



**US Army Corps
of Engineers®**
Los Angeles District

PUBLIC NOTICE

APPLICATION FOR PERMIT **Orange County Public Works (OCPW)** **Countywide Long-Term Routine Maintenance Program**

Public Notice/Application No.: SPL-2012-00817

Project: OCPW Countywide Long-Term Maintenance Program

Comment Period: June 25, 2025 through July 25, 2025

Project Manager: Eric Sweeney; (760) 602-4837; Eric.R.Sweeney@usace.army.mil

Applicant

Giles Matthews
Orange County Public Works
601 North Ross Street
Santa Ana, California 92701

Location

The OCPW Countywide Long-Term Maintenance Program (Maintenance Program) would take place in flood control management facilities, bridges, dams, basins, and long-term mitigation sites, located throughout the County of Orange as well as one location in Riverside County and one location in San Bernadino County (Exhibits 1 and 2a-k). A complete list of facilities covered by the Program is available upon request.

Activity

OCPW has applied for a Regional General Permit (RGP) to conduct routine maintenance activities throughout the facilities identified in Exhibits 1 and 2 on an as-needed basis. Types of maintenance activities that would be covered under the permit are listed in Exhibit 3. The permit would primarily authorize temporary impacts to waters of the U.S. but would also authorize permanent impacts for some activity types (e.g., riprap installation). The proposed maintenance activities would be expected to result in no more than minimal impacts to the aquatic environment, based on the existing conditions of the facilities and/or the lack of environmental resources.

The purpose of the proposed Maintenance Program would be to maintain the functional capacity of facilities, minimize the risk of damage, reduce flooding and erosion of adjacent roadways and properties during storm events, perform bridge maintenance, maintain the County's long-term mitigation sites, and implement channel improvements deviating from as-built conditions when environmental benefits result from the new design.

OCPW is currently authorized to conduct routine maintenance under [Regional General Permit \(RGP\) No. 100](#). RGP 100 authorizes maintenance within Orange County Flood Control Division (OCFCD) rights-of-way situated throughout the 13 watersheds of Orange County. RGP 100 was originally issued May 7, 2019 and reissued May 3, 2024. The proposed revised RGP would expand

authorized maintenance activities beyond what's currently authorized under RGP 100 to include maintenance activities having limited effects on federally listed species (e.g., temporary habitat removal with avoidance/minimization measures), activities having limited permanent impacts (e.g., for riprap placement), and activities resulting in minor deviations from as-built conditions when using bioengineered solutions. The RGP would be valid for a period of 5 years, like the current RGP 100 and would add some flood control facilities outside of Orange County (e.g., Prado Basin, Seven Oaks Dam).

For more information regarding the proposed Maintenance Program, please see Page 5 of this Public Notice.

Submittal of Public Comments

Interested parties are hereby notified an application has been received for a Department of the Army permit for the activity described herein and shown on the attached drawing(s). We invite you to review today's public notice and provide views on the proposed work. By providing substantive, site-specific comments to the Corps Regulatory Division, you provide information that supports the Corps' decision-making process. All comments received during the comment period become part of the record and will be considered in the decision. This permit will be issued, issued with special conditions, or denied under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act.

Please do not mail hard copy documents, including comments to any Regulatory staff. Instead, your comments should be submitted electronically to: Eric.R.Sweeney@usace.army.mil. Should you have any questions or concerns about the Corps' proposed action or our comment period, you may contact Eric Sweeney directly at (760) 602-4837.

The mission of the U.S. Army Corps of Engineers Regulatory Program is to protect the Nation's aquatic resources, while allowing reasonable development through fair, flexible and balanced permit decisions. The Corps evaluates permit applications for essentially all construction activities that occur in the Nation's waters, including wetlands. The Regulatory Program in the Los Angeles District is executed to protect aquatic resources by developing and implementing short- and long-term initiatives to improve regulatory products, processes, program transparency, and customer feedback considering current staffing levels and historical funding trends.

Corps permits are necessary for any work, including construction and dredging, in the Nation's navigable water and their tributary waters. The Corps balances the reasonably foreseeable benefits and detriments of proposed projects and makes permit decisions that recognize the essential values of the Nation's aquatic ecosystems to the general public, as well as the property rights of private citizens who want to use their land. The Corps strives to make its permit decisions in a timely manner that minimizes impacts to the regulated public.

During the permit process, the Corps considers the views of other Federal, state and local agencies, interest groups, and the general public. The results of this careful public interest review are fair and equitable decisions that allow reasonable use of private property, infrastructure development, and growth of the economy, while offsetting the authorized impacts to the waters of the United States. The permit review process serves to first avoid and then minimize adverse effects of projects on aquatic resources to the maximum practicable extent. Any remaining unavoidable adverse impacts to the aquatic environment are offset by compensatory mitigation requirements, which may include restoration, enhancement, establishment, and/or preservation of aquatic ecosystem system functions

and services.

Evaluation Factors

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof. Factors that will be considered include conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people. In addition, if the proposal would discharge dredged or fill material, the evaluation of the activity will include application of the EPA Guidelines (40 CFR Part 230) as required by Section 404 (b)(1) of the Clean Water Act.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Preliminary Review of Selected Factors

EIS Determination- A preliminary determination has been made an environmental impact statement is not required for the proposed work.

Water Quality- The applicant is required to obtain water quality certification, under Section 401 of the Clean Water Act, from the State Water Resources Control Board.

Coastal Zone Management- OCPW has notified the Corps that it is not applying for a Coastal Development Permit (CDP) to accompany the Corps permit. Therefore, the Corps permit would authorize all maintenance activities occurring outside the coastal zone, with activities located within the coastal zone only authorized on a provisional basis. OCPW would be required to obtain project-specific Coastal Zone Management Act consistency concurrence (generally conferred via a CDP) for all Program-covered maintenance activities located within the coastal zone.

Essential Fish Habitat- The Corps of Engineers preliminary determination indicates the proposed activity may adversely affect EFH. Pursuant to Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA), the Los Angeles District hereby requests initiation of EFH consultation for the proposed project. Some portions of channels covered under the permit would occur within EFH for various federally managed fish species within the Coastal Pelagic Species and Pacific Coast Groundfish Fishery Management Plans. These channel segments containing EFH correspond with Section 10 (tidally influenced) waters covered under the Program, which are identified in Exhibits 1 and 2.

The Corps has preliminarily determined that the proposed maintenance activities may adversely affect EFH. However, potential adverse effects on EFH (e.g., due to increased turbidity) would be temporary and minimal. Though not anticipated, four years of monitoring and compensatory mitigation per the California Eelgrass Mitigation Policy (CEMP) would be required for any activities resulting in permanent loss of eelgrass habitat. The Corps will initiate consultation with NMFS pursuant to 50 CFR 600.920(e)(3) to seek their concurrence with our effect determination as well as to coordinate on conservation recommendations for ensuring temporary/minimal EFH impacts.

Cultural Resources- The latest version of the National Register of Historic Places has been consulted and none of the proposed maintenance sites are listed. This review constitutes the extent of cultural resources investigations by the District Engineer, who is otherwise unaware of the presence of such resources.

Endangered Species- Preliminary determinations indicate the proposed activity may affect, but is not likely to adversely affect, federally listed endangered or threatened species, or their critical habitat. Federally listed potentially affected by maintenance conducted under the Program would include: coastal California gnatcatcher (*Poliophtila californica californica*), least Bell's vireo (*Vireo bellii pusillus*), and southwestern willow flycatcher (*Empidonax traillii extimus*).

OCPW has proposed to incorporate various measures for protecting federally threatened and endangered species into the RGP, for cases in which listed species are determined to occur within 500 feet of a proposed maintenance activity (Exhibit 4). OCPW has proposed a site reconnaissance/habitat assessment of each facility prior to maintenance to assess the potential for federally listed species. In addition, maintenance activities in vegetated facilities would occur outside of the nesting season (activities in vegetated facilities would be conducted between September 15 and February 1) to the maximum extent practicable.

The procedures proposed in this RGP include an annual work plan meeting where each maintenance activity is discussed and potential impacts to federally threatened and endangered species can be fully discussed with the resource agencies and a determination can be made as to whether or not the proposed activity fits within the RGP or will the proposed maintenance activity require a separate permit action and further consultation with the USFWS.

In consideration of the information above, the Corps Regulatory Division has made a preliminary "may affect, not likely to adversely affect" determination for gnatcatcher, vireo, and flycatcher, pursuant to Section 7 of the Endangered Species Act. The Corps will initiate informal consultation with the U.S. Fish and Wildlife Service to seek their concurrence on our effect determination and coordinate on avoidance/minimization measures.

Public Hearing- Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearing shall state with particularity the reasons for holding a public hearing.

Proposed Activity for Which a Permit is Required

Basic Project Purpose- The basic project purpose comprises the fundamental, essential, or irreducible purpose of the proposed project, and is used by the Corps to determine whether the applicant's project is water dependent (i.e., requires access or proximity to or siting within the special aquatic site to fulfill its basic purpose). Establishment of the basic project purpose is necessary only when the proposed activity would discharge dredged or fill material into a special aquatic site (e.g.,

wetlands, pool and riffle complex, mudflats, coral reefs). Because no fills are proposed within special aquatic sites, identification of the basic project purpose is not necessary.

Overall Project Purpose- The overall project purpose serves as the basis for the Corps' 404(b)(1) alternatives analysis and is determined by further defining the basic project purpose in a manner that more specifically describes the applicant's goals for the project, and which allows a reasonable range of alternatives to be analyzed. The overall project purpose for the proposed project is to establish an RGP authorizing routine flood control maintenance activities by OCPW for improving permitting efficiency and streamlining the process for less review time and faster authorization for conducting maintenance. Under the RGP, the OCPW would be authorized to conduct Corps-jurisdictional activities associated with the wide variety of routine maintenance activities associated with OCPW's Maintenance Program (identified in Exhibit 3) within channel facilities throughout Orange County (identified in Exhibits 1 and 2).

Additional Project Information

Baseline information- The OCPW Long Term Routine Maintenance Program would be implemented throughout Orange County within the flood management facilities shown on the Exhibits 1, County Map and Exhibits 2a to 2k, Project Flood Control Facility Maps. These exhibits also indicate the basic characteristics of each facility including their configuration and substrate composition, which include earthen, rip-rap-lined, and concrete-lined channels, basins, and dams maintained by OCPW. Some facilities are primarily unvegetated, while others contain varying amounts of vegetation (native and non-native). These facilities and characteristics are also detailed and listed in Tables 1 to 6.

Project description- OCPW conducts routine maintenance activities within OC Flood Control District rights-of-way throughout the County's 13 watersheds, Seven Oaks Dam, Prado Basin and its long-term migration sites. Maintenance activities would be performed on an as needed basis and would include channel and basin/dam maintenance (e.g., cleaning, silt removal, slope maintenance/repair); landscape maintenance and vegetation control/removal; insect/rodent control; rip-rap installation and repair; structural inspection/cleaning; installation of storm drain pipes and underdrains; fabrication and installation of headwalls; removal/replacement of concrete lining; and the repair and backfill of washouts and slope failures.

To guide maintenance activities and to reduce impacts to sensitive resources, OCPW has defined five categories of channels for maintenance work. These categories characterize channels in terms of existing conditions and provide guidance for resource protection.

Category 1 Channels: Channels that are entirely concrete lined (e.g., concrete bed and banks, grouted riprap, or energy dissipation structures). Category 1 Channels are expected to have no vegetation or sparse vegetation (i.e., 5% or less total vegetation cover); if sediment has deposited and vegetation has grown on top of the concrete bottom.

Category 2 Channels: Channels that have an earthen or rock bottom and either lined or unlined banks (e.g., earth/rock bottom channel and concrete-lined or metal sheetpile banks; earthen/rock bottom with grouted or ungrouted riprap on the banks; or earthen bottom and earthen banks). Category 2 Channels are those with no vegetation; sparse native or non-native vegetation (i.e., 5% or less total vegetation cover); or are vegetated with a majority of non-native vegetation (more than 50% relative cover non-native).

Category 3 Channels: Channels that have an earthen bottom and either lined or unlined banks (e.g., earth bottom channel and concrete-lined or metal sheetpile banks; earthen bottom with grouted

or ungrouted riprap on the banks; or earthen bottom and earthen banks). Category 3 Channels have more than 5% total vegetation cover and are vegetated with a majority native herbaceous or emergent vegetation (more than 50% relative cover native).

Category 4 Channels: Channels that would otherwise be classified as Categories 1, 2, or 3, but are within 500 feet of native woody vegetation that comprises riparian scrub/forest/woodland or coastal sage scrub habitat (see Category 5 Channels below) and require Special Conditions for work in order to avoid and minimize indirect effects on special status species.

Category 5 Channels: Channels that have an earthen bottom and either lined or unlined banks (e.g., earth bottom channel and concrete-lined or sheetpile banks; earthen bottom with grouted or ungrouted riprap on the banks; or earthen bottom and earthen banks). Category 5 Channels support native woody vegetation that comprises riparian scrub/forest/woodland or coastal sage scrub habitat.

The majority of work authorized through the Annual Work Plan would continue to be maintenance to existing baseline/as-built conditions of covered facilities. Any changes to as-built conditions would be presented for authorization to resource agencies through the Annual Work Plan approval process. Changes to as-built conditions with environmental impacts will have mitigation/restoration agreed upon during the Annual Work Plan process prior to any work being conducted.

OCPW Bridge Maintenance proposes routine maintenance activities for existing County bridge facilities. Maintenance activities would include bridge concrete repair, cleaning and painting of bridge steel, and restoration of bridge scour protection measures.

All haul/service routes would be designated along each channel's existing paved service roads (situated outside of the drainage channel). All sediment/debris created during maintenance would be hauled to an approved County facility (e.g., stockyard or landfill). Wet sediment would be left in an approved stockpile site or an OCFCD parcel to dry out (outside of jurisdictional areas and prior to transport) using the appropriate Best Management Practices (BMPs).

All activities and staging would be done within the existing OCFCD facilities (or within the limits of prescriptive rights road right-of-way, using a temporary construction easement, where the County lacks an official right-of-way easement) using appropriate BMPs per the State General Construction Permit and Santa Ana and San Diego RWQCBs Municipal Separate Storm Sewer System (MS4) Permits. For some bridge maintenance, such as scour repairs, the work area may extend into temporary construction easements immediately adjacent to the roadway right-of-way. Per the County's Operations Manual, each area of staging would be sited as close as possible to the maintenance activity in order to maximize efficiency.

