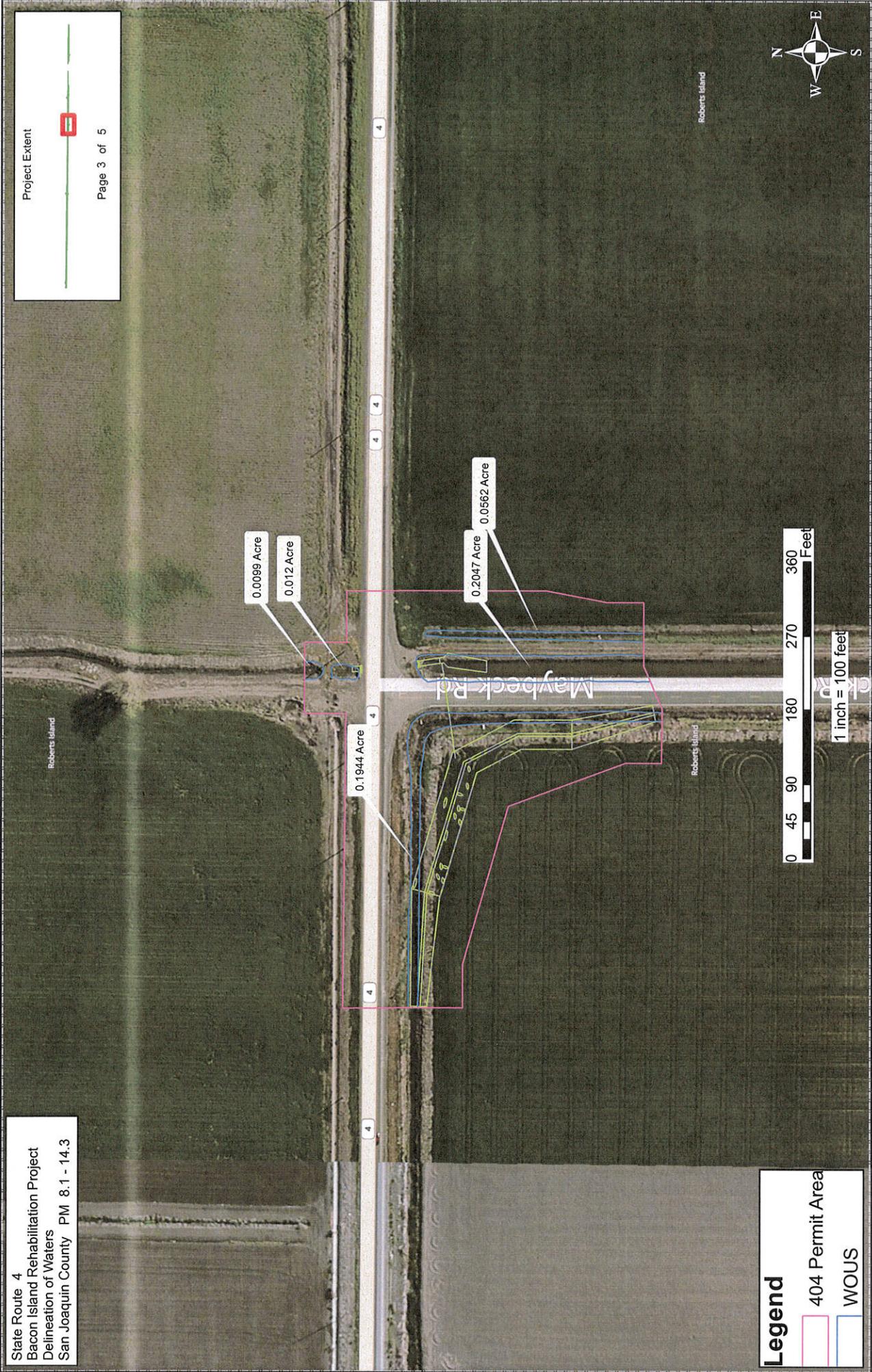


**Legend**

-  404 Permit Area
-  WOUS

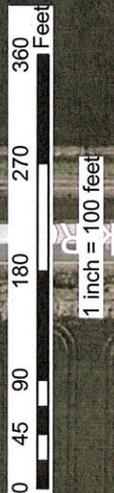
0 45 90 180 270 360 Feet

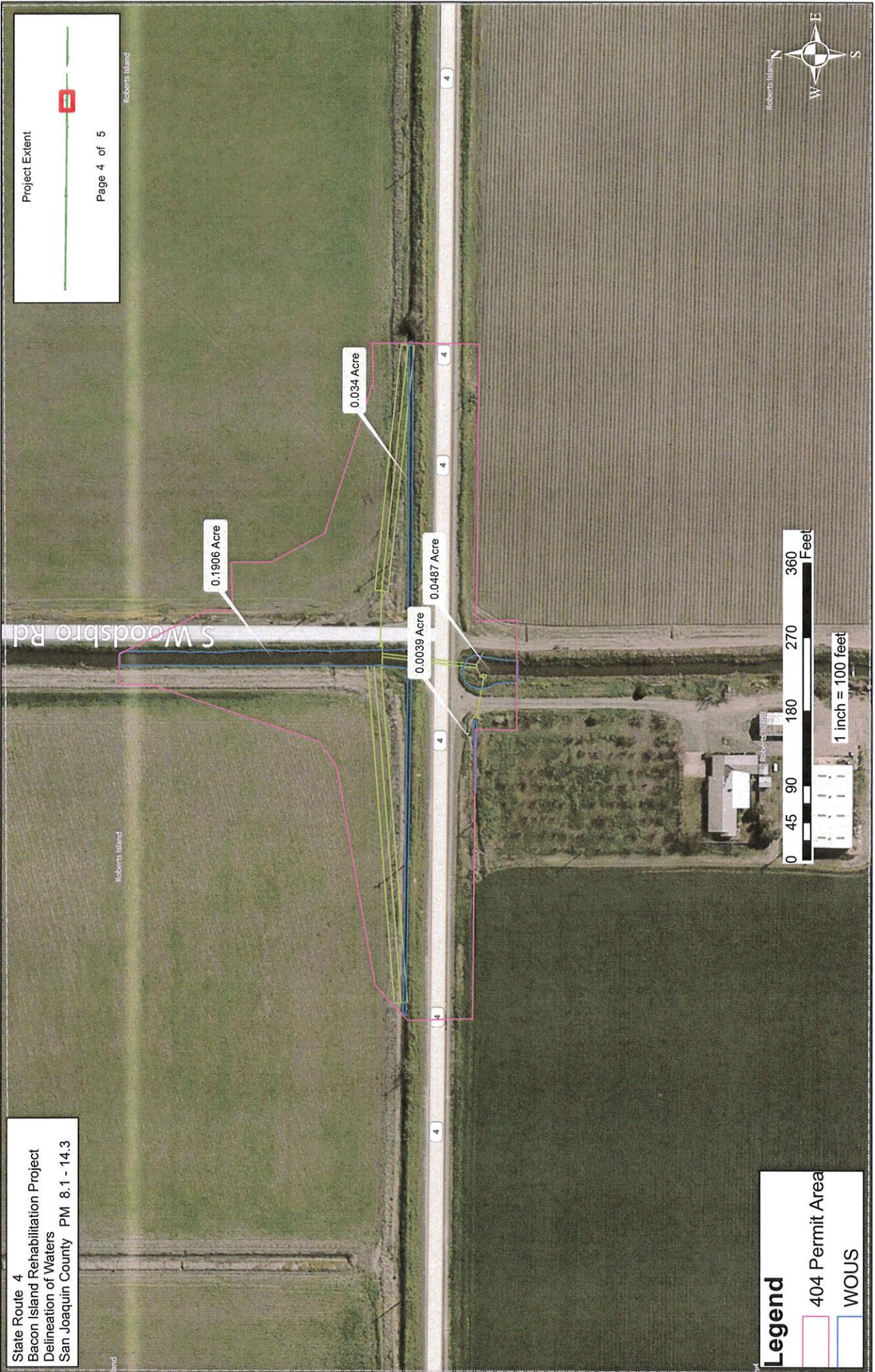
1 inch = 100 feet



**Legend**

- 404 Permit Area
- WOUS





**Legend**

- 404 Permit Area
- WOUS

0 45 90 180 270 360 Feet  
1 inch = 100 feet





State of California – The Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
Bay Delta Region  
7329 Silverado Trail  
Napa, CA 94558  
(707) 944-5500  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

EDMUND G. BROWN JR., Governor  
CHARLTON H. BONHAM, Director



May 1, 2013

Frank Meraz  
California Department of Transportation  
855 M Street, Suite 200  
Fresno, CA 93721

Subject: Final Lake or Streambed Alteration Agreement  
Notification No. 1600-2013-0021-3  
State Route 4, Bacon Island Rehabilitation Project

Dear Mr. Meraz:

Enclosed is the final Streambed Alteration Agreement (“Agreement”) for the State Route 4 Bacon Island Rehabilitation Project (“Project”). Before the Department may issue an Agreement, it must comply with the California Environmental Quality Act (“CEQA”). In this case, the Department, acting as a responsible agency, filed a notice of determination (“NOD”) on May 1, 2013, based on information contained in the Negative Declaration, the lead agency prepared for the Project.

Under CEQA, filing a NOD starts a 30-day period within which a party may challenge the filing agency’s approval of the project. You may begin your project before the 30-day period expires if you have obtained all necessary local, state, and federal permits or other authorizations. However, if you elect to do so, it will be at your own risk.

If you have any questions regarding this matter, please contact, Melissa Escaron, Staff Environmental Scientist, at (925)786-3045 or [Melissa.Escaron@wildlife.ca.gov](mailto:Melissa.Escaron@wildlife.ca.gov).

