FOR CONTRACT NO.: 07-4L5704

INFORMATION HANDOUT

WATER QUALITY

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

BOARD ORDER NO.09-137

PERMITS

UNITED STATES ARMY CORPS OF ENGINEERS
NON-REPORTING NATIONWIDE 404 PERMIT

AGREEMENTS

CALIFORNIA DEPARTMENT OF FISH AND GAME
NOTIFICATION NO.1600-2010-0038-R5

NATIONAL MARINE FISHERIES SERVICES

UNITED STATES FISH AND WILDLIFE SERVICE (Biological Opinion)

ROUTE: 07-Ven-33, 150-48.0, 50.8, 46.0

California Regional Water Quality Control Board

Los Angeles Region

Linda S. Adams
Agency Secretary

Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

Arnold Schwarzenegger
Governor

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.waterboards.ca.gov/losangeles

Linna Wei
California Department of Transportation
100 S. Main Street
Los Angeles, CA 90012

WATER QUALITY CERTIFICATION FOR PROPOSED VEN-150 SANTA PAULA CREEK FISH WEIR MODIFICATION PROJECT (Corps' Project No. 2009-00558-VCC), VENTURA COUNTY (File No. 09-137)

Dear Ms. Linna Wei:

Board staff has reviewed your request on behalf of CA Dept. of Transportation (Applicant) for a Clean Water Act Section 401 Water Quality Certification for the above-referenced project. Your application was deemed complete on March 4, 2010.

I hereby issue an order certifying that any discharge from the referenced project 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, and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003 - 0017 - DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges that have received State Water Quality Certification" which requires compliance with all conditions of this Water Quality Certification.

The Applicant shall be liable civilly for any violations of this Certification in accordance with the California Water Code. This Certification does not eliminate the Applicant's responsibility to comply with any other applicable laws, requirements and/or permits.

Should you have questions concerning this Certification action, please contact Dana Cole, Section 401 Program, at (213) 576-5733.

Tracy J. Egoscue
Executive Officer

3/16/10
Date

DISTRIBUTION LIST

Bill Orme (via electronic copy)
State Water Resources Control Board
Division of Water Quality
P.O. Box 944213
Sacramento, CA 94244-2130

Jamie Jackson
(via electronic copy)
California Department of Fish and Game
Streambed Alteration Team
4949 View Ridge Avenue
San Diego, CA 92123

Veronica Chen
U.S. Army Corps of Engineers
Regulatory Branch, Los Angeles District
P.O. Box 532711
Los Angeles, CA 90053-2325

Eric Raffini (via electronic copy)
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105

Diane Noda
U.S. Fish and Wildlife Service
2493 Portola Road, Suite B
Ventura, CA 93003

Vicki Clark, Staff Attorney
Environmental Defense Center
906 Garden Street
Santa Barbara, CA 93101

Jessie Altstatt
Santa Barbara Channel Keeper
714 Bond Street
Santa Barbara, CA 93103
For Ventura Co. only. Erase me please!

Peter Brand
Coastal Conservancy
1330 Broadway, Suite 1100
Oakland, CA 94612

ATTACHMENT A

Project Information
File No. 09-137

1. Applicant:

California Department of Transportation
100 S. Main Street
Los Angeles, CA 90012

Phone: (213) 897-0840 Fax: (213) 897-0685

2. Project Name:

Ven-150 Santa Paula Creek Fish Weir Modification Project

3. Project Location:

North of the City of Santa Paula, Ventura County

Latitude (decimal degrees)	Longitude (decimal degrees)
34.4265	119.0900
34.4266	119.0889
34.4266	119.0890
34.4265	119.0900
34.4266	119.0889
34.4266	119.0890
34.4265	119.0900
34.4265	119.0900

4. Type of Project:

Repair of concreted Rock Weir and Rock Slope

5. Project Purpose:

The proposed project (Project) will replace the destroyed check dams (channel stabilizers and concrete rock slope protection). This section of the creek was heavily damaged in major flood events estimated to be close to the 100-year level during the winter of 2005. The 2005 storm destroyed several grade control structures and created an eight-foot high waterfall that is impassable to upstream migrating steelhead.