Proposed Mitigation- The proposed mitigation may change as a result of comments received in response to this public notice, the applicant's response to those comments, and/or the need for the project to comply with the 404(b)(1) Guidelines. In consideration of the above, the proposed mitigation sequence (avoidance/minimization/compensation), as applied to the proposed project is summarized below:

Avoidance: OCPW would avoid impacts to waters of the United States to the maximum extent practicable. This RGP includes activities that could result in permanent impacts to waters of the United States, including the installation of rip-rap for bank stabilization, the installation or modification of headwalls, and the installation or modification of culverts. No activities would be authorized by the proposed RGP that would adversely affect a federally listed endangered or threatened species or designated critical habitat. In areas with federally listed species, the County has proposed special

permit conditions to be implemented to allow maintenance activities to proceed (Exhibit 4). Activities in vegetated facilities would be allowed to be completed outside of the nesting season. Activities in vegetated facilities would be conducted between September 15 and February 15) to the maximum extent practicable. Activities in vegetated facilities between February 15 and September 15 would be allowed with conditions as proposed by the County, such as pre-activity biological surveys and monitoring if needed.

Minimization: All activities would be conducted using standard county mandated BMPs. Some permanent impacts would be allowed under this RGP with additional special conditions as determined necessary by the Corps, the State Water Resources Control Board, and the California Department of Fish and Wildlife.

Compensation: The proposed maintenance program would result mostly in temporary impacts to waters of the United States through routine maintenance activities in the afore mentioned county facilities. Some minimal permanent impacts would be allowed under this RGP with compensatory mitigation as proposed by the County and as approved by the Corps, the State Water Resources Control Board and the California Department of Fish and Wildlife.

Proposed Special Conditions

The following list of initially proposed special conditions derives from conditions required under RGP 100, the County's current long-time routine maintenance permit. Additional OCPW-proposed special conditions are listed in Exhibit 4.

1. **Coastal Zone Management Act:** For maintenance activities located in the California Coastal Zone, this permit is contingent upon issuance of a Coastal Zone Management Act (CZMA) consistency certification by the California Coastal Commission. The Permittee shall abide by the terms and conditions of the CZMA consistency certification. For activities located in the coastal zone, Permittee shall submit the CZMA consistency certification to the Corps Regulatory Division (preferably via email) within two weeks of receipt from the issuing state agency. The Permittee shall not proceed with construction until receiving an email or other written notification from Corps Regulatory Division acknowledging the CZMA consistency certification has been received, reviewed, and determined to be acceptable. If the California Coastal Commission fails to act on a request for concurrence with your certification within six months after receipt, please notify the Corps so we may consider whether to presume a concurrence pursuant to 33 CFR 325.2(b)(2)(ii).
2. **33 U.S.C. 408:** A pre-construction notification shall be submitted to the Corps Regulatory Division for any activity that would alter or temporarily or permanently modify or use an existing Corps project. Notification shall not be required for any Operation & Maintenance (O&M) activities specified in a Corps-issued O&M manual or any activities to restore the Corps project to the physical dimensions and design of the constructed project, without any changes to the real property, existing design features, or physical dimensions or performance of the Corps project. No activity requiring a Section 408 permit shall be authorized by this permit within the following facilities until the activity has been approved by the Corps Engineering Division:
 - a. Coyote Creek Channel (A01) from 900 feet downstream of Valley View Street to 1,200 feet downstream of Imperial Highway;
 - b. Santa Ana River Channel (E01) from Pacific Coast Highway to Weir Canyon Road; and

- c. Greenville-Banning Channel (D03) from downstream of Victoria Avenue to 1,500 feet upstream of Gisler Avenue.
3. Endangered Species Act: This Corps permit does not authorize you to take any threatened or endangered species or adversely modify designated critical habitat. In order to legally take a listed species, you must have separate authorization under the ESA (e.g. ESA Section 10 permit, or a Biological Opinion (BO) under ESA Section 7, with "incidental take" provisions with which you must comply).
4. Essential Fish Habitat: A pre-construction notification shall be submitted to the Corps Regulatory Division for any activity that may result in impacts to eelgrass (*Zostera marina*). In tidally influenced areas, a pre-project eelgrass survey should be conducted in accordance with the California Eelgrass Mitigation Policy (CEMP) (https://media.fisheries.noaa.gov/dam-migration/cemp_oct_2014_final.pdf). The results of the survey must be submitted to the Corps at least 15 calendar days prior to the scheduled start date for work in waters of the United States. If the pre-project survey demonstrates eelgrass presence within 25 feet of the project footprint, the Permittee shall conduct two years of post-construction eelgrass monitoring surveys per the mapping guidelines in NOAA Fisheries' California Eelgrass Mitigation Policy (Policy) (https://media.fisheries.noaa.gov/dam-migration/cemp_oct_2014_final.pdf). All required post-construction monitoring surveys shall be submitted by the Permittee to the Corps and NOAA Fisheries within 30 calendar days of each survey completion date. Based upon the post-construction monitoring survey results and in accordance with the Policy, the Corps will determine the need and/or amount of Essential Fish Habitat (EFH) mitigation required to offset adverse impacts to such habitat. The Corps will transmit its determination to the Permittee in writing. Within 60 calendar days of receiving the Corps' determination specifying the need and amount of mitigation, the Permittee shall submit a draft EFH mitigation plan to the Corps for review and approval. The EFH mitigation plan shall be prepared in accordance with the Policy and the Corps' South Pacific Division Regional Compensatory Mitigation Guidelines and Monitoring Requirements, dated January 12, 2015. The Permittee shall fully implement the final EFH mitigation plan as approved by the Corps.
5. CAULERPA PRE-CONSTRUCTION SURVEY: For maintenance activities involving bottom disturbance in tidally influenced areas, a pre-construction survey of the project area for Caulerpa sp. (Caulerpa) shall be conducted by a certified Caulerpa surveyor in accordance with the Caulerpa Control Protocol (see <https://media.fisheries.noaa.gov/2021-12/caulerpa-control-protocol-v5.pdf>) not earlier than 90 calendar days prior to planned construction and not later than 30 calendar days prior to construction. The results of this survey shall be furnished to the Corps Regulatory Division, NOAA Fisheries, and the California Department of Fish and Wildlife (CDFW) at least 15 calendar days prior to initiation of work in navigable waters. In the event that Caulerpa is detected within the project area, the Permittee shall not commence work until such time as the infestation has been isolated, treated, and the risk of spread is eliminated as confirmed in writing by the Corps Regulatory Division, in consultation with NOAA Fisheries and CDFW.
6. Historic Properties: Pursuant to 36 C.F.R. section 800.13, in the event of any discoveries during construction within waters within the Corps Permit Area of either human remains, archaeological deposits, or any other type of historic property, the Permittee shall notify the

Corps Regulatory Project Manager (Eric Sweeney at 760-602-4837) and the Corps' Regulatory Archaeology Staff (Daniel Grijalva, 213-215-3228) within 24 hours. The Permittee shall immediately suspend all work in any area(s) where potential cultural resources are discovered. The Permittee shall not resume construction in the area surrounding the potential cultural resources until the Corps Regulatory Division re-authorizes project construction, per 36 C.F.R. Section 800.13.

7. Authorized Work: Any work authorized by this permit must be the minimum necessary to alleviate the maintenance need and shall not exceed the design specifications of the facilities. In the event that additional maintenance activities are required, the Permittee shall submit a pre-construction notification to the Corps Regulatory Division to perform the work. If the work requested under the permit were denied, the Permittee would need a separate permit from the Corps Regulatory Division.
8. Access: You must allow representatives from this office and other Federal and state resource agencies to inspect the authorized activity at any time deemed necessary to ensure the project is being or has been accomplished in accordance with the terms and conditions of this permit.
9. Best Management Practices (BMPs): No debris, soil, silt, sand, sawdust, rubbish, cement or concrete washings thereof, oil or petroleum products, from construction shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into waters of the United States. Therefore, the Permittee shall employ all standard BMPs to ensure that toxic materials, silt, debris, or excessive erosion do not enter waters of the United States during project construction.
10. Equipment: Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
11. Limits of Work: The Permittee shall clearly mark the limits of the workspace with flagging or similar means to ensure mechanized equipment does not enter sensitive habitats outside of the permitted maintenance areas. Adverse impacts to waters of the United States beyond the Corps-approved maintenance footprint are not authorized. Such impacts could result in permit suspension and revocation, administrative, civil or criminal penalties, and/or substantial, additional, compensatory mitigation requirements.
12. 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).
13. Aquatic Life Movements: No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbodies in which work is authorized under this permit, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water.
14. 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 or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, 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.

15. Reporting: [see "Reporting Measures" in Exhibit 4]

For additional information please call Eric Sweeney of my staff at (760) 602-4837 or via e-mail at Eric.R.Sweeney@usace.army.mil. This public notice is issued by the Chief, Regulatory Division.



Regulatory Program Goals:

- To provide strong protection of the nation's aquatic environment, including wetlands.
- To ensure the Corps provides the regulated public with fair and reasonable decisions.
- To enhance the efficiency of the Corps' administration of its regulatory program.

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County Map

County of Orange Long-Term Maintenance Permitting Program

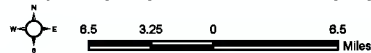
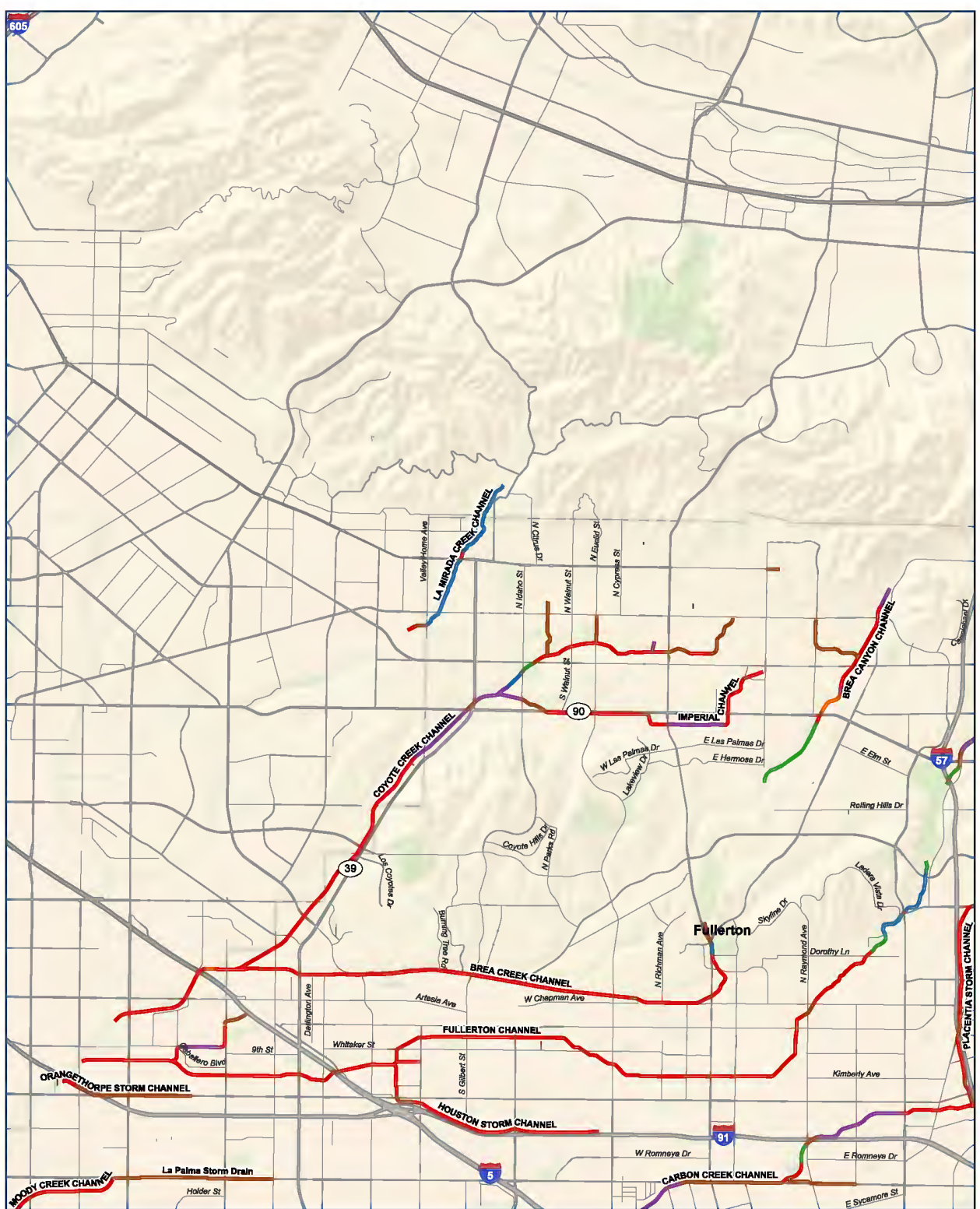
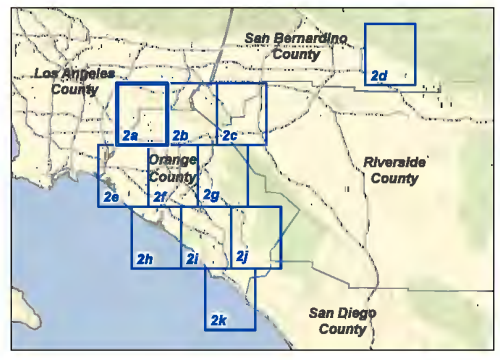