Sincerely,

Scott Wilson  
Acting Regional Manager  
Bay Delta Region

cc: Dena Gonzalez  
California Department of Transportation

Lieutenant Vielhauer

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE**  
BAY DELTA REGION  
7329 SILVERADO TRAIL  
NAPA, CALIFORNIA 94558  
(707) 944-5500  
[WWW.WILDLIFE.CA.GOV](http://WWW.WILDLIFE.CA.GOV)



**STREAMBED ALTERATION AGREEMENT**  
NOTIFICATION No. 1600-2013-0021-R3  
IRRIGATION DITCHES

CALIFORNIA DEPARTMENT OF TRANSPORTATION  
Bacon Island Rehabilitation Project

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW) and California Department of Transportation (Permittee) or as represented Mr. Frank Meraz.

**RECITALS**

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified CDFW on January 18, 2012, that Permittee intends to complete the Project described herein.

WHEREAS, pursuant to FGC section 1603, CDFW has determined that the Project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, Permittee has reviewed the Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, Permittee agrees to complete the Project in accordance with the Agreement

**PROJECT LOCATION**

The Project is located on State Route (SR) 4 two miles west of Stockton in San Joaquin County.

**PROJECT DESCRIPTION**

Caltrans proposes to repair and overlay pavement and improve associated drainage facilities on State Route 4. Existing shoulders will be widened to the current standard of 8 feet and rumble strips will be installed. Drainage facility work is scheduled to be conducted during the non-irrigation season (ditches are dry). However should the schedule shift, or if water is present within the canals, then a dewater system may be installed. The Permittee may install temporary earthen barriers and piping to divert the

water but continue to allow it to flow through the work area. The Woods Irrigation District would then shut off the water for a maximum of two days to allow the contractor to build two temporary earthen dams, one locate up- and the other, downstream. The installed pipe would run through the existing culvert and through both temporary earthen dams. Each dam would be 30 feet long by 6 feet high, by 2 feet deep. The remaining water would then be pumped out of the drainage ditches. Once the space is dewatered the Permittee will ensure a 15 day drying period. Once the construction work is completed, the Woods Irrigation District will turn off flows to allow the Permittee to remove the temporary earthen dams and piping.

Drainage System 1: Remove existing headwalls and extend box culvert 17 feet to the north and 9 feet to the south to accommodate widened shoulders. Construct new wing walls. Construct new concrete ditch.

Drainage System 2: Replace the existing 84-inch concrete pipe culvert and headwall. Place Rock Slope Protection (RSP) at the inlet and outlet.

Drainage System 3: Extend existing culvert on the south side by 27.2 feet and 10.8 feet on the north side to allow for construction of new shoulders and intersection improvements. Replace head walls and wing walls at new inlet and outlet. Realign existing ditch to the new inlet location.

Drainage System 4: Remove existing 18-inch corrugated steel pipe on Maybeck Road and existing canal gate, and relocate the new inlet of System #3. Realign existing ditch along the southwest quadrant of the Route 4 and Maybeck Road intersection, place RSP.

Drainage System 5: Remove existing 36-inch reinforced corrugated pipe along Route 4 and replace it with 48-inch reinforced corrugated pipe. Construct new headwall and wing walls for the inlet and outlet.

Drainage System 6: Replace existing culvert just north of State Route 4. This system will outlet into north end of Drainage System #5 inlet. Drainage ditches will be filled and realigned on the north side of State Route 4.

Drainage System 7: Replace and extend existing culvert by 66 feet. Realigned Drainage System 7 will connect to the south end of system 5.

Drainage System 8: Extend existing 72-inch by 44-inch concrete box culvert by 13 feet to allow for construction of shoulders, replace existing wing walls.

Project activities will include excavation, grading, filling, concrete work, RSP installation, ditch realignment, paving, clearing and grubbing, trenching, and other activities.

## PROJECT IMPACTS

Existing fish or wildlife resources the Project could substantially adversely affect include:

- Potential giant garter snake habitat
- Bird nesting

The adverse effects the Project could have on the fish or wildlife resources identified above include:

- Temporary loss of habitat for giant garter snakes
- Harassment or mortality of giant garter snakes
- Temporary Water quality degradation
- Short-term release of contaminants
- Disruption of bird nesting

## MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

### 1. Administrative Measures

Permittee shall meet each administrative requirement described below.

- 1.1 Documentation at Project Site. Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the Project site at all times and shall be presented to CDFW personnel, or personnel from another state, federal, or local agency upon request.
- 1.2 Providing Agreement to Persons at Project Site. Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the Project at the Project site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.
- 1.3 Notification of Conflicting Provisions. Permittee shall notify CDFW if Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the Project by another local, state, or federal agency. In that event, CDFW shall contact Permittee to resolve any conflict.

- 1.4 Project Site Entry. Permittee agrees that CDFW personnel may, with notification of the Resident Engineer, enter the Project site at any time to verify compliance with the Agreement.

## **2. Avoidance and Minimization Measures**

To avoid or minimize adverse impacts to fish and wildlife resources identified above, Permittee shall implement each measure listed below. These conditions apply to CDFW jurisdiction as described in the Project Description above.

- 2.1 All work within drainages shall occur between October 1 and April 30, the inactive period for the giant garter snake.
- 2.2 Aquatic habitat that will be disturbed shall be dewatered 15 days prior to the initiation of construction activities.
- 2.3 At least 30-days prior to commencing Project activities covered by this Agreement, the Permittee shall submit to CDFW, for review and approval, the qualifications for a number of biologists (Qualified Biologist) that shall oversee the implementation of the conditions in this Agreement. At a minimum, the Qualified Biologists shall have a combination of academic training and professional experience in biological sciences and related resource management activities. The Qualified Biologists shall communicate to the Resident Engineer when any activity is not in compliance with this Agreement and the Resident Engineer shall immediately stop the activity that is not in compliance with this Agreement.
- 2.4 Before the onset of construction activities, a Qualified Biologist shall conduct an education program for all construction personnel. At a minimum the training will include a description of giant garter snake; migratory birds and their habitats; the occurrence of these species within the Project site; an explanation of their state and federal statuses; avoidance and minimization measures; habitats as they relate to the Project site; and boundaries within which construction may occur. A fact sheet conveying this information will be prepared and distributed to all construction crews and Project personnel entering the Project site. Upon completion of the program, personnel will sign a form stating that they attended the program and understand all the avoidance and minimization measures.
- 2.5 Prior to the start of construction, Wildlife Exclusion Fencing (WEF) shall be installed in all areas sensitive species could enter the Project site. The location of the fencing will be determined by the Resident Engineer a Qualified Biologist based on habitat suitability. The WEF will remain in place

throughout the duration of the Project, while construction activities are ongoing. The WEF shall be inspected daily by the biological monitor and maintained throughout the Project duration. Repairs to the WEF shall be completed within 24 hours of discovery. Upon Project completion the WEF will be completely removed and the areas returned to original condition or better.

- 2.6 Prior to the start of construction Environmentally Sensitive Areas (ESAs) will be clearly delineated using high-visibility orange fencing to protect sensitive habitats. The ESA fencing will remain in place throughout the duration of the Project. The final Project plans will depict all locations where ESA fencing will be installed and how it will be installed. The bid solicitation package special provisions will clearly describe acceptable fencing material and prohibited construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within ESAs. ESA fencing shall be erected as directed by a Qualified Biologist, 200 feet from the edge of potential aquatic habitat for the giant garter snake.
- 2.7 Immediately prior to the initiation of any ground disturbing activities including staging of equipment or materials, a Qualified Biologist shall conduct a clearance survey to ensure no sensitive species are present within the area to be disturbed.
- 2.8 If Project activities will occur between February 15 and September 1, a Qualified Biologist shall conduct pre-construction surveys for nesting birds no more than one week prior to construction. Surveys shall consist of multiple days of observations. If nesting birds are found, a 50-foot radius buffer shall be established around the nest, a 300-foot radius buffer in the case of raptors, e.g. hawks, owls, and eagles. The area shall be avoided. A buffer of less than 300 feet, but no less than 100 feet, may be used if a Qualified Biologist, experienced in raptor behavior, is assigned to monitor the behavior of any raptor nesting within 300 feet of Project activities. The Qualified Biologist shall have authority, through the Resident Engineer, to order the cessation of all Project activities within 300 feet of any raptor nest if the birds exhibit abnormal nesting behavior which may cause reproductive failure (nest abandonment and loss of eggs and/or young). Abnormal nesting behaviors which may cause reproductive harm include, but are not limited to: defensive flights/vocalizations directed towards Project personnel, standing up from a brooding position, and flying away from the nest. Project activities within 300 feet of the nest shall not resume until the Qualified Biologist has consulted with CDFW and both the Qualified Biologist and CDFW confirm that the bird's behavior has normalized or the young have left the nest.
- 2.9 To prevent inadvertent entrapment of animals during construction, all excavated, steep-walled holes or trenches more than 2-feet deep will be covered at the close of each working day by plywood or similar materials, or

provided with one or more escape ramps constructed of earth fill or wooden planks at an angle no greater than 30 degrees. Before such holes or trenches are filled they must be thoroughly inspected for trapped animals. All replacement pipes, culverts, or similar structures stored in the action area overnight will be inspected before they are subsequently moved, capped and/or buried.