The objective is to stabilize this portion of Santa Paula Creek and to permanently remedy the steelhead migration barrier that has been present since the 2005 storm. This project will benefit the steelhead trout and other sensitive fish by increasing their migratory corridors and habitats for spawning along the Santa Paula Creek.

ATTACHMENT A

Project Information
File No. 09-137

Project Description:

The check dams were initially constructed to protect the abutments of Santa Paula Bridge and retaining wall adjacent to Route 150 at Santa Paula Creek. The Project will construct concrete rock weirs and concrete rock slope protection with the capacity to facilitate fish passage upstream of Santa Paula Creek adjacent to State Route 150. Additional drainage work will include the repair of existing, damaged 12-inch-diameter galvanized corrugated metal pipes. Two educational kiosks will be erected on State Route 33.

The proposed project is located adjacent to Route 150 on Santa Paula Creek. It is downstream of bridge No. 52-105, at Post-mile 28.7 within the Santa Paula Creek in Ventura County. It is a mountainous location, on the east slope of Sulfur Mountain. Agriculture and scattered homes are the prevalent land use. A small private college, Saint Thomas Aquinas, is adjacent to the project site. Most of the area is covered with native vegetation, consisting of riparian scrub and coast live oak-walnut woodlands.

Access to the project site has been planned to reduce the impact to the existing riparian vegetation. Construction equipment will be lowered down to the creek from the freeway side. This access will minimize the impact to the existing native vegetation. Construction equipment to be used during project construction includes excavators, loaders, dump trucks, rollers, backhoes, bulldozers, graders, cranes, concrete mixing trucks and pickup trucks.

Caltrans will install a series of 14 rock weir grade control structures and repair grouted rock-slope protection on an approximate 370-foot section of Santa Paula Creek.

To construct the project, water diversion will be created using a coffer dam made from sand or gravel bags and a plastic corrugated pipe that will act as a culvert. Prior to water diversion the creek will be blocked off with nets to ensure steelhead juveniles cannot enter the diversion area. After the construction area is blocked off, a biologist will survey the aquatic habitat for steelhead. Steelhead will be captured via seine or dip nets or both and relocated prior to dewatering and water diversion. The construction area will then be dewatered, and creek flows will be diverted around the construction area for the duration of project construction, which is expected to be about six months.

After the project area is dewatered, the main creek channel will be excavated to a depth of about eight to twelve feet to reach the underlying shale bedrock (bedrock). Concrete debris leftover from the damaged grade control structures and damaged grouted rock slope protection will be removed from the creek channel.

A layer of concrete will be placed over the existing bedrock to create a foundation for the rock weirs and step-pools. Permeable gravel will be placed over the concrete, which will promote groundwater conveyance.

On top of the permeable gravel, a two-ton class rock layer will be placed that will serve as a scour protection and primary foundation layer for the rock weirs and step-pools. The voids in the two-ton class rock layer will be filled with native creek substrate including small boulders, cobbles, gravel, and fines. The approximate six-ton single layer of rocks, comprising the rock weirs, will be placed over the two-ton class rock layer and chained together in two or three rock groups to increase mass of resistance. The voids in the rock weir will be filled with small boulders as well as native cobbles, gravels and fines.

Pools between rock layers will be constructed of small boulders, cobbles, gravel, fines and one or two boulder clusters per pool consisting of three boulders per cluster to create flow diversity. To repair damaged rock slope protection and stabilized banks, four-ton class rock will be placed along the new toes of bank slope. Creek flows will be restored through the main channel after construction is complete. Vegetation will be recruited throughout the project area that will adjust to the natural creek substrate used in the engineered pools and rock weir void filler.

The permanent impact area includes the streambed, stream bank, and partial riparian area along the stream that will be altered during construction, 0.428 acres. Construction will be primarily in the stream and the amount of excavation will be 9,670 cubic yards.

The temporary impact area includes the temporary access points and the area in between the Environmental Sensitive Area fencing and the permanent impact area, 0.276 acres.