Exhibit 1



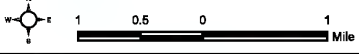


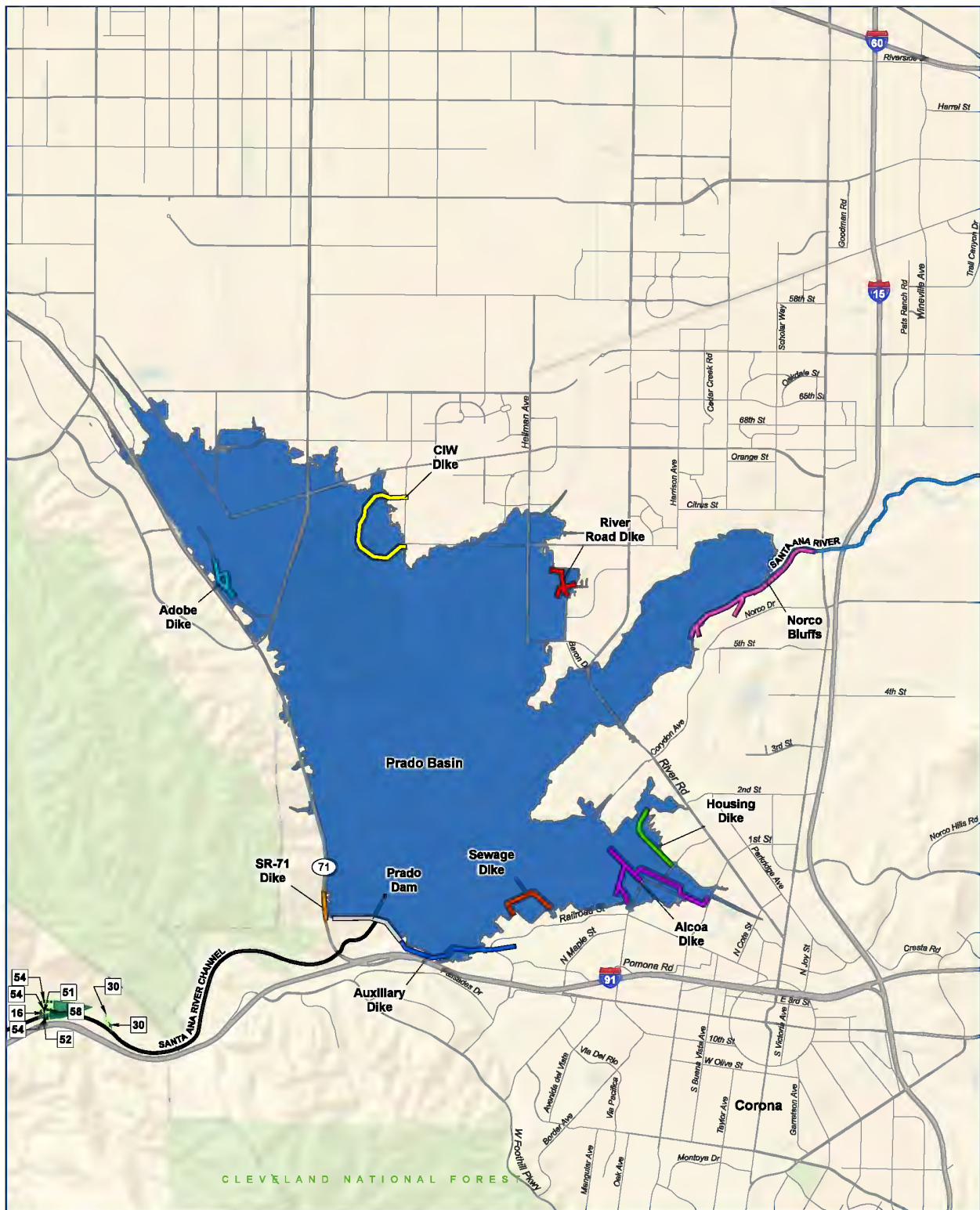
- Channel Type**
- Concrete-Lined
 - Concrete Sides, Soft Bottom
 - Natural Watercourse
 - Earth Channel
 - Riprap Channel
 - Metal Sheet Channel
 - Underground Conduit
 - Not Available
 - Dams/Reservoirs/Basins
 - Mitigation Sites*



* Note: See Attachment 3, Table C-1
Mitigation Sites for
Mitigation Site Names

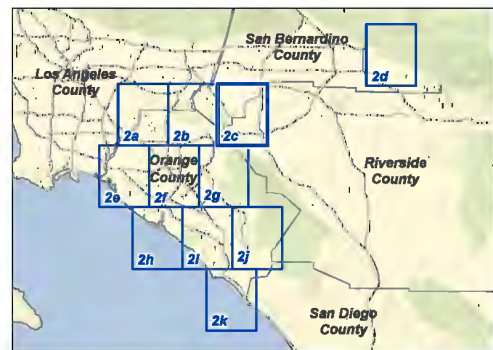
Project Facilities Map
County of Orange Long-Term Maintenance Permitting Program





Channel Type	Prado Basin Features
Concrete-Lined	Adobe Diike
Concrete Sides, Soft Bottom	Alcoa Diike
Natural Watercourse	Auxiliary Diike
Earth Channel	CIW Diike
Riprap Channel	Housing Diike
Metal Sheet Channel	Norco Bluffs
Underground Conduit	Prado Dam
Not Available	River Road Diike
Dams/Reservoirs/Basins	SR-71 Diike
Mitigation Sites*	Sewage Diike

* Note: See Attachment 3, Table C-1 Mitigation Sites for Mitigation Site Names



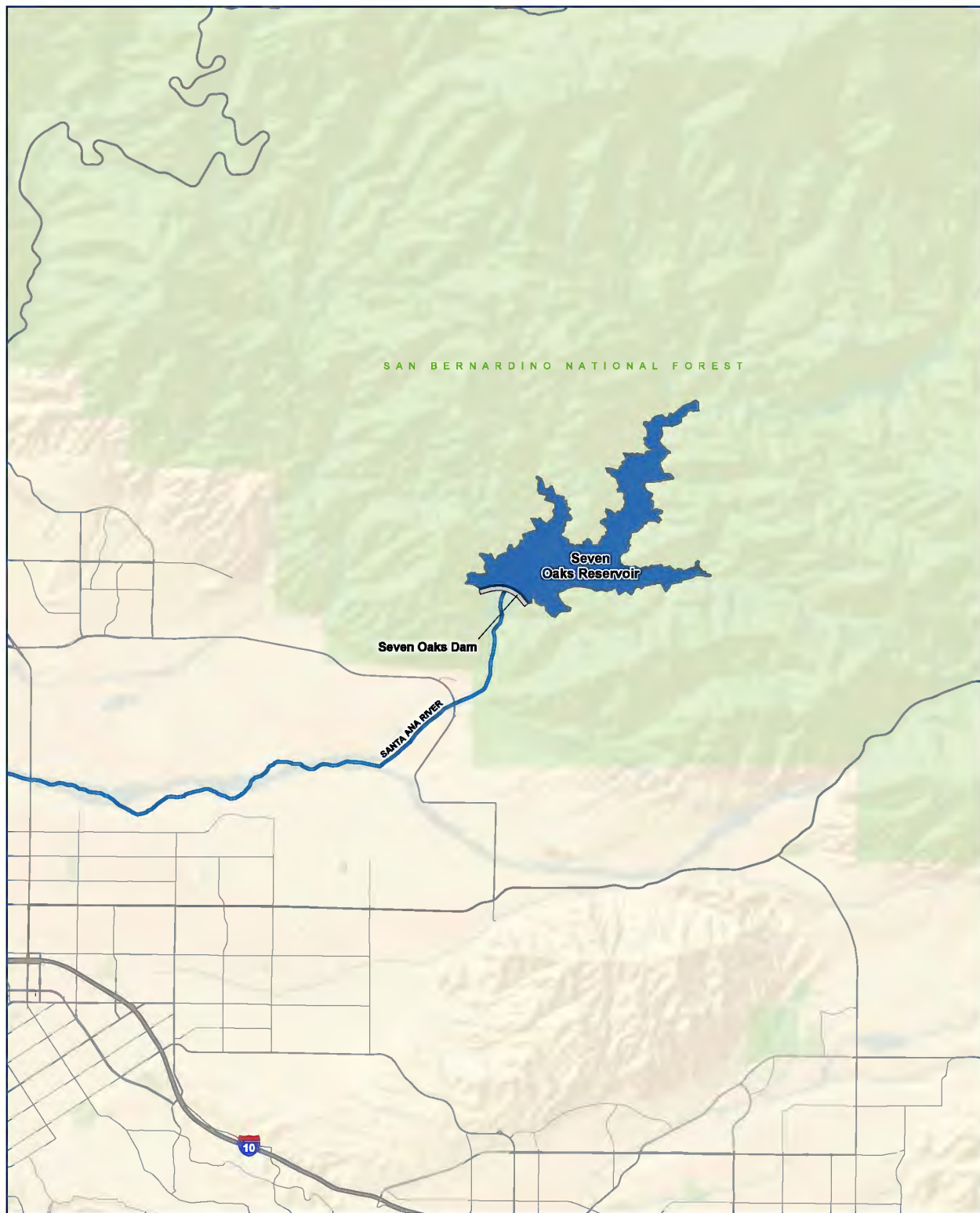
Project Facilities Map

County of Orange Long-Term Maintenance Permitting Program



Exhibit 2c



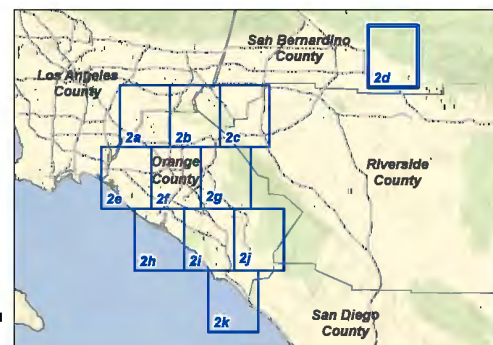


- Channel Type**

 - Concrete-Lined
 - Concrete Sides, Soft Bottom
 - Natural Watercourse
 - Earth Channel
 - Riprap Channel
 - Metal Sheet Channel
 - Underground Conduit
 - Not Available
 - Dams/Reservoirs/Basins
 - Mitigation Sites*

Seven Oaks Features

 - Seven Oaks Dam



* Note: See Attachment 3, Table C-1
Mitigation Sites for
Mitigation Site Names

Project Facilities Map

County of Orange Long-Term Maintenance Permitting Program

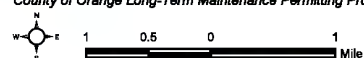


Exhibit 2d

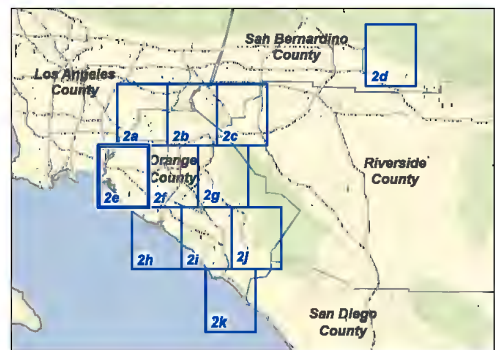




Channel Type

- Concrete-Lined
- Concrete Sides, Soft Bottom
- Natural Watercourse
- Earth Channel
- Riprap Channel
- Metal Sheet Channel
- Underground Conduit
- Not Available
- Dams/Reservoirs/Basins
- Mitigation Sites*

* Note: See Attachment 3, Table C-1
Mitigation Sites for
Mitigation Site Names



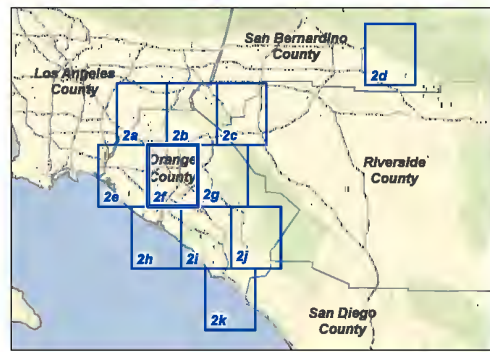
Project Facilities Map

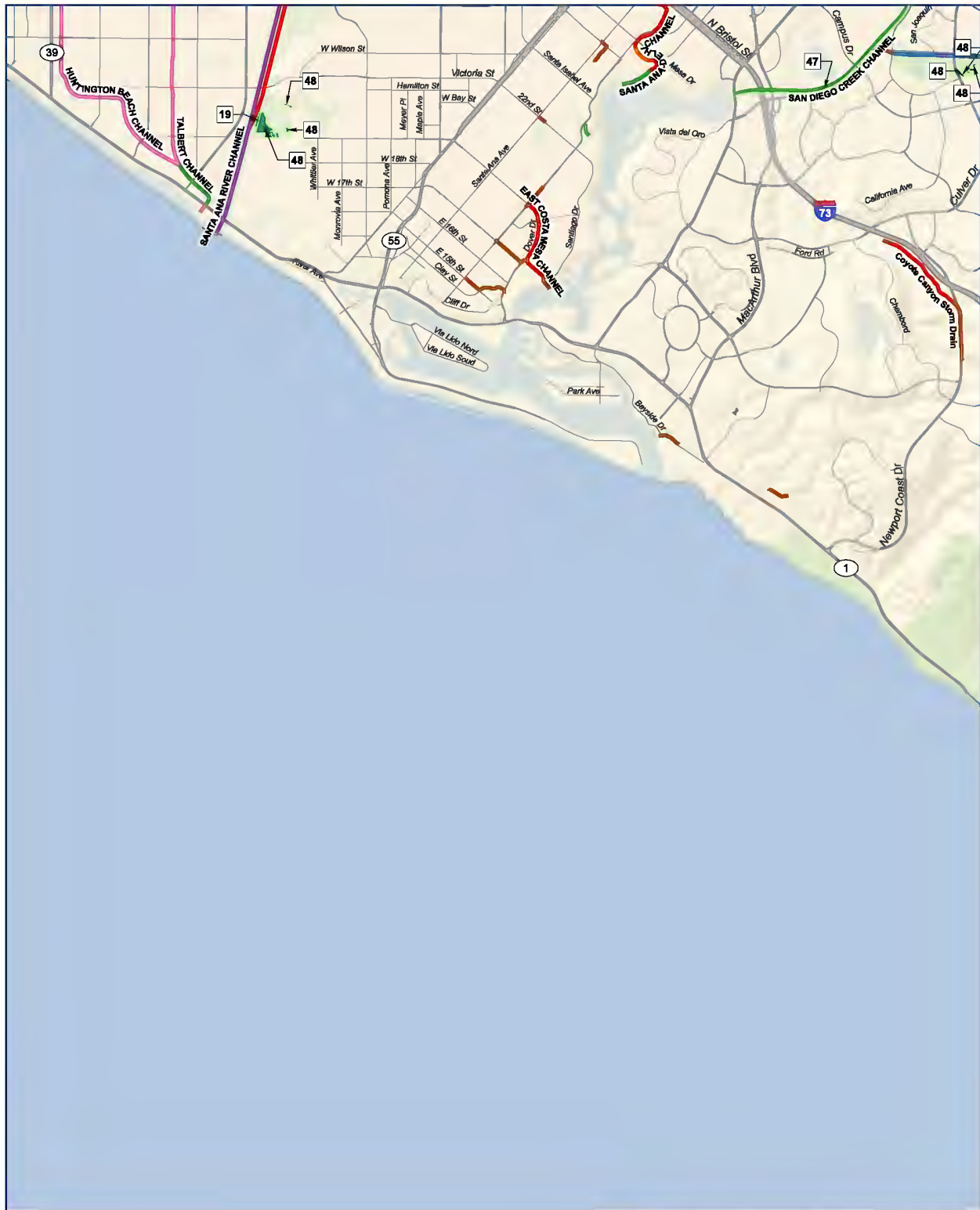
County of Orange Long-Term Maintenance Permitting Program