- 2.10 Permittee shall conduct work defined in the above Project Description, and within the Project area, during periods of dry weather. The Project area is defined as the bed, bank, channel, and associated wetland habitat. The Permittee shall monitor forecasted precipitation. When  $\frac{1}{4}$  inch or more of precipitation is forecasted to occur, the Permittee shall stop work before precipitation commences. No Project activities may be started if its associated erosion control measures cannot be completed prior to the onset of precipitation. After any storm event, the Permittee shall inspect all sites currently under construction and all sites scheduled to begin construction within the next 72 hours for erosion and sediment problems and take corrective action as needed. Seventy-two hour weather forecasts from National Weather Service shall be consulted and work shall not start back up until runoff ceases and there is less than a 30% forecast for precipitation for the following 24-hour period.
- 2.11 Permittee shall utilize erosion control measures throughout all phases of operation where sediment runoff from exposed slopes threatens to enter waterways. At no time shall silt laden runoff be allowed to enter the stream or directed to where it may enter the stream. Erosion control installations shall be monitored for effectiveness and shall be repaired or replaced as recommended by a Qualified Biologist or Water Quality Monitor to the Resident Engineer. As needed to prevent sediment transport, Permittee shall deploy soil stabilizer such as hydroseeding, netting, erosion control mats, mulch, fiber rolls, silt fences, check dams, and flow velocity dissipation devices. Permittee shall stabilize and equip construction site entrances and exits with tire washing capability. Materials containing monofilament or plastic shall not be used. Erosion and sediment control measures shall be installed prior to unseasonable rain storms.
- 2.12 After construction is complete, temporarily impacted areas will be restored to original grade to the maximum extent practicable.
- 2.13 All disturbed areas shall be re-graded and hydroseeded. Hydroseed shall not contain invasive exotic plant species. Prohibited exotic plant species include those identified in the California Exotic Pest Plant Council's database, which is accessible at: <http://www.calipc.org/ip/inventory/weedlist.php>.

- 2.14 Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located outside of the creek channel and banks. Stationary equipment such as motors, pumps, generators, compressors and welders, located within or adjacent to the creek shall be positioned over drip pans. Any equipment or vehicles driven and/or operated within or adjacent to the stream must be checked and maintained daily, to prevent leaks of materials that if introduced to water could be deleterious to aquatic life.
- 2.15 Refueling of mobile construction equipment and vehicles shall not occur within 50 feet of any water body, or anywhere that spilled fuel could drain to a water body. Refueling of stationary equipment requiring breakdown and setup to move will remain in place. All equipment shall be refueled with appropriate drip pans, absorbent pads, and water quality Best Management Practices. Equipment and vehicles operating in the Project site shall be checked and maintained daily to prevent leaks of fuels, lubricants, or other liquids.
- 2.16 Permittee shall comply with all applicable state and federal laws, including the California and Federal Endangered Species Act. This Agreement does not authorize the take of any state or federally endangered listed species. Liability for any take or incidental take of such species remains the responsibility of the Permittee for the duration of the Project. Any unauthorized take of listed species may result in prosecution and nullification of the Agreement. This Agreement does not authorize the capture or relocation of Fully Protected Species.

### **3. Compensatory Measures**

To compensate for adverse impacts to fish and wildlife resources identified above that cannot be avoided or minimized, Permittee shall implement each measure listed below.

- 3.1 The Permittee shall compensate for permanent and temporary impacts to giant garter snake habitat at a 3:1 mitigation to impact acreage ratio. The Permittee shall submit an offsite giant garter snake mitigation plan to CDFW for review and written approval at least 3 months prior to start of construction activities.

### **CONTACT INFORMATION**

Any communication that Permittee or CDFW submits to the other shall be in writing and any communication or documentation shall be delivered to the address below by U.S.

mail, fax, or email, or to such other address as Permittee or CDFW specifies by written notice to the other.

To Permittee:

California Department of Transportation  
Frank Meraz  
855 M St., Suite 200  
Fresno, Ca 93721  
[frank\\_meraz@dot.ca.gov](mailto:frank_meraz@dot.ca.gov)

To CDFW:

California Department of Fish and Wildlife  
Bay Delta Region  
7329 Silverado Trail  
Napa, California 94558  
Attn: Lake and Streambed Alteration Program – Melissa Escaron  
Notification #1600-2013-0021-R3  
Fax (707) 944-5553  
[Melissa.escaron@wildlife.ca.gov](mailto:Melissa.escaron@wildlife.ca.gov)

**LIABILITY**

Permittee shall be solely liable for any violations of the Agreement, whether committed by Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the Project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute CDFW's endorsement of, or require Permittee to proceed with the Project. The decision to proceed with the Project is Permittee's alone.

**SUSPENSION AND REVOCATION**

CDFW may suspend or revoke in its entirety the Agreement if it determines that Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before CDFW suspends or revokes the Agreement, it shall provide Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide Permittee an opportunity to correct any deficiency before CDFW suspends or revokes the Agreement, and include instructions to Permittee, if necessary, including but not limited

to a directive to immediately cease the specific activity or activities that caused CDFW to issue the notice.

## **ENFORCEMENT**

Nothing in the Agreement precludes CDFW from pursuing an enforcement action against Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects CDFW's enforcement authority or that of its enforcement personnel.

## **OTHER LEGAL OBLIGATIONS**

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from obtaining any other permits or authorizations that might be required under other federal, state, or local laws or regulations before beginning the Project or an activity related to it.

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the FGC including, but not limited to, FGC sections 2050 et seq. (threatened and endangered species), 3503 (bird nests and eggs), 3503.5 (birds of prey), 5650 (water pollution), 5652 (refuse disposal into water), 5901 (fish passage), 5937 (sufficient water for fish), and 5948 (obstruction of stream).

Nothing in the Agreement authorizes Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

## **AMENDMENT**

CDFW may amend the Agreement at any time during its term if CDFW determines the amendment is necessary to protect an existing fish or wildlife resource.

Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by CDFW and Permittee. To request an amendment, Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

## **TRANSFER AND ASSIGNMENT**

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by Permittee in writing, as specified below, and thereafter CDFW approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

## **EXTENSIONS**

In accordance with FGC section 1605(b), Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's term. To request an extension, Permittee shall submit to CDFW a completed CDFW "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). CDFW shall process the extension request in accordance with FGC 1605(b) through (e).

If Permittee fails to submit a request to extend the Agreement prior to its expiration, Permittee must submit a new notification and notification fee before beginning or continuing the Project the Agreement covers (Fish & G. Code, § 1605, subd. (f)).

## **EFFECTIVE DATE**

The Agreement becomes effective on the date of CDFW's signature, which shall be: 1) after Permittee's signature; 2) after CDFW complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable FGC section 711.4 filing fee listed at [http://www.wildlife.ca.gov/habcon/ceqa/ceqa\\_changes.html](http://www.wildlife.ca.gov/habcon/ceqa/ceqa_changes.html).

## **TERM**

This Agreement shall expire on December 31, 2017, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605(a)(2) requires.

## **AUTHORITY**

If the person signing the Agreement (signatory) is doing so as a representative of Permittee, the signatory hereby acknowledges that he or she is doing so on Permittee's behalf and represents and warrants that he or she has the authority to legally bind Permittee to the provisions herein.

### AUTHORIZATION

This Agreement authorizes only the Project described herein. If Permittee begins or completes a Project different from the Project the Agreement authorizes, Permittee may be subject to civil or criminal prosecution for failing to notify CDFW in accordance with FGC section 1602.

### CONCURRENCE

The undersigned accepts and agrees to comply with all provisions contained herein.

### FOR CALIFORNIA DEPARTMENT OF TRANSPORTATION



Mr. Frank Meraz  
Office Chief



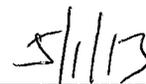
Date

### FOR DEPARTMENT OF FISH AND WILDLIFE



As

Scott Wilson  
Acting Regional Manager



Date

Prepared by: Melissa Escaron  
Staff Environmental Scientist

Date Prepared: April 8, 2013  
Date Sent: April 17, 2013

FOR DEPARTMENT USE ONLY

Date Received	Amount Received	Amount Due	Date Complete	Notification No.
1/18/13	\$ 4482.75	\$		1600-2013-0021-3



ck# 082-202701 \$ 4482.75  
 Bill Lockyer, Treasurer  
 STATE OF CALIFORNIA

DEPARTMENT OF FISH AND GAME

Escaron

Vielhauer



**NOTIFICATION OF LAKE OR STREAMBED ALTERATION**

ck# 082-236389 \$224.00  
 Bill Lockyer, Treasurer

Complete EACH field, unless otherwise indicated, following the enclosed instructions and submit ALL required enclosures. Attach additional pages, if necessary.

**Fish & Game**

**1. APPLICANT PROPOSING PROJECT**

Name	Frank Meraz	JAN 18 2013		
Business/Agency	California Department of Transportation			
Street Address	855 M Street, Suite 200	<b>Yountville</b>		
City, State, Zip	Fresno, CA 93721			
Telephone	(559) 445-6406	Fax	(559) 445-6236	
Email	Frank_meraz@dot.ca.gov			

**2. CONTACT PERSON (Complete only if different from applicant)**

Name	Dena Gonzalez			
Street Address	855 M Street, Suite 200			
City, State, Zip	Fresno, CA 93721			
Telephone	(559) 445-6227	Fax	(559) 445-6236	
Email	Dena_Gonzalez@dot.ca.gov			

**3. PROPERTY OWNER (Complete only if different from applicant)**

Name				
Street Address				
City, State, Zip				
Telephone		Fax		
Email				

**4. PROJECT NAME AND AGREEMENT TERM**

A. Project Name		Bacon Island Rehabilitation Project		
B. Agreement Term Requested		<input checked="" type="checkbox"/> Regular (5 years or less) <input type="checkbox"/> Long-term (greater than 5 years)		
C. Project Term		D. Seasonal Work Period		E. Number of Work Days
Beginning (year)	Ending (year)	Start Date (month/day)	End Date (month/day)	
2013	2016	06/01	12/16	365.00

## NOTIFICATION OF LAKE OR STREAMBED ALTERATION

### 5. AGREEMENT TYPE

Check the applicable box. If box B, C, D, or E is checked, complete the specified attachment.

