

## San Diego Regional Water Quality Control Board

August 8, 2016

**Certified Mail – Return Receipt Requested**

Article Number: 7011 0470 0002 8952 8318

Ms. Gail Getz  
County of San Diego  
Department of Public Works  
5510 Overland Avenue  
Suite 410  
San Diego, CA 92123-1239

**In reply/refer to:  
R9-2016-0119:823855:mporter**

**Subject: Clean Water Act Section 401 Water Quality Certification  
No. R9-2016-0119 for the Keys Creek Channel Access  
and Maintenance Project**

Ms. Getz:

Enclosed find Clean Water Act Section 401 Water Quality Certification No. R9-2016-0119 (Certification) issued by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board ) in response to the application submitted by the County of San Diego for the Keys Creek Channel Access and Maintenance Project (Project). A description of the Project and Project location can be found in the Certification and site maps which are included as attachments to the Certification.

The County of San Diego is enrolled under State Water Resources Control Board Order No. 2003-017-DWQ as a condition of the Certification and is required to implement and comply with all terms and conditions of the Certification in order to ensure that water quality standards are met for the protection of wetlands and other aquatic resources. Failure to comply with this Certification may subject the County of San Diego to enforcement actions by the San Diego Water Board including administrative enforcement orders requiring the County of San Diego to cease and desist from violations or to clean up waste and abate existing or threatened conditions of pollution or nuisance; administrative civil liability in amounts of up to \$10,000 per day per violation; referral to the State Attorney General for injunctive relief; and, referral to the District Attorney for criminal prosecution.

Please submit all reports and information required under this Certification in electronic format via e-mail to [SanDiego@waterboards.ca.gov](mailto:SanDiego@waterboards.ca.gov). Documents over 50 megabytes will not be accepted via e-mail and must be placed on a disc and delivered to the San Diego Water Board, 2375 Northside Drive, San Diego, CA 92108. Each electronic document must be submitted as a single file, in Portable Document Format (PDF), and converted to text searchable format using Optical Character Recognition (OCR). All electronic documents must include scanned copies of all signature pages; electronic signatures will not be accepted.

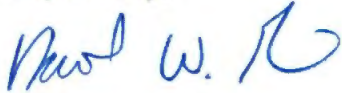
HENRY ABARBANEL, PH.D, CHAIR | DAVID GIBSON, EXECUTIVE OFFICER

2375 Northside Drive, Suite 100, San Diego, California 92108-2700 | [www.waterboards.ca.gov/sandiego](http://www.waterboards.ca.gov/sandiego)

Electronic documents submitted to the San Diego Water Board must include the following identification numbers in the header or subject line: Certification No. R9-2016-0119: 823855:mporter.

For questions or comments regarding the Certification, please contact Mike Porter at (619) 521-3967 or at Mike.Porter@waterboards.ca.gov.

Respectfully,



DAVID W. GIBSON  
Executive Officer  
San Diego Regional Water Quality Control Board

Enclosure:

Clean Water Act Section 401 Water Quality Certification No. R9-2016-0119 for the Keys Creek Channel Access and Maintenance Project

DWG:jgs:eb:mgp

cc:

Ms. Meris Guerrero  
Project Manager  
Carlsbad Field Office  
U.S. Army Corps of Engineers, Regulatory Branch  
Melanie.b.tymes@usace.army.mil

State Water Resources Control Board  
Division of Water Quality  
401 Water Quality Certification and Wetlands Unit  
Stateboard401@waterboards.ca.gov

U.S. EPA, OWOW, Region 9  
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Mr. Eric Becker  
San Diego Water Board  
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Tech Staff Information	
Certification No.	R9-2016-0119
Party ID	11763
Reg. Meas. ID	405712
Place ID	823855
Person ID	549370
WDID	9000003046

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION**

2375 Northside Drive, Suite 100, San Diego, CA 92108  
Phone (619) 516-1990 • Fax (619) 516-1994  
<http://www.waterboards.ca.gov/sandiego/>

Clean Water Act Section 401 Water Quality Certification  
and  
Waste Discharge Requirements  
for  
Discharge of Dredged and/or Fill Materials

**PROJECT: Keys Creek Channel Access and  
Maintenance Project  
Certification Number R9-2016-0119  
WDID 9000003046**

Reg. Meas. ID: 405712 Place ID: 823855 Party ID: 11763 Person ID: 549370
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**APPLICANT: County of San Diego, Department of Public Works  
5510 Overland Avenue  
San Diego, CA 92123**

**ACTION:**

<input type="checkbox"/> Order for Low Impact Certification	<input type="checkbox"/> Order for Denial of Certification
<input checked="" type="checkbox"/> Order for Technically-conditioned Certification	<input type="checkbox"/> Enrollment in Isolated Waters Order No. 2004-004-DWQ
<input checked="" type="checkbox"/> Enrollment in SWRCB GWDR Order No. 2003-017-DWQ	

**PROJECT DESCRIPTION**

An application dated April 7, 2016 was submitted by County of San Diego, Department of Public Works (hereinafter Applicant), for Water Quality Certification pursuant to section 401 of the Clean Water Act (United States Code (USC) Title 33, section 1341) for the proposed Keys Creek Channel Access and Maintenance Project (Project). The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) deemed the application to be complete on May 12, 2016. The Applicant proposes to discharge dredged or fill material to waters of the United States and/or State associated with construction activity at the Project site. The Applicant has also applied for a Clean Water Act section 404 permit from the United States Army Corps of Engineers for the Project (USACE File No. SPL-2014-00199-MG).

The Project is located within the unincorporated community of Bonsall, San Diego County, California, within the engineered flood control channel just south of where the Dulin Road bridge crosses over Keys Creek. The Project center reading is located at latitude 33° 19' 15" and longitude -117° 09' 17". The Applicant has paid all required application fees for this Certification in the amount of \$28,350.00. On an annual basis, the Applicant shall also pay all

active discharge fees and post discharge monitoring fees, as appropriate<sup>1</sup>. On June 15, 2016, the San Diego Water Board provided public notice of the Project application pursuant to California Code of Regulations, title 23, section 3858 by posting information describing the Project on the San Diego Water Board's web site and providing a period of twenty-one days for public review and comment. No comments were received.

The Applicant proposes to maintain flood channel capacity and manage riparian/wetland habitats in Keys Creek, a tributary to the nearby San Luis Rey River. The activities proposed to achieve those two project goals are described in the *Adaptive Management Plan (AMP) for the Key's Creek Flood Control Channel*, dated April 6, 2016.

The AMP integrates management of the channel for both biological resources and flood control. The AMP describes the project strategies for management of the channel for flood conveyance in a manner that preserves the biological integrity of the stream. It also details specific project activities for management of the channel for jurisdictional wetlands and waters, sensitive vegetation communities, and sensitive wildlife species.

The project is separated into three activities: access ramps construction; flood control maintenance activities; and habitat management activities.

**1. One-time Construction of Access Ramps:**

- Construct two access ramps with integrated sediment depth markers.
- Mitigate for all permanent impacts off-site.
- Restore all temporary impacts on-site.

**2. Flood Control Maintenance Activities:**

Flood control maintenance activities include the removal of excessive sediment and vegetation removal/trimming. These activities are tiered in five levels from least amount of sediment and vegetation removal (Tier 1) to the maximum amount of sediment and vegetation removal (Tier 5). The goal is that flood control capacity can be achieved and maintained with just Tier 1 activities. If Tier 1 activities are not sufficient to maintain channel capacity, then flood control maintenance activities will progress through the Tiers until channel capacity is achieved.

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<sup>1</sup> The Applicant shall pay an annual active discharge fee each fiscal year or portion of a fiscal year during which discharges occur until the regional board or the State Board issues a Notice of Completion of Discharges Letter to the discharger. Dischargers shall pay an annual post-discharge monitoring fee each fiscal year or portion of a fiscal year commencing with the first fiscal year following the fiscal year in which the regional board or State Board issued a Notice of Completion of Discharges Letter to the discharger, but continued water quality monitoring or compensatory mitigation monitoring is required. Dischargers shall pay the annual post-discharge monitoring fee each fiscal year until the regional board or the State Board issues a Notice of Project Complete Letter to the discharger. Additional information regarding fees can be found electronically at the following location: [http://www.waterboards.ca.gov/water\\_issues/programs/cwa401/docs/dredgefillcalculator.xlsx](http://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/dredgefillcalculator.xlsx)

### Tier 1 – Preventative Maintenance

- Remove all sediment and debris from the concrete low-flow channel semi-annually.
- Trim vegetation along both sides of the low-flow channel to no lower than 18-inches in height.
- Conduct preventative maintenance sediment removal in the high-flow channel where equipment can access without removal of vegetation; some flattening of vegetation would occur.
- Selective pruning or “limbing up” of trees.
- Access ramp maintenance.

### Tier 2

- All maintenance within Tier 1.
- Remove sediment from a 20-foot swath adjacent to the low-flow channel.
- Regular Maintenance Areas would be mitigated at a 2:1 mitigation ratio if the mitigation site is considered establishment/re-establishment, a 2:1 ratio for restoration/rehabilitation, and at 2:1 ratio for enhancement.

### Tier 3

- All maintenance within Tiers 1 and 2.
- Remove sediment from a 30-foot-wide swath adjacent to the low-flow channel.
- Regular maintenance areas would be mitigated one time as summarized for Tier 2.

### Tier 4

- All maintenance within Tiers 1, 2, and 3
- Remove sediment from a 40-foot wide swath adjacent to the low-flow channel.
- Regular maintenance areas would be mitigated one time as summarized for Tier 2

### Tier 5

- All maintenance within Tiers 1, 2, 3 and 4.
- Remove sediment from the entire width of an approximately 400-foot swath at the upstream end of the engineered channel.
- Regular maintenance areas would be mitigated one time as summarized for Tier 2.

Single-Event Maintenance Option for Tiers 2–5

- Implementation of a particular maintenance tier as a single event.
- Implemented if urgently needed and/or the need for continued maintenance at the chosen tier is not foreseen.

**3. Habitat Management Activities** – Habitat and species management activities are the third key component of this AMP. The habitat and species management activities will also serve to monitor and minimize any adverse effects to federally listed species and their designated critical habitats. The County will be responsible for maintaining this land and its biological resources in perpetuity. Habitat management responsibilities include:

- Vegetation monitoring (qualitative): Annual one-day qualitative monitoring will be conducted to assess the status and quality of the vegetation on-site, assess native and non-native invasive plant cover, and identify any trespass issues.
- Vegetation monitoring (quantitative): Quantitative monitoring will be conducted every three years in the spring, using the relevé system of vegetation classification. A comprehensive plant inventory will be recorded at this time.
- Habitat maintenance: Perform necessary maintenance actions annually to restore the habitat based on the qualitative and quantitative monitoring assessments. This may include, for example, repairing fences, re-installing signs, and treatment of non-native invasive plants as needed.
- Wildlife Monitoring: All incidentally observed wildlife species detected during the annual vegetation monitoring site visits will be recorded, and the qualitative site assessment will include an evaluation of the habitat suitability for sensitive species. Focused surveys will be conducted for least Bell's vireo and Arroyo toad within one year before any construction or maintenance activities. Surveys for these species will be conducted in accordance with the most recent survey protocols provided by the U.S. Fish and Wildlife Service. If species are detected during focused surveys, a plan of action would be developed in consultation with the USACE and USFWS, which could include alterations to the survey schedule.
- Corrective action plans will be developed to address native vegetation or sensitive wildlife issues, as needed.

The Project application includes a description of the design objective, operation, and degree of treatment expected to be attained from equipment, facilities, or activities (including construction and post-construction BMPs) to treat waste and reduce runoff or other effluents which may be discharged. Compliance with the Certification conditions will help ensure that construction and post-construction discharges from the Project will not cause on-site or off-site



downstream erosion, damage to downstream properties, or otherwise damage stream habitats in violation of water quality standards in the *Water Quality Control Plan for the San Diego Basin (9)* (Basin Plan).