Exhibit 2e



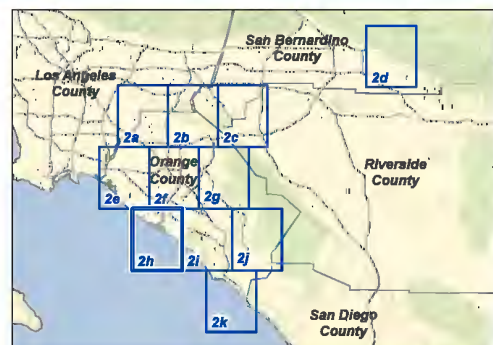




Channel Type

- Concrete-Lined
- Concrete Sides, Soft Bottom
- Natural Watercourse
- Earth Channel
- Riprap Channel
- Metal Sheet Channel
- Underground Conduit
- Not Available
- Dams/Reservoirs/Basins
- Mitigation Sites*

* Note: See Attachment 3, Table C-1
Mitigation Sites for
Mitigation Site Names



Project Facilities Map

County of Orange Long-Term Maintenance Permitting Program

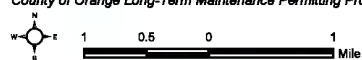


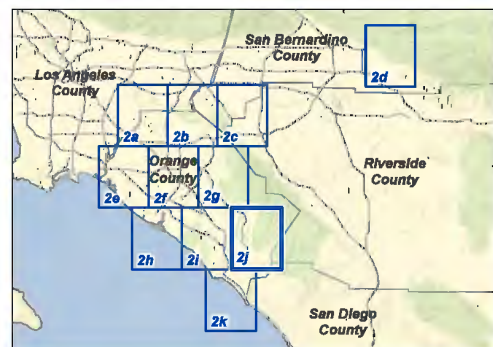
Exhibit 2h





Channel Type

- Concrete-Lined
- Concrete Sides, Soft Bottom
- Natural Watercourse
- Earth Channel
- Riprap Channel
- Metal Sheet Channel
- Underground Conduit
- Not Available
- Dams/Reservoirs/Basins
- Mitigation Sites*



* Note: See Attachment 3, Table C-1
Mitigation Sites for
Mitigation Site Names

Project Facilities Map

County of Orange Long-Term Maintenance Permitting Program

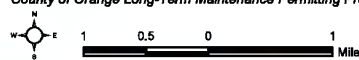


Exhibit 2j



Exhibit 3

TABLE 3
PROPOSED FLOOD CONTROL MAINTENANCE ACTIVITIES

	Maintenance Type	Maintenance Description	Equipment Needed	Timing	Non-Reporting (Allowed outside of nesting season or during the nesting season following pre-activity nesting survey)				
					Category 1	Category 2	Category 3	Category 4	Category 5
1	Pre-Emergent Weed Control	Application of herbicides to control growth of unwanted vegetation on flood control property.	Spray Truck, Spray Tank, All-Terrain Vehicle (ATV), and Trailer	Performed annually from early Fall to late Spring following a predetermined plan. Spraying is conducted from right-of-way to right-of-way.	Y	Y	Y	Y ^a	Y ^a
2	Weed Control	Application of herbicides to control unwanted vegetation on flood control properties.	Spray Truck, Spray Tank, ATV, and Trailer	Spray year round to eliminate or control weeds not killed by pre-emergent spraying. Generally, spray 4–6 times per year.	Y	Y	Y	Y ^a	Y ^a
3	Manual Removal of Invasive Species (including <i>Arundo</i>)	Cutting, chipping, and removal of invasive species (including <i>Arundo</i>). This activity is performed to remove unwanted vegetation from County right-of-ways and flood management channels.	Chipper Truck, Chipper, Trash Compactor, and Hand tools	Remove as directed.	Y	Y	Y	Y ^a Y	^a
4	Invasive Species Treatment (including <i>Arundo</i>)	Application of herbicides to control invasive vegetation on flood control properties.	Spray Truck, Spray Tank, ATV and Trailer, Backpack sprayer	Spray two to five times per year to eliminate or control <i>Arundo</i> . During the months of February through August, a biologist is required to monitor bird nesting activity.	Y	Y	Y	Y ^a Y	^a
5	Rodent Control	Control of rodents in flood right-of-way by the use of toxicants or fumigation to prevent erosion problems, and public and safety hazards.	Pickup Truck, ATV, and Trailer	All channels would follow a pre-determined plan from scheduling.	Y	Y	Y	Y ^a	Y ^a

**TABLE 3
PROPOSED FLOOD CONTROL MAINTENANCE ACTIVITIES**

	Maintenance Type	Maintenance Description	Equipment Needed	Timing	Non-Reporting (Allowed outside of nesting season or during the nesting season following pre-activity nesting survey)				
					Category 1	Category 2	Category 3	Category 4	Category 5
6	Insect Control	Application of Insecticides to control insects on flood control properties, roadway right-of-way, contract cities, and county parks.	Spray truck or backpack sprayer and a Bee Suit	Spray as needed for public safety or to protect landscape plants.	Y	Y	Y	Y ^a Y	a
7	General Fence Maintenance	Inspection and general repair of fences to ensure control of access to flood channels.	Fence Truck and Welder	Performed on a routine basis.	Y	Y	Y	Y ^a Y	a
8	Channel Cleaning	General maintenance cleaning consists of work necessary to maintain channel flow and permit access of maintenance vehicles and personnel. Work includes the removal of trash, debris, obstructions, and silt from the channel; trimming and clearing of vegetation along the vehicular and pedestrian access roads; and the removal of vegetation from channel slopes and inverts.	Inmate Crew Truck, Dump Truck, Trash Compactor Truck, Chipper, and Chipper Truck	Completed whenever location prohibits use of equipment and work needed to restore facility to operating capacity and/or acceptable appearance.	Y	Y	Y	Y ^a Y	a
9	Graffiti Pressure Wash	Removal of vandalized markings on fences, flood management channel walls, and traffic signs with a steam cleaner.	Utility Truck and Steam Cleaner	Performed per request from Graffiti Hotline and County Inspection staff.	Y	Y	Y	Y ^a Y	a
10	Graffiti Paint/Spray	Removal of vandalized markings on fences, flood management channel walls, and signs on County flood control facilities.	Utility Truck and Steam Cleaner	Performed per request from Graffiti Hotline and County Inspection staff.	Y	Y	Y	Y ^a Y	a
11	Graffiti Hand Roll	Painting over of vandalized markings on fences, flood management channel walls and signs on County flood control facilities using a hand roller.	Utility Truck and Van with Toilet	Performed per request from Graffiti Hotline and County Inspection staff.	Y	Y	Y	Y ^a Y	a

**TABLE 3
PROPOSED FLOOD CONTROL MAINTENANCE ACTIVITIES**

	Maintenance Type	Maintenance Description	Equipment Needed	Timing	Non-Reporting (Allowed outside of nesting season or during the nesting season following pre-activity nesting survey)				
					Category 1	Category 2	Category 3	Category 4	Category 5
12	Flap Gate Inspection/ Maintenance	Inspection and maintenance of flap gates includes identifying repairs on gates and performance of repairs or complete gate replacement.	Utility Truck	Flap gates would be inspected and serviced annually.	Y	Y	Y	Y ^a Y	^a
13	Maintain Pump Stations	The maintenance of mechanical, electrical, and other aspects of pumps and/or pump station facilities to ensure proper functioning of these drainage systems.	Utility Truck	Periodic cleaning and debris removal are required. Pumps are serviced and overhauled, as required, to provide peak efficiency.	Y	Y	Y	Y ^a Y	^a
14	Operate Pump Stations	The operation and inspection of pump stations would be conducted to ensure the operation and control of these facilities. Includes work during storm situations.	Utility Truck	Operation would be initialized after moderate rainfall. Manual control of the system would be required to completely empty the basin.	Y	Y	Y	Y	Y
15	Pump Station Cleaning	The manual cleaning of pump station wet wells and grates would be conducted to ensure that the pumps are functioning at full capacity.	Utility, Crew Truck, Dump Truck, and Trash Compactor	Pump stations are checked and cleaned annually. Recurring problem pump stations are checked and would be cleaned (as required) after storm events.	Y	Y	Y	Y ^a Y	^a

**TABLE 3
PROPOSED FLOOD CONTROL MAINTENANCE ACTIVITIES**

	Maintenance Type	Maintenance Description	Equipment Needed	Timing	Non-Reporting (Allowed outside of nesting season or during the nesting season following pre-activity nesting survey)				
					Category 1	Category 2	Category 3	Category 4	Category 5
16	Pump Station Cleaning Sump (via Vacuum Truck)	The pump stations would be cleaned to ensure that the pumps are functioning at full capacity.	Vacuum Truck	Pump stations are checked and cleaned annually. Recurring problem pump stations are checked and would be cleaned (as required) after storm events.	Y	Y	Y	Y ^a Y	^a
17	Pump Station Inspection	Inspection of pump stations would be conducted to ensure the proper working condition and a safe environment.	Utility Truck	Work would be performed weekly.	Y	Y	Y	Y	Y
18	Inspect/Maintain Diversions	Routine inspections and the maintenance of diversions in on-site channels.	Utility Truck	Inspections are performed routinely, and the maintenance would be performed, on an as-needed basis.	Y	Y	Y	Y	Y
19	Dam Operations and Maintenance	Proper operations and maintenance of the County's dams, which would include gate operation, service and cleaning of equipment, instrumentation checks, and periodic inspections.	Pickup and Utility Truck	Operations and Maintenance would be performed routinely and on an as-needed basis.	Y	Y	Y	Y	Y
20	Clean Drains (via vacuum truck)	The cleaning of drainage inlets, pipes, down drains, and storm drainage lines with a vacuum truck to ensure the drainage system is functioning at full capacity. This activity excludes maintenance yard drains.	Vacuum Truck, Oxygen Meter, and Pickup with Arrowboard	Drains are checked and would be cleaned in accordance with an annual plan. Recurring problem drains are checked and cleaned, as needed after storm events.	Y	Y	Y	Y ^a Y	^a

**TABLE 3
PROPOSED FLOOD CONTROL MAINTENANCE ACTIVITIES**

	Maintenance Type	Maintenance Description	Equipment Needed	Timing	Non-Reporting (Allowed outside of nesting season or during the nesting season following pre-activity nesting survey)				
					Category 1	Category 2	Category 3	Category 4	Category 5
21	Install or Repair Storm Drain Pipe for Flood Alleviation	The installation or repair of pipe would be conducted to provide drainage for flood management purposes.	Backhoe, Dump truck with Trailer, Air Compressor, Flatbed Truck, Mixer, and Excavator	Replace (or repair) pipe where flow is restricted and/or the pipe is damaged and is not functioning as designed, creating a drainage problem.	Y	Y	N	N	N
22	Fabricate and Install or Repair Headwalls	The repair of pipe headwalls to provide drainage for park, flood, and roadway right-of- way.	Backhoe, Dump truck with Trailer, Air Compressor, Flatbed Truck, Mixer, and Concrete Saw	Replace (or repair) pipe headwalls where flow is restricted and/or is damaged and is not functioning as designed, creating a drainage problem.	Y	Y	N	N	N
23	Install Underdrain	The installation of an underground drainage system to provide effective subsurface ground water control.	Back hoe, Haul Truck with Trailer, Haul Truck, Construction Crew Truck, Air Compressor, Flatbed Truck, Mixer, and Concrete Saw	Installation of underdrain when persistent surface and subsurface ground water is damaging County facilities or creating a hazard.	Y	Y	N	N	N
24	Remove/Repair/Replace Concrete Lining	Repair of concrete channel lining would be conducted to restore damaged channel lining per County standards.	Dump Truck, Bobcat, Backhoe, Compressor, Excavator and Concrete Saw	Fabrication and installation of headwalls in order to provide adequate drainage. This work would be performed as needed. Repair or replacement lining and reinforcement of steel would be conducted.	Y	Y	N	N	N

**TABLE 3
PROPOSED FLOOD CONTROL MAINTENANCE ACTIVITIES**

	Maintenance Type	Maintenance Description	Equipment Needed	Timing	Non-Reporting (Allowed outside of nesting season or during the nesting season following pre-activity nesting survey)				
					Category 1	Category 2	Category 3	Category 4	Category 5
25	Vault Cleaning	The cleaning of sub drain vaults to allow the system to fully operate. The intent of the system is to assist in the removal of the hydrostatic pressure on concrete slopes, walls, toeline, and the bottom of the channels. This task includes both an annual inspection and routine maintenance.	Vacuum Truck, Pick up with Wench, and Oxygen Meter. Underground Crew- Safety gear	Inspect annually and clean 1/3 of all vaults located on- site each year.	Y	Y	Y	Y ^a Y	^a
26	Concrete Channel Silt Removal- Loader	Mechanical removal of silt and debris from channel bottom to provide for normal flow of water. This activity applies to silt and debris removal from the bottom of a concrete channel with a large loader and may include stockpiling debris removed until dry.	Tender Truck, Dump Truck, and Large Loader	Normally conducted from April to October but can be performed throughout the year. Performed when the capacity of a channel is impaired, or adjacent drainage structures are restricted.	Y	Y	N	N	N
27	Concrete Channel Silt Removal- Bobcat	Mechanical removal of silt and debris from channel bottom to provide for normal flow of water. This activity applies to silt and debris removal from a concrete channel with a Bobcat or skip loader and may include stockpiling debris removed until dry.	Tender Truck, Dump Truck, Bobcat/Skip Loader, Mobile Crane, and Trailer	Normally conducted from April to October but can be performed throughout the year. Performed when the capacity of a channel is impaired, or adjacent drainage structures are restricted.	Y	Y	N	N	N
28	Dirt Channel Silt Removal	Mechanical removal of silt, vegetation, and/or debris that has been removed and stockpiled to restore dirt channels and roadways, and to provide proper flow of water.	Tender Truck, Dump Trucks, Crane, Excavator, and Dozer	Stockpiled materials have drained sufficiently to allow loading and hauling.	Y	Y	N	N	N
29	Compact Channel Slope	Provide soil or rock compaction (into slope) to inhibit subsequent erosion.	Crane, Excavator, Tender Truck,	Slopes should be compacted whenever major repairs occur and	Y	Y	N	N	N