A.	<input checked="" type="checkbox"/> Standard (Most construction projects, excluding the categories listed below)
B.	<input type="checkbox"/> Gravel/Sand/Rock Extraction (Attachment A) <span style="float: right;">Mine I.D. Number: _____</span>
C.	<input type="checkbox"/> Timber Harvesting (Attachment B) <span style="float: right;">THP Number: _____</span>
D.	<input type="checkbox"/> Water Diversion/Extraction/Impoundment (Attachment C) <span style="float: right;">SWRCB Number: _____</span>
E.	<input type="checkbox"/> Routine Maintenance (Attachment D)
F.	<input type="checkbox"/> DFG Fisheries Restoration Grant Program (FRGP) <span style="float: right;">FRGP Contract Number: _____</span>
G.	<input type="checkbox"/> Master
H.	<input type="checkbox"/> Master Timber Harvesting

### 6. FEES

Please see the current fee schedule to determine the appropriate notification fee. Itemize each project's estimated cost and corresponding fee. **Note: The Department may not process this notification until the correct fee has been received.**

	A. Project	B. Project Cost	C. Project Fee
1	Bacon Island Rehabilitation Project	\$7,941,000.00	\$4,482.75
2			
3			
4			
5			
		D. Base Fee (if applicable)	
		<b>E. TOTAL FEE ENCLOSED</b>	<b>\$4,482.75</b>

### 7. PRIOR NOTIFICATION OR ORDER

A. Has a notification previously been submitted to, or a Lake or Streambed Alteration Agreement previously been issued by, the Department for the project described in this notification?

Yes (Provide the information below)       No

Applicant: California Dept. of Transportation      Notification Number: 1600-2008-0136-3      Date: 05/19/08

B. Is this notification being submitted in response to an order, notice, or other directive ("order") by a court or administrative agency (including the Department)?

No       Yes (Enclose a copy of the order, notice, or other directive. If the directive is not in writing, identify the person who directed the applicant to submit this notification and the agency he or she represents, and describe the circumstances relating to the order.)

Continued on additional page(s)

## NOTIFICATION OF LAKE OR STREAMBED ALTERATION

### 8. PROJECT LOCATION

<b>A. Address or description of project location.</b> <i>(Include a map that marks the location of the project with a reference to the nearest city or town, and provide driving directions from a major road or highway)</i>				
The proposed project site is located along State Route 4, two miles west of the Town of Stockton in San Joaquin County. This project would extend from 12 miles east of the Bacon Island Road to the approach railings of the San Joaquin River Bridge (Post Mile 8.1 to 14.3).				
<input type="checkbox"/> Continued on additional page(s)				
<b>B. River, stream, or lake affected by the project.</b>		Irrigation ditches in the proposed project study area.		
<b>C. What water body is the river, stream, or lake tributary to?</b>		Trapper Slough, Middle River, San Joaquin River		
<b>D. Is the river or stream segment affected by the project listed in the state or federal Wild and Scenic Rivers Acts?</b>		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown		
<b>E. County</b>	San Joaquin			
<b>F. USGS 7.5 Minute Quad Map Name</b>	<b>G. Township</b>	<b>H. Range</b>	<b>I. Section</b>	<b>J. ¼ Section</b>
Holt/ Stockton West	1N	5E	13-16	
			21-24	
	1N	6E	17-20	
<input type="checkbox"/> Continued on additional page(s)				
<b>K. Meridian (check one)</b>	<input type="checkbox"/> Humboldt <input checked="" type="checkbox"/> Mt. Diablo <input type="checkbox"/> San Bernardino			
<b>L. Assessor's Parcel Number(s)</b>				
(1) PM 10.63 ROW Parcels 14806, 14807, 15451 (2) PM 11.21 ROW Parcels 1406, 14812 (3) PM 11.63 ROW Parcel 14811 (4) PM 11.62 ROW Parcel 14812 (5) PM 12.08 ROW Parcel 14810D				
<input type="checkbox"/> Continued on additional page(s)				
<b>M. Coordinates (If available, provide at least latitude/longitude or UTM coordinates and check appropriate boxes)</b>				
Latitude/Longitude	Latitude:                      N37 55'24.95" E		Longitude:                      S 121 25'59.89 W	
	<input checked="" type="checkbox"/> Degrees/Minutes/Seconds		<input type="checkbox"/> Decimal Degrees <input type="checkbox"/> Decimal Minutes	
UTM	Easting:	Northing:	<input type="checkbox"/> Zone 10 <input type="checkbox"/> Zone 11	
Datum used for Latitude/Longitude or UTM		<input type="checkbox"/> NAD 27 <input type="checkbox"/> NAD 83 or WGS 84		

## NOTIFICATION OF LAKE OR STREAMBED ALTERATION

### 9. PROJECT CATEGORY AND WORK TYPE *(Check each box that applies)*

PROJECT CATEGORY	NEW CONSTRUCTION	REPLACE EXISTING STRUCTURE	REPAIR/MAINTAIN EXISTING STRUCTURE
Bank stabilization – bioengineering/recontouring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bank stabilization – rip-rap/retaining wall/gabion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat dock/pier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat ramp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bridge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Channel clearing/vegetation management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Culvert	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Debris basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diversion structure – weir or pump intake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Filling of wetland, river, stream, or lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geotechnical survey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Habitat enhancement – revegetation/mitigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Levee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low water crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road/trail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sediment removal – pond, stream, or marina	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storm drain outfall structure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Temporary stream crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utility crossing : Horizontal Directional Drilling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jack/bore	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Open trench	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Other (specify):</b> Fill of irrigation canals	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## NOTIFICATION OF LAKE OR STREAMBED ALTERATION

### 10. PROJECT DESCRIPTION

<p>A. Describe the project in detail. Photographs of the project location and immediate surrounding area should be included.</p> <ul style="list-style-type: none"> <li>- Include any structures (e.g., rip-rap, culverts, or channel clearing) that will be placed, built, or completed in or near the stream, river, or lake.</li> <li>- Specify the type and volume of materials that will be used.</li> <li>- If water will be diverted or drafted, specify the purpose or use.</li> </ul> <p>Enclose diagrams, drawings, plans, and/or maps that provide all of the following: site specific construction details; the dimensions of each structure and/or extent of each activity in the bed, channel, bank or floodplain; an overview of the entire project area (i.e., "bird's-eye view") showing the location of each structure and/or activity, significant area features, and where the equipment/machinery will enter and exit the project area.</p>	
<p>The Bacon Island Rehabilitation Project proposes to repair and overlay pavement and improve associated drainage facilities on SR-4. This project would extend from approximately 12 miles east of Bacon Island Road to the approach railings of the San Joaquin River Bridge (PM 8.1 to PM 14.3). Existing shoulders would be widened to the current standard of 8 feet and rumble strips would be installed. Intersections along SR-4 would be upgraded to current standards with safety lighting and left-turn lanes added at Inland Drive, and Maybeck, Woodsbro, Daggett and Wilholt roads.</p> <p>DS#1-Remove existing headwalls and extend box culvert from 16.7 feet to 9.4 feet to allow for construction of new shoulders. Wing walls "Type A" will be constructed. New ditch will be concrete lined at the inlet and outlet.</p> <p>DS#2-Remove exiting 84" RCP and headwall. Construct new 84" RCP. Construct new headwalls and wing walls "Type B" at outlet and inlet. Place RSP (Method B) at outlet side of RCP. Place structure backfill along inlet and outlet of RCP.</p> <p>DS#3-Extend exiting concrete box culvert from 27.2 ft to 10.8 ft for construction of new shoulders on Route 4 and intersection improvements. Remove existing headwalls and wing walls and replace with new headwalls and wing walls at new outlet and inlet, Existing ditch to be realigned to the new inlet location.</p> <p>DS#4-Remove exiting 18"CSP on Maybeck Road, remove existing canal gate and relocate to new inlet of DS#3. Realign existing ditch along southwest quadrant of the Route 4 and Maybeck Road intersection. Realigned ditch will have RSP.</p> <p>DS#5-Remove existing 36"RCP and replace with 48" RCP. New pipe will allow for construction of new shoulders on Route 4 and intersection improvements at Woodsbro Road. Construct headwall and wing walls "Type B" for inlet and outlet.</p> <p>DS#6-Remove existing culvert just south of SR 4 and replace with 18" RCP and construct concrete flares, system will outlet into DS#5 inlet</p> <p>DS#7-Remove exiting culvert under Woodsbro Road and replace with 18 in RCP. The length is 65.6 lf. Concrete flared end sections will be constructed at the inlet and outlet. Ditches will be realigned along the northern portion of Route 4, the ditch will have a 1:1 side slope.</p> <p>DS#8-Extend existing 72"x44" RCB, north of SR 4, by 13.1 ft to allow for construction of shoulders on Route 4.</p>	
<input type="checkbox"/> <i>Continued on additional page(s)</i>	
<p>B. Specify the equipment and machinery that will be used to complete the project.</p>	
<p>Construction equipment will include pavers, excavators, loaders, haulers, truck trailers and compactors.</p>	
<input type="checkbox"/> <i>Continued on additional page(s)</i>	
<p>C. Will water be present during the proposed work period (specified in box 4.D) in the stream, river, or lake (specified in box 8.B).</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ( <i>Skip to box 11</i> )
<p>D. Will the proposed project require work in the wetted portion of the channel?</p>	<input checked="" type="checkbox"/> Yes ( <i>Enclose a plan to divert water around work site</i> ) <input type="checkbox"/> No

## NOTIFICATION OF LAKE OR STREAMBED ALTERATION

### 11. PROJECT IMPACTS

A. Describe impacts to the bed, channel, and bank of the river, stream, or lake, and the associated riparian habitat. Specify the dimensions of the modifications in length (linear feet) and area (square feet or acres) and the type and volume of material (cubic yards) that will be moved, displaced, or otherwise disturbed, if applicable.