Project construction will permanently impact 2.266 acre (2100 linear feet) of wetland and non-wetland waters of the United States and/or State. Although there is expected to be a slight reduction in aquatic functions including energy dissipation, nutrient cycling, particulate retention and plant communities, the flood control maintenance would cause only a minimal affect to these functions. In addition, the maintenance would result in no net loss of aquatic resource area, no type conversion of aquatic vegetation/habitat, hydrology would be restored and tree canopy and aquatic habitat connectivity up- and down-stream would be retained. The Applicant reports that the Project purpose cannot be practically accomplished in a manner which would avoid or result in less adverse impacts to aquatic resources considering all potential practicable alternatives, such as the potential for alternate available locations, designs, reductions in size, configuration or density.

The Applicant reports that compensatory mitigation for the maximum, permanent loss of 2.266 acre of jurisdictional waters will be achieved through the enhancement and rehabilitation of 8.16 acres of wetland waters of the United States and State. All waters of the United States and State receiving temporary discharges of fill material will be restored upon removal of the fill. Mitigation for discharges of fill material to waters of the United States and/or State will be completed by the Applicant at Wilderness Gardens Preserve located in the Pauma hydrologic sub-area (HSA 903.22), and at a minimum compensation ratio of 3.6:1 (area mitigated:area impacted). Other mitigation sites may be used if maintenance impacts exceeds Tier 1 activities.

Detailed written specifications and work descriptions for the compensatory mitigation project including, but not limited to, the geographic boundaries of the project, timing, sequence, monitoring, maintenance, ecological success performance standards and provisions for long-term management and protection of the mitigation areas are described in the *Draft Final Conceptual Mitigation and Monitoring Plan for Keys Creek Flood Control Channel Maintenance and Habitat Management Project* (Mitigation Plan), dated July 14, 2015. San Diego Water Board acceptance of the Mitigation Plan applies only to the Project described in this Certification and must not be construed as approval for other current or future projects that are planning to use additional acreage at the site for mitigation. The Mitigation Plan is incorporated in this Certification by reference as if set forth herein. The Mitigation Plan provides for implementation of compensatory mitigation which offsets adverse water quality impacts attributed to the Project in a manner that protects and restores the abundance, types and conditions of aquatic resources and supports their beneficial uses. Implementation of the Mitigation Plan will reduce significant environmental impacts to resources within the San Diego Water Board's purview to a less than significant level. Based on all of these considerations, the Mitigation Plan will adequately compensate for the loss of beneficial uses and habitat within waters of the United States and/or State attributable to the Project.

It is anticipated that Tier 1 activities will be sufficient to maintain the designed flood channel capacity and will minimize impacts to Keys Creek. However, the proposed mitigation acreage is to compensate for the maximum impacts from Tier 5 activities. Three sites are being

considered for compensatory mitigation: Wilderness Gardens Preserve, San Luis Rey Mitigation Bank, and Lake Rancho Viejo Recreational Vehicle Site. The preferred site is Wilderness Gardens Preserve. If other site(s) are selected, an amendment to the Certification will be required.

All waters of the United States and/or State receiving temporary discharges of fill material will be restored upon removal of the fill.

Additional Project details are provided in Attachments 2 through 4 of this Certification.



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### Attachments:

- 1. Definitions**
- 2. Project Location Maps**
- 3. Project Site Plans**
- 4. CEQA Mitigation Monitoring and Reporting Program**

## I. STANDARD CONDITIONS

Pursuant to section 3860 of title 23 of the California Code of Regulations, the following three standard conditions apply to all water quality certification actions:

- A. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to section 13330 of the Water Code and chapter 28, article 6 (commencing with title 23, section 3867), of the California Code of Regulations.
- B. This Certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to California Code of Regulations title 23, section 3855 subdivision (b), and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
- C. This Certification action is conditioned upon total payment of any fee required under title 23, chapter 28 (commencing with section 3830) of California Code of Regulations and owed by the applicant.

## II. GENERAL CONDITIONS

- A. **Term of Certification.** Water Quality Certification No. R9-2016-0119 (Certification) shall expire upon a) the expiration or retraction of the Clean Water Act section 404 (33 USC Title 33, section 1344) permit issued by the U.S. Army Corps of Engineers for this Project, or b) five (5) years from the date of issuance of this Certification, whichever occurs first.
- B. **Duty to Comply.** The Applicant must comply with all conditions and requirements of this Certification. Any Certification noncompliance constitutes a violation of the Water Code and is grounds for enforcement action or Certification termination, revocation and reissuance, or modification.
- C. **General Waste Discharge Requirements.** The requirements of this Certification are enforceable through Water Quality Order No. 2003-0017-DWQ, *Statewide General Waste Discharge Requirements for Discharges of Dredged or Fill Material that have Received State Water Quality Certification* (Water Quality Order No. 2003-0017-DWQ). This provision shall apply irrespective of whether a) the federal permit for which the Certification was obtained is subsequently retracted or is expired, or b) the Certification is expired. Water Quality Order No. 2003-0017-DWQ is accessible at:

[http://www.waterboards.ca.gov/water\\_issues/programs/cwa401/docs/generalorders/go\\_wdr401regulated\\_projects.pdf](http://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/generalorders/go_wdr401regulated_projects.pdf).

**D. Project Conformance with Application.** All water quality protection measures and BMPs described in the application and supplemental information for water quality certification are incorporated by reference into this Certification as if fully stated herein. Notwithstanding any more specific conditions in this Certification, the Applicant shall construct, implement and comply with all water quality protection measures and BMPs described in the application and supplemental information. The conditions within this Certification shall supersede conflicting provisions within the application and supplemental information submitted as part of this Certification action.

**E. Project Conformance with Water Quality Control Plans or Policies.** Notwithstanding any more specific conditions in this Certification, the Project shall be constructed in a manner consistent with the Basin Plan and any other applicable water quality control plans or policies adopted or approved pursuant to the Porter Cologne Water Quality Act (Division 7, commencing with Water Code Section 13000) or section 303 of the Clean Water Act (33 USC section 1313). The Basin Plan is accessible at:

[http://www.waterboards.ca.gov/sandiego/water\\_issues/programs/basin\\_plan/index.shtml](http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml)

**F. Project Modification.** The Applicant must submit any changes to the Project, including Project operation, which would have a significant or material effect on the findings, conclusions, or conditions of this Certification, to the San Diego Water Board for prior review and written approval. If the San Diego Water Board is not notified of a significant change to the Project, it will be considered a violation of this Certification.

**G. Certification Distribution Posting.** During Project construction, the Applicant must maintain a copy of this Certification at the Project site. This Certification must be available at all times to site personnel and agencies. A copy of this Certification shall also be provided to any contractor or subcontractor performing construction work, and the copy shall remain in their possession at the Project site.

**H. Inspection and Entry.** The Applicant must allow the San Diego Water Board or the State Water Resources Control Board, and/or their authorized representative(s) (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents as may be required under law, to:

1. Enter upon the Project or Compensatory Mitigation site(s) premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Certification;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Certification;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Certification; and

4. Sample or monitor, at reasonable times, for the purposes of assuring Certification compliance, or as otherwise authorized by the Clean Water Act or Water Code, any substances or parameters at any location.
- I. **Enforcement Notification.** In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under State law. For purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Certification.
- J. **Certification Actions.** This Certification may be modified, revoked and reissued, or terminated for cause including but not limited to the following:
1. Violation of any term or condition of this Certification;
  2. Monitoring results indicate that continued Project activities could violate water quality objectives or impair the beneficial uses of Keys Creek or its tributaries;
  3. Obtaining this Certification by misrepresentation or failure to disclose fully all relevant facts;
  4. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; and
  5. Incorporation of any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.
- The filing of a request by the Applicant for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Certification condition.
- K. **Duty to Provide Information.** The Applicant shall furnish to the San Diego Water Board, within a reasonable time, any information which the San Diego Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Certification or to determine compliance with this Certification.
- L. **Property Rights.** This Certification does not convey any property rights of any sort, or any exclusive privilege.
- M. **Petitions.** Any person aggrieved by this action of the San Diego Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with the California Code of Regulations, title 23, sections 3867 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Certification. Copies of the law and regulations applicable to filing

petitions may be found on the Internet at:  
[http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

### III. CONSTRUCTION BEST MANAGEMENT PRACTICES

- A. **Approvals to Commence Construction.** The Applicant shall not commence Project construction until all necessary federal, State, and local approvals are obtained.
- B. **Personnel Education.** Prior to the start of the Project, and annually thereafter, the Applicant must educate all personnel on the requirements in this Certification, pollution prevention measures, spill response measures, and BMP implementation and maintenance measures.
- C. **Spill Containment Materials.** The Applicant must, at all times, maintain appropriate types and sufficient quantities of materials on-site to contain any spill or inadvertent release of materials that may cause a condition of pollution or nuisance if the materials reach waters of the United States and/or State.
- D. **General Construction Storm Water Permit.** Prior to start of Project construction, the Applicant must, as applicable, obtain coverage under, and comply with, the requirements of State Water Resources Control Board Water Quality Order No. 2009-0009-DWQ, the *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activity*, (General Construction Storm Water Permit) and any reissuance. If Project construction activities do not require coverage under the General Construction Storm Water Permit, the Applicant must develop and implement a runoff management plan (or equivalent construction BMP plan) to prevent the discharge of sediment and other pollutants during construction activities.
- E. **Waste Management.** The Applicant must properly manage, store, treat, and dispose of wastes in accordance with applicable federal, state, and local laws and regulations. Waste management shall be implemented to avoid or minimize exposure of wastes to precipitation or storm water runoff. The storage, handling, treatment, or disposal of waste shall not create conditions of pollution, contamination or nuisance as defined in Water Code section 13050. Upon Project completion, all Project generated debris, building materials, excess material, waste, and trash shall be removed from the Project site(s) for disposal at an authorized landfill or other disposal site in compliance with federal, state and local laws and regulations.
- F. **Waste Management.** Except for a discharge permitted under this Certification, the dumping, deposition, or discharge of trash, rubbish, unset cement or asphalt, concrete, grout, damaged concrete or asphalt, concrete or asphalt spoils, wash water, organic or earthen material, steel, sawdust or other construction debris waste from Project activities directly into waters of the United States and or State, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited.

- G. Downstream Erosion.** Discharges of concentrated flow during construction or after Project completion must not cause downstream erosion or damage to properties or stream habitat.
- H. Construction Equipment.** All equipment must be washed prior to transport to the Project site and must be free of sediment, debris, and foreign matter. All equipment used in direct contact with surface water shall be steam cleaned prior to use. All equipment using gas, oil, hydraulic fluid, or other petroleum products shall be inspected for leaks prior to use and shall be monitored for leakage. Stationary equipment (e.g., motors, pumps, generator, etc.) shall be positioned over drip pans or other types of containment.
- I. Process Water.** Water containing mud, silt, or other pollutants from equipment washing or other activities, must not be discharged to waters of the United States and/or State or placed in locations that may be subjected to storm water runoff flows. Pollutants discharged to areas within a stream diversion must be removed at the end of each work day or sooner if rain is predicted.
- J. Surface Water Diversion.** All surface waters, including ponded waters, must be diverted away from areas of active grading, construction, excavation, vegetation removal, and/or any other activity which may result in a discharge to the receiving water. Diversion activities must not result in the degradation of beneficial uses or exceedance of the receiving water quality objectives. Any temporary dam or other artificial obstruction constructed must only be built from materials which will cause little or no siltation. Normal flows must be restored to the affected stream immediately upon completion of work at that location.
- K. Hazardous Materials.** Except as authorized by this Certification, substances hazardous to aquatic life including, but not limited to, petroleum products, unused cement/concrete, asphalt, and coating materials, must be prevented from contaminating the soil and/or entering waters of the United States and/or State. BMPs must be implemented to prevent such discharges during each Project activity involving hazardous materials.
- L. Vegetation Removal.** Removal of vegetation must occur by hand, mechanically, or through application of United States Environmental Protection Agency (USEPA) approved herbicides deployed using applicable BMPs to minimize adverse effects to beneficial uses of waters of the United States and/or State. Discharges related to the application of aquatic pesticides within waters of the United States must be done in compliance with State Water Resources Control Board Water Quality Order No. 2004-0009-DWQ, the *Statewide General National Pollution Discharge Elimination System Permit for the Discharge of Aquatic Weed Control in Waters of the United States*, and any subsequent reissuance as applicable.