**TABLE 3
PROPOSED FLOOD CONTROL MAINTENANCE ACTIVITIES**

	Maintenance Type	Maintenance Description	Equipment Needed	Timing	Non-Reporting (Allowed outside of nesting season or during the nesting season following pre-activity nesting survey)				
					Category 1	Category 2	Category 3	Category 4	Category 5
			and Badger	earth is imported to provide a base for the final invert surface.					
30	Back Fill/Repair Washout	The in-kind repair and/or back fill of washouts would be conducted to stabilize slopes or hinder water flow.	Backhoe, Dump Truck, Crane, Equipment Trailer, and Tender	This work would be performed as needed. High priority would be given to concrete or asphalt structures that require backfill for stabilization.	Y	Y	N	N	N
31	Slope Repair/Rip Rap Preparation	Mechanical removal of dirt from channel slopes and channel bottom in preparation for riprap lining installation in order to restore design cross section. Repair and replace damaged concrete lining, compact channel slope (provide soil or rock compaction into slope in order to inhibit subsequent erosion. Slopes should be compacted to provide a base for the final invert surface).	Tender Truck, Crane, Excavator, and Dump Trucks	This work would be performed as needed for structures that require stabilization. Performed when erosion is (a) undermining adjacent property, (b) creating a turbulence problem, and/or (c) undercutting drainage structures or access roads. Reoccurring problems are candidates for rock installation.	Y	Y	N	N	N
32	Install Rip Rap	The installation of rock riprap on channel slopes would be conducted in order to stabilize channel slopes and prevent erosion. Preparation of slopes prior to riprap installation, new riprap placement.	Tender Truck, Dump Trucks, Crane/Excavator , and Dozer	This work would be performed as needed for structures that require stabilization. The installation of riprap would be performed to protect slopes that have	Y	Y	N	N	N

**TABLE 3
PROPOSED FLOOD CONTROL MAINTENANCE ACTIVITIES**

	Maintenance Type	Maintenance Description	Equipment Needed	Timing	Non-Reporting (Allowed outside of nesting season or during the nesting season following pre-activity nesting survey)				
					Category 1	Category 2	Category 3	Category 4	Category 5
				experienced past slope erosion.					
33	Aggregate-Base (AB) Maintain Levee	Prepare roadway and plate AB and compact with rubber tire roller to increase the channel roadways to all weather facilities. This activity also includes placement of AB to maintenance of channels.	Tender Truck, Dump Trucks, Rubber T Roller, and Motor Grader	Performed under direction of engineer to provide maintenance access.	Y	Y	N	N	N
34	Tractor Removal of <i>Arundo</i>	Removal of <i>Arundo</i> would be conducted using excavators. A large loader with a clam bucket would be utilized to stockpile material at a processing area and a water truck would be utilized for dust and fire control.	Excavator, Large Loader, Water Truck, Tender Truck, Off Road Truck, and Crew	<i>Arundo</i> would be removed if required as mitigation.	Y	Y	N	N	N
35	Manual Cleaning/ Inspection of Drains	The inspection and manual cleaning of drainage inlets, pipes, down drains, and storm drainage lines would be conducted to ensure that the drainage system is functioning at full capacity. This activity excludes maintenance yard drains.	Stakebed/Crew cab, Oxygen Meter, and Mini Vac, Vacuum Truck	Drains are manually checked and cleaned. Recurring problem drains are checked and cleaned (as necessary) after storm events.	Y	Y	Y	Y ^a Y	^a
36	Landscape Maintenance	Maintenance of County-landscaped areas including ground cover, trees, and shrubs often in undeveloped areas. This work effort includes the removal of trash, elimination of right-of-way encroachment, and provides security clearance in flood channels and right-of-ways.	Road Truck, Inmate and Contract Crews	This work would be performed as needed, generally outside of the bird nesting season.	Y	Y	Y	Y ^a Y	^a
37	Right-of-Way Pruning	Trim and prune trees and shrubs to provide equipment access and provide right-of-way clearance.	Road Truck, Inmate and Contract Crews	This work would be performed as needed, generally outside of the bird nesting season.	Y	Y	Y	Y ^a Y	^a

**TABLE 3
PROPOSED FLOOD CONTROL MAINTENANCE ACTIVITIES**

	Maintenance Type	Maintenance Description	Equipment Needed	Timing	Non-Reporting (Allowed outside of nesting season or during the nesting season following pre-activity nesting survey)				
					Category 1	Category 2	Category 3	Category 4	Category 5
38	Annual Division of Safety of Dams (DSOD) Inspection	Inspection and maintenance of dams	Utility Truck	Annual DSOD Inspection.	Y	Y	Y	Y	Y
39	Annual DSOD Repairs	Vegetation removal, erosion repairs, sediment removal	Excavator, Large Loader, and Off-Road Water Truck	Performed as recommended by DSOD Inspection	Y	Y	N	N	N
40	Repair concrete structure damage below deck level	Pressure-Epoxy-Inject Crack s— below deck or on side of bridge	Air compressor, air & high- pressure water guns, Epoxy gun, variable reach forklift, boom lifts	Performed as recommended by inspection reports or Orange County Public Works bridge maintenance staff.	Y	Y	Y	Y ^a Y	^a
<p>Y – Yes, this maintenance activity can be performed without including it in the Annual Work Plan of activities to be conducted in the upcoming year and does not need to be included in the Annual Report of activities conducted over the year. A pre-activity nesting bird survey is required during the nesting season.</p> <p>Y^a – Yes, this maintenance activity can be performed without including it in the Annual Work Plan of activities to be conducted in the upcoming year, and does not need to be included in the Annual Report of activities conducted over the year. However, in addition to the pre-activity nesting bird survey, a Biological Monitor may be required during the maintenance work as determined by a Biologist based on the results of their survey.</p> <p>N – No, this maintenance activity cannot be performed without including it in the Annual Work Plan of activities to be conducted in the upcoming year; it needs to be included in the Annual Work Plan and the Annual Report of activities conducted over the year.</p>									

**TABLE 4
PROPOSED BRIDGE MAINTENANCE ACTIVITIES**

	Maintenance type.	Maintenance Description	Equipment needed	Performance criteria	Pre-authorized (* Allowed outside of nesting season or following survey)				
					1	2	3	4	5
1	Graffiti Paint/Spray	Removal of vandalized markings on fences, walls, and traffic signals in the road right of way	Utility Truck	Performed per request from Graffiti Hotline and County Inspection staff (e.g., signs, controllers boxes, lights, posts, etc.).	Y	Y	Y	Y ^a Y	a
2	Graffiti Hand Roll	Painting over vandalized markings on fences, walls, and traffic signals in County right of way using a hand roller	Utility Truck	Performed per request from Graffiti Hotline and County Inspection staff (e.g., signs, controllers boxes, lights, posts, etc.).	Y	Y	Y	Y ^a Y	a
3	Repair concrete structure damage below deck level	Pressure-Epoxy-Inject Cracks — below deck or on side of bridge	Air compressor, air & high-pressure water spray guns, Epoxy pressure-grout gun	Performed as recommended by Caltrans Bridge Inspection Reports or OC Public Works Bridge Maintenance staff	Y	Y	Y	Y ^a Y	a
4	Repair concrete structure damage below deck level	Remove & replace unsound or spalled concrete — below deck level (temp. support required)	Air compressor, air, sandblast & high-pressure water spray guns, generator, man-lift (access-permitting), concrete saw, chipping gun, towable concrete pump, ready-mix truck, or drum mixer		Y	Y	Y	Y ^a Y	a
5	Repair concrete structure damage below deck level	Remove & replace unsound or spalled concrete — below deck level (temp. support required)	Air compressor, air, sandblast & high-pressure water spray guns, generator, man-lift (access-permitting), concrete saw, chipping gun, towable concrete pump, ready-mix truck or drum mixer, and temporary support system consisting of heavy timber or steel posts on timber cribbing and steel or wood cross-members	Performed as recommended by Caltrans Bridge Inspection Reports or OC Public Works Bridge Maintenance staff	Y	Y	Y	Y ^a Y	a
6	Clean & paint bridge steel (above and/or below deck level)	Clean and paint steel girders — above or below deck	Air compressor, air & sandblast guns, man-lift (access-permitting), light scaffold, paint gun, tarps	Performed as recommended by Caltrans Bridge Inspection Reports	Y	Y	Y	Y ^a Y	a

**TABLE 4
PROPOSED BRIDGE MAINTENANCE ACTIVITIES**

	Maintenance type.	Maintenance Description	Equipment needed	Performance criteria	Pre-authorized (* Allowed outside of nesting season or following survey)				
					1	2	3	4	5
7	Restore scour protection measures at bridge	Slurry-fill scour recesses and restore eroded invert with grouted riprap	Bobcat or loader, dump truck, ready-mix truck, towable concrete pump	or OC Public Works Bridge Maintenance staff	Y	Y	N	N	N
8	Restore scour protection measures at bridge	Slurry-fill scour recesses and restore eroded invert with ungrouted riprap	Bobcat or loader, dump truck, ready-mix truck, towable concrete pump		Y	Y	N	N	N
9	Restore scour protection measures at bridge	Slurry-fill scour recesses and restore eroded invert with concrete invert (including cutoff walls) extending to limits of bridge wingwalls, and grouted or ungrouted riprap aprons upstream and downstream	Bobcat or loader, dump truck, ready-mix truck, towable concrete pump		Y	Y	N	N	N
Y – Yes, this maintenance activity can be performed without including it in the Annual Work Plan of activities to be conducted in the upcoming year and does not need to be included in the Annual Report of activities conducted over the year. A pre-activity nesting bird survey is required during the nesting season.									
Y ^a _ Yes, this maintenance activity can be performed without including it in the Annual Work Plan of activities to be conducted in the upcoming year, and does not need to be included in the Annual Report of activities conducted over the year. However, in addition to the pre-activity nesting bird survey, a Biological Monitor may be required during the maintenance work as determined by a Biologist based on the results of their survey.									
N – No, this maintenance activity cannot be performed without including it in the Annual Work Plan of activities to be conducted in the upcoming year; it needs to be included in the Annual Work Plan and the Annual Report of activities conducted over the year.									

Exhibit 4

COUNTYWIDE STANDARD CONDITIONS TO PROTECT FISH AND WILDLIFE RESOURCES

February 21, 2025

1. Avoidance and Minimization Measures

To avoid or minimize adverse impacts to fish and wildlife resources, the Permittee (Orange County Public Works [OCPW]) proposes implementing each measure listed below. The resource agencies referred to below are the U.S. Army Corps of Engineers (USACE), State Water Resources Control Board (SWRCB), and the California Department of Fish and Wildlife (CDFW).

Resource Protection

- 1.1 Site-Specific Worker Environmental Awareness Program (WEAP) Training. Prior to the initiation of maintenance activities in Category 3, 4, and 5 channels, the Permittee shall conduct a WEAP training for all activities requiring approval under the Annual Work Plan. The WEAP shall be presented by a qualified Biologist and shall include a discussion of the habitats within and adjacent to the project work area; any sensitive species that could occur within and adjacent to the project work area; legal protections for those species and penalties for violations; any Environmentally Sensitive Areas (ESAs) designated for the project (e.g., nesting birds, habitat for sensitive species, etc.); and an overview of the applicable permit conditions including the project-specific protection measures. Interpretation shall be provided for non-English speaking workers, and the same instruction shall be provided for any new workers prior to their performing work on the project site. Upon completion of the WEAP training, employees shall sign a form (i.e., the WEAP Log) stating they attended the program and understand all protection measures.
- 1.2 Annual Resource Education. In addition to site-specific WEAP training, all OCPW Operations and Maintenance staff will be required to attend an annual environmental training program, which will provide appropriate training to allow activities that are pre-authorized under the Countywide Permit approval, and do not need to be added to the Annual Work Plan (e.g. graffiti removal, rodent control, pump station maintenance).
- 1.3 Maintenance Area Demarcation. For all activities requiring approval under the Annual Work Plan (i.e., those in Category 3, 4, and 5 channels), the Permittee shall mark the authorized maintenance area to identify the limits of disturbance prior to the initiation of activities associated with the maintenance work. A qualified Biologist shall be present for the staking of the limits and installation of Best Management Practices to ensure that sensitive habitats are protected, and areas that would be impacted are within the limits authorized by the permit. During maintenance activities, no vegetation shall be removed outside of this marked area, and no construction debris, equipment, or soils shall be placed outside of the marked area.

