



U.S. ARMY CORPS OF ENGINEERS LOS ANGELES DISTRICT **BUILDING STRONG®** 

**APPLICATION FOR PERMIT** 

# Programmatic Individual Permit for Maintenance Activities at the Vern Freeman Diversion Facility

Public Notice/Application No.: SPL-2013-00171-EBR
Project: Vern Freeman Diversion Facility Maintenance Permit
Comment Period: July 31, 2019 through August 31, 2019
Project Manager: Emma Ross; (805) 350-4157; <u>emma.b.ross@usace.army.mil</u>

# Applicant

Evan Lashly United Water Conservation District 106 N. 8th Street Santa Paula, California 93060 Contact

Eric Schaad Rincon Consultants, Inc. 180 N. Ashwood Avenue Ventura, California 93003

# Location

At the Vern Freeman Diversion Facility on the Santa Clara River, near the community of Saticoy, Ventura County, CA (at: 34.299, -119.108).

# <u>Activity</u>

To conduct routine maintenance activities at the Vern Freeman Diversion Facility in association with Vern Freeman Diversion Facility Maintenance Permit (see attached drawings). For more information see page 4 of this notice.

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. Comments should be mailed to:

U.S. Army Corps of Engineers Ventura Field Office 60 South California Street, Suite 201 Ventura, CA 93001-2598 Attn: SPL-2013-171-EBR

Alternatively, comments can be sent electronically to: emma.b.ross@usace.army.mil.

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**

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

<u>Water Quality</u>- The applicant is required to obtain water quality certification, under Section 401 of the Clean Water Act, from the California Regional Water Quality Control Board. Section 401 requires any applicant for an individual Section 404 permit provide proof of water quality certification to the Corps of Engineers prior to permit issuance. For any proposed activity on Tribal land that is subject to Section 404 jurisdiction, the applicant will be required to obtain water quality certification from the U.S. Environmental Protection Agency.

<u>Coastal Zone Management</u>- This project is located outside the coastal zone and preliminary review indicates it would not affect coastal zone resources. After a review of the comments received on this public notice and in consultation with the California Coastal Commission, the Corps will make a final determination of whether this project affects coastal zone resources after review of the comments received on this Public Notice.

**Essential Fish Habitat**- The Corps of Engineers preliminary determination indicates the proposed activity would not adversely affect EFH. Therefore, formal consultation under Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) is not required at this time.

<u>Cultural Resources</u>- The latest version of the National Register of Historic Places has been consulted and this site is not listed. This review constitutes the extent of cultural resources investigations by the District Engineer, and he is otherwise unaware of the presence of such resources. The area covered by the proposed permit is confined to active channel bottom and areas of previous disturbance associated with the construction of the facility. As such there is little likelihood of previously unknown cultural resources to be present within the project site.

Endangered Species- The project site supports suitable habitat for four federally listed endangered and threatened species: least Bell's vireo (Vireo bellii pusillus), southwestern willow flycatcher (Empidonax traillii extimus), western yellow-billed cuckoo (Coccyzus americanus occidentalis) and southern steelhead trout (Oncorhynchus mykiss). Additionally, the project site also includes designated critical habitat for both the flycatcher and steelhead trout. Habitat for the vireo and flycatcher is generally confined to areas of dense riparian vegetation, which is predominantly found extending upstream of the diversion dam along the right descending bank of the river and the adjacent floodplain. Areas of open water with sufficient depth (generally greater than 6") provide migratory habitat for steelhead trout, both for upstream-migrating adults and downstream-migrating smolts. The project area is not known to provide spawning habitat for steelhead trout, which is concentrated in upstream tributaries. The Freeman Diversion includes a fish ladder to facilitate passage of migrating steelhead trout. A plan to replace the existing ladder with a new fish passage facility is currently being developed by United Water Conservation District (UWCD), as well as other possible design alternatives that are being evaluated. The new facility would be subject to a separate Corps permit authorization, however the permit may be amended at a future date to incorporate maintenance activities associated with the new facility (if constructed).