- M. Limits of Disturbance.** The Applicant shall clearly define the limits of Project disturbance to waters of the United States and/or State using highly visible markers such as flag markers, construction fencing, or silt barriers prior to commencement of Project construction activities within those areas.
- N. On-site Qualified Biologist.** The Applicant shall designate an on-site qualified biologist to monitor Project construction activities within or adjacent to waters of the United States and/or State to ensure compliance with the Certification requirements. The biologist shall be given the authority to stop all work on-site if a violation of this Certification occurs or has the potential to occur. Records and field notes of the biologist's activities shall be kept on-site and made available for review upon request by the San Diego Water Board.
- O. Beneficial Use Protection.** The Applicant must take all necessary measures to protect the beneficial uses of waters of Keys Creek. This Certification requires compliance with all applicable requirements of the Basin Plan. If at any time, an unauthorized discharge to surface waters (including rivers or streams) occurs or monitoring indicates that the Project is violating, or threatens to violate, water quality objectives, the associated Project activities shall cease immediately and the San Diego Water Board shall be notified in accordance with Notification Requirement VII.A of this Certification. Associated Project activities may not resume without approval from the San Diego Water Board.
- P. Groundwater Dewatering.** If groundwater dewatering is required for the Project, the Applicant shall enroll in and comply with the requirements of San Diego Water Board Order No. R9-2008-0002 NPDES No. CAG919002, *General Waste Discharge Requirements For Groundwater Extraction Waste Discharges From Construction, Remediation, and Permanent Groundwater Extraction Projects to Surface Waters within the San Diego Region Except for San Diego Bay* or its successor permit.

#### **IV. POST-CONSTRUCTION BEST MANAGEMENT PRACTICES**

- A. Post-Construction Discharges.** The Applicant shall not allow post-construction discharges from the Project site to cause or contribute to on-site or off-site erosion or damage to properties or stream habitats.

#### **V. PROJECT IMPACTS AND COMPENSATORY MITIGATION**

- A. Project Impact Avoidance and Minimization.** The Project must avoid and minimize adverse impacts to waters of the United States and/or State to the maximum extent practicable.
- B. Project Impacts and Compensatory Mitigation.** Unavoidable Project impacts to Keys Creek within the San Luis Rey Watershed must not exceed the type and magnitude of impacts described in the table below. At a minimum, compensatory mitigation required to offset unavoidable temporary and permanent Project impacts to waters of the United States and/or State must be achieved as described in the table below:



	Impacts (acres)	Impacts (linear ft.)	Mitigation for Impacts (acres)	Mitigation Ratio (area mitigated :area impacted)	Mitigation for Impacts (linear ft.)	Mitigation Ratio (linear feet mitigated :linear feet impacted)
<b>Permanent Impacts</b>						
Streambed (Concrete)	0.006	38	0	0	0	0
Wetland	2.23	2100	2.23 <sup>1</sup> 2.23 <sup>2</sup>	1:1 1:1	N/A N/A	N/A N/A
Riparian	0.03	30	3.7 <sup>3</sup>	123:1	1110	37:1
<b>Temporary Impacts</b>						
Streambed	0.02	88	N/A			
Wetland	0.02	80	N/A			
Riparian	0.11	60	N/A			

1. Wetland enhancement mitigation at the Wilderness Gardens Preserve in the upper San Luis Rey Watershed.
2. Wetland rehabilitation at either San Luis Rey Mitigation Bank or Lake Rancho Viejo mitigation site.
3. Riparian mitigation occurred at Wilderness Gardens Preserve in 2011 as Enhancement and is on-track in year 4 to meet the planned success criteria.

**C. Compensatory Mitigation Plan Implementation.** The Applicant must fully and completely implement the Mitigation Plan; any deviations from, or revisions to, the Mitigation Plan must be pre-approved by the San Diego Water Board.

**D. Performance Standards.** Compensatory mitigation required under this Certification shall be considered achieved once it has met the ecological success performance standards contained in the Mitigation Plan and to the satisfaction of the San Diego Water Board.

**E. Compensatory Mitigation Site Design.** The compensatory mitigation site(s) shall be designed to be self-sustaining once performance standards have been achieved. This includes minimization of active engineering features (e.g., pumps) and appropriate siting to ensure that natural hydrology and landscape context support long-term sustainability in conformance with the following conditions:

1. Most of the channels through the mitigation sites shall be characterized by equilibrium conditions, with no evidence of severe aggradation or degradation;

2. As viewed along cross-sections, the channel and buffer area(s) shall have a variety of slopes, or elevations, that are characterized by different moisture gradients. Each sub-slope shall contain physical patch types or features that contribute to irregularity in height, edges, or surface and to complex topography overall; and
3. The mitigation sites shall have a well-developed plant community characterized by a high degree of horizontal and vertical interspersions among plant zones and layers.

**F. Temporary Project Impact Areas.** The Applicant must restore all areas of temporary impacts and all other areas of temporary disturbance which could result in a discharge or a threatened discharge of pollutants to waters of the United States and/or State. Restoration must include grading of disturbed areas to pre-project contours and re-vegetation with native species. The Applicant must implement all necessary BMPs to control erosion and runoff from areas associated with the Project.

**G. Long-Term Management and Maintenance.** The compensatory mitigation site(s) must be managed, protected, and maintained, in perpetuity, in conformance with the long-term management plan and the final ecological success performance standards identified in the Mitigation Plan. The aquatic habitats, riparian areas, buffers and uplands that comprise the mitigation site(s) must be protected in perpetuity from land-use and maintenance activities that may threaten water quality or beneficial uses within the mitigation area(s) in a manner consistent with the following requirements:

1. Any maintenance activities on the mitigation site(s) that do not contribute to the success of the mitigation site(s) and enhancement of beneficial uses and ecological functions and services are prohibited;
2. Maintenance activities must be limited to the removal of trash and debris, removal of exotic plant species, replacement of dead native plant species, and remedial measures deemed necessary for the success of the compensatory mitigation project;
3. The Mitigation site(s) must be maintained, in perpetuity, free of perennial exotic plant species including, but not limited to, pampas grass, giant reed, tamarisk, sweet fennel, tree tobacco, castor bean, and pepper tree. Annual exotic plant species must not occupy more than 5 percent of the mitigation site(s); and
4. If at any time a catastrophic natural event (e.g., fire, flood) causes damage(s) to the mitigation site(s) or other deficiencies in the compensatory mitigation project, the Applicant must take prompt and appropriate action to repair the damage(s) including replanting the affected area(s) and address any other deficiencies. The San Diego Water Board may require additional monitoring by the Applicant to assess how the compensatory mitigation site(s) or project is responding to a catastrophic natural event.

- H. **Timing of Mitigation Site Construction.** The construction of proposed mitigation must be concurrent with project grading and completed no later than 9 months following the start of Project construction. Delays in implementing mitigation must be compensated for by an increased mitigation implementation of 10% of the cumulative compensatory mitigation for each month of delay.
- I. **Mitigation Site(s) Preservation Mechanism.** Within 90 days from the issuance of this Certification, the Applicant must provide the San Diego Water Board with a draft preservation mechanism (e.g. deed restriction, conservation easement, etc.) that will protect all mitigation areas and their buffers in perpetuity. Within 90 days of the start of Project construction, the Applicant must submit proof of a completed final preservation mechanism that will protect all mitigation areas and their buffers in perpetuity. The conservation easement, deed restriction, or other legal limitation on the mitigation properties must be adequate to demonstrate that the sites will be maintained without future development or encroachment on the sites which could otherwise reduce the functions and values of the sites for the variety of beneficial uses of waters of the United States and/ or State that it supports. The legal limitation must prohibit, without exception, all residential, commercial, industrial, institutional, and transportation development, and any other infrastructure development that would not maintain or enhance the wetland and streambed functions and values of the sites. The preservation mechanism must clearly prohibit activities that would result in soil disturbance or vegetation removal, other than the removal of non-native vegetation. Other infrastructure development to be prohibited includes, but is not limited to, additional utility lines, maintenance roads, and areas of maintained landscaping for recreation.
- J. By August 8, 2017, submit a plan that identifies additional mitigation sites that can be utilized for compensatory mitigation for additional impacts caused by channel maintenance activities exceeding Tier 1.

## VI. MONITORING AND REPORTING REQUIREMENTS

- A. **Representative Monitoring.** Samples and measurements taken for the purpose of monitoring under this Certification shall be representative of the monitored activity.
- B. **Monitoring Reports.** Monitoring results shall be reported to the San Diego Water Board at the intervals specified in section VI of this Certification.
- C. **Monitoring and Reporting Revisions.** The San Diego Water Board may make revisions to the monitoring program at any time during the term of this Certification and may reduce or increase the number of parameters to be monitored, locations monitored, the frequency of monitoring, or the number and size of samples collected.
- D. **Records of Monitoring Information.** Records of monitoring information shall include:
1. The date, exact place, and time of sampling or measurements;
  2. The individual(s) who performed the sampling or measurements;

3. The date(s) analyses were performed;
  4. The individual(s) who performed the analyses;
  5. The analytical techniques or methods used; and
  6. The results of such analyses.
- E. **Discharge Commencement Notification.** The Applicant must notify the San Diego Water Board in writing **at least 5 days prior to** the start of Project construction.
- F. **Geographic Information System Data.** The Applicant must submit Geographic Information System (GIS) shape files of the Project impact sites within 30 days of the start of project construction and GIS shape files of the Project mitigation sites within 30 days of mitigation installation. All impact and mitigation site shape files must be polygons. Two GPS readings (points) must be taken on each line of the polygon and the polygon must have a minimum of 10 points. GIS metadata must also be submitted.
- G. **Annual Project Progress Reports.** The Applicant must submit annual Project progress reports describing status of BMP implementation, and compliance with all requirements of this Certification to the San Diego Water Board prior to **March 1** of each year following the issuance of this Certification, until the Project has reached completion. The Annual Project Progress Reports must contain compensatory mitigation monitoring information sufficient to demonstrate how the compensatory mitigation project is progressing towards accomplishing its objectives and meeting its performance standards. Annual Project Progress Reports must be submitted even if Project construction has not begun. The monitoring period for each Annual Project Progress Report shall be January 1<sup>st</sup> through December 31<sup>st</sup> of each year. Annual Project Progress Reports must include, at a minimum, the following:
1. **Project Status and Compliance Reporting.** The Annual Project Progress Report must include the following Project status and compliance information:
    - a. The names, qualifications, and affiliations of the persons contributing to the report;
    - b. The status, progress, and anticipated schedule for completion of Project construction activities including the installation and operational status of best management practices project features for erosion and storm water quality treatment;
    - c. A description of Project construction delays encountered or anticipated that may affect the schedule for construction completion; and
    - d. A description of each incident of noncompliance during the annual monitoring period and its cause, the period of the noncompliance including exact dates and

times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

**H. Final Project Completion Report.** The Applicant must submit a Final Project Completion Report to the San Diego Water Board **within 30 days of completion of the Project**. The final report must include the following information:

1. Date of construction initiation;
2. Date of construction completion;
3. BMP installation and operational status for the Project;
4. As-built drawings of the Project, no bigger than 11"X17"; and
5. Photo documentation of implemented post-construction BMPs and all areas of permanent and temporary impacts, prior to and after project construction. Photo documentation must be conducted in accordance with guidelines posted at [http://www.waterboards.ca.gov/sandiego/water\\_issues/programs/401\\_certification/docs/StreamPhotoDocSOP.pdf](http://www.waterboards.ca.gov/sandiego/water_issues/programs/401_certification/docs/StreamPhotoDocSOP.pdf). In addition, photo documentation must include Global Positioning System (GPS) coordinates for each of the photo points referenced.