- 1.4 Biological Monitoring. During vegetation clearing for Category 4 and 5 channels, the Permittee shall have a qualified Biologist on-site immediately prior to and during all clearing of vegetation to ensure no impacts occur outside of staked limits or to nearby habitat.
- 1.5 Native Tree Avoidance. No equipment shall be operated or parked within the dripline of native trees (e.g., oaks, sycamore, cottonwood) except where there are existing access roads. Native trees within 50 feet of the project work area (that do not already have an access road within their canopy) shall be protected with temporary fencing or flagging (see Category 4 Special Conditions for Tree Protection). The fencing will be placed at 1.5 times the dripline/root protection zone (defined as the outer canopy edge, at least 15 feet from the trunk). These areas will be labeled as "Tree Protection Areas" and will be regarded as ESAs. If an existing access road is within the Tree Protection Area, the Tree Protection Area may be adjusted to allow for access along the existing roadway. If it is unavoidable to track equipment within the dripline of a native tree, root protection measures will be implemented, including but not limited to placing plywood sheets over roots. Should native trees require trimming of the canopy greater than 10 percent, branches greater than three inches in diameter, or roots, a qualified Arborist shall approve the tree trimming.
- 1.6 Tree Removal. A total of up to five small native trees (i.e., greater than three inches in diameter at breast height [DBH] but less than eight inches DBH), may be removed for each maintenance project following Special Conditions for Category 4 channels for trees. Small trees shall be replaced through replanting nearby using cuttings or container plants at a 2:1 ratio per native tree removed, with replacement species and location approved by a qualified Biologist. The Annual Work Plan will present the replacement planting plan in a letter report describing active restoration activities for this Category 4 (or Category 5) maintenance activity (see Restoration and Monitoring Plan).
- If any native trees greater than eight inches DBH would need to be removed, the Annual Work Plan will present the replacement planting plan in a letter report describing active restoration activities following Special Conditions for Category 4 channels for maintenance activities that affect trees (see Restoration and Monitoring Plan). Native trees with eight inches or greater DBH will be replaced at a minimum 3:1 ratio, or as otherwise agreed to by the resource agencies, and will require follow-up monitoring for three to five years as described in the letter report describing active restoration activities. Alternative mitigation approaches (e.g., non-native vegetation removal) may be considered with approval by the resource agencies in the Annual Work Plan.
- 1.7 Riparian Vegetation Avoidance. The disturbance or removal of vegetation shall not exceed the minimum necessary to complete the identified activities for each maintenance activity. Appropriate precautions shall be taken to avoid inadvertent damage to vegetation by people or equipment.
- 1.8 Leave Patches of Vegetation in Channel. Permittee shall minimize vegetation removal to the minimal amount necessary. Vegetation removal in the Category 2, 3, 4, and 5 channels shall be conducted in a non-continuous manner, as feasible, allowing small patches of in-channel vegetation to persist provided it would not adversely affect conveyance capacity.

- 1.9 Herbaceous Vegetation Avoidance Between Sediment Removal Activities. Permittee shall avoid removal of native emergent herbaceous vegetation on the channel bottom that is rooted in or near the low flow channel or pond to provide cover for aquatic wildlife, where feasible. Native non-woody vegetation that does not interfere with designed flood management capacity shall be allowed to grow between sediment removal activities within Category 2, 3, 4, and 5 channels. If necessary to alleviate flood risk between sediment removal activities, native non-woody vegetation may be cut down to a level above the water line or root zone.
- 1.10 Maximum Woody Vegetation-Free Zone at the Toe of the Bank. When removing woody vegetation from channels for the sole purpose of visual access to inspect the toe of leveed slopes or dam structures, Permittee shall treat a maximum of 25-foot-wide zone from the toe of the bank for leveed slopes and 25-foot-wide zone from the toe of dam structures and should retain non-woody vegetation, where feasible, for erosion protection. In compliance with Division of Safety of Dams requirements and Corps requirements, if woody vegetation is removed for visual inspection purposes, it shall be replaced with grasses or low-growing herbaceous vegetation for erosion control and in consultation the resource agencies. For Category 3, 4, and 5 channels, a qualified Biological Monitor shall be present when this work is occurring. This work must be authorized by the resource agencies prior to removing vegetation from Category 5 channels.
- 1.11 Staging Areas. Staging/storage areas for equipment and materials shall be located outside of channels, including overnight staging/storage, wherever feasible.
- 1.12 Work During Dry Weather Only. If work is performed within the stream channel during the winter storm period, Permittee shall monitor the 5-day weather forecast. If greater than 20% of precipitation is forecasted, work activities shall include securing of the site, so that no materials may enter or be washed into the stream. The site shall be completely secured 24 hours prior to precipitation, unless prior written approval has been provided by USACE, SWRCB, and CDFW. During periods of precipitation (i.e., any event that results in discharges of stormwater from a site), no in-stream maintenance activities may occur; activities involving the prevention of materials from entering the stream or being washed downstream, or environmentally benign activities conducted by hand-crews, may be conducted.
- 1.13 Project Lighting. Lighting required to complete project activities at night shall not illuminate Category 3, 4, or 5 channels, unless otherwise authorized by the resource agencies.
- 1.14 Fire Safety. Permittee, its contractors, subcontractors, employees, and visitors to the site are prohibited from starting personal fires. Construction personnel will follow best management practices for fire safety. For work near dry vegetation, project-specific fire safety procedures will be discussed prior to work. Any use of torches or other equipment that may ignite or spark is prohibited near dry vegetation without a project-specific fire safety plan and training review.

- 1.15 Personnel Compliance on Site. Permittee, its contractors, subcontractors, employees, and visitors to the site are prohibited from 1) feeding wildlife, 2) bringing domestic pets to the work site, 3) collecting native plants (unless the collection is for propagating/replanting associated with restoration or mitigation), or 4) harassing or killing wildlife (e.g., snakes). It shall be the responsibility of Permittee to ensure compliance with this measure.
- 1.16 Prohibited Plant Species. Permittee shall not plant, seed, or otherwise introduce 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.cal-ipc.org/ip/inventory/weedlist.php>.

Wildlife and Habitat Protection

- 1.17 Sensitive Species. Several streams in Orange County support native riparian vegetation or other suitable habitat for sensitive species. Sensitive species have been known to occur within some of the identified areas of the Maintenance Program. Streams (or portions of streams and/or tributaries) where sensitive species have potential to occur include, but are not limited to: San Juan Creek (including tributaries Cañada Chiquita and Cañada Gobernadora), Trabuco Creek, Coyote Creek, San Diego Creek (including tributaries Sand Canyon Wash, Borrego Canyon Wash, and Agua Chinon), Aliso Creek (including tributary English Creek), Santa Ana River (including Prado Basin), East Garden Grove-Wintersburg Channel, Santiago Creek, and Silverado Creek. Maintenance activities within 500 feet of habitat where sensitive species have potential to occur, as determined by a qualified Biologist are categorized as Category 4 or 5 channels; Special Conditions shall be required to avoid and minimize impacts on sensitive species. The Permittee shall implement Special Conditions as written, or as otherwise approved by the resource agencies (see Attachment B of the Restoration and Monitoring Plan).
- 1.18 Listed Species. Approvals do not authorize take, incidental or otherwise, of any federal or State-listed Threatened, Endangered, Candidate, or Proposed Listed species. The use of Special Conditions shall be applied to Category 4 and 5 channels to avoid and minimize impacts on these species and their habitats. The Special Conditions shall be determined by a qualified Biologist, described in the Annual Work Plan, and approved by the resource agencies prior to proceeding with maintenance activities in Category 4 and 5 channels. Special Conditions shall be consistent with the Central-Coastal Natural Communities Conservation Plan, Southern Subregion Habitat Conservation Plan, and Western Riverside Multiple Species Habitat Conservation Plan; work in these areas may include measures for Covered Species that are not currently federal or State-listed. The Permittee shall implement Special Conditions as written, or as otherwise approved by the resource agencies (see Attachment B of the Restoration and Monitoring Plan).
- 1.19 Pre-Activity Nesting Bird/Raptor Survey¹. To the extent possible, maintenance work that involves the removal of vegetation shall be conducted outside the

¹ The methods/approach in this permit condition supersede the nesting bird mitigation measure listed in the CEQA Mitigated Negative Declaration. These methods are the current industry standard for areas that are highly urbanized. Special Conditions following a different methodology would be used in any

nesting bird/raptor nesting season (i.e., February 1 to September 15). If the nesting bird/raptor season cannot be avoided and maintenance work and/or vegetation removal must be initiated between February 1st and September 15th, a qualified Biologist (i.e., one with experience conducting nesting bird/raptor surveys) shall conduct a pre-activity nesting bird/raptor survey within three days prior to the initiation of maintenance and/or prior to any vegetation removal to ensure no nesting birds/raptors would be impacted by the maintenance activities. The survey area will include the work area plus a 100-foot buffer from the work area for nesting birds and up to a 500-foot buffer for nesting raptors and listed bird species.

If an active nest is identified, the qualified Biologist shall determine the appropriate size protective buffer based on the sensitivity of the species, the location of the nest with respect to the work activities, the type of work activities, and the existing amount of human activity in the area. The protective buffer size should generally be 25 to 200 feet for common species; 100 to 300 feet for special status species; and 300 to 500 feet for nesting raptors. The protective buffer size for federally or State Threatened or Endangered species shall be 300 to 500 feet (per Special Conditions), unless otherwise authorized by the resource agencies. The protective buffer shall be clearly flagged in all directions and designated as an ESA; the construction supervisor/staff shall be notified of the location of the protective buffer/flagging. The protective buffer shall not be disturbed until the nest becomes inactive (i.e., the nest fails or the young have fledged).

- 1.20 Pile Driving. To avoid and minimize impacts to nesting birds/raptors, maintenance activities in Category 4 and 5 channels shall not include jack hammering or non-silent pile driving between February 1st and September 15th unless pre-activity nesting bird/raptor surveys and surveys conducted per applicable Special Conditions find that there are no sensitive or listed species present within 500 feet of the proposed pile driving site, and/or noise minimization measures are implemented to the satisfaction of the resource agencies, as described in the Special Conditions.
- 1.21 Leave Wildlife Unharmed. If any wildlife is encountered during the course of maintenance activities, said wildlife shall be allowed to leave the maintenance area unharmed. If any sensitive wildlife species is encountered during the maintenance work or biological monitoring, a qualified Biologist shall determine whether additional measures would be needed to ensure the safety of the sensitive wildlife species. Any sensitive species observed shall be reported to the California Natural Diversity Database (CNDDDB).
- 1.22 Native Amphibian Eggs and Larvae. To the extent practicable, Permittee shall avoid the disturbance or destruction of native amphibian eggs and larvae.
- 1.23 Open Trenches/Entrapment. At the end of each work day, an escape ramp shall be placed at each end of any open trench or excavated pit to allow any animals in the trench or excavated pit to climb out. The ramp may be constructed of earthen fill, wood planking, or other suitable material that is placed at an angle

areas with potential for listed species.

no greater than 30 degrees. If an escape ramp is not feasible, other appropriate wildlife exclusionary devices shall be employed to avoid entrapping wildlife.

Vegetation Removal

1.24 Vegetation Removal by Category. Vegetation removal, after appropriate biological surveys, is proposed as follows:

Category 1 channels may be cleared of all vegetation.

Category 2 and 3 channels may be cleared of vegetation as follows:

- a. Native vegetation removed from Category 3 channels shall not exceed the minimum necessary to complete the identified activities for each maintenance activity.
- b. Vegetation removal in Category 2 and 3 channels shall be conducted in a non-continuous manner, as feasible, allowing small patches of in-channel vegetation to persist provided it will not adversely affect conveyance capacity.
- c. When vegetation removal is deemed necessary, mowing and/or trimming of vegetation, or herbicide treatment, if necessary, shall be done in such a manner as to maintain soil stability.
- d. Permittee shall avoid removal of emergent herbaceous vegetation (non-invasive) on the channel bottom that is rooted in or near the low flow channel and ponds to provide cover for aquatic wildlife, where feasible. Native non-woody vegetation that does not interfere with designed flood control capacity shall be allowed to grow between sediment removal activities within Category 2 and 3 channels. If necessary to alleviate flood risk between sediment removal activities, native non-woody vegetation may be cut down to a level above the water line or root zone, or treated if necessary.
- e. No living native woody vegetation with a DBH of three inches or greater shall be removed or damaged without prior approval from the resource agencies.
- f. Appropriate precautions shall be taken to avoid inadvertent damage to native vegetation by people or equipment.

Category 4 and 5 channels may be cleared of vegetation as follows:

- a. Native vegetation removed from Category 4 and 5 channels shall not exceed the minimum necessary to complete the identified activities for each maintenance activity.
- b. Vegetation removal may be allowed for permanent or temporary impacts less than 0.05 acre per 500 linear feet, or as otherwise approved by the resource agencies. The Annual Work Plan will present the proposed maintenance activity along with a letter report describing the mitigation approach proposed (see Restoration and Monitoring Plan). Category 5 vegetation will be replaced at a minimum 1:1 ratio, or as otherwise agreed to by the resource agencies, and will require follow-up monitoring for three to five years as described in the letter report describing active restoration activities. Alternative mitigation approaches (e.g., non-native vegetation removal) may be considered with approval by the resource agencies.

- c. When vegetation removal is deemed necessary, clearing and/or trimming of vegetation, or herbicide treatment, if necessary, shall be done in such a manner as to maintain soil stability.
 - d. Permittee shall avoid removal of woody native vegetation to provide cover for wildlife, where feasible. Native non-woody vegetation that does not interfere with designed flood control capacity shall be allowed to grow between sediment removal activities within Category 4 and 5 channels. If necessary to alleviate flood risk between sediment removal activities, native non-woody or woody vegetation may be cut down to a level above the water line or root zone, or treated as necessary.
 - e. No living native woody vegetation with a DBH of three inches or greater shall be removed or damaged without prior approval from the resource agencies.
 - f. Appropriate precautions shall be taken to avoid inadvertent damage to native vegetation by people or equipment.
- 1.25 Removal and Disposal of Non-Native Vegetation. Non-native vegetation removed from work areas shall be disposed of legally in a manner which prevents its re-establishment and in a manner that does not negatively affect other native habitat communities.
- 1.26 Fire Safety Vegetation Removals. Appropriate setbacks from structures and tree removals as required by the fire authority should be maintained.
- 1.27 Maintenance Access Roads/Ramps. Permittee may remove sparse native vegetation, fallen trees, and branches from existing maintenance access roads and existing access ramps. Minor pruning of native trees and brush growing on the stream side slope of access roads is acceptable; pruning shall be limited to the removal of vegetation that interferes with vehicle access/visual survey along existing access roads, or to return the road to its as-built width and condition.
- 1.28 Herbicides – General. Only herbicides containing a harmless dye and registered with the California Department of Pesticide Regulation (DPR) shall be used. All herbicides shall be applied in accordance with regulations set by DPR. All herbicides shall be used according to labeled instructions. Herbicide mixing sites shall only be located in designated maintenance areas that are devoid of vegetation, and where there is no potential of a spill reaching a vegetated area or stream. Herbicides will not be applied within two days of a predicted rain event.
- 1.29 Vehicle-Based Herbicide Sprayers. Where a flood channel is designed to convey storm flows with minimal or no vegetation, vehicle-based sprayers or boom trucks may be used to treat native and non-native vegetation. Vehicle-based sprayer may be used only on existing roads or the margins of unvegetated channels and where non-native vegetation is growing in large clumps with no perennial native woody vegetation within 10 feet (unless the hose attachment is used by pedestrian crews and can specifically target non-native species). Herbicide applied via vehicle-based sprayers shall not damage native woody vegetation unless

required for flood conveyance/capacity purposes. Herbicides will not be applied within two days of a predicted rain event.