Maintenance activities authorized under the proposed permit, including activities such as surface water diversions and vegetation removal, could result in direct and indirect disturbance to endangered species

and their associated habitat. UWCD would implement construction activities during periods when federally listed species are absent from the work area to the maximum extent practicable, however unforeseen maintenance needs during periods when these species may be present could occur. Based on a review of the existing conditions within the project area and the scope of the proposed maintenance activities, including proposed measures to avoid and minimize adverse effects to federally listed endangered species, the Corps has determined the proposed action may adversely affect each of the above-described endangered species and will initiate formal consultation pursuant to Section 7 of the Endangered Species Act with the U.S. Fish & Wildlife Service to address effects to the vireo, cuckoo, and flycatcher, and the National Marine Fisheries Service to address effects to steelhead trout.

<u>Public Hearing</u>- 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

<u>Basic Project Purpose</u>- 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). Portions of the work area support wetlands associated with the Santa Clara River, particularly upstream of the diversion dam. The basic project purpose for the proposed project is maintenance of a water diversion facility, which is water dependent.

<u>Overall Project Purpose</u>- 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 conduct routine maintenance operations of the Vern Freeman Diversion Facility and its appurtenant structures.

#### Additional Project Information

<u>Baseline information-</u> The Freeman Diversion Facility was constructed in 1991, to provide water for groundwater recharge and help mitigate the effects of saltwater intrusion in the Oxnard Plain (Figure 1). The facility consists of a low, roller compacted concrete dam approximately 20 feet high, which spans the width of the Santa Clara River (approximately 1,200 feet). The diversion inlet and fish ladder are located on the southerly end of the diversion dam. Surface flows are diverted into a system of canals, which in turn deliver the water to pipelines and percolation basins on the Oxnard Plain. Flood flows in excess of the facility's capacity to divert spill over the diversion dam and continue downstream.

The diversion facility detains surface and subsurface flows on the Santa Clara River behind the dam, which in turn has resulted in the development of extensive stands of riparian habitat dominated by willow (*Salix* sp.). Existing habitat surrounding the diversion facility includes areas of shallow, openwater habitat with dense stands of willow-riparian habitat (Figure 5).

<u>Project description-</u> The programmatic individual permit would authorize the routine maintenance activities described below for a period of ten years (Figure 2). The maintenance activities proposed are not intended to alter the established diversion operations, but to ensure the facility is functioning as designed and to meet safety requirements. No maintenance work that would change the character,

size, or extent of structural features associated with the diversion facility would be authorized under this permit. Notification to the Corps would be required prior to conducting maintenance work under the proposed permit. The permit would be subject to renewal after the ten-year period based on an assessment of its effectiveness and verification that the maintenance activities do not result in more than minimal effects on the aquatic environment, either individually or cumulatively. A previous regional general permit (RGP) was issued in April 2014 covering a similar scope of activities, which expired in March 2019. The Corps was notified of the 2014 reissuance of the RGP being used once in September 2014 (SPL-2014-00583-AJS). Two amendments were made to the 2014 reissued RGP in 2015 and are explained below. Based on a review of maintenance activities conducted under the previous RGP, these actions resulted in minor temporary impacts to waters of the U.S.

Maintenance activities at the Freeman Diversion consist of maintenance work upstream and downstream of the diversion in the Santa Clara River. The maintenance work would include routine maintenance at facility structures, access roads and the right of way. Maintenance work would also include occasional in-channel sediment control and repair to rip rap damage caused by winter storms (Figure 2). Routine maintenance of the facility and its access points is necessary for the continued operation of the Freeman Diversion. Additionally, damage to bank stabilization materials such as rip rap can severely inhibit United's operations by destabilizing the banks and posing a threat to the integrity of the diversion structure. Sediment build-up can also obstruct flows over the diversion, preventing accuracy in the flow measurements necessary for compliance with the Amended Judgment and Permanent Injunction issued in the case of *Wishtoyo et al. vs United Water Conservation District* [CV 16-3869-DOC (PLAx)] (court order). The maintenance activities required for the project include the following:

## Flow Rerouting and Dewatering

Flow rerouting and dewatering may be necessary to facilitate in-channel maintenance work and annual headworks maintenance and repair. In general, in-channel maintenance work (e.g. rip rap repair, sediment control) is planned for the dry part of the year when little to no water is flowing at the Freeman Diversion. However, if water is still present at the diversion or an emergency (i.e. large storm event) necessitates that in-channel work occur when water is present in the channel, flow rerouting and dewatering of the upstream and/or downstream in-channel maintenance footprint would be required to protect water quality and biological resources on the site. Additionally, annual headworks maintenance and repair is required on specific facility components (e.g. annual testing/operation, lubrication, repair, and calibration of the roller gate, fish ladder gates, head control gates, and canal gates) to ensure proper functionality. Maintenance of the gates also promotes gate reliability, optimizing UWCD's ability to remain in compliance with the court order regarding prescribed bypass flows. Annual headworks maintenance is planned for the dry part of the year (may vary depending on annual rainfall events) and typically requires dewatering of the impounded area upstream of the facility but may also require flow rerouting. The location and extent of surface water present on the site would dictate the specifics of dewatering activities. Work requiring dewatering activities would be scheduled to overlap to the maximum extent possible, to minimize maintenance activity impacts to sensitive resources.

## Downstream

Downstream flow rerouting would consist of excavating material from an in-channel "borrow site" to establish a temporary obstacle to water flow within the downstream maintenance footprint using earthen berms and pumps. The dimensions of the borrow site would be a maximum of 100 feet by 150 feet by 4 feet. To facilitate downstream dewatering, a small drainage channel may need to be

excavated directly north of the borrow site. Drainage channel dimensions would be a maximum of 400 feet by 4 feet by 2 feet. Dewatering would occur at a rate of less than 2 inches per hour, or rapidly into a downstream pool, depending on site conditions. Dewatering is not expected to be necessary more than once every year and is expected to take approximately one to two days.

Equipment used to build the temporary diversion and drainage channel would include an excavator, bulldozer, front-end loader, and skid steer, which would access the downstream maintenance footprint via an existing road that utilizes UWCD's 15-foot maintenance right of way (Access Road C). The maximum area of temporary impact would be approximately 2.22 acres. After downstream maintenance work is completed, the temporary drainage area and borrow site may be re-graded to contours that promote a more defined channel downstream of the entrance of the Denil fish ladder.

#### Upstream

Upstream flow rerouting would take approximately six days and consist of the development of an earthen berm diversion upstream of the diversion structure with a disturbance footprint of approximately 250 feet by 6 feet (1,500 square feet). The earthen berm would be constructed using native streambed material and potentially the use of materials such as concrete blocks, sandbags, plywood, block netting, and corrugated plastic pipe. Equipment used to build the temporary diversion would include an excavator, bulldozer, front-end loader, and skid steer. This temporary diversion would collect and impound any residual surface flow present following dewatering, which would then be pumped around the work site into United's facilities or over the diversion crest to facilitate dewatering of the upstream maintenance footprint. Dewatering would not exceed a drop of 2 inches per hour in surface water elevation. The maximum area of temporary impact would be approximately four acres. After upstream maintenance work is completed, the temporary diversion would be removed, and the channel would be contoured to conditions that promote flows moving toward the headworks and Denil fish ladder exit gate.

### <u>Rip-Rap Repair</u>

UWCD uses rip rap to stabilize the banks of the Santa Clara River near the Freeman Diversion to prevent erosion and control sediment deposition in the river. High flows during winter storms may damage rip rap near the diversion over time, necessitating repair activities approximately once every three years depending on winter storm severity that may take up to eight working days to complete. Downstream rip rap repair is planned within a 100-foot by 150-foot boundary (the repair site) with a 15-foot installation height, immediately downstream of the Freeman Diversion and within the river channel. Repair would involve importing new, purchased, 3- to 4-ton, rip rap rock, and would necessitate the use of heavy equipment in the river channel. Equipment used on the repair site in-channel may include a crane, excavator, and front-end loader. Immediately downstream of the diversion facility, a "borrow site" would be established in-channel, from which materials would be excavated to build a stable work pad within the repair site to facilitate rip rap placement. Excavation dimensions for the borrow site would be a maximum of 100 feet by 150 feet by 4 feet. Excavation equipment used in the borrow site may include an excavator, mini excavator, or bulldozer. Access would be provided by a downstream access road that utilizes UWCD's 15-foot right-of-way and would be cleared and graded to the channel (Access Road C). In addition, a small temporary access area (15 feet by 50 feet) would be established between the repair site and the borrow site to accommodate the movement of equipment between the two sites. Staging would be located in the existing operational area (Staging Area 3). After excavation, a bulldozer would be used to recontour the borrow site to pre-activity conditions.