**I. Reporting Authority.** The submittal of information required under this Certification, or in response to a suspected violation of any condition of this Certification, is required pursuant to Water Code section 13267 and 13383. Civil liability may be administratively imposed by the San Diego Water Board for failure to submit information pursuant to Water Code sections 13268 or 13385.

**J. Electronic Document Submittal.** The Applicant must submit all reports and information required under this Certification in electronic format via e-mail to [SanDiego@waterboards.ca.gov](mailto:SanDiego@waterboards.ca.gov). Documents over 50 megabytes will not be accepted via e-mail and must be placed on a disc and delivered to:

California Regional Water Quality Control Board  
San Diego Region  
Attn: 401 Certification No. R9-2016-0119:818146:mporter  
2375 Northside Drive, Suite 100  
San Diego, California 92108

Each electronic document must be submitted as a single file, in Portable Document Format (PDF), and converted to text searchable format using Optical Character Recognition (OCR). All electronic documents must include scanned copies of all signature pages; electronic signatures will not be accepted. Electronic documents submitted to the San Diego Water Board must include the following identification numbers in the header or subject line: Certification No. R9-2016-0119:PIN 818146.

**K. Document Signatory Requirements.** All applications, reports, or information submitted to the San Diego Water Board must be signed as follows:

1. For a corporation, by a responsible corporate officer of at least the level of vice president.
2. For a partnership or sole proprietorship, by a general partner or proprietor, respectively.
3. For a municipality, or a state, federal, or other public agency, by either a principal executive officer or ranking elected official.
4. A duly authorized representative may sign applications, reports, or information if:
  - a. The authorization is made in writing by a person described above.
  - b. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated activity.
  - c. The written authorization is submitted to the San Diego Water Board Executive Officer.

If such authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the Project, a new authorization satisfying the above requirements must be submitted to the San Diego Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative.

**L. Document Certification Requirements.** All applications, reports, or information submitted to the San Diego Water Board must be certified as follows:

*"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."*

## **VII. NOTIFICATION REQUIREMENTS**

- A. Twenty Four Hour Non-Compliance Reporting.** The Applicant shall report any noncompliance which may endanger health or the environment. Any such information shall be provided orally to the San Diego Water Board within **24 hours** from the time the Applicant becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Applicant becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken

or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The San Diego Water Board, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

- B. Hazardous Substance Discharge.** Except for a discharge which is in compliance with this Certification, any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, shall as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the County of San Diego, in accordance with California Health and Safety Code section 5411.5 and the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Government Code Title 2, Division 1, Chapter 7, Article 3.7 (commencing with section 8574.17), and immediately notify the State Water Board or the San Diego Water Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of section 13271 of the Water Code unless the Applicant is in violation of a Basin Plan prohibition.
- C. Oil or Petroleum Product Discharge.** Except for a discharge which is in compliance with this Certification, any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Government Code Title 2, Division 1, Chapter 7, Article 3.7 (commencing with section 8574.1). This requirement does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to Clean Water Act section 311, or the discharge is in violation of a Basin Plan prohibition.
- D. Anticipated Noncompliance.** The Applicant shall give advance notice to the San Diego Water Board of any planned changes in the Project or the Compensatory Mitigation project which may result in noncompliance with Certification conditions or requirements.
- E. Transfers.** This Certification is not transferable in its entirety or in part to any person or organization except after notice to the San Diego Water Board in accordance with the following terms:
- 1. Transfer of Property Ownership:** The Applicant must notify the San Diego Water Board of any change in ownership of the Project area. Notification of change in ownership must include, but not be limited to, a statement that the Applicant has provided the purchaser with a copy of the Section 401 Water Quality Certification and that the purchaser understands and accepts the certification requirements and



the obligation to implement them or be subject to liability for failure to do so; the seller and purchaser must sign and date the notification and provide such notification to the San Diego Water Board **within 10 days of the transfer of ownership.**

Upon properly noticed transfers of responsibility, the transferee assumes responsibility for compliance with this Certification and references in this Certification to the Applicant will be interpreted to refer to the transferee as appropriate. Transfer of responsibility does not necessarily relieve the Applicant of responsibility for compliance with this Certification in the event that a transferee fails to comply.

## VIII. CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE

- A. The County of San Diego Department of Public Works is the Lead Agency under the California Environmental Quality Act (CEQA) (Public Resources Code section 21000, et seq.) section 21067, and CEQA Guidelines (California Code of Regulations, title 14, section 15000 et seq.) section 15367, and has filed a Notice of Determination dated August 8, 2016 for the Mitigated Negative Declaration for the Keys Creek Channel Access and Maintenance Project (State Clearing House Number 2016041034). The Lead Agency has determined the Project will have a significant effect on the environment and mitigation measures were made a condition of the Project.
- B. The San Diego Water Board is a Responsible Agency under CEQA (Public Resources Code section 21069; CEQA Guidelines section 15381). The San Diego Water Board has considered the Lead Agency's MND and finds that the Project as proposed will have a significant effect on resources within the San Diego Water Board's purview.
- C. The San Diego Water Board has required mitigation measures as a condition of this Certification to avoid or reduce the environmental effects of the Project to resources within the Board's purview to a less than significant level.
- D. The Lead Agency has adopted a mitigation monitoring and reporting program pursuant to Public Resources Code section 21081.6 and CEQA Guidelines section 15097 to ensure that mitigation measures and revisions to the Project identified in the MND are implemented. The Mitigation Monitoring and Reporting Program (MMRP) is included and incorporated by reference in Attachment 4 to this Certification. The Applicant shall implement the Lead Agency's MMRP described in the FEIR, as it pertains to resources within the San Diego Water Board's purview. The San Diego Water Board has imposed additional MMRP requirements as specified in sections V and VI of this Certification.
- E. As a Responsible Agency under CEQA, the San Diego Water Board will file a Notice of Determination in accordance with CEQA Guidelines section 15096 subdivision (i).

**IX. SAN DIEGO WATER BOARD CONTACT PERSON**

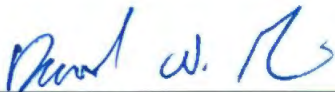
Mike Porter, Engineering Geologist  
Telephone: 619-521-3967  
Email: mike.porter@waterboards.ca.gov

**X. WATER QUALITY CERTIFICATION**

I hereby certify that the proposed discharge from the **Keys Creek Channel Access and Maintenance Project** (Certification No. R9-2016-0119) will comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. This discharge is also regulated under State Water Board Order No. 2003-0017-DWQ, "*Statewide General Waste Discharge Requirements for Dredged or Fill Discharges that have Received State Water Quality Certification (General WDRs)*," which requires compliance with all conditions of this Water Quality Certification. Please note that enrollment under Order No. 2003-017-DWQ is conditional and, should new information come to our attention that indicates a water quality problem, the San Diego Water Board may issue individual waste discharge requirements at that time.

Except insofar as may be modified by any preceding conditions, all Certification actions are contingent on (a) the discharge being limited to, and all proposed mitigation being completed in strict compliance with, the applicants' Project description and/or the description in this Certification, and (b) compliance with all applicable requirements of the Basin Plan.

I, David W. Gibson, Executive Officer, do hereby certify the forgoing is a full, true, and correct copy of Certification No. R9-2016-0119 issued on August 8, 2016.

  
\_\_\_\_\_  
DAVID W. GIBSON  
Executive Officer  
San Diego Water Board

8 August 2016  
Date

# ATTACHMENT 1

## DEFINITIONS

**Activity** - when used in reference to a permit means any action, undertaking, or project including, but not limited to, construction, operation, maintenance, repair, modification, and restoration which may result in any discharge to waters of the state.

**Buffer** - means an upland, wetland, and/or riparian area that protects and/or enhances aquatic resource functions associated with wetlands, rivers, streams, lakes, marine, and estuarine systems from disturbances associated with adjacent land uses.

**California Rapid Assessment Method (CRAM)** - is a wetland assessment method intended to provide a rapid, scientifically-defensible and repeatable assessment methodology to monitor status and trends in the conditions of wetlands for applications throughout the state. It can also be used to assess the performance of compensatory mitigation projects and restoration projects. CRAM provides an assessment of overall ecological condition in terms of four attributes: landscape context and buffer, hydrology, physical structure and biotic structure. CRAM also includes an assessment of key stressors that may be affecting wetland condition and a "field to PC" data management tool (eCRAM) to ensure consistency and quality of data produced with the method.

**Compensatory Mitigation Project** - means compensatory mitigation implemented by the Applicant as a requirement of this Certification (i.e., applicant -responsible mitigation), or by a mitigation bank or an in-lieu fee program.

**Discharge of dredged material** – means any addition of dredged material into, including redeposit of dredged material other than incidental fallback within, the waters of the United States and/or State.

**Discharge of fill material** – means the addition of fill material into waters of the United States and/or State.

**Dredged material** – means material that is excavated or dredged from waters of the United States and/or State.

**Ecological Success Performance Standards** – means observable or measurable physical (including hydrological), chemical, and/or biological attributes that are used to determine if a compensatory mitigation project meets its objectives.

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

**Establishment** – means the manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist. Creation results in a gain in aquatic resource area.

**Fill material** – means any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a water body.

**Isolated wetland** – means a wetland with no surface water connection to other aquatic resources.

**Mitigation Bank** – means a site, or suite of sites, where resources (e.g., wetlands, streams, riparian areas) are restored, established, enhanced, and/or preserved for the purpose of providing mitigation for impacts authorized by this Certification.

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

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

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

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

**Start of Project Construction** - For the purpose of this Certification, "start of Project construction" means to engage in a program of on-site construction, including site clearing, grading, dredging, landfilling, changing equipment, substituting equipment, or even moving the location of equipment specifically designed for a stationary source in preparation for the fabrication, erection or installation of the building components of the stationary source within waters of the United States and/or State.

**Uplands** - means non-wetland areas that lack any field-based indicators of wetlands or other aquatic conditions. Uplands are generally well-drained and occur above (i.e., up-slope) from nearby aquatic areas. Wetlands can, however, be entirely surrounded by uplands. For example, some natural seeps and constructed stock ponds lack aboveground hydrological connection to other aquatic areas. In the watershed context, uplands comprise the landscape matrix in which aquatic areas form. They are the primary sources of sediment, surface runoff, and associated chemicals that are deposited in aquatic areas or transported through them.

**Water quality objectives and other appropriate requirements of state law** – means the water quality objectives and beneficial uses as specified in the appropriate water quality control plan(s); the applicable provisions of sections 301, 302, 303, 306, and 307 of the Clean Water Act; and any other appropriate requirement of state law.