- 1.30 Backpack Herbicide Sprayers. Backpack sprayers or hose attachments used by pedestrian crews that can target specific non-native species shall be used in all situations where non-native vegetation exists within 10 feet of native vegetation that will be preserved. The application of herbicides shall be conducted in such a manner to minimize overspray of herbicide onto native vegetation. Herbicide shall be applied only on calm (non-windy) days to prevent airborne transfer of the herbicide. Any native vegetation inadvertently damaged during herbicide application shall be left to re-sprout. Herbicides will not be applied within two days of a predicted rain event.
- 1.31 Native Vegetation Intermixed with Non-Native Vegetation. In areas where native vegetation is intermixed with invasive vegetation (e.g., isolated stands of giant reed, *Arundo*, among native species), invasive vegetation shall be removed using hand-operated tools or by using the hose attachment of a vehicle-based sprayer.
- 1.32 Allow Vegetation to Grow. Between treatment cycles, vegetation (non-woody) should be allowed to grow and provide interim habitat for wildlife species. When native vegetation (woody or non-woody) is allowed to periodically grow in flood channels between maintenance events, there will be no mitigation requirement when vegetation needs to be maintained or removed for flood conveyance/capacity.

Temporary Impacts

- 1.33 Passive Restoration for Temporary Impacts (Category 2, 3, and 4 Channels). For maintenance activities in Category 2, 3, and 4 channels that result in the temporary disturbance to native riparian vegetation, Permittee shall allow for revegetation through passive restoration where root systems remain intact.
- 1.34 Monitoring of Passive Restoration. Per the Restoration and Monitoring Plan, a one-year follow-up visit shall be conducted to monitor the recovery of native vegetation within the temporary impact area. If passive restoration is occurring naturally (i.e., percent cover of native species is similar to pre-maintenance conditions [within approximately 10 percent cover]), no further monitoring will be needed. If recovery of vegetation appears stunted, the Permittee will prepare a brief memo or letter report describing the recommended restoration activities and follow-up monitoring requirements. No planting/seeding would be required for Category 2 channels (or Category 4 that would otherwise be categorized as Category 2 except for Special Conditions).
- 1.35 Active Restoration of Temporary Impacts to Category 5 Channels and Permanent Impacts to Category 2, 3, 4, or 5 Channels. For maintenance activities in Category 5 channels that result in vegetation removal less than 0.05 acre per 500 linear feet, or as otherwise agreed to by the resource agencies, the Annual Work Plan will present the proposed maintenance activity along with a letter report describing the mitigation approach proposed (see Restoration and Monitoring Plan). Category 5 vegetation will be replaced at a minimum 1:1 ratio,

or as otherwise agreed to by the resource agencies, and will require follow-up monitoring for three to five years as described in the letter report describing active restoration activities. At the completion of the monitoring period, the restoration site shall have received no supplemental watering for a period of 2 consecutive years. Alternative mitigation approaches (e.g., non-native vegetation removal) may be considered with approval by the resource agencies. If the restoration fails to meet the established success criteria after the maintenance and monitoring period, maintenance and monitoring will extend beyond designated monitoring period until the criteria are met or unless otherwise approved by the resource agencies.

1.36 Annual Monitoring Reports for Active Restoration. Mitigation, maintenance, and monitoring reporting for each active restoration area shall be submitted with the Annual Report as described in the Restoration and Monitoring Plan until the area has met performance criteria. Monitoring reports shall include, but not be limited to, the following:

- a. Identifying specific restoration site boundaries and the time period that the monitoring report is applicable;
- b. A list of names, titles, and companies of all persons who prepared the content of the annual report and participated in monitoring activities;
- c. Methods used to assess achievement of success criteria;
- d. Relevant data summarizing the site's achievement of success criteria;
- e. Progress photographs taken from the same vantage point as baseline photographs; and
- f. Detailed remedial maintenance to be performed (if applicable).

If the restoration area has failed to meet success criteria after five years, the Permittee shall develop an alternative mitigation strategy, including but not limited to alternative restoration sites, the purchase of credits from approved mitigation banks or in-lieu fee programs, and/or removal of non-native vegetation.

Structures

1.37 Repair to Existing Bank Protection. Permittee may repair damage to existing bank protection structures such as riprap or concrete lining. These activities are described in Table 3 of the Project Description. Such repair shall employ the same type of material used in the original construction or existing conditions and shall occur only in the locations of existing bank protection. Exceptions to this requirement are included in the Maintenance Program Project Description and involve the use of bioengineered solutions and modification/addition of riprap to earthen slopes for erosion protection. Repair work that does not return the channel to as-built condition shall be limited to only the amount necessary to complete the needed repair/improvement. For work that modifies the as-built condition, the plans and specifications shall be presented at the Annual Work Plan meeting for resource agency review and approval. The temporarily impacted area shall be passively or actively restored and monitored according to the Restoration and Monitoring Plan and all measures in this agreement.

- 1.38 Grouted RipRap and Gabions. Grouted riprap material to replace un-grouted riprap requires resource agency approval due to an increase of impervious space. Gabions also require resource agency approval for the replacement for any structure in the stream. However, removing grouted riprap or gabions, then replacing with un-grouted riprap are authorized activities.
- 1.39 Rock Slope Protection. Un-grouted rock slope protection and energy dissipater materials shall consist of durable, clean rock sized and properly installed to resist washout. Rock slope protection shall be supported with competent bottom keyed into a footing trench with a depth sufficient to properly seat the footing course rock and prevent instability. Bioengineering techniques, including planting voids between rocks with riparian species native to the area or other similar solutions, may be used provided using bioengineering measures. Bioengineering methods will be provided in the Annual Work Plan for resource agency review and approval.
- 1.40 Remove Temporary Structures Before High Water Flow. Temporary structures and associated materials not designed to withstand high water flows shall be moved to areas above high water before such flows occur.

Dewatering and Temporary Diversions

- 1.41 Diversion Plan. No equipment shall be operated in ponded or flowing areas to the maximum extent practicable, unless the activity has no effect to water quality or habitat as described in the Annual Work Plan. When work in a flowing stream is unavoidable, the entire stream flow may be diverted around the work area by a barrier, temporary culvert, new channel, or other means approved by the resource agencies. Location of the upstream and downstream diversion points shall be approved by the resource agencies. Construction of the barrier and/or the new channel shall normally begin in the downstream area and continue in an upstream direction, and the flow shall be diverted only when construction of the diversion is completed. Channel bank or barrier construction shall be adequate to prevent seepage into or from the work area. Diversion berms shall be constructed of onsite soils, inflatable dams, coffer dams, biodegradable sand/gravel bags, or other suitable materials. The diversion shall be removed when the work is completed, and removal shall normally proceed from downstream in an upstream direction. Permittee shall submit a Dewatering and Diversion Plan and an Erosion and Sediment Control Plan for approval from the resource agencies with the Annual Work Plan or prior to each diversion. Separate De Minimis authorization from the Regional Waterboard will be followed when required.
- 1.42 Maintain Flows. Flow diversions shall be done in a manner that shall prevent pollution and/or siltation and which shall provide flows to downstream reaches. Flows to downstream reaches shall be provided during all times that the pre-existing flow would have supported aquatic life. Downstream flows shall be conveyed consistent with existing conditions at the time of the maintenance activity so as to support the currently occurring aquatic life both above and below the diversion. Diversions shall be engineered, installed, and maintained to assure resistance to washout and erosion of the stream bed and banks. Normal

flows shall be restored to the affected stream immediately upon completion of work at that location.

- 1.43 Pump Intakes. Pump intakes placed in any stream water shall be fitted with 1/8-inch or smaller mesh screens to prevent harm to wildlife.
- 1.44 Excavation Dewatering. If an excavation site must be dewatered, any muddy, or otherwise contaminated, water shall be pumped into a holding facility or into a settling pond located in flat stable areas outside of the stream channel or pumped up on a stable grassy area where the water clears prior to flowing back into the stream.
- 1.45 Stranded Aquatic Life. Permittee shall check daily for stranded native aquatic life as the water level in the dewatering area drops. All reasonable efforts shall be made to capture and move all stranded native aquatic life observed in the dewatered areas. Capture methods may include fish landing nets, dip nets, buckets, and by hand. Captured native aquatic life shall be released immediately in the closest body of water to the work site. This measure does not allow for the take or disturbance of any sensitive species.
- 1.46 Rewatering. Permittee shall take appropriate measures to contain sediment and reduce stream turbidity when a work area is rewatered. Permittee shall install an appropriate sediment control device downstream of the work area to contain sediment.

Erosion and Turbidity

- 1.47 Prepare Erosion Control Plan. Permittee shall submit (E-mail is sufficient) an Erosion Control Plan (ECP) for the Maintenance Program to the resource agencies for approval along with the Annual Work Plan or prior to the commencement of maintenance activities. The ECP shall include performance standards, monitoring and reporting programs, and corrective actions to be taken if necessary. The ECP shall be implemented by Permittee before, during, and at the completion of maintenance activities. The ECP shall be approved by the resource agencies prior to commencement of maintenance activities (preferably with the Annual Work Plan).
- 1.48 Contaminated Water. Water containing mud, silt, or other pollutants used during maintenance activities shall not be allowed to enter a flowing stream or placed in locations that may be subjected to high storm flows.
- 1.49 Minimize Turbidity and Siltation. Permittee shall take precautions to minimize turbidity and siltation during and after maintenance activities. Precautions shall include but are not limited to: pre-construction planning to identify site specific turbidity and siltation minimization measures and best management erosion control practices; best management erosion control practices during maintenance activities; and settling, filtering, or otherwise treating silty and turbid water prior to discharge into a stream or storm drain.
- 1.50 Silt Settling Barriers. If silt catchment barriers are used, the basin(s) shall be constructed across the stream immediately downstream of the work area. Catchment barriers shall be constructed of materials which are free from mud

and silt. Upon completion of the maintenance activity, all basin materials along with the trapped sediments shall be removed from the stream in such a manner that does not introduce sediment to the stream.

- 1.51 Erosion Control Measures. Permittee shall utilize erosion control measures throughout all phases of maintenance activities where sediment runoff from exposed slopes threatens to enter the stream.
- 1.52 Erosion Control Monitoring. Permittee shall monitor erosion control measures before, during, and after each storm event and repair and/or replace ineffective measures immediately.
- 1.53 Turbidity Caused by Natural Occurring Algae. When turbidity levels are high due to inherent algae that is not project-related, Total Suspended Solids laboratory tests may be substituted.

Existing Bridges and Culverts

- 1.54 Bat Protection. Prior to maintenance activities that would remove trees suitable for bat roosting or at any culvert, bridge, or other structure suitable for roosting bats, the trees/structures shall be surveyed by a qualified bat Biologist as described in the Special Conditions. If roosting bats are found, the procedures described in the Special Conditions, or other measures as approved by the resource agencies, shall be followed to avoid and minimize impacts on roosting bats.
- 1.55 Swallow Nesting at Bridges. Maintenance activities on existing bridges shall either occur outside of the swallow nesting period (i.e., March 15 through August 31), or the suitable bridge nesting habitat shall be netted by Permittee before initiation of the breeding season to prevent nesting. The netting shall remain in place until August 31 or until maintenance activities at the site are complete, after which the netting shall be removed. The netting shall be anchored such that swallows cannot attach nests to the structure through gaps in the net. If swallows begin building nests on the structure after net installation, the mud placed by the swallows shall be removed and the integrity of the net repaired. At no time shall an occupied nest be destroyed.

Flood Management Basins

- 1.56 Leave Vegetation on Basin Slopes. Permittee shall not remove vegetation on flood management basin slopes except as follows: (1) the vegetation is non-native; (2) shrubs and trees become hazards to the stability and function of the basin or preclude visual survey; (3) the vegetation/sediment meets or exceeds the 20 percent capacity line (or specific line designated by the approved Operation and Maintenance Manual) for specific facility; or (4) slope maintenance is required to correct rill erosion or other slope damage. Where native vegetation is allowed to periodically grow in basins, there will be no mitigation required when vegetation needs to be maintained or removed for flood conveyance/capacity.
- 1.57 Leave Patches of Vegetation in Basin. Permittee shall minimize native vegetation removal or reduction from flood management basins to the least

amount necessary to achieve the specific maintenance objectives for the site. When feasible, native vegetation removal (excludes herbicide treatments) shall be conducted in a non-continuous manner, allowing small patches of native vegetation to persist, provided that it would not adversely affect conveyance capacity. Where native vegetation is allowed to periodically grow in basins, there will be no mitigation required when vegetation needs to be maintained or removed for flood conveyance/capacity.

- 1.58 Herbaceous Vegetation Avoidance Between Sediment Removal Activities. Permittee shall avoid removal or reduction of emergent herbaceous vegetation within flood management basins to provide cover for wildlife, where feasible. Native non-woody vegetation that does not interfere with designed flood management capacity shall be allowed to grow between sediment removal activities within flood management basins. If necessary to alleviate flood risk between sediment removal activities, native non-woody vegetation may be cut down to a level above the root zone. Where native vegetation (woody or non-woody) is allowed to periodically grow in basins, between maintenance events, there will be no mitigation required when vegetation needs to be maintained or removed for flood conveyance/capacity.