Project construction is slated to begin in late May and conclude in

ATTACHMENT A

Project Information
File No. 09-137

	late October or early November 2011.
6. Federal Agency/Permit:	U.S. Army Corps of Engineers NWP No. 27 and 33 (Permit No. 2009-00558-VCC)
7. Other Required Regulatory Approvals:	California Department of Fish and Game Streambed Alteration Agreement
8. California Environmental Quality Act Compliance:	California Department of Transportation finds the Project Categorically Exempt from CEQA pursuant to "Class 1(d) (PRC 21084; 14 CCR 15300 et seq.)
9. Receiving Water:	Santa Paula Creek (Hydrologic Unit No. 403.21)
10. Designated Beneficial Uses:	MUN*, IND, PROC, AGR, GWR, FRSH, REC-1, REC-2, WARM, WILD, RARE, MIGR, SPWN *Conditional beneficial use
11. Impacted Waters of the United States:	Non-wetland waters (vegetated streambed): 0.276 temporary acres (260) linear feet) and 0.428 permanent acres (370 linear feet)
12. Dredge Volume:	None
13. Related Projects Implemented/to be Implemented by the Applicant:	Construction is completed for widening of Sisar Creek Bridge and Santa Paula Creek Bridge. The following table shows Caltrans' proposed projects in the next five (5) years that might have impacts to Santa Paula Creek:

ATTACHMENT A

Project Information
File No. 09-137

County	Route	Postmile	Project Description
Ventura	150	20.5/31.5	Storm damage repair
Ventura	150	22.5/23.5	Restore 6 damaged slopes
Ventura	150	22.7/22.8	Storm damage repair
Ventura	150	26.6/30.5	Restore slope
Ventura	150	27.0/31.0	Rebuild a section of failed roadway

14. Avoidance/ Minimization Activities:

The Applicant has proposed to implement several Best Management Practices, including, but not limited to, the following:

- Biological surveys of the project area shall be performed in locations having increased biological sensitivity as determined by the District Biologist;
- Surveys shall be conducted at most two weeks prior to the clearing and grubbing of vegetation;
- Surveys for nesting birds shall be conducted when clearing and grubbing of vegetation, having the potential to support nesting birds, cannot be avoided during the nesting season between March 1st and September 1st;
- Bridges shall also be surveyed for nesting birds and exclusionary measures shall be implemented to prevent nesting during construction activities;
- All applicable Construction Best Management Practices for water quality shall be implemented to minimize project affects to jurisdictional drainages;

- All Federal and State litter laws shall be followed by the contractors;
- Access will be limited to one pathway only. The designed pathway will have the least impact to the native plants and riparian habitat;
- Access limit will be flagged or marked out in some manner;
- Access path will be re-contoured back to original if necessary, and blocked so as not to allow public access upon project completion;
- Work will be conducted during the dry season from April 1st to November 1st;
- Work will occur during daylight hours only, to minimize impacts on nocturnal wildlife activity;
- Vehicle maintenance will not be conducted in the streambed;
- Staging and storage of materials shall be at a minimum of 100 feet from edge of top of bank;
- A water diversion plan shall be submitted to the NOAA, CDFG, USFWS, ACOE and RWQCB for their approval prior to implementation;
- An environmentally sensitive area shall consist of an area within and near the limits of construction where access is prohibited or limited for the preservation of existing vegetation and the protection of biological habitat;
- Impacts to riparian habitat will be mitigated in consultation with the regulatory agencies once drainages design details are finalized;

15. Proposed Compensatory Mitigation: The Applicant proposes mitigation onsite at 1:1 for 0.428 acres and off site at 2:1 mitigation for 0.856 acres, for a total of 1.284 acres

ATTACHMENT A

Project Information
File No. 09-137

16. Required Compensatory Mitigation:	The Applicant shall provide 1.56 acres of mitigation for impacts to vegetated streambed. See *Attachment B, Conditions of Certifications, Additional Conditions* for modifications and additions to the above proposed compensatory mitigation.

ATTACHMENT B

Conditions of Certification
File No. 09-137

STANDARD CONDITIONS

Pursuant to §3860 of Title 23 of the California Code of Regulations (23 CCR), the following three standard conditions shall apply to this project:

1. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to §13330 of the California Water Code and Article 6 (commencing with 23 CCR §3867).