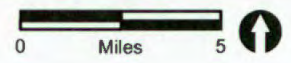
County of San Diego  
Keys Creek Channel Access  
And Maintenance Project  
Certification No. R9-2016-0119

**ATTACHMENT 2  
PROJECT LOCATION MAP**

Figure 1 – Regional Location of the Keys Creek Flood Control Site

Figure 2 – Project Location on USGS Map

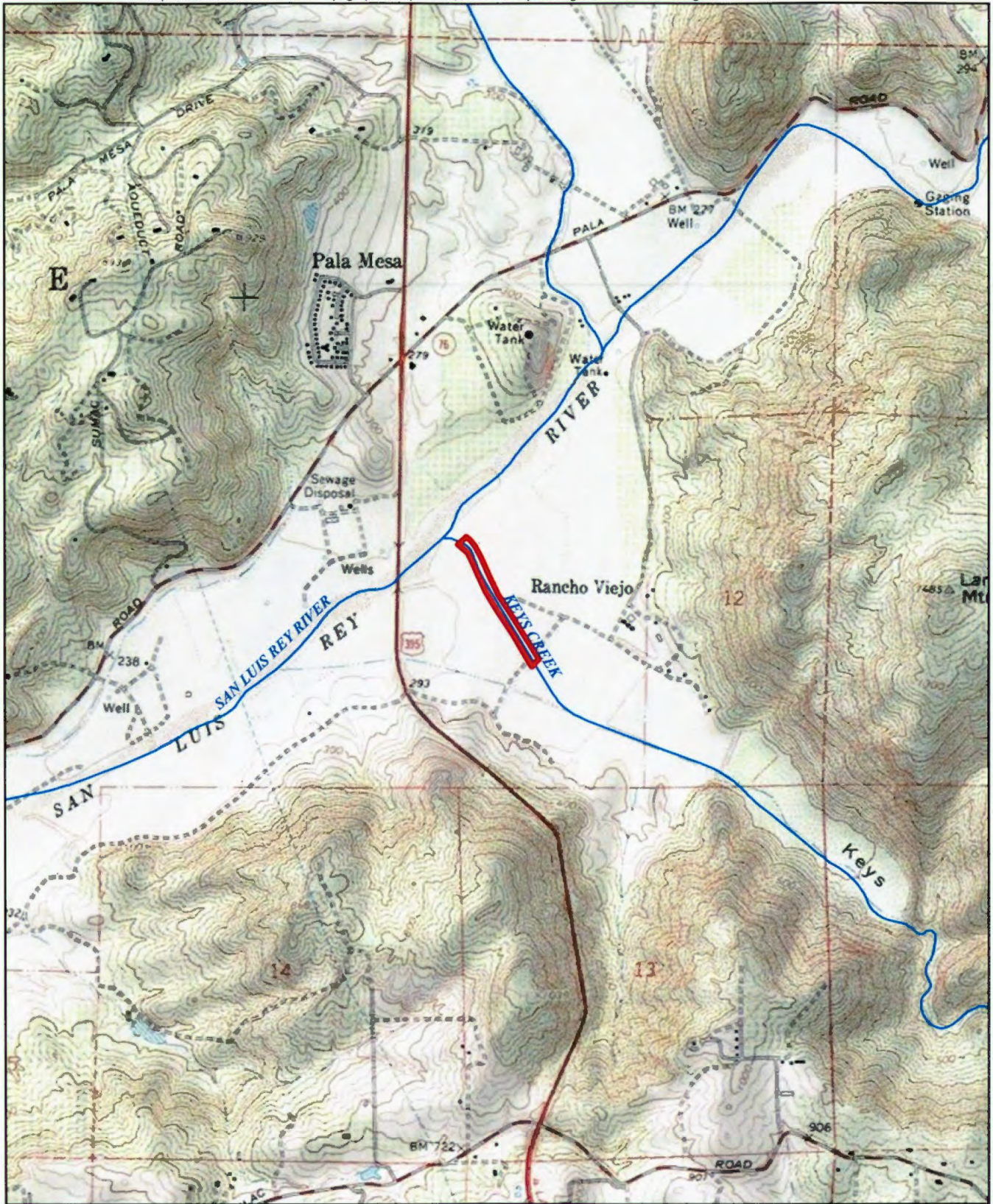




 Project Location

**FIGURE 1**  
Regional Location of the  
Keys Creek Flood Control Site







-  Project Location
-  Current River Alignment



FIGURE 2

Project Location on USGS Map



County of San Diego  
Keys Creek Channel Access  
And Maintenance Project  
Certification No. R9-2016-0119

**ATTACHMENT 3  
PROJECT SITE PLANS**

Figure 3 – Existing Vegetation Communities/Land Cover Types and Access Ramp Design Overview

Figure 4 – Keys Creek Flood Control Channel and Tiered Maintenance Approach on Aerial Photograph

Figure 5 – Regional Locations of the Keys Creek Channel Maintenance Project and Off-Site Mitigation Areas

Figure 7 – Habitat Types Mapped within the Wilderness Gardens Rowan Parcel

Figure 8 – Phase Mitigation Within the Wilderness Gardens Sparsely Vegetated Channel Proposed Mitigation Area

Figure 9 – Landscape Context of Proposed Mitigation Area

Figure 10 – San Luis Rey Watershed and Mitigation Site Subwatershed

Figure 12b – Geology of the Project Site and Proposed Compensatory Mitigation Site



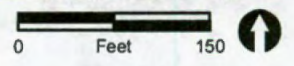
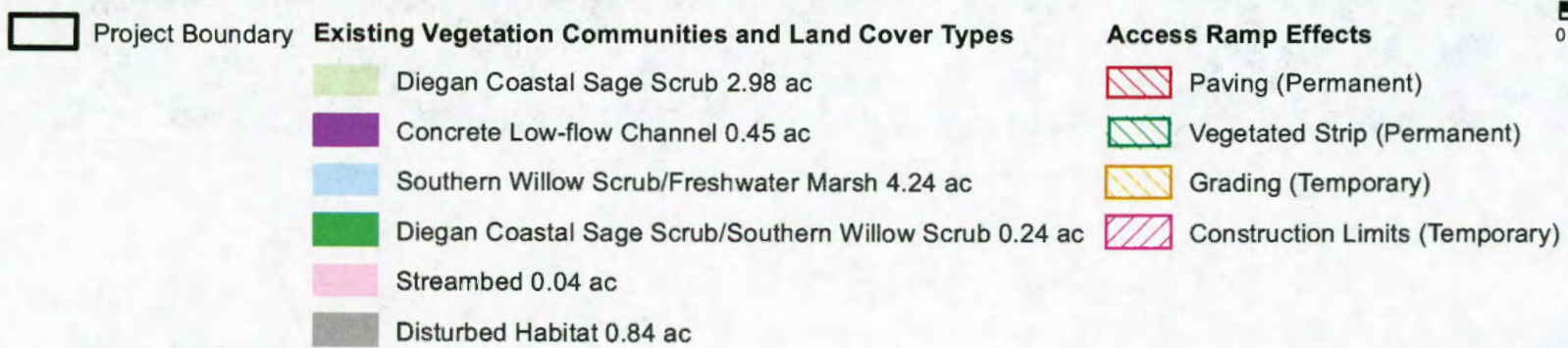
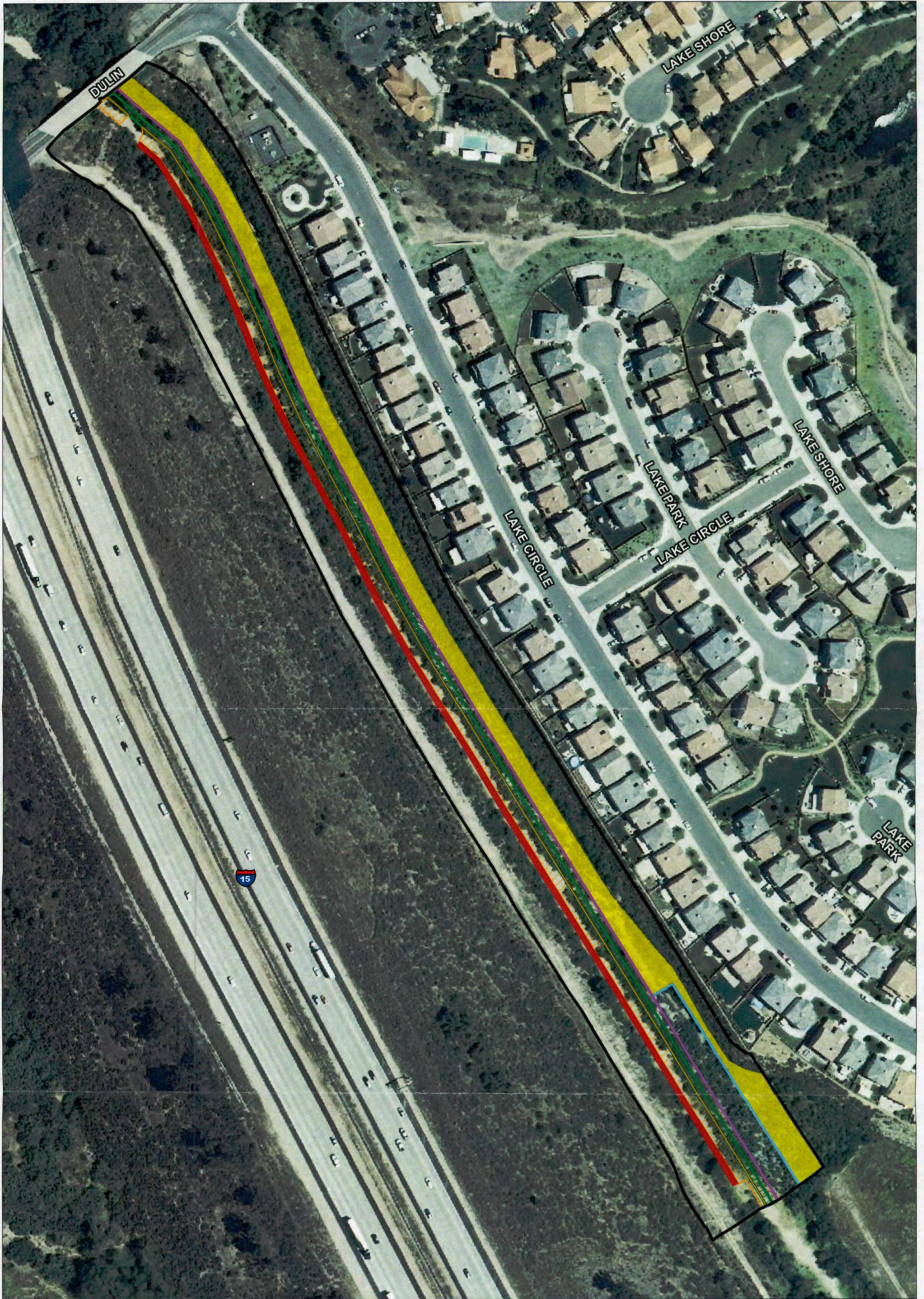









FIGURE 3

Existing Vegetation Communities/Land Cover Types and Access Ramp Design Overview







-  Flood Control Easement Approximate Boundary (8.79 Acres)
-  Non-maintained Area (1.5 acres)
-  Tier 1
-  Tier 2
-  Tier 3
-  Tier 4
-  Tier 5

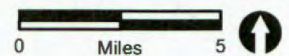
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FIGURE 4  
Keys Creek Flood Control Channel and Tiered Maintenance Approach on Aerial Photograph