Drainage System 1: Remove all existing headwalls and extend box culvert at Sta 226+31.2 (Route 4) from 16.7 feet to 9.4 feet to allow for construction of new shoulders. Wing walls "Type A" will be constructed. New ditch will be concrete lined at the inlet and outlet. The total amount of fill that will be deposited for System 1 is 11.7 CY. Soil- 11.7 CY. Concrete- 23.3 CY.

Continued on additional page(s)

B. Will the project affect any vegetation?       Yes (Complete the tables below)     No

Vegetation Type	Temporary Impact	Permanent Impact
Conium maculatum, Azolla filiculoides, Cyperus eragrostis, Juncus spp.	Linear feet: _____ Total area: <u>0.37 Acres</u>	Linear feet: _____ Total area: <u>0.277 Acres</u>
	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____

Tree Species	Number of Trees to be Removed	Trunk Diameter (range)

Continued on additional page(s)

C. Are any special status animal or plant species, or habitat that could support such species, known to be present on or near the project site?

Yes (List each species and/or describe the habitat below)     No     Unknown

Giant Garter Snake (*Thamnophis gigas*), Swainson's Hawk (*Buteo swainsoni*)

Continued on additional page(s)

D. Identify the source(s) of information that supports a "yes" or "no" answer above in Box 11.C.

CNDDDB, FWS, Field visits by Caltrans Biologist

Continued on additional page(s)

E. Has a biological study been completed for the project site?

Yes (Enclose the biological study)     No

*Note: A biological assessment or study may be required to evaluate potential project impacts on biological resources.*

F. Has a hydrological study been completed for the project or project site?

Yes (Enclose the hydrological study)     No

*Note: A hydrological study or other information on site hydraulics (e.g., flows, channel characteristics, and/or flood recurrence intervals) may be required to evaluate potential project impacts on hydrology.*

## NOTIFICATION OF LAKE OR STREAMBED ALTERATION

### 12. MEASURES TO PROTECT FISH, WILDLIFE, AND PLANT RESOURCES

A. Describe the techniques that will be used to prevent sediment from entering watercourses during and after construction.

Work will be done outside the irrigation season, temporary erosion control measures will be incorporated for clear water diversion, temporary silt fence, concrete washout (portable), and rain even action plan.

Continued on additional page(s)

B. Describe project avoidance and/or minimization measures to protect fish, wildlife, and plant resources.

The project has been designed to include the smallest footprint practicable to minimize temporary, indirect and temporary impacts to WOUS. Minimization and on-site restoration will occur. The improved irrigation ditches will have the same functions and values as the previous irrigation ditches, including similar quality habitat.

Avoidance of sloughs and/or rivers within the project study, along with the timing of work, would ensure that no impact to special-status species and/or habitat

Continued on additional page(s)

C. Describe any project mitigation and/or compensation measures to protect fish, wildlife, and plant resources.

Minimization efforts and on-site restoration will be included in project plans. Drainage ditches and irrigation canals will be recreated along new right-of-way. These ditches will have the same functions and values as the WOUS removed, including similar habitat.

Continued on additional page(s)

### 13. PERMITS

List any local, state, and federal permits required for the project and check the corresponding box(es). Enclose a copy of each permit that has been issued.

- |    |                                                                                                                                                                                     |                                             |                                            |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|--------------------------------------------|
| A. | _____ United States Army Corps of Engineers _____                                                                                                                                   | <input checked="" type="checkbox"/> Applied | <input type="checkbox"/> Issued            |
| B. | _____ CRWQCB 401 Water Quality Permit _____                                                                                                                                         | <input type="checkbox"/> Applied            | <input checked="" type="checkbox"/> Issued |
| C. | _____ B.O. _____                                                                                                                                                                    | <input type="checkbox"/> Applied            | <input checked="" type="checkbox"/> Issued |
| D. | Unknown whether <input type="checkbox"/> local, <input type="checkbox"/> state, or <input type="checkbox"/> federal permit is needed for the project. (Check each box that applies) |                                             |                                            |

Continued on additional page(s)

## NOTIFICATION OF LAKE OR STREAMBED ALTERATION

### 14. ENVIRONMENTAL REVIEW

<p>A. Has a draft or final document been prepared for the project pursuant to the California Environmental Quality Act (CEQA), National Environmental Protection Act (NEPA), California Endangered Species Act (CESA) and/or federal Endangered Species Act (ESA)?</p>			
<p><input checked="" type="checkbox"/> Yes (Check the box for each CEQA, NEPA, CESA, and ESA document that has been prepared and enclose a copy of each)</p> <p><input type="checkbox"/> No (Check the box for each CEQA, NEPA, CESA, and ESA document listed below that will be or is being prepared)</p>			
<p><input type="checkbox"/> Notice of Exemption</p> <p><input type="checkbox"/> Initial Study</p> <p><input checked="" type="checkbox"/> Negative Declaration</p> <p><input type="checkbox"/> THP/ NTMP</p>	<p><input type="checkbox"/> Mitigated Negative Declaration</p> <p><input type="checkbox"/> Environmental Impact Report</p> <p><input type="checkbox"/> Notice of Determination (Enclose)</p> <p><input type="checkbox"/> Mitigation, Monitoring, Reporting Plan</p>	<p><input checked="" type="checkbox"/> NEPA document (type): <u>CE</u></p> <p><input checked="" type="checkbox"/> CESA document (type): <u>ND</u></p> <p><input type="checkbox"/> ESA document (type): _____</p>	
<p>B. State Clearinghouse Number (if applicable)</p>		<p>2002042015</p>	
<p>C. Has a CEQA lead agency been determined?</p>		<p><input checked="" type="checkbox"/> Yes (Complete boxes D, E, and F)      <input type="checkbox"/> No (Skip to box 14.G)</p>	
<p>D. CEQA Lead Agency</p>		<p>Caltrans</p>	
<p>E. Contact Person</p>		<p>David Farris</p>	<p>F. Telephone Number</p> <p style="text-align: center;">(559) 445-6218</p>
<p>G. If the project described in this notification is part of a larger project or plan, briefly describe that larger project or plan.</p> <p>Culverts will be widened in association with the Bacon Island Rehabilitation Project.</p> <p style="text-align: right;"><input type="checkbox"/> Continued on additional page(s)</p>			
<p>H. Has an environmental filing fee (Fish and Game Code section 711.4) been paid?</p> <p><input checked="" type="checkbox"/> Yes (Enclose proof of payment)      <input type="checkbox"/> No (Briefly explain below the reason a filing fee has not been paid)</p>			
<p><i>Note: If a filing fee is required, the Department may not finalize a Lake or Streambed Alteration Agreement until the filing fee is paid.</i></p>			

### 15. SITE INSPECTION

<p>Check one box only.</p> <p><input checked="" type="checkbox"/> In the event the Department determines that a site inspection is necessary, I hereby authorize a Department representative to enter the property where the project described in this notification will take place at any reasonable time, and hereby certify that I am authorized to grant the Department such entry.</p> <p><input type="checkbox"/> I request the Department to first contact (insert name) _____ at (insert telephone number) _____ to schedule a date and time to enter the property where the project described in this notification will take place. I understand that this may delay the Department's determination as to whether a Lake or Streambed Alteration Agreement is required and/or the Department's issuance of a draft agreement pursuant to this notification.</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



DISTRICT 10	COUNTY SJ	ROUTE 4	POST MILE 8.3/14.2	PROJECT ID 1000020428	EA 0W1202
FEDERAL AID NUMBER N/A			OWNER'S FILE NUMBER Caltrans layout sheets D-1 thru D-4		
FEDERAL PARTICIPATION On the Project <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                      On the Utilities <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					

**UTILITY AGREEMENT NO. 10-3775.11    DATE April 8, 2013**

The State of California acting by and through the Department of Transportation, hereinafter called "STATE" proposes to install left turn pockets and safety lighting at Inland Road, Maybeck Road, Woodsbro Road and Wilhoit Road. Asphalt concrete overlay and widening of shoulders of all public road approaches and mainline near the City of Stockton, on State Route 4 from 0.2 km east of Bacon Island Road to San Joaquin River Bridge #29-50, in San Joaquin County and Woods Irrigation District hereinafter called "OWNER", owns and maintains irrigation facilities within the limits of STATE's project, which requires irrigation facilities to be extended to accommodate STATE's project.

It is hereby mutually agreed that:

**I.        WORK TO BE DONE**

In accordance with, STATE shall extend OWNER's irrigation facilities as shown on STATE's contract plans for the improvement of State Route 4, EA 0W1202, which by this reference are made a part hereof. OWNER hereby acknowledges review of STATE's plans for work and agrees to the construction in the manner proposed. Deviations from the plan described above initiated by either the STATE or the OWNER shall be agreed upon by both parties hereto under a Revised Notice to Owner. Such Revised Notices to Owner, approved by the STATE and agreed to/acknowledged by the OWNER, will constitute an approved revision of the plan described above and are hereby made a part hereof. No work under said deviation shall commence prior to written execution by the OWNER of the Revised Notice to Owner. Changes in the scope of the work will require an amendment to this Agreement in addition to the revised Notice to Owner. OWNER shall have the right to inspect the work during construction. Upon completion of the work by STATE, OWNER agrees to accept ownership and maintenance of the constructed facilities and relinquishes to STATE ownership of the replaced facilities.

**II.       LIABILITY FOR WORK**

The existing facilities are located in their present position pursuant to prescriptive rights prior and superior to those of the STATE and will be extended at STATE expense.

III. PERFORMANCE OF WORK

OWNER shall have access to all phases of the relocation work to be performed by STATE, as described in Section I above, for the purpose of inspection to ensure that the work is in accordance with the specifications contained in the Highway Construction Contract; however, all questions regarding the work being performed will be directed to STATE's Resident Engineer for their evaluation and final disposition.