2. This Certification action is not intended and shall not be construed to apply to 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 23 CCR Subsection 3855(b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

3. Certification is conditioned upon total payment of any fee required pursuant to 23 CCR Chapter 28 and owed by the Applicant.

ADDITIONAL CONDITIONS

Pursuant to 23 CCR §3859(a), the Applicant shall comply with the following additional conditions:

1. The Applicant shall submit to this Regional Board copies of any other final permits and agreements required for this project, including, but not limited to, the U.S. Army Corps of Engineers' (ACOE) Section 404 Permit and the California Department of Fish and Game's (CDFG) Streambed Alteration Agreement. **These documents shall be submitted prior to any discharge to waters of the State.**

2. The Applicant shall adhere to the most stringent conditions indicated with either this certification, the CDFG's Streambed Alteration Agreement, or the ACOE Section 404 Permit.

3. The Applicant shall comply with all water quality objectives, prohibitions, and policies set forth in the *Water Quality Control Plan, Los Angeles Region (1994),* as amended.

4. The Avoidance/Minimization activities proposed by the Applicant as described in Attachment A, No. **14**, are incorporated as additional conditions herein.

5. The Applicant and all contractors employed by the Applicant shall have copies of this Certification and all other regulatory approvals for this project on site at all times and shall be familiar with all conditions set forth.

ATTACHMENT B

Conditions of Certification
File No. 09-137

6. Fueling, lubrication, maintenance, operation, and storage of vehicles and equipment shall not result in a discharge or a threatened discharge to waters of the State. At no time shall the Applicant use any vehicle or equipment which leaks any substance that may impact water quality. Staging and storage areas for vehicles and equipment shall be located outside of waters of the State.

7. All excavation, construction, or maintenance activities shall follow best management practices to minimize impacts to water quality and beneficial uses. Dust control activities shall be conducted in such a manner that will not produce downstream runoff.

8. No construction material, spoils, debris, or any other substances associated with this project that may adversely impact water quality standards, shall be located in a manner which may result in a discharge or a threatened discharge to waters of the State. Designated spoil and waste areas shall be visually marked prior to any excavation and/or construction activity, and storage of the materials shall be confined to these areas.

9. All waste and/or dredged material removed shall be relocated to a legal point of disposal if applicable. A legal point of disposal is defined as one for which Waste Discharge Requirements have been established by a California Regional Water Quality Control Board, and is in full compliance therewith. Please contact the Land Disposal Unit, at (213) 620-6119 for further information.

10. The Applicant shall implement all necessary control measures to prevent the degradation of water quality from the proposed project in order to maintain compliance with the Basin Plan. The discharge shall meet all effluent limitations and toxic and effluent standards established to comply with the applicable water quality standards and other appropriate requirements, including the provisions of Sections 301, 302, 303, 306, and 307 of the Clean Water Act. This Certification does not authorize the discharge by the applicant for any other activity than specifically described in the 404 Permit.

11. The discharge shall not: a) degrade surface water communities and populations including vertebrate, invertebrate, and plant species; b) promote the breeding of mosquitoes, gnats, black flies, midges, or other pests; c) alter the color, create visual contrast with the natural appearance, nor cause aesthetically undesirable discoloration of the receiving waters; d) cause formation of sludge deposits; or e) adversely affect any designated beneficial uses.

12. The Applicant shall allow the Regional Board and its authorized representative entry to the premises, including all mitigation sites, to inspect and undertake any activity to determine compliance with this Certification, or as otherwise authorized by the California Water Code.

13. Application of pesticides must be supervised by a certified applicator and be in conformance with manufacturer's specifications for use. Compounds used must be appropriate to the

target species and habitat. All pesticides directed toward aquatic species must be approved by the Regional Board. Pesticide utilization shall be in accordance with State Water Resources Control Board Water Quality Order Nos. 2004-0008-DWQ and 2004-0009-DWQ.

14. The Applicant shall not conduct any maintenance activities within waters of the State during a rainfall event, or at any period when site conditions would lead to excessive erosion. If any maintenance activities are to be held within five (5) days of a predicted rainfall event, the Applicant shall stage materials necessary to prevent water degradation on site, and shall ensure that all stabilization procedures are completed prior to the rainfall event.