Repair is planned for when the channel is dry, but if work must occur when the channel is wet, dewatering of the repair site would be conducted according to the downstream dewatering

procedure (Section 2.1.1). If a drainage channel must be excavated east of the repair site due to flowing downstream water, another temporary access area (15 feet by 150 feet) would be established between the drainage channel and the repair site.

## In-Channel Sediment Control

Sediment control is necessary when high flow events result in channel reformation through deposition or scour above or below the Freeman Diversion. This redistribution of sediment may shift the thalweg of the river away from the facility, or otherwise interfere with UWCD's operations. Inchannel sediment deposit recontouring would occur immediately upstream and downstream of the Freeman Diversion, approximately once every three years. The maximum disturbance areas are approximately 40 feet by 90 feet by 2 feet (downstream) and 100 feet by 600 feet by 2 foot (upstream) for a maximum total of 4,710 cubic yards. Recontouring activity includes excavation of accumulated sediment near the fish ladder entrance or exit gates, establishing a low-flow channel to or from the bypass channel or grading to redistribute deposits that interfere with flows adjacent to the facility. These activities may involve the use of a grader, excavator, front-end loader, dump truck, bulldozer, or skid-steer loader within the channel. These activities are planned to occur only when the channel is dry, but if work must occur when the channel is wet, United would implement upstream or downstream flow rerouting and dewatering described above.

The riverbed upstream of the diversion can be accessed to conduct these activities from two points: Access Road A and Access Road B. Access Road A is located at the north abutment of the Freeman Diversion, along the top of the diversion crest. Staging for this access point would occur near the north abutment of the Freeman Diversion along or adjacent to the levee in already permanently disturbed areas (Staging Area 1). Access Road B is located on the south side of the river channel near the diversion structure and connected to the 15-foot maintenance right of way and may require clearing of emergent vegetation within the right of way. Staging for this site would be located on the already permanently disturbed entrance to Access Road B, south of the diversion channel (Staging Area 2). Downstream access is provided by Access Road C and staging would be located in Staging Area 3.

# Vegetation Control

Vegetation control at engineered structures, access roads, and along the right of way is necessary to prevent damage to the Freeman Diversion facility and maintain visibility for inspection and access. Vegetation removal would be accomplished through herbicide application, manual clearance involving hand tools and heavy equipment, and would utilize Access Roads A, B, and C, as well as the Canal Access Road. Staging would be located on the permanently disturbed existing operational area. Vegetation removal involving herbicide application would be conducted quarterly, while mechanical removal would be conducted annually and would involve removing young, non-native vegetation that has established since the last round of removal. The duration of vegetation control activities will be dependent upon the amount of recolonization that occurs in cleared areas, but each event is generally expected to be completed in three days or less. The impact area includes a 15-foot area surrounding all engineered structures in the riverbed, including both sides of the roller- compacted concrete (RCC) dam (1,175 linear feet), the toe of rip rap and desilting basin (5170 linear feet), the 15-foot upstream right-of-way (175 linear feet), access areas, levee walls, and bank stabilization structures, for a maximum disturbance area of approximately 2.6 acres. Access would be provided by Access Roads A, B, C, and Canal Access Road. Staging would be located at Staging Areas 1, 2, and 3. Necessary equipment for vegetation removal would include a Caterpillar D6 bulldozer (eight-foot blade width), excavator, hand tools, and herbicide materials. Vegetation control would only be conducted in areas where the channel is dry and manual removal would only be conducted outside nesting bird season (September 15 to February 15), and would not result in dewatering or additional water diversion activities.

## <u>Access Road Maintenance</u>

Access Road maintenance would include vegetation clearing (as detailed above) and road grading, recontouring, compaction, and fill to prevent erosion and ensure UWCD access to all structures at the Freeman Diversion. Road grading is expected to occur annually when needed and would take approximately three working days to complete. Access road maintenance would necessitate the use of a grader, front-end loader, dump truck, and excavator. Staging areas for the work would be located on the already permanently disturbed entrance areas to the access roads and would not impact the river channel.

<u>Proposed Mitigation</u>– 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: Complete avoidance of waters of the United States is not possible in light of the fact that the facility is a water diversion within the Santa Clara River, the maintenance of which would necessitate encroachment into the river to accomplish.