Pursuant to Public Works Case No. 2001-059 determination by the California Department of Industrial Relations dated October 25, 2002, work performed by OWNER's contractor is a public work under the definition of Labor Code Section 1720(a) and is therefore subject to prevailing wage requirements. OWNER shall verify compliance with this requirement in the administration of its contracts referenced above.

IV. PAYMENT FOR WORK

The STATE shall perform the work under Section I above, at no expense to OWNER, as OWNER has "Prescriptive Rights."

It is understood and agreed that the STATE will not pay for any betterment as defined under 23 CFR 645.105 and FHWA Program Guide - Utility Relocation and Accommodation on Federal Aid Highway Projects (Pages B-26 -B-27) of Owner's facilities in the new location and that Owner shall give credit to State for all accrued depreciation on the replaced facilities and the salvage value of any material or parts salvaged and retained or sold by Owner.

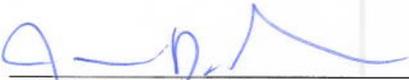
V. GENERAL CONDITIONS

Upon completion of the work to be done by STATE in accordance with the above-mentioned plans and specifications, the new facilities shall become the property of OWNER, and OWNER shall have the same rights in the new location that it had in the old location.

IN WITNESS WHEREOF, the above parties have executed this Agreement the day and year above written.

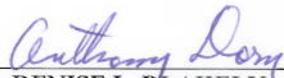
STATE: DEPARTMENT OF TRANSPORTATION

OWNER: WOODS IRRIGATION DISTRICT

By  4/8/13  
 Name JAMES D. GONZALEZ Date  
 Title Acting Assistant Central Region Chief  
 Right of Way

By  8-27-12  
 Name Jim Brunshy Date  
 Title President

APPROVAL RECOMMENDED:

By  3/25/2013  
 Name DENISE L. BLAKELY Date  
 Title District Utility Coordinator  
 Right of Way

By  1/13/12  
 Name ANDREA ALVAREZ Date  
 Title Utility Coordinator  
 Right of Way

**THIS AGREEMENT SHALL NOT BE EXECUTED BY THE STATE OF CALIFORNIA – DEPARTMENT OF TRANSPORTATION UNTIL FUNDS ARE CERTIFIED.**

**DO NOT WRITE BELOW - FOR ACCOUNTING PURPOSES ONLY**

PLANNING AND MANAGEMENT COMPLETES EXCEPT SHADED COLUMNS:

UTILITY COMPLETES:

T CODE	DOCUMENT NUMBER	SUF FIX	DIST	UNIT	CHG DIST	EA	SUB JOB	SPECIAL DESIGNATION	FFY	FA	OBJ CODE	DOLLAR AMOUNT

EA FUNDING VERIFIED:

Sign:> \_\_\_\_\_  
 Print> DENISE GONZALEZ  
 R/W Planning and Management

Date \_\_\_\_\_

REVIEW/REQUEST FUNDING:

Sign>  1/13/12  
 Print> ANDREA ALVAREZ  
 Utility Coordinator

Date \_\_\_\_\_

THE ESTIMATED COST TO STATE FOR ITS SHARE OF THE ABOVE DESCRIBED WORK IS \$697,634.00

CERTIFICATION OF FUNDS				
I hereby certify upon my own personal knowledge that budgeted funds are available for the period and purpose of the expenditure shown here.				
HQ Accounting Officer				Date
ITEM	CHAP	STAT	FY	AMOUNT

FUND TYPE	EA	AMOUNT
Design Funds		\$
Construction Funds	<u>OW1202</u>	\$697,634.00
RW Funds		\$

Vendor/Customer: N/A  
 Address ID: N/A

Distribution: 2 originals to R/W Accounting  
 1 original to Utility Owner  
 1 original to Utility File



# COUNTY OF SAN JOAQUIN

## DEPARTMENT OF PUBLIC WORKS

P.O. BOX 1810-1810 E. HAZELTON AVENUE  
STOCKTON, CALIFORNIA 95201  
(209) 468-3000  
FAX # (209) 468-9324

Permit No: **PS-1300936**  
Date Issued: 04/08/2013  
Exp. Date: 12/01/2013  
Project No: PWP110005  
Quad: SW

## ENCROACHMENT PERMIT

To: JOSE HUERTA - CALTRANS  
1976 E. CHARTER WAY  
STOCKTON, CA 95219

### Encroachment Type:

Detour Along	County Roads		
--------------	--------------	--	--

### Location:

TRACY BLVD., HOWARD RD. AND ROBERTS RD.

In compliance with your request of **04/08/2013**, permission is hereby granted to do work in County right-of-way as shown on attached application and subject to all the terms, conditions and restrictions written below or printed as general or special provisions on any part of this form. See reverse side and attached sheet, if any.

Trench excavations for service connections will not be permitted within ten feet (10') of pavement centerline unless otherwise approved by the Director. Surface of trench patches shall match in kind and be smooth and even with that of abutting surface. Special attention shall be given to depth of utilities through roadside area in anticipation of future drainage facilities, road profile and/or frontage development. All underground utility facilities are to be established and accurately dimensioned on sketches from surveyed centerline of road right of way, or from right of way (border) lines.

**Permittee shall call the Department of Public Works, Field Engineering Division (Permit Inspections) at (209)953-7421 at least forty-eight hours prior to beginning any work within the County right of way.** All work performed under this permit shall conform to the rules and regulations pertaining to safety established by the California Division of Industrial Safety and Cal-OSHA.

The jobsite shall be kept in a safe condition at all times by the daily removal of any excess dirt or debris which might be a hazard to either pedestrian or automobile traffic. All necessary traffic convenience and warning devices and personnel shall be provided, placed and maintained by and at the sole expense of the Permittee in accordance with the latest edition of the CALTRANS Manual of Traffic Control.

After completion of the work permitted herein, all debris, lumber, barricades, or any excess material shall be removed and the jobsite left in a neat workmanlike manner. Immediately following completion of construction permitted herein, Permittee shall fill out and mail notice of completion (see attached post card) provided by Grantor.

### Special Comments:

Traffic Control Per MUTCD\*\*\*\*Caltrans to form MediaBlitz\*\*\*\*Caltrans shall provide permanent message boards, stating "Tune into Radio....." for closure message, so truckers can plan ahead\*\*\*\*\*Work starts on Nov. 1, 2013 for 3-consecutive weekends\*\*\*\*\*

FORMS: 

SS/WW		
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Est. Permit Fee: \$0.00

- WHITE -Permittee
- GOLDENROD -PWD Central File
- YELLOW -Field Inspection
- PINK -Permit Section

THOMAS M. GAU, Director  
Department of Public Works

By:   
Permit Section

## ENCROACHMENT PERMIT GENERAL PROVISIONS

13-1

1. This permit is issued under and subject to all laws and ordinances of agencies governing the encroachment herein permitted. See the following references:  
STREETS AND HIGHWAYS CODE
  1. Division 1, Chapter 3
  2. Division 2, Chapter 2, Section 942
  3. Division 2, Chapter 4, Section 1126
  4. Division 2, Chapter 5.5 and Chapter 6

SAN JOAQUIN COUNTY ORDINANCES NUMBERED: 324, 441, 648, 662, 672, 695, 700, 860, 892, 3359, and 3675.
2. It is understood and agreed by the Permittee that the performance of any work under this permit shall constitute an acceptance of all the provisions contained herein and failure on the Permittee's part to comply with any provision will be cause for revocation of this permit. Except as otherwise provided for public agencies and franchise holders, this permit is revocable on five days notice.
3. All work shall be done subject to the supervision of and the satisfaction of the grantor. The Permittee shall at all times during the progress of the work keep the County Highway in as neat and clean condition as is possible and upon completion of the work authorized herein, shall leave the County Highway in a thoroughly neat, clean and usable condition.
4. The Permittee also agrees by the acceptance of this permit to properly maintain any encroachment structure placed by the Permittee on any part of the County Highway and to immediately repair any damage to any portion of the highway, which occurs as a result of the maintenance of the said encroachment structure, until such time as the Permittee may be relieved of the responsibility for such maintenance by the County of San Joaquin.
5. The Permittee also agrees by the acceptance of this permit to make, at its own expense, such repairs as may be deemed necessary by the County Department of Public Works.
6. It is further agreed by the Permittee that whenever construction, reconstruction or maintenance work upon the highway is necessary, the installation provided for herein shall, upon request of the County Department of Public Works, be immediately moved or removed by and at the sole expense of the Permittee.
7. No material used for fill or backfill in the construction of the encroachment shall be borrowed or taken from within the County right of way.
8. All work shall be planned and carried out with as little inconvenience as possible to the traveling public. No material shall be stacked within eight feet (8') of the edge of the pavement or traveled way unless otherwise provided herein. Adequate provision shall be made for the protection of the traveling public. Traffic control standards shall be utilized including barricades; approved signs and lights; and flagmen, as required by the particular work in progress.
9. The Permittee, by the acceptance of this permit, shall assume full responsibility for all liability for personal injury or damage to property which may arise out of the work herein permitted or which may arise out of the failure of the part of the Permittee to properly perform the work provided under this permit. In the event any claim of such liability is made against the County of San Joaquin or any department, official or employee thereof, the Permittee shall defend, indemnify, and hold each of them harmless for such claim.
10. All backfill material is to be moistened as necessary and thoroughly compacted with mechanical means. If required by the County Director of Public Works, such backfill shall consist of gravel or crushed rock. The Permittee shall maintain the surface over structures placed hereunder as may be necessary to insure the return of the roadway to a completely stable condition and until relieved of such responsibility by the County Department of Public Works. Wherever a gravel, crushed rock or asphalt surface is removed or damaged in the course of work related to the permitted encroachment, such material shall either be separately stored and replaced in the roadway as nearly as possible in its original state or shall be replaced in kind, and the roadway shall be left in at least as good a condition as it was before the commencement of operations of placing the encroachment structure.
11. Whenever it becomes necessary to secure permission from abutting property owners for the proposed work, such authority must be secured by the Permittee prior to starting work.
12. The current and future safety and convenience of the traveling public shall be given every consideration in the location and methods of construction utilized.
13. The Permittee is responsible for the preservation of survey monuments within the work herein permitted. If any are disturbed, the Permittee is required to tie out each location and re-establish them after completion of work, using a licensed land surveyor. A corner record must be filed in accordance with state law for any re-set monuments.