15. If rain is predicted after operations have begun, grading activities must cease immediately and the site must be stabilized to prevent impacts to water quality, and minimize erosion and runoff from the site.

16. The Applicant shall utilize the services of a qualified biologist with expertise in riparian assessments during all construction activities where clearing involves areas to be partially cleared (i.e. some vegetation is to remain in the same reach or in an adjacent reach). The biologist shall be available on site during construction activities to ensure that all protected areas are marked properly and ensure that no vegetation outside the specified areas is removed. The biologist shall have the authority to stop the work, as necessary, if instructions are not followed. The biologist shall be available upon request from this Regional Board for consultation within 24 hours of request of consultation.

17. No activities shall involve wet excavations (i.e., no excavations shall occur below the seasonal high water table). A minimum **5-foot** buffer zone shall be maintained above the existing groundwater level. If construction or groundwater dewatering is proposed or anticipated, the Applicant shall file a **Report of Waste Discharge** to this Regional Board and obtain any necessary NPDES permits/Waste Discharge Requirements prior to discharging waste. Sufficient time should be allowed to obtain any such permits (generally 180 days). If groundwater is encountered without the benefit of appropriate permits, the Applicant shall cease all activities in the areas where groundwater is present, file a Report of Waste Discharge to this Regional Board, and obtain any necessary permits prior to discharging waste.

18. All project construction or maintenance activities not included in this Certification, and which may require a permit, must be reported to the Regional Board for appropriate permitting. Bank stabilization and grading, as well as any other ground disturbances, are subject to restoration and revegetation requirements, and may require additional Certification action.

19. All surface waters, including ponded waters, shall be diverted away from areas undergoing grading, construction, excavation, vegetation removal, and/or any other activity which may

result in a discharge to the receiving water. If surface water diversions are anticipated, the Applicant shall develop and submit a **Surface Water Diversion Plan** (plan) to this Regional Board. The plan shall include the proposed method and duration of diversion activities, structure configuration, construction materials, equipment, erosion and sediment controls, and a map or drawing indicating the locations of diversion and discharge points. Contingency measures shall be a part of this plan to address various flow discharge rates. The plan shall be submitted prior to any surface water diversions. If surface flows are present, then upstream and downstream monitoring for the following shall be implemented:

- pH
- temperature
- dissolved oxygen
- turbidity
- total suspended solids(TSS)

Analyses must be performed using approved US Environmental Protection Agency methods, where applicable. These constituents shall be measured at least once prior to diversion and then monitored for on a daily basis during the first week of diversion and/or dewatering activities, and then on a weekly basis, thereafter, until the in-stream work is complete.

Results of the analyses shall be submitted to this Regional Board by the 15th day of each subsequent sampling month. A map or drawing indicating the locations of sampling points shall be included with each submittal. Diversion activities shall not result in the degradation of beneficial uses or exceedance of water quality objectives of the receiving waters. Downstream TSS shall be maintained at ambient levels. Where natural turbidity is between 0 and 50 Nephelometric Turbidity Units (NTU), increases shall not exceed 20%. Where natural turbidity is greater than 50 NTU, increases shall not exceed 10%. Any such violations may result in corrective and/or enforcement actions, including increased monitoring and sample collection.

20. The Applicant shall restore the proposed **0.276 acres** of TEMPORARY IMPACTS to waters of the United States and all other areas of temporary disturbance which could result in a discharge or a threatened discharge to waters of the State. Restoration shall include revegetation with native species. Restored areas shall be monitored and maintained with native species as necessary for five years. The Applicant shall implement all necessary Best Management Practices to control erosion and runoff from areas associated with this project.

21. The Applicant shall provide COMPENSATORY MITIGATION to offset the proposed temporary loss of **0.276 acres** waters of the United States by creating or restoring riparian habitat at a minimum **1:1** area replacement ratio (**0.276 acres**). The Applicant shall also provide compensatory mitigation for the proposed permanent impacts to **0.428 acres** of vegetation within waters of the United States/Federal jurisdictional wetlands by creating or restoring riparian habitat/Federal jurisdictional wetland habitat at a minimum **3:1** area replacement ratio (**1.284 acres**). Total mitigation provided shall be **1.560 acres**.