Minimization: Minimization measures would include seasonal restrictions to avoid affecting federally listed species and nesting birds to the maximum extent practicable, confining vegetation removal to the minimum width necessary to protect structures and allow visual inspection, conducting surveys for federally listed bird species prior to any authorized work conducted during the nesting season.

Compensation: Compensatory mitigation is not proposed at this time. The proposed permit would authorize the continuation of maintenance activities that have historically been conducted by UWCD. Mitigation for the construction of the Freeman Diversion, was previously implemented by UWCD. Compensatory mitigation may be required for non-routine repair activities that result in impacts to aquatic resources beyond the scope of typically routine actions. In such cases the need for any compensatory mitigation would be considered on a case-by-case basis at the time work is proposed.

## Proposed Special Conditions

Special conditions will be developed in part based on the outcome of consultations with the U.S. Fish & Wildlife Service and National Marine Fisheries Service addressing avoidance and minimization of effects to federally listed endangered species.

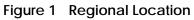
For additional information please call Emma Ross of my staff at (805) 350-4157 or via e-mail at <u>emma.b.ross@usace.army.mil</u>. This public notice is issued by the Chief, Regulatory Division.



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.

DEPARTMENT OF THE ARMY LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS 60 S California Street, Suite 201 Ventura, CA 93001-2598 WWW.SPL.USACE.ARMY.MIL/MISSIONS/REGULATORY



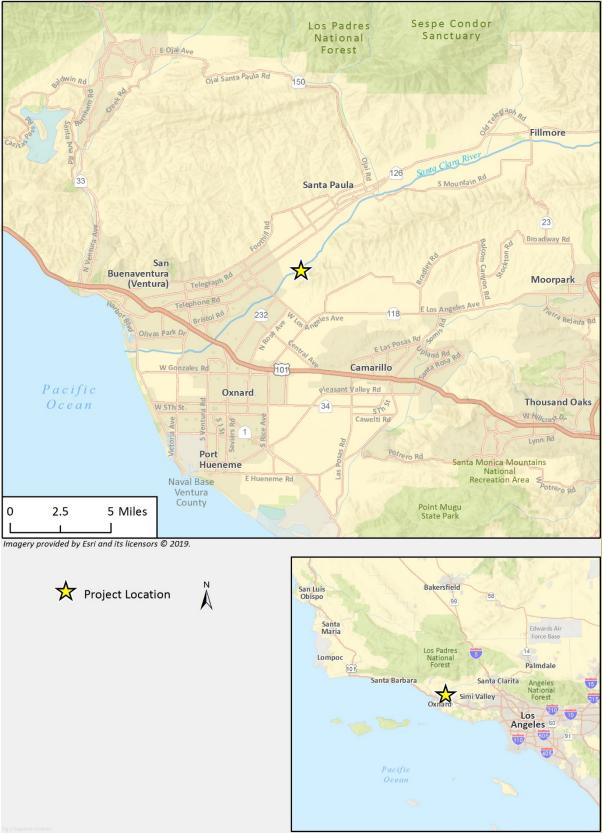
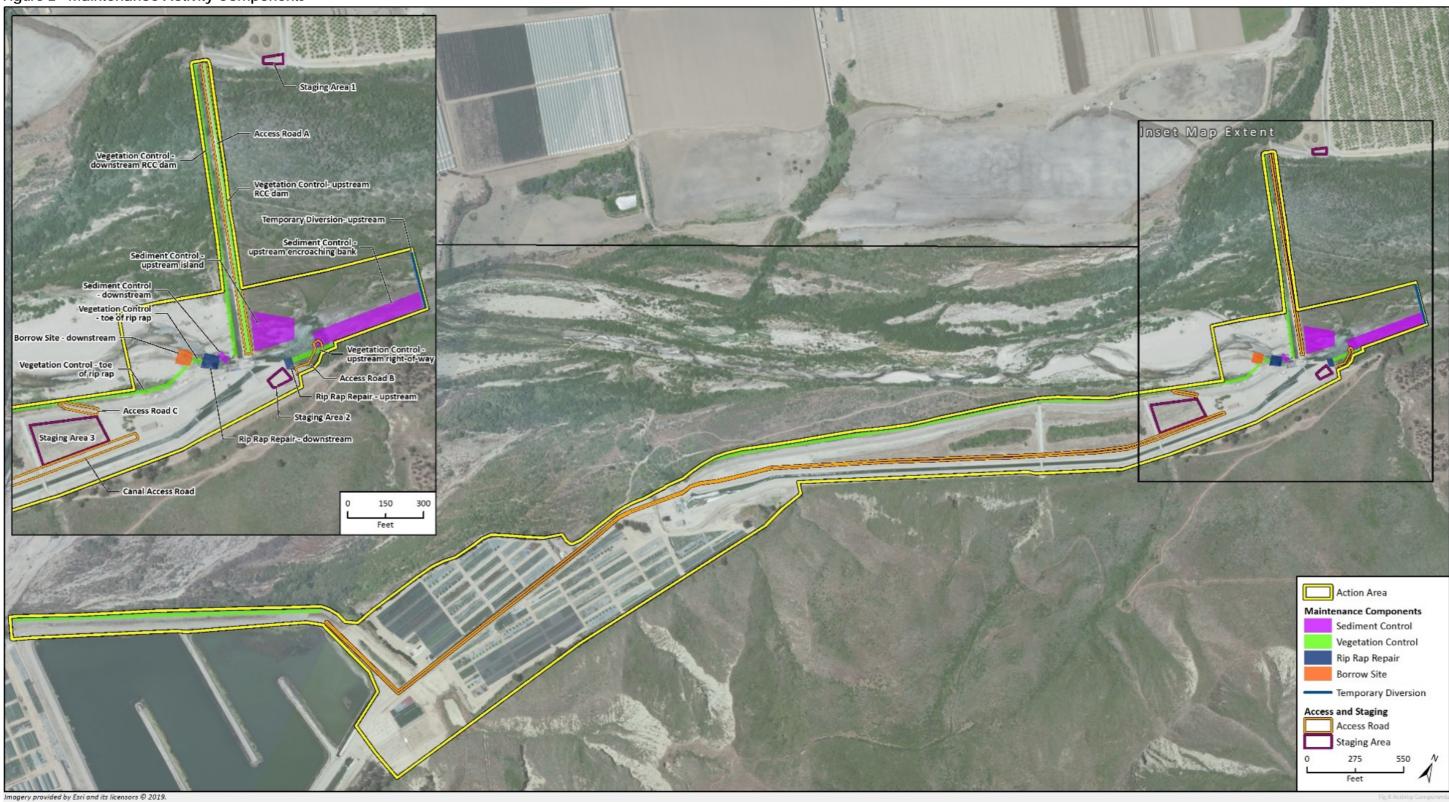