**APPLICATION FOR ENCROACHMENT PERMIT**

**PLEASE PRINT:**

Date 1/23/13

To: San Joaquin County  
Department of Public Works

Jose Huerta  
(Applicant Name)

1976 E Charter Way  
(Mailing Address)

Stockton CA 95219  
(City, State, Zip Code)

209-948-7902  
(Area Code - Telephone Number)

OFFICE USE ONLY	
JOB #	<u>110005</u> REF # _____
APN	_____ CR# _____
EXP. DATE	_____
VALID	<u>11/1/13</u> TO <u>12/1/13</u> DRIVEWAYS: _____
STREET	<u>Tracy Blvd, Howard Rd, Roberts Rd,</u>
AREA	<u>Delta</u> QUAD <u>SW</u> *
TYPE	<u>Detour</u> *
FORMS	<u>ES/WW</u>
NOTES	_____
	_____
	_____
	_____

Sketch (Detailed plans may be submitted)

See attached plans

The undersigned hereby applies for permission to excavate, construct and/or otherwise encroach on County Highway Right-of-Way on the both side of Tracy Blvd/ Howard Rd/ Roberts Rd approximately \_\_\_\_\_ feet/mile of \_\_\_\_\_, by performing the following work (description of work):

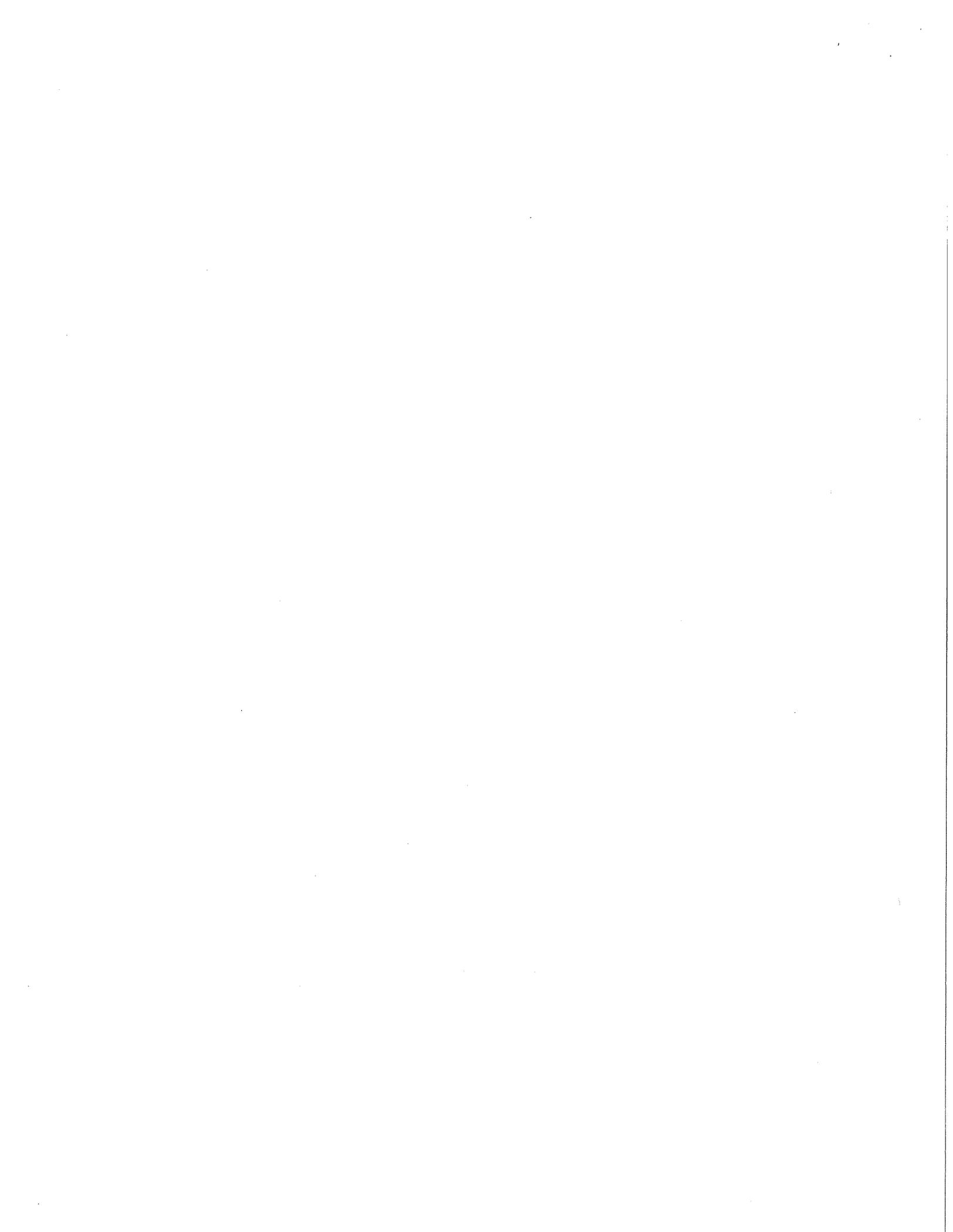
replacement or extension of existing irrigation facilities on Route 4 between Inland Rd and Woodstro Ed as part of a major rehabilitation of Route 4, between Trapper Slough Rd and San Joaquin River Bridge.

Work will commence on or about 11/1/13 for approximately 3 consecutive days. weeks

I, the undersigned, certify that I am the owner of the respective property, or am qualified to represent the owner and agree to do the work described above in accordance with the rules and regulations of San Joaquin County and subject to inspection and approval.

Jose Huerta STE  
Signature of Applicant - Title

1/23/13  
Date



## SPECIAL PROVISIONS

### Winter Weather Utility Work

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1. **SUPERVISION:** The utility company (**permittee**) shall furnish full-time supervision of all work to insure full compliance with the permit provisions.
2. **START OF WORK:** No work within the County right-of-way shall be started until the utility company representative has made an evaluation of weather conditions and has determined the work can be accomplished under the provisions of the permit.
3. **CLEAN PAVEMENT:** Dirt and mud shall not be deposited on the pavement outside the area of work, and if inadvertently tracked onto the road travel way shall be removed immediately.
4. **DAILY RESTORATION:** Private driveways and road intersections shall be restored daily
5. **WEATHER-TIGHT CONDITION:** All trenches shall be filled and compacted, ditches and other drainage facilities regraded and opened, and the entire work area restored to weather-tight condition prior to any rain.

## GENERAL PROVISIONS

### OVERNING INSTALLATION OF SUBSURFACE STRUCTURES AND PIPELINES WITHIN COUNTY ROAD RIGHTS-OF-WAY

#### PUBLIC CONVENIENCE AND SAFETY:

A. Before obstructing any private driveway entrance or County road traveled way with a trench, spoil bank, equipment or other barrier permitted for any prolonged period of time, the Permittee shall notify the known users of the respective thoroughfare(s) involved, and shall provide access for vehicular and pedestrian traffic to and from the road.

1. Unless otherwise permitted, all work shall be conducted in such a manner that no less than one lane of the existing County road traveled way will be maintained open to public traffic during working hours in a smooth and safe riding condition(s). Two lanes shall be open after working hours.

2. In cases where road closure is permitted, the permission to close the road will be granted under the condition that the Permittee notify the following persons and/or agencies of the time, the period of closure, and the detour route at least twenty-four (24) hours prior to said road closure.

- |                                                      |                                 |
|------------------------------------------------------|---------------------------------|
| a. The County of San Joaquin Public Works Department | d. The local fire district      |
| b. The County of San Joaquin Sheriff's Office        | e. The local school district    |
| c. The local postal service                          | f. The local residents involved |

B. Should hazardous conditions relative to the installation operations warrant flagmen, as many capable flagmen as may be necessary shall be provided by the Permittee and stationed in advance of work to warn and direct traffic.

C. Lights, signs and barricades shall be furnished, erected and maintained by the Permittee for the adequate warning and convenience of the public, with particular attention to be taken in this regard after dark.

D. Any excess dirt and/or debris which might be a hazard to either automobile or pedestrian traffic, uncontrollable by lights, signs and barricades, shall be removed from the job site daily.

#### STRUCTURES:

A. Walls of structures shall be such quality and strength that they will resist all pressures and will not crack or be deformed in such a way as to create a hazard or maintenance problem at any time. Therefore, the minimum structural requirements for concrete pipe placed under County road rights-of-way shall conform to the following American Association of State Highway and Transportation Officials (AASHTO) designations.

1. For concrete pipe up to and including thirty-three inches (33") inside diameter, extra strength concrete pipe conforming to AASHTO Designation M 170M.

2. For concrete pipe thirty-six inches (36") inside diameter and larger, reinforced concrete pipe conforming to AASHTO designation M 170M Class III.

3. Plastic pipe conforming to AASHTO Designation M 294.

All concrete pipe joints within County road rights-of-way shall be sealed against leakage and/or infiltration with rubber gasket in conformance with section 65-1.06 of the California Standard Specifications, or with other methods as may be permitted under the Special Provisions.

Cast-in-place concrete pipe, vitrified clay pipe, spiral welded steel pipe, or corrugated aluminum alloy pipe shall not be installed within the County road rights-of-way unless specifically so stated in the Special Provisions, and only under the conditions as provided.