If the Applicant proposes funding to a third-party organization for the creation or restoration of a total of **1.284 acres** of vegetated streambed riparian habitat within waters of the United States/Federal jurisdictional wetlands, then funding shall apply to mitigation acreage only, exclusive of administrative costs. The Applicant shall submit a **Proposed Mitigation Report** which shall include:

(a) Documentation from the third party indicating that funds have been used for mitigation acreage only, which do not include administrative costs.
(b) The boundary of the mitigation site shall be clearly identified on a map of suitable resolution and quality and shall also be defined by latitude and longitude.
(c) The type(s) of mitigation shall be described (e.g., removal of exotics and/or replanting with native species, etc.)
(d) Success criteria shall be established.

This information shall be submitted to this Regional Board for approval prior to any disturbance within waters of the United States and shall include copies of all agreements made between the Applicant and a third party organization regarding compensatory mitigation efforts.

22. All open space and mitigation areas shall be placed within a conservation easement to ensure preservation in perpetuity. Documentation of proper easement placement shall be submitted to the Regional Board within one year.

23. A *Habitat Mitigation Monitoring Plan* was submitted to this Regional Board on March 3, 2010. In accordance with the mitigation plan signed February 19, 2010 the mitigation required above shall be adhered to as long as the mitigation requirements in acreage stated above are met.

24. The Applicant shall submit to this Regional Board **Annual Mitigation Monitoring Reports** (Annual Reports) by **January 1st** of each year for a minimum period of **five (5) years** following this issuance of 401 Certification or until mitigation success has been achieved and documented. The Annual Reports shall describe in detail all of the project/construction activities performed during the previous year and all restoration and mitigation efforts; including percent survival by plant species and percent cover. The Annual Reports shall describe the status of other agreements (e.g., mitigation banking) or any delays in the mitigation process. At a minimum the Annual Reports shall include the following documentation and answered appropriately whether or not mitigation has been performed:

(e) Color photo documentation of the pre- and post-project and mitigation site conditions;

(f) Geographical Positioning System (GPS) coordinates in decimal-degrees format outlining the boundary of the project and mitigation areas;

(g) The overall status of project including a detailed schedule of work;

(h) Copies of all permits revised as required in Additional Condition 1;

(i) Water quality monitoring results for each reach (as required) compiled in an easy to interpret format;

(j) A certified Statement of "no net loss" of wetlands associated with this project;

(k) Discussion of any monitoring activities and exotic plant control efforts; and

(l) A certified Statement from the permittee or his/her representative that all conditions of this Certification have been met.

25. All applications, reports, or information submitted to the Regional Board shall be signed:

(a) For corporations, by a principal executive officer at least of the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which discharge originates.

(b) For a partnership, by a general partner.

(c) For a sole proprietorship, by the proprietor.

(d) For a municipal, State, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

26. Each and any report submitted in accordance with this Certification shall contain the following completed declaration:

"I declare under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who managed the system or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Executed on the _____ day of _____ at _____.

ATTACHMENT B

Conditions of Certification
File No. 09-137

_____ (Signature)
_____ (Title)"

27. All communications regarding this project and submitted to this Regional Board shall identify the Project File Number **09-137**. Submittals shall be sent to the attention of the 401 Certification Unit.

28. Any modifications of the proposed project may require submittal of a new Clean Water Act Section 401 Water Quality Certification application and appropriate filing fee.

29. The project shall comply with the local regulations associated with the Regional Board's **Municipal Stormwater Permit** issued to the Department of Transportation (Caltrans) under NPDES No. CAS000003 and Waste Discharge Requirements Order No. 99 - 06 - DWQ. This includes the Standard Urban Storm Water Mitigation Plan (SUSMP) and all related implementing local ordinances and regulations for the control of stormwater pollution from new development and redevelopment.

30. The project shall also comply with all requirements of the National Pollutant Discharge Elimination System (NPDES) **General Permit** for Storm Water Discharges Associated with Construction Activity, Order No. 99-08-DWQ. All stormwater treatment systems shall be located outside of any water of the State and shall not be used as a wetland or riparian mitigation credit.