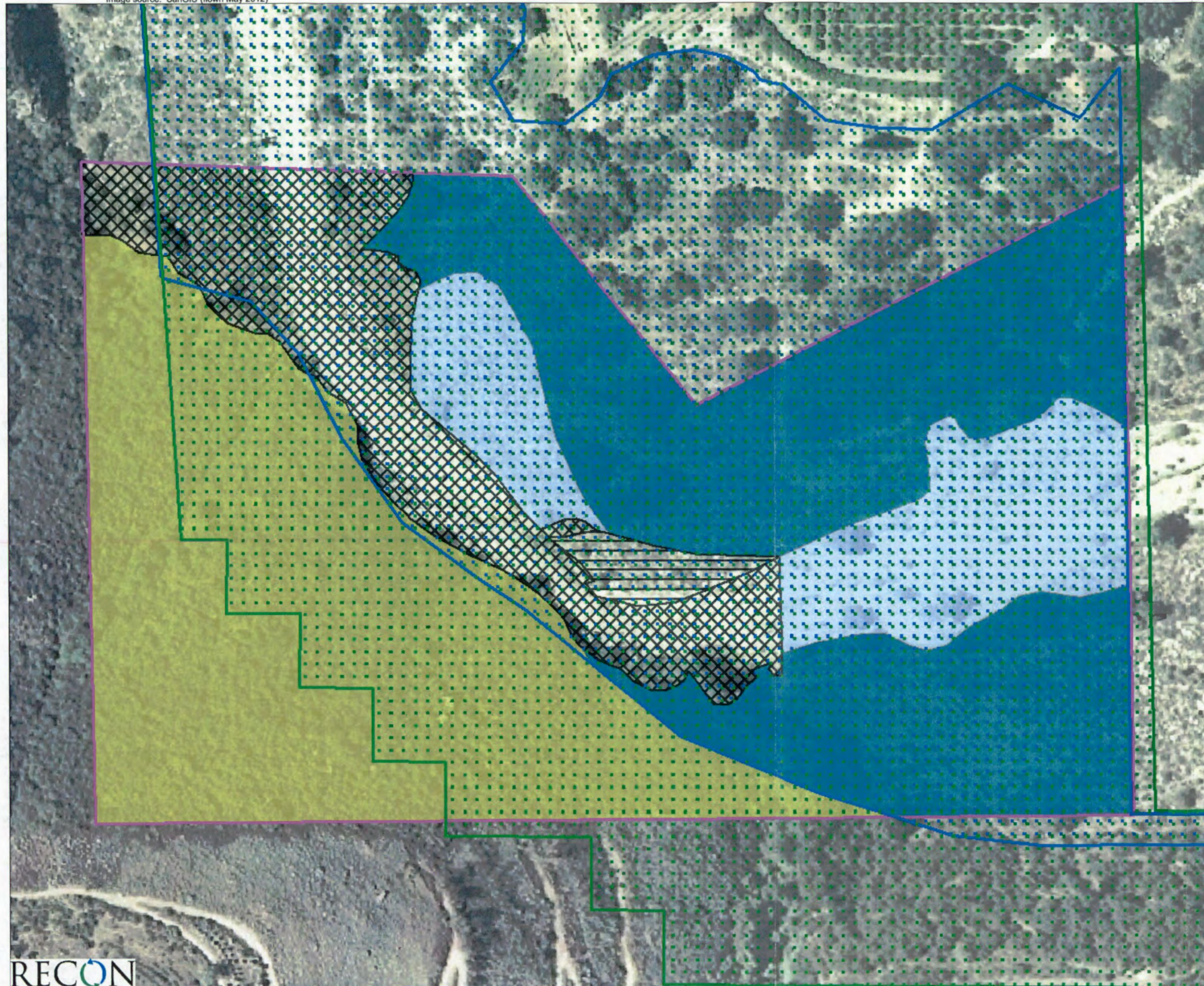


-  Project Location
-  Off-site Mitigation Location



**FIGURE 5**  
Regional Locations of the Keys Creek  
Channel Maintenance Project  
and Off-Site Mitigation Area





-  Arroyo Toad Final Critical Habitat (FCH)
-  Southwestern Willow Flycatcher FCH
- Mitigation Sites**
-  Rowan Parcel, Wilderness Gardens Park
-  Wilderness Gardens Park Previously Implemented 3.7 Acre Mitigation Area
-  De Luz Previously Implemented 0.36 Acre Mitigation Area
- Habitat Classification**
-  Sparsely Vegetated Channel: Non-vegetated Channel, Southern Willow Scrub, Mule Fat Scrub, and Alluvial Fan Scrub (3.3 ac)
-  Upper Flood Plain: Southern Coast Live Oak Riparian Forest, Non-native Grassland, Coast Live Oak Woodland, and Coastal Sage Scrub (8.5 ac)
-  Upland: Coastal Sage Scrub (9.0 ac)

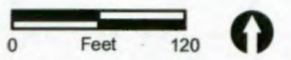
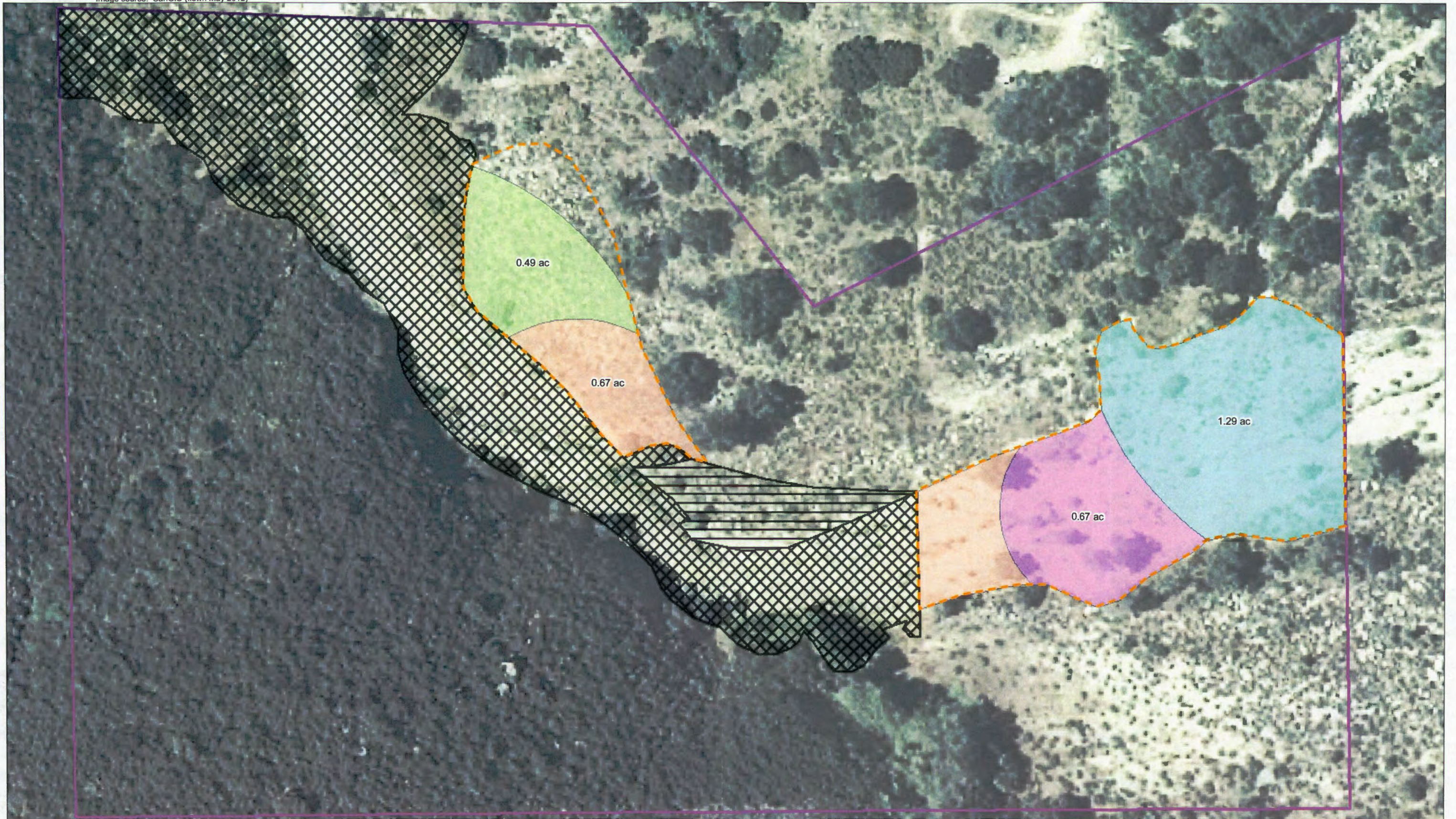


FIGURE 7

Habitat Types Mapped within the Wilderness Gardens Rowan Parcel



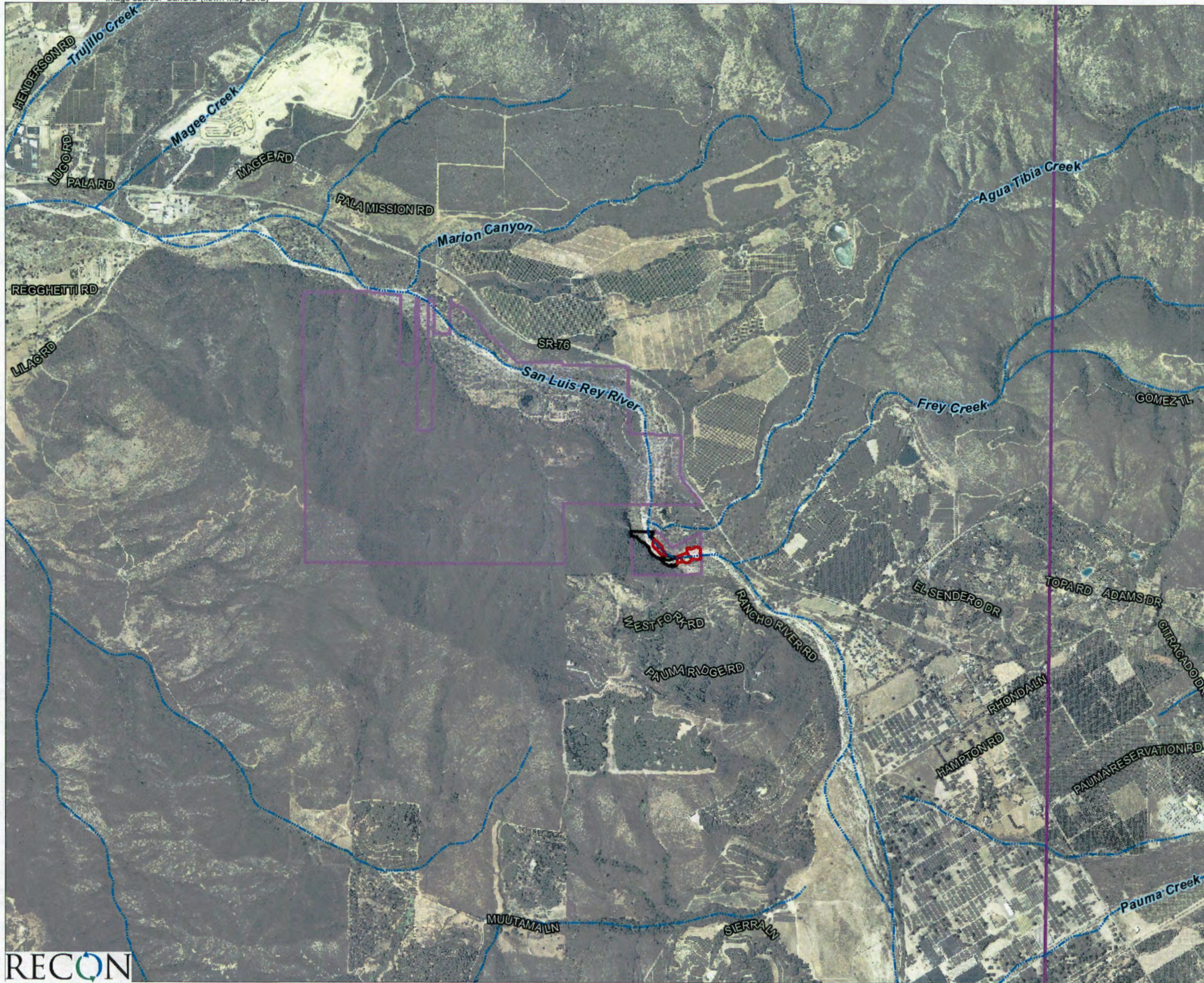






- |   |   |         |         |
|---|---|---------|---------|
| Rowan Parcel, Wilderness Gardens Park                                   | De Luz Previously Implemented 0.36 Acre Mitigation Area       | Phase 1 | Phase 3 |
| Wilderness Gardens Park Previously Implemented 3.7 Acre Mitigation Area | Sparsely Vegetated Channel Proposed Mitigation Area (3.30 ac) | Phase 2 | Phase 4 |