D. All structures to be buried within the County road rights-of-way shall be set at such elevations as to allow minimum coverage of thirty inches (30") to the centerline of the roadways and twelve inches (12") at the bottoms of borrow ditches each side of the roadways. The depths of structures shall be established on a flat plane extending across the rights-of-way, no part of which shall extend above the elevations stated above; manholes, lampholes, valves, etc. not included. Future surface elevations shall be anticipated as nearly as possible and structure elevations shall be established for future adjustment accordingly.

3. The County hereby reserves the right to specify in the Special Provisions the gage and surface treatment of any galvanized corrugated metal pipe that is to be installed.

All longitudinal utility facilities are to be established (and dimensioned on sketches) from surveyed centerline of road right-of-way, not from right-of-way (order) lines.

#### REPAIRS OF THE COUNTY RIGHT-OF-WAY:

All excavations shall be backfilled and compacted immediately after work therein has been completed.

Trenches shall not be left open farther than 300 feet in advance of pipe laying operations, or 200 feet to the rear thereof, unless otherwise permitted by the Engineer.

Unless otherwise permitted under the Special Provisions, backfill shall be placed and mechanically compacted in such a manner that the relative compaction throughout the entire fill within the County road right-of-way shall conform to the percentages of compaction as shown on the Trench Detail.

Backfill material shall be placed in horizontal uniform layers not to exceed in thickness, before compaction, 0.67 foot in the bedding region, one foot where 90% compaction is required, and two feet where 80% compaction is required.

No portion of the excavation(s) shall be compacted by ponding or jetting unless a maintenance bond is provided.

Gravel backfill material shall be utilized only where specifically so stated on the face of the permit. It shall be compacted by means of a high-frequency external vibrator, the compactor to be a size and type approved by the Engineer. Points of compaction shall be not greater than 18" centers and to the full depth of the lift.

All pavements, curbs, gutters, sidewalks, borrow ditches, pipes, head walls, road signs, trees, shrubbery, and/or other permanent road facilities impaired by or as a result of construction operations at the construction site(s), or at other ground(s) occupied by materials and/or equipment, shall be restored immediately upon backfilling of the excavation to the original grades and cross sections, and to a condition as good as, or better than existing prior construction.

All surfacing materials of roadways and driveway approaches cut or damaged by or as a result of construction operations, shall be replaced within ONE WEEK following the backfilling of excavation, weather permitting, with compacted layers of surfacing materials at least as thick as the existing, and no less than two inches (2") of asphalt concrete over six inches (6") of aggregate base, both as specified below.

1. Asphalt Concrete: Combined mineral aggregate shall conform to the quality and gradation requirements for Type "B" one-half (1/2") maximum aggregate, coarse or medium gradation, as specified in Section 39 of the California Standard Specifications. The bituminous binder to be mixed with mineral aggregate shall be paving asphalt having (Grade PG 64-10), unless otherwise directed by the Engineer. Placement of asphalt concrete surfacing shall conform to the applicable provisions of Section 39 of the California Standard Specifications.

2. Aggregate Base: Combined mineral aggregates shall conform to the quality and the grading for three-quarter inch (3/4") maximum size aggregate Class 2 Aggregate Base specified in Section 26 of the California Standard Specifications

Before acceptance of repairs to the County road rights-of-way, all unsightly and detrimental dirt, dust and/or debris shall be removed and the construction areas left in a neat and presentable condition(s).

1. If necessary, County road traveled way and driveway pavements shall be washed with water to remove dirt and dust.

2. Driveway approaches and field entrance pavements damaged by equipment or spoil banks shall be repaired as directed by the Engineer.

Upon request by the County, any settlement, sagging of surface, or cracking of pavement shall be repaired immediately by and at the sole expense of the Permittee for a period of one year following acceptance of the work.

**Replace "Reserved" in section 12-4.05G with:**

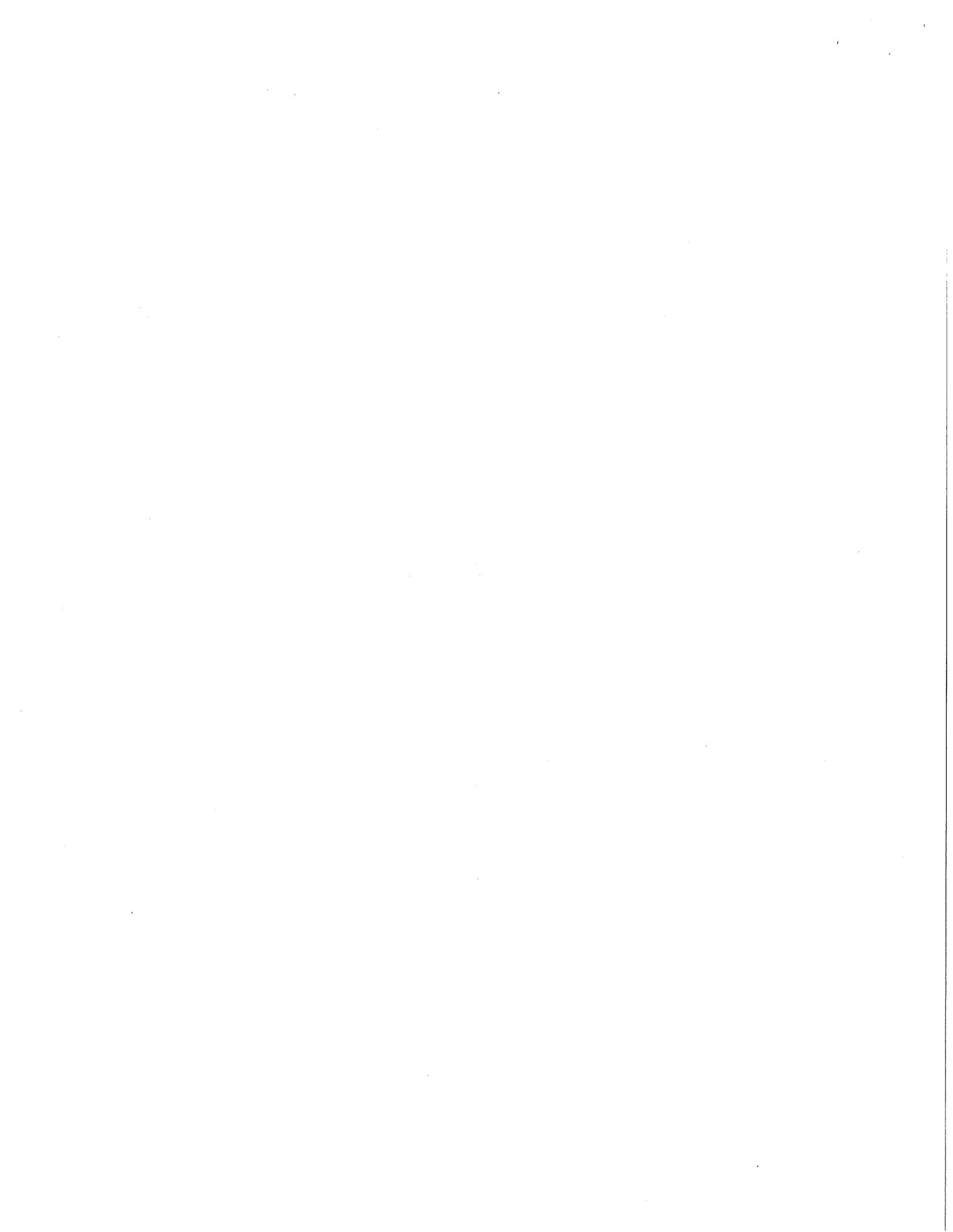
Chart no. 2 Complete Conventional Highway Closure Hours																											
County: San Joaquin					Route/Direction:4/EB-WB										PM:5.96/14.045												
Closure limits: In San Joaquin County on SR 4 near Discovery Bay between Tracy Blvd and Roberts Road.																											
From hour to hour		24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Mondays		C	C	C	C																						
Tuesdays through Thursdays																											
Fridays																											
Saturdays		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Sundays		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C

**Legend:**  
 C Conventional highway may be closed completely  
 No complete conventional highway closure is allowed

**REMARKS:**  
 1. The above window is valid for only 3 weekends between November 1<sup>st</sup> to March 1<sup>st</sup>, from Friday (2000 hr) to Monday (0400 hr)  
 2. See lane closure Restriction for Designated Legal Holidays and Special Days table in maintaining Traffic of these special provisions for additional closure restrictions.  
 3. 14-day advanced notice required.  
 4. Detour required.  
 5. Closures of all local roads will require City/County concurrence.

**Note to Design:**

Above window must be re-evaluated or updated if actual construction takes place later than 2014.



Replace "Reserved" in section 12-4.05F with:

Chart no. 1 Conventional Highway Lane Requirements																														
County: San Joaquin					Route/Direction: 4/EB-WB										PM: R8.3/T14.3															
Closure limits: In San Joaquin County on SR 4 near Discovery Bay at 1.3 miles west of Middle River Bridge.																														
From hour to hour		24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
Mondays through Thursdays		R	R	R	R	R																				R	R	R	R	
Fridays		R	R	R	R	R																								
Saturdays																														
Sundays																												R	R	R
Legend:																														
R		Provide at least 1 through traffic lane, not less than 10 feet in width, for use by both directions of travel (Reversing Control)																												
		Work allowed within the highway where shoulder or lane closure is not required																												
REMARKS:																														
<ol style="list-style-type: none"> <li>1. See Lane Closure Restriction for Designated Legal Holidays and Special Days table in Maintain Traffic of these special provisions for additional closure restrictions.</li> <li>2. Closures of local roads will require City/County concurrence.</li> </ol>																														

**Note to Design:**

Above window must be re-evaluated or updated if actual construction takes place later than 2014.