31. Coverage under this Certification may be transferred to the extent the underlying federal permit may legally be transferred and further provided that the Applicant notifies the Executive Officer at least 30 days before the proposed transfer date, and the notice includes a written agreement between the existing and new Applicants containing a specific date of coverage, responsibility for compliance with this Certification, and liability between them.

32. The Applicant or their agents shall report any noncompliance. Any such information shall be provided verbally to the Executive Officer 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 Executive Officer, 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.

ATTACHMENT B

Conditions of Certification
File No. 09-137

33. *Enforcement:*

    (a) 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.

    (b) In response to a suspected violation of any condition of this Certification, the State Water Resources Control Board (SWRCB) or Regional Water Quality Control Board (RWQCB) may require the holder of any permit or license subject to this Certification to furnish, under penalty of perjury, any technical or monitoring reports the SWRCB deems appropriate, provided that the burden, including costs, of the reports shall be a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

    (c) In response to any violation of the conditions of this Certification, the SWRCB or RWQCB may add to or modify the conditions of this Certification as appropriate to ensure compliance.

34. This Certification shall expire five (5) years from date of this Certification. The Applicant shall submit a complete application prior to termination of this Certification if renewal is requested.

DEPARTMENT OF THE ARMY
P.O. Box 532711
Los Angeles, CA 90017-3401

March 19, 2010

REPLY TO
ATTENTION OF:

Office of the Chief
Regulatory Division

DEPARTMENT OF THE ARMY NATIONWIDE PERMIT AUTHORIZATION

Paul Caron
Senior District Biologist
California Department of Transportation
District 7
100 Main Street, Suite 100
Los Angeles, California 90012-3606

Dear Mr. Caron:

This is in reply to your application (File No. SPL-2009-00558-VCC) dated July 6, 2009, for a Department of the Army Permit to discharge fill onto waters of the U.S., in association with the (Fish Ladder at Santa Paula Creek) Project. The proposed work would take place in Santa Paula Creek within the City of Santa Paula, Ventura County, California.

Based on the information you have provided, the Corps of Engineers has determined that your proposed activity complies with the enclosed terms and conditions of Nationwide Permit Nos. NWP 27, Aquatic Habitat Restoration, Establishment, and Enhancement Activities and NWP 33, Temporary Construction, Access, and Dewatering, as described in enclosure 1.

Specifically, you are authorized to:

1. Excavation of approximately 9,670 cubic yards within 0.428 acre of waters of the U.S to an approximate depth of 2.5 to 3.5 meters to reach existing dense shale (bedrock) of the streambed
2. Discharge of approximately 27,860 cubic yards of fill material within waters of the U.S. to construct the concreted rock wier system consisting of various sized rocks, boulders, gravel, fines, and native substrate

3. Temporary impact of 0.276 acres within waters of the U.S.
4. Temporary water diversion and stockpile of native material to be covered and wrapped with a plastic, impermeable liner until it is needed in the creek bed reconstruction within waters of the U.S.
5. Temporary construction access within waters of the U.S.

Furthermore, you must comply with the following non-discretionary Special Conditions:

Special Conditions:

1) The Permittee shall clearly mark the limits of the workspace with flagging or similar means to ensure mechanized equipment does not enter preserved waters of the U.S. and riparian wetland/habitat areas shown on Figure L-1. Adverse impacts to waters of the U.S. beyond the Corps-approved construction footprint are not authorized. Such impacts could result in permit suspension and revocation, administrative, civil or criminal penalties, and/or substantial, additional, compensatory mitigation requirements.

2) The Permittee shall hydroseed any disturbed slope areas that have been left exposed with native vegetation according to the planting palette recommendations provided in the submitted Habitat Mitigation Monitoring Plan (dated February 25, 2010, and prepared by Linna Wei).

3) The permittee shall remove all temporary project related structures outside waters of the U.S. upon project completion.