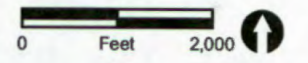


**FIGURE 8**  
Phased Mitigation Within the Wilderness Gardens  
Sparsely Vegetated Channel Proposed Mitigation Area



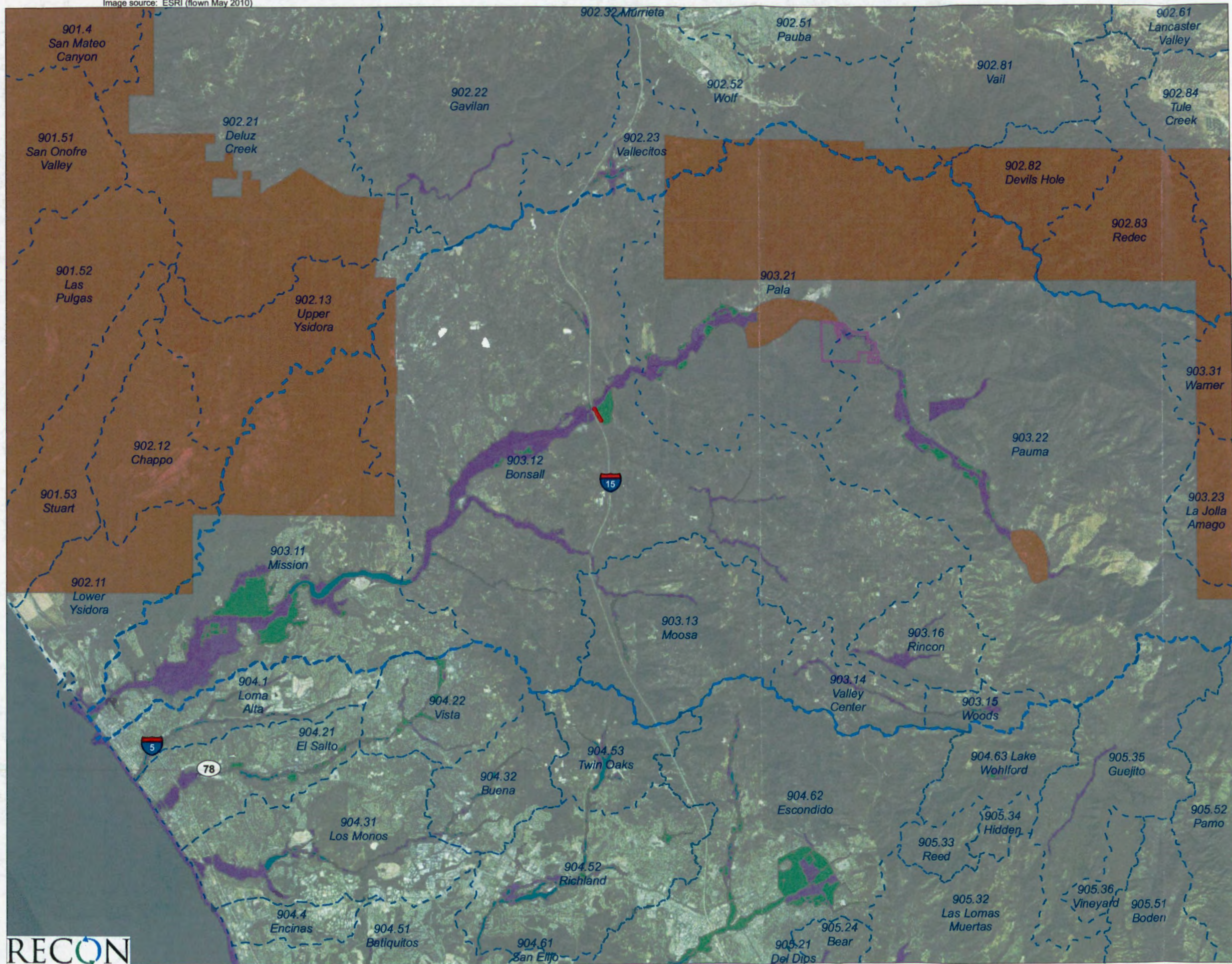


-  Wilderness Gardens Park
-  Sparsely Vegetated Channel Proposed Mitigation Area
-  De Luz and Wilderness Gardens Park Previous Mitigation
-  Streams/Creeks



**FIGURE 9**  
Landscape Context of  
Proposed Mitigation Area





- Project Boundary
- San Luis Rey Watershed
- Subwatershed
- Mitigation Sites**
- Wilderness Gardens Park
- FEMA Flood Data**
- 100-Year Flood Way
- 100-Year Flood Plain
- 500-Year Flood Plain
- Zone D - Possible But Undetermined Flood Hazards

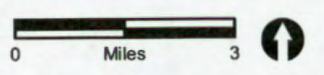


FIGURE 10

San Luis Rey Watershed and Mitigation Site Subwatershed



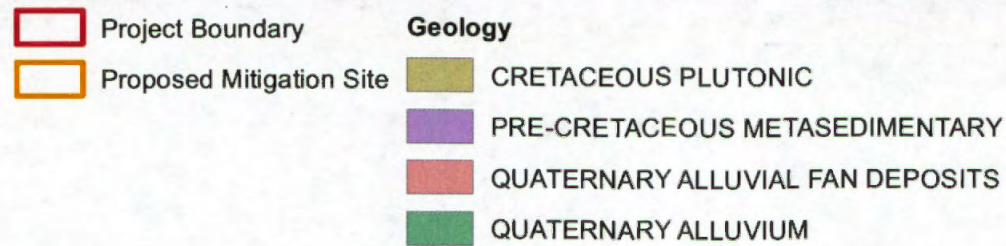


FIGURE 12b  
Geology of the Project Site and Proposed Compensatory Mitigation Site



County of San Diego  
Keys Creek Channel Access  
And Maintenance Project  
Certification No. R9-2016-0119

**ATTACHMENT 4**  
**CEQA MITIGATION MONITORING AND REPORTING PROGRAM**

**MITIGATION MONITORING AND REPORTING PROGRAM**

**MITIGATED NEGATIVE DECLARATION**

**FOR**

**KEYS CREEK CHANNEL ACCESS AND MAINTENANCE PROJECT**

**State Clearinghouse # 2016041034**

**Prepared for:**

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**April 12, 2016**

**MITIGATION MONITORING AND REPORTING PROGRAM  
KEYS CREEK CHANNEL ACCESS AND MAINTENANCE PROJECT**

Mitigation measures have been identified in the Mitigated Negative Declaration for the Keys Creek Channel Access and Management Project (project) to reduce or eliminate potential environmental impacts. The County of San Diego (County) is required to implement all adopted mitigation measures. In order to ensure compliance, the following mitigation monitoring program has been formulated. This program consists of a checklist followed by a detailed description of the mitigation measures.

This project will benefit the public by providing a safe and effective method of conducting maintenance of the flood control channel while incorporating biological resource management of sensitive species and their habitat located within and adjacent to the project site. The project site is located within and along the banks of the lower, channelized portion of Keys Creek Flood Control Channel, east of Interstate 15 and south of Dulin Road in the unincorporated community of Fallbrook in northern San Diego County.

A mitigation checklist has been prepared for the project. Table 1 summarizes the mitigation measures for the Keys Creek Channel Access and Maintenance Project. Information contained within the checklist clearly identifies the mitigation measure, delineates the monitoring schedule, and defines the conditions required to verify compliance. Following is an explanation of the seven columns that constitute the checklist.

**Column 1**     **Mitigation Measure:** An inventory of each mitigation measure is provided with a brief description.

**Column 2**     **Type:** Each mitigation measure is classified as Project Design Mitigation (PD), Ongoing Mitigation (OM), or Long-Term Mitigation (LT) based upon the following definitions:

- Project Design Mitigation - mitigation that has been incorporated into the project design (e.g., dust control measures, traffic control plan, landscape plan);
- Ongoing Mitigation - mitigation associated with the project over a period of time (e.g., success of revegetation);
- Long-Term Mitigation - mitigation which requires monitoring over a greater period of time (e.g., five year revegetation monitoring program).

**Column 3**     **Monitor:** Identifies the County department or other public agency that is responsible for determining compliance with the mitigation measure and for informing DPW about compliance.

**Column 4**     **Schedule:** The monitoring schedule depends upon the progression of the overall

project. Therefore, specific dates are not used within the "Schedule" column. Instead, scheduling describes a logical succession of events (e.g., prior to construction, annual) and if necessary, delineates a follow-up program.

**Column 5**     **Compliance Action:** The monitor can easily determine a mitigation measure's completion by referring to "Compliance Action". Upon satisfaction of the requirement listed in this column, the mitigation measure is considered complete.

**Column 6**     **Verification of Compliance:** The monitor verifies completion of the particular mitigation measure by initialing and dating in this column. Where the "Schedule" column indicates annual or other ongoing mitigation measures, verification of compliance may not occur until completion of the project. Provision of all required signatures within the Verification of Compliance column signifies conclusion of the monitoring program.

**Column 7**     **Remarks:** The status of ongoing and cumulative mitigation measures is to be documented during each visit. The space provided for remarks is obviously too small for the inclusion of the remarks. It is intended that this space be used to indicate whether there are specific comments pertaining to the status of the mitigation measure. If there are additional comments they are to be attached to the checklist. Progress reports are required for the revegetation program. Information provided within progress reports will be helpful in the development of future mitigation programs.

This program is to be adopted by the lead and responsible agencies upon formulation of findings in order to comply with the requirements set forth by Assembly Bill 3180 (Public Resources Code Section 21081.6).

**Table 1. Keys Creek Channel Access and Maintenance Project**

	Mitigation Measure	Type	Monitor	Schedule	Compliance Action	Verification of Compliance		
						Initial	Date	Remarks
<b>BIOLOGICAL RESOURCES</b>								
MM-1	Mitigate for temporary impacts (resulting from access ramp construction activities) to 0.15 acre of sensitive vegetation communities.	OM	DPW Project Biologist	Upon completion of access ramp construction activities	Temporary impacts to 0.15 acre of sensitive vegetation communities, including 0.11 acre of Diegan Coastal Sage Scrub, 0.02 acre of Southern Willow Scrub/Freshwater Marsh, and 0.02 acre of Unvegetated Streambed will be mitigated at a 1:1 ratio through the restoration of impacted areas to pre-construction conditions and contours.			
MM-2	Mitigate for transitory effects (resulting from regular flood control maintenance activities) to a maximum of 2.23 acres of sensitive vegetation communities.	LT	DPW Project Biologist	Upon completion of regular flood control maintenance activities	Transitory effects to a maximum of 2.23 acres of sensitive vegetation communities, will be mitigated, according to mitigation type, at the following ratios: <ol style="list-style-type: none"> <li>1. Purchase of mitigation credits from the San Luis Rey Mitigation Bank, 1:1 ratio;</li> <li>2. Enhancement at the Wilderness Gardens Preserve, 1.4:1 ratio;</li> <li>3. Enhancement at the Lake Rancho Viejo RV site, 4.4:1 ratio</li> </ol>			
MM-3	Mitigate for transitory effects (resulting from single-event flood control maintenance activities) to a maximum of 2.23 acres of sensitive vegetation communities.	LT	DPW Project Biologist	Upon completion of single-event flood control activities	Transitory effects (resulting from single-event flood control maintenance activities) to sensitive vegetation communities will be mitigated at half the ratio of those identified in MM-2 for transitory effects from regular flood control maintenance activities.			
MM-4	Avoid/Minimize impacts to sensitive species and their habitat.	PD	DPW Project Biologist (Qualified)	During all work (access ramp construction or flood control maintenance)	All work (access ramp construction and flood control maintenance activities) is to be performed under the guidance of a qualified biological monitor with demonstrated knowledge and experience identifying arroyo toad (ARTO), coastal California gnatcatcher (CAGN), and least			