Figure 2 Maintenance Activity Components



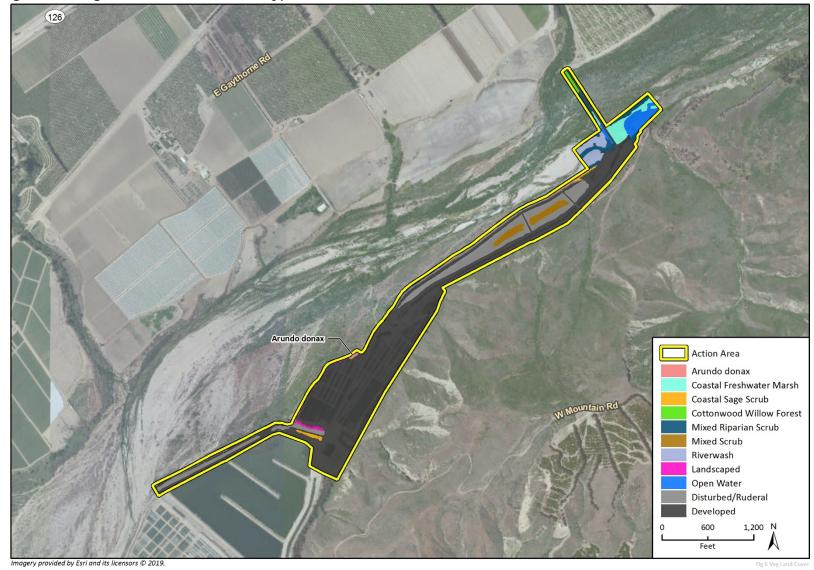


Figure 5 Vegetation and Land Cover Types