Equipment and Access

- 1.59 Avoid Road Base Discharge. Permittee shall implement appropriate best management practice measures to prevent the discharge of road base, fill, sediments, and asphalt beyond a previously established road when working near channels or flood management basins.
- 1.60 Equipment Access. Access to the work site shall be via existing roads and access ramps. If no ramps are available in the immediate area, a temporary ramp may be constructed within the project work area. Any temporary ramp shall be removed upon completion of maintenance activities.
- 1.61 Speed Limit. A 15-mile per hour speed limit shall be observed on dirt access roads to reduce dust and allow reptiles and small mammals to move out of the way of vehicles and/or to allow vehicle drivers the ability to slow down to allow wildlife to move off the road.
- 1.62 Excavation Equipment. Prior to working within the bed, bank, or channel of the stream, all equipment shall be closely examined for oil and fuel discharges. Any contaminants shall be cleaned prior to any work and all equipment shall be examined daily for new oil and fuel discharges and cleaned as needed. Ground protection pads shall be required for any construction vehicles stored overnight adjacent to waters of the United States.
- 1.63 Wildlife Sheltered in Construction Material. All sections of pipe shall be visually checked for the presence of wildlife sheltering within them prior to the pipe sections being placed in a trench and attached together or shall have the ends capped while stored on site to prevent wildlife from entering the pipes. After attachment of the pipe sections to one another, whether in the trench or not, the exposed end(s) of the pipeline shall be capped at the end of each day during

maintenance activities to prevent wildlife from entering and being trapped within the pipeline. Any pipe or post installed vertically as a part of the maintenance activity shall not have an exposed opening at the top. Any opening shall be capped or otherwise permanently covered.

Fill and Spoil

- 1.64 Alluvium Fill. Fill materials other than on-site alluvium shall consist of clean gravel or river rock.
- 1.65 Cover Spoil Piles. Permittee shall have readily available plastic sheeting to cover exposed spoil piles and exposed areas to prevent loose soil from moving into the stream. These covering materials shall be applied when it is evident rainy conditions threaten to erode loose soils into the stream.
- 1.66 Temporary Stockpiles. Temporary stockpiles located near channels or flood management basins shall be stabilized by compacting or other measures if present near the stream from December 1 to April 1. Silt fences, berms, or other methods shall be used to prevent sediment from being eroded from the temporary stockpile into the stream. Temporary stockpiles may be placed in channel bottoms or flood management basins only if they are located on barren soil or areas with only non-native vegetation and are not placed in such a manner that they would be exposed to flowing water. All temporary stockpiles within the bed or banks of the channel shall be removed from the stream before a storm event or other anticipated flows.

Pesticides, Pollution, Litter, and Clean-Up

- 1.67 Rodent Control. Rodent control rodenticides are known to cause secondary exposure to non-target wildlife. Permittee shall use rodent control methods only as deemed necessary. A qualified Applicator shall apply the rodenticide in a manner specifically described on the product label and shall monitor the application areas until rodenticides are removed. The qualified Applicator shall conform to all applicable federal, State, and local regulations. If deemed appropriate, electronic traps or use of owl boxes to attract natural predators should be attempted as an alternative to the continued use of rodenticides. However, owl boxes shall not be installed in areas where rodenticides are actively being used.
- 1.68 Insect Control. Insecticides shall be applied only when necessary by licensed personnel according to product label instructions and in compliance with all local, State, and federal regulations. Proper applications maximize a product's effectiveness while avoiding or minimizing any adverse impacts to the public fish and wildlife resources.
- 1.69 Concrete. Permittee shall implement appropriate waste management practices during concrete repair or replacement. Waste management practices shall be applied to the stockpiling of concrete, curing and finishing of concrete, as well as to concrete wash-out operations. Waste management practices shall be adequate to ensure that fluids associated with the curing, finishing, and wash-out of concrete shall not be discharged to the channel or flood management

basin. Concrete waste shall be stockpiled separately from sediment and protected by erosion control measures so that concrete dust and debris are not discharged into the channel or flood management basin. Permittee shall determine the appropriate waste management practices based on considerations of expected flow velocities, site conditions, and availability of erosion control materials.

- 1.70 Litter and Pollution. Permittee shall comply with all litter and pollution laws. All contractors, subcontractors, and employees shall also obey these laws, and it shall be the responsibility of the Permittee to ensure compliance.
- 1.71 Secure Trash Receptacles. Permittee shall use fully covered trash receptacles with secure lids (wildlife proof) to contain all food, food scraps, food wrappers, beverages, and other miscellaneous trash.
- 1.72 Stationary Equipment. Stationary equipment such as motors, pumps, generators, and welders located within or near the stream shall be positioned over drip pans. Stationary heavy equipment shall have suitable containment to handle a catastrophic spill/leak.
- 1.73 Equipment Maintenance and Fueling. No equipment maintenance or fueling shall be done within or near any stream channel where petroleum products or other pollutants from the equipment may enter these areas.
- 1.74 Equipment and Vehicle Spills and Contaminants. Any equipment or vehicles driven or operated within or near the stream shall be checked daily, to prevent leaks of materials that if introduced to water could be deleterious to aquatic life. Permittee shall maintain all vehicles and equipment in proper working condition to minimize fugitive emissions and accidental spills from motor oil, antifreeze, hydraulic fluid, grease, and other fluids or hazardous materials. All fuel or hazardous waste leaks, spills, or releases shall be stopped or repaired immediately and cleaned up at the time of occurrence. Permittee shall be responsible for spill material removal and disposal to an approved offsite landfill and spill reporting to the resource agencies. Service construction equipment shall be stored in designated areas only. Maintenance vehicles shall carry appropriate equipment and materials to isolate and remediate leaks or spills. A spill containment kit shall be available on site for all maintenance activities.
- 1.75 Site Cleanup. When operations are completed, any excess materials or debris shall be removed from the work area.

2. General Conditions for Covered Activities

The following general measures apply to any covered maintenance activity:

- 2.1 Category Evaluation. As part of preparing each Annual Work Plan (see Section 3.1 below), OCPW Operations and Maintenance will submit a written request to OCPW Regulatory Permits for maintenance projects deemed necessary within stream channels, containing the location and dimension of the channel, volume and type of materials proposed, and site photographs. A qualified Biologist will evaluate site for potential impacts to fish and wildlife resources, particularly those considered sensitive (concentrating on listed species); shall determine if the stream is in Category 1, 2, 3, 4,

or 5 based on the Category definitions provided in this permit (see Attachment A); and shall explain the rationale in the assessment form. If maintenance activities are proposed in Category 3, 4 or 5 channels, applicable measures will be identified by the qualified Biologist (see Special Conditions). If the activity would impact greater than 0.05 acre per 500 feet of Category 5 vegetation, or as otherwise agreed to by the resource agencies, the activity may not be authorized by this Maintenance Agreement and may be required to obtain a separate authorization. Impacts over 0.05 acres per 500 linear feet may be authorized with appropriate mitigation and minimization measures, at the discretion of the resource agencies, if the activity is determined otherwise consistent with the terms of the Maintenance Agreement.

- 2.2 Biological Surveys in Appropriate Habitat Prior to Maintenance Activities. Prior to any sediment removal, vegetation control (by herbicide application, mowing, or disking), or repair work in channels or flood management basins that contain habitat suitable for fish and wildlife resources (i.e., Category 2, 3, 4, or 5 channels), the Permittee shall conduct appropriate field investigations to determine if any sensitive species have the potential to occur. This information, including the name and contact information of the qualified Biologist, shall be submitted to the resource agencies with the Annual Work Plan.
- 2.3 Pre-Project Wildlife Habitat Surveys. At least thirty (30) days prior to the commencement of any regulated activity within Category 2, 3, 4, or 5 channels, Permittee shall have a qualified Biologist perform wildlife habitat surveys. Data collected during the surveys shall include the following: a written description of the general habitat types occurring within the channel, identification of observed wildlife species, a list of sensitive species with potential to occur on-site, and a list of any Special Conditions that would apply. This information, along with copies of field notes taken during the surveys, shall be made available upon request from the resource agencies. The document can be in memorandum format and provided via email.
- 2.4 Pre-Project Vegetation Mapping. At least thirty (30) days prior to the commencement of any regulated activity, the Permittee shall have a qualified Biologist map vegetation in the portion of the channel where maintenance activities are proposed. Data collected during surveys shall include the following: vegetation mapping of the channel, list of dominant plant species in each vegetation type, categorization of the channel based on definitions in this permit (see Attachment A) with justification for the finding, potential for sensitive species to occur on-site, and a list of any applicable Special Conditions that would apply. This information, along with copies of field notes taken during the surveys, shall be made available upon request from the resource agencies. The document can be in memorandum format and provided via email.
- 2.5 Photo-Documentation. Prior to commencement of work within the channel, Permittee shall take representative photographs of the proposed work area and associated habitat. Spatial information shall be provided with each photograph (photo point location). Upon completion of maintenance activities, Permittee shall photograph the work area from the same identified photo points, as described above. This information shall be made available to the resource agencies upon request.

3. Reporting Measures

Permittee shall meet all reporting measures described below and submit to the resource agencies per the dates listed below, as summarized in Attachment B.

3.1 Annual Work Plan. Permittee shall submit a Draft Annual Work Plan (AWP) to the resource agencies by May 1 of each year describing all maintenance projects proposed for the following year. The plan shall include the following information for each proposed work site:

- a. Identification of the channel and specific location of the work area within the channel, including aerial views of the site;
- b. Identification of channel categories within and adjacent to the work area;
- c. Acreage of Category 3, 4, or 5 vegetation within the channel that would be impacted by the proposed maintenance activities;
- d. Approximate volumes of types of material(s), that will be removed from and/or deposited within the channel;
- e. Site-specific measures (i.e., Special Conditions) recommended by a qualified Biologist to be implemented prior to and during maintenance activities to avoid and minimize impacts to the extent practicable;
- f. Pre-project photo-documentation; and
- g. For Category 4 and 5 channels, the proposed restoration approach and a description of active restoration as described in the Restoration and Monitoring Plan.

Upon receipt of the Draft AWP, the resource agencies shall have 30 calendar days to respond with any objections they may have to the proposed maintenance activities or stream category determinations stated in the Draft AWP. Any maintenance activities or stream category determinations for which agency objections have not been resolved within 30 calendar days of receipt of the Draft AWP shall be omitted from the Draft AWP. OCPW shall issue to the resource agencies a Final AWP containing the maintenance activities and stream category determinations for which the resource agencies have no objections no earlier than 31 calendar days after the date of issuance of the Draft AWP but no later than June 14 of each year.

The Final AWP shall be authorized only after OCPW has obtained a formal response from the SWRCB. If the SWRCB has no objections to the Final AWP, SWRCB shall issue a Notice of Applicability (NOA) to OCPW verifying the acceptability of the Final AWP. If the SWRCB objects to one or more maintenance activities or stream category determinations, SWRCB shall issue a Notice of Exclusion (NOE) to OCPW documenting these objections. Any activities objected to in the NOE shall be excluded from the Authorized AWP. If the SWRCB does not issue an NOA or NOE to OCPW 60 calendar days after receipt of the Draft AWP, then OCPW may presume that SWRCB does not object to the AWP and may proceed with the activities included in the Final AWP.

Additional work within approved waterbodies or bridges can be added to the Final Annual Work Plan throughout the year, as needed, through written requests to the resource agencies. Agencies shall have 30 calendar days to respond with any objections they may have to the proposed additional maintenance activities or stream category determinations. If, after 30 calendar days, any agency has not responded to the request with questions or concerns, the activity will be deemed authorized and OCPW can proceed with the activity, as proposed, including implementation of proposed mitigation. If any agency objects to the additional activities within the first 30 days, OCPW and the agency will have a further 30 days to resolve concerns. If OCPW and the agency cannot agree on an acceptable solution, OCPW will withdraw the activity from the AWP.

Maintenance projects approved under an AWP are authorized for a period of 18 months from approval of the AWP to align with the County of Orange maintenance funding cycles, or until the expiration of the RGP. Work authorized, but not completed, within the period covered by an AWP must be reauthorized under a subsequent AWP.

- 3.2 Annual Report. Permittee shall submit an Annual Report to the resource agencies by September 1 of each year. The report shall include the following:
- a. A list of completed maintenance projects, categorized by AWP approval year and including those added to the AWP over the year. The Annual Report shall verify that all maintenance activities were conducted in accordance with the applicable permit conditions, including implementation of applicable Special Conditions. If there were any differences between proposed impacts identified in the AWP versus actual impacts, the Annual Report shall explain the reason for the difference. Information included for completed maintenance projects shall include the same information required in the AWP (described above).
 - b. Pre-activity biological survey data (as described above) for maintenance activities included in the Annual Report.
 - c. Annual Monitoring Report that describes monitoring of passive and active restoration activities, list by AWP approval year. Monitoring reports shall include a description of the revegetation with respect to established performance criteria, representative photographs taken from designated photo points, remedial measures implemented, or planned to be implemented, if necessary, to ensure revegetation success. Annual Monitoring Reports for each applicable maintenance project shall be included in the Annual Report until the success criteria have been achieved.
 - d. For projects where compensatory mitigation was required, the Annual Report shall quantify the impacts to resources and list the approved mitigation ratio. Where mitigation has taken place at a mitigation bank, details of the secured bank credits will be included. Where mitigation has occurred at an off-site mitigation site, the Permittee shall demonstrate that a long-term protection mechanism has been placed over the mitigation site.

- e. An evaluation of the success or failure of the avoidance and minimization measures implemented, and suggestions for improving them for future maintenance activities.
- 3.3 Notification Prior to Work. Covered maintenance activities identified in Table 3 of the Project Description, when performed within Category 1 and Category 2 channels, shall not require further notice to the resource agencies. Covered maintenance activities within Category 3, 4, or 5 channels require Permittee to notify the resource agencies, in writing, at least 30 days prior to initiation of maintenance activities. A notice to proceed would be required in writing (email or letter) from USACE for covered maintenance activities within a Category 3, 4, or 5 channels prior to regulated activities within waters of the United States.
- 3.4 Crossing Maintenance Report. When maintenance is proposed at a stream crossing or its associated structure(s), Permittee shall submit a Crossing Maintenance Report (CMR) to the resource agencies. The CMR shall be submitted at least 30 days prior to any work at the crossing. The CMR shall include the following: identification of proposed activities; existing conditions within the vicinity; information regarding previous Notifications or Notifications of Emergency Work near the stream crossing; recommended measures to protect fish and wildlife resources; a determination regarding the adequacy of the stream crossing to pass peak flows without increasing flow velocities; and information regarding the stream crossing's compliance with Fish and Game Code sections 5901 (fish passage) and 5937 (sufficient water for fish).
- 3.5 Sensitive Species Observations. Permittee shall be responsible for reporting all observations of Threatened/Endangered species or of species of special concern to CDFW's CNDDDB within ten (10) days of sighting.