**Table 1. Keys Creek Channel Access and Maintenance Project**

	Mitigation Measure	Type	Monitor	Schedule	Compliance Action	Verification of Compliance		
						Initial	Date	Remarks
					<p>Bell's vireo (LBVI) habitat. The qualified biological monitor shall meet the following qualifications:</p> <ol style="list-style-type: none"> <li>1. B.S. or B.A. degree in wildlife management, ecology, zoology, botany, biology, or related field;</li> <li>2. At least 2 years of experience in field biology, conducting bird and general wildlife species surveys in Southern California, preferably in San Diego County;</li> <li>3. Experience conducting focused presence/absence surveys for coastal California gnatcatcher;</li> <li>4. At least 2 years of experience conducting arroyo toad and least Bell's vireo surveys in accordance with the U.S. Fish &amp; Wildlife Service survey guidelines.</li> </ol>			
MM-5	Avoid/Minimize impacts to sensitive species and their habitat.	PD	DPW Project Biologist (Qualified)	During all work (access ramp construction or flood control maintenance)	The biological monitor will be on site during all access ramp construction and flood control activities.			
MM-6	Avoid/Minimize impacts to sensitive species and their habitat.	PD	DPW Project Biologist (Qualified)	Prior to any work (access ramp construction or flood control maintenance)	<p>Construction personnel will attend an on-site pre-construction education program on how to avoid impacts to ARTO, CAGN, and LBVI habitat. This program will focus on:</p> <ol style="list-style-type: none"> <li>1. The purpose for resource protection;</li> <li>2. Contractor identification of sensitive resource areas in the field;</li> </ol>			



**Table 1. Keys Creek Channel Access and Maintenance Project**

	Mitigation Measure	Type	Monitor	Schedule	Compliance Action	Verification of Compliance		
						Initial	Date	Remarks
					3. Environmentally responsible practices and protection measures; 4. Protocol to resolve conflicts that may arise at any time during the project.			
MM-7	Avoid/Minimize impacts to sensitive species and their habitat.	PD	DPW Project Biologist (Qualified)	Prior to any work (access ramp construction or flood control maintenance)	Prior to any work, all construction and/or maintenance areas will be demarcated in coordination with the biological monitor to ensure that adverse effects to ARTO, CAGN, and LBVI critical habitat are minimized and that no work is performed outside of the designated boundaries.			
MM-8	Avoid/Minimize impacts to sensitive species and their habitat.	PD	DPW Project Biologist (Qualified)	Prior to any work (access ramp construction or flood control maintenance)	The contractor will provide the construction schedule 21 calendar days prior to the start of access ramp construction or flood control maintenance activities to facilitate early coordination with the biological monitor.			
MM-9	Avoid/Minimize indirect impacts to sensitive species and their habitat.	PD	DPW Project Biologist	During all work (access ramp construction or flood control maintenance)	In order to minimize indirect impacts to ARTO, CAGN, and LBVI critical habitat, the following measures will be implemented during access ramp construction and flood control maintenance activities: <ol style="list-style-type: none"> <li>1. Pets and other domestic animals will not be present in the work area at any time;</li> <li>2. The contractor will pick up and remove trash and debris from the project area daily;</li> <li>3. Vehicles and equipment will be operated in existing and designated access areas only;</li> <li>4. Staging areas will be placed within</li> </ol>			

**Table 1. Keys Creek Channel Access and Maintenance Project**

	Mitigation Measure	Type	Monitor	Schedule	Compliance Action	Verification of Compliance		
						Initial	Date	Remarks
					existing roads so as not to remove vegetation; 5. No storage of equipment will be permitted within the channel; 6. No cleaning of vehicles or equipment will take place on site; and 7. Appropriate best management practices (BMPs) will be implemented to minimize erosion and siltation associate with maintenance activities within Keys Creek.			
MM-10	Avoidance of impacts to sensitive species.	PD	DPW Project Biologist	Project Life	In order to avoid impacts to ARTO, CAGN, and LBVI, all work will occur outside of their combined breeding seasons (defined as February 15 through September 15). No work (access ramp construction or flood control maintenance) will be conducted from February 15 through September 15.			
MM-11	Avoidance of impacts to sensitive species.	PD	Qualified Biologist	Within 1 year prior to any work (access ramp construction or flood control maintenance)	Since ARTO and LBVI were previously detected on the project site, protocol surveys for arroyo toad and least Bell's vireo will be conducted no more than 1 year prior to any access ramp construction or flood control maintenance activities. Surveys shall be conducted in accordance with current USFWS protocol guidelines. The results of the surveys will be provided to the U.S. Army Corps of Engineers and the Carlsbad Fish and Wildlife Office prior to initiating any project impacts (access ramp construction or flood control maintenance			

**Table 1. Keys Creek Channel Access and Maintenance Project**

	Mitigation Measure	Type	Monitor	Schedule	Compliance Action	Verification of Compliance		
						Initial	Date	Remarks
					activities). If ARTO or LBVI are detected within or adjacent to the project area, no access ramp construction or maintenance activities will occur until further coordination and/or consultation, as appropriate, with the USFWS is completed.			
MM-12	Minimization of impacts to sensitive species habitat.	PD	DPW Project Biologist	Project Life	Adverse effects to the functions and values of Southern Willow Scrub and Freshwater Marsh habitat will be minimized through implementation of the lowest tier of maintenance that provides adequate flood control.			
MM-13	Minimization of impacts to sensitive species habitat.	PD	DPW Project Biologist	During all work (access ramp construction or flood control maintenance)	In order to minimize impacts to sensitive species habitat, vegetation along the sides of the low-flow channel will be trimmed to no less than 18 inches in height when vegetation trimming is deemed necessary.			
MM-14	Avoidance of impacts to sensitive species.	PD	Qualified Biologist	Project Life	<p>If ARTO or LBVI are detected within or adjacent to the project area, no maintenance or access ramp construction activities will occur until further coordination and/or consultation, as appropriate, with the ACOE and USFWS is completed. Once coordination and/or consultation with the ACOE and USFWS has been completed, the County proposes that the following measures be employed to avoid and/or minimize effects on ARTO and LBVI:</p> <p><u>Access Ramp Construction</u></p> <ol style="list-style-type: none"> <li>1. A qualified biological monitor, as described above in MM-4, with the approval to handle and relocate ARTO if</li> </ol>			

**Table 1. Keys Creek Channel Access and Maintenance Project**

	Mitigation Measure	Type	Monitor	Schedule	Compliance Action	Verification of Compliance		
						Initial	Date	Remarks
					<p>encountered, shall be present during construction and fence installation activities to ensure avoidance of impacts to any sensate species and habitats on site.</p> <p>2. Given that access ramp construction activities could disturb potential arroyo toad aestivating habitat, at least 14 days prior to the start of construction:</p> <ul style="list-style-type: none"> <li>a. The limits of work line shall be staked and fenced with orange fencing.</li> <li>b. Temporary arroyo toad exclusionary fencing shall be installed along the limits of work. The arroyo toad exclusionary fencing shall consist of silt fencing that is staked and secured at the base with a double layer of gravel bags, and be installed under the supervision of a qualified biological monitor.</li> <li>c. Pre-construction arroyo toad clearance surveys shall be conducted following installation of the exclusionary fencing. These surveys will consist of a qualified biologist walking the</li> </ul>			

**Table 1. Keys Creek Channel Access and Maintenance Project**

Mitigation Measure	Type	Monitor	Schedule	Compliance Action	Verification of Compliance		
					Initial	Date	Remarks
				<p>site within the fence line prior to construction to locate arroyo toad individuals within the construction limits. A total of three consecutive survey nights within the week prior to the start of construction, with the contingent for three additional nights. No work will occur until surveys result in no toads present.</p> <p>3. The qualified biologist shall be on site during all construction activities to ensure no arroyo toads enter or are uncovered. Any arroyo toad found shall be relocated to the nearest safe location containing suitable habitat outside the work area. Both the biological monitor and the translocation area should be approved by the USFWS prior to access ramp construction activities.</p> <p>4. The approved biological monitor shall maintain a complete record of any arroyo toad encountered and moved from harm's way during the construction activity. Information shall include: location, date, and time of observation; details of the observed behavior; relocation site; estimated number of toads seen or heard; and photographs (when feasible). The</p>			

**Table 1. Keys Creek Channel Access and Maintenance Project**

Mitigation Measure	Type	Monitor	Schedule	Compliance Action	Verification of Compliance		
					Initial	Date	Remarks
				<p>ACOE and USFWS shall be notified immediately should any arroyo toad be found injured or dead.</p> <p><u>Tiered Maintenance</u></p> <ol style="list-style-type: none"> <li>Given that maintenance could disturb potential arroyo toad aestivating habitat, pre-maintenance arroyo toad clearance surveys shall be conducted within seven days prior to the maintenance activity. These surveys will consist of a qualified biologist walking the site prior to construction to locate arroyo toad individuals within the maintenance-proposed area of effect. A total of three consecutive survey nights within the week prior to the start of the maintenance shall be conducted, with the contingent for three additional nights. No work will occur until surveys result in no toads present.</li> <li>A qualified biological monitor, as defined above in MM-4, with the added approval to handle and relocate ARTO if encountered, shall be present during maintenance activities to ensure avoidance of impacts to any sensitive species and habitats on-site.</li> <li>The qualified biologist shall be on-site during all maintenance activities to ensure no arroyo toad enter the maintenance area</li> </ol>			

**Table 1. Keys Creek Channel Access and Maintenance Project**

	Mitigation Measure	Type	Monitor	Schedule	Compliance Action	Verification of Compliance		
						Initial	Date	Remarks
					<p>or are uncovered during any maintenance activities. Any arroyo toad found shall be relocated to the nearest safe location containing suitable habitat outside the relevant maintenance area.</p> <p>4. The approved biological monitor shall maintain a complete record of any arroyo toad encountered and moved from harm's way during the maintenance activity. Information shall include: location, date, and time of observation; details of the observed behavior; relocation site; estimated number of toads seen or heard; and photographs (when feasible). The ACOE and USFWS shall be notified immediately should any arroyo toads be found injured or dead.</p>			
MM-15	Qualitative Monitoring of sensitive species and their habitat.	LT	Qualified Biologist	Annually During Spring	In order to maintain and manage the sensitive species and their habitats, a qualified biologist will conduct annual surveys, in conjunction with vegetation monitoring, to note any signs or occurrences of sensitive wildlife species. The biologist will conduct qualitative assessments to evaluate habitat based on native vegetation. Assessments will include general observations of vegetation health and vigor, vandalism/trespassing, encroachment of non-native invasive species, and other maintenance needs. Qualitative monitoring visits will include photo documentation of the site from established photo point locations.			

**Table 1. Keys Creek Channel Access and Maintenance Project**

	Mitigation Measure	Type	Monitor	Schedule	Compliance Action	Verification of Compliance		
						Initial	Date	Remarks
MM-16	Quantitative Monitoring of sensitive species and their habitat.	LT	Qualified Biologist	Vegetation monitoring performed every 3 years	In order to assess the success of the management and maintenance of sensitive species habitat, a qualified biologist will conduct quantitative assessments of the site every third year. Vegetation monitoring detailing habitat quality will be performed every third year in spring. Monitoring will follow the California Native Plant Society Relevé Protocol.			
MM-17	Notifications to Resource Agencies	LT	Qualified Biologist	Project Life	Prior to work, resource agencies will be notified of proposed construction or maintenance activities. Results of surveys and monitoring reports shall be prepared and submitted. After work is performed, a post-maintenance summary report shall be submitted within 30 days of work completion. An annual monitoring report shall be prepared that summarizes all the yearly activities. All notifications and reports shall be conducted in accordance with resource agencies requirements.			