4) Within 45 calendar days of completion of authorized work in waters of the U.S., as described above, the Permittee shall submit to the Corps Regulatory Division a post-project implementation memo that includes: A) the date authorized impacts to waters of the U.S. ceased; B) Photographs taken at the project site before, during and after construction; and C) One copy of "as built" drawings

5) The Permittee has proposed to mitigate for impacts to waters of the U. S., through implementation of the final mitigation plan: “Habitat Mitigation and Monitoring Plan" (dated February 25, 2010, and prepared by Linna Wei). According to the mitigation plan, responsible parties would be as follows: a) Implementation: State of California Department of Transportation; b) Performance: State of California Department of Transportation; c) Long-term management: State of California Department of Transportation. The Permittee retains ultimate legal responsibility for meeting the requirements of the final mitigation plan. Detailed mitigation objectives,

performance standards, and monitoring requirements are described in the above mitigation plan. The Permittee shall complete site preparation and planting and initiate monitoring as described in the final, approved mitigation plan concurrently with or immediately after completion of impacts to waters of the U.S. and as follows:

A) Within 45 calendar days of complete installation of all mitigation, the Permittee shall submit to the Corps Regulatory Division two copies of a memo indicating the following:
a) Date(s) all mitigation was installed and monitoring was initiated;
b) Schedule for future mitigation monitoring, implementation and reporting pursuant to final, Corps-approved HMMP;
c) Summary of compliance status with each special condition of this permit (including any noncompliance previously occurred or currently occurring and corrective actions taken to achieve compliance);
d) Color photographs taken at the project site before and after construction for those aspects directly associated with impacts to waters of the U.S.; and
e) One copy of "as built" drawings for the entire project, including all mitigation sites (all sheets must be signed, dated, to-scale, and no larger than 11 x 17 inches).

B) No later than April 30th of each year including the first year and for a minimum of four years, the Permittee shall submit annual monitoring reports which include photographs and documentation of monitoring results.

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

6) Thirty (30) days prior to initiating construction in waters of the U.S., and to mitigate for impacts to 0.251 acre of waters of the U.S., the Permittee shall provide documentation verifying purchase of 0.501 credits for the establishment of riparian waters of the U.S. from a Corps-approved mitigation bank or in-lieu fee program (ILFP). The Permittee shall not initiate work in waters of the U.S. prior to receiving written confirmation (by letter or e-mail) from the Corps Regulatory Division as to compliance with this special condition. The Permittee retains responsibility for providing the compensatory mitigation until the number and resource type of credits described above have been secured from a sponsor and the district engineer has received documentation that confirms that the sponsor has accepted the responsibility for providing the required compensatory mitigation. This documentation may consist of a letter or form signed by the sponsor, with the permit number and a statement indicating the number and resource type of credits that have been secured from the sponsor.

Endangered Species Act:

1) This Corps permit does not authorize you to take any threatened or endangered species, in particular the steelhead (*Oncorhynchus mykiss*) or adversely modify its designated critical habitat. In order to legally take a listed species, you must have separate authorization under the Endangered Species Act (ESA) (e.g. ESA Section 10 permit, or a Biological Opinion (BO) under ESA Section 7, with "incidental take" provisions with which you must comply). The enclosed NMFS BO (F/SWR/2009/02689) contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BO. Your authorization under this Corps permit is conditional upon your compliance with all of the mandatory terms and conditions associated with incidental take of the attached BO, which terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BO, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your Corps permit.

2) Pursuant to the enclosed FWS correspondence dated November 25, 2009, including the required avoidance and minimization measures, the Corps Regulatory Division has determined and the FWS has concurred that your activity is not likely to adversely affect the above species. Your authorization under this Corps permit is conditional upon your compliance with all of the required avoidance and minimization measures, which are incorporated by reference in this permit. Failure to comply with the required avoidance and minimization measures would constitute non-compliance with your Corps permit.

Cultural Resources:

1) Pursuant to 36 C.F.R. section 800.13, in the event of any discoveries during construction of either human remains, archeological deposits, or any other type of historic property, the Permittee shall notify the Corps' Archeology Staff within 24 hours (Steve Dibble at 213-452-3849 or John Killeen at 213-452-3861). The Permittee shall immediately suspend all work in any area(s) where potential cultural resources are discovered. The Permittee shall not resume construction in the area surrounding the potential cultural resources until the Corps Regulatory Division re-authorizes project construction, per 36 C.F.R. section 800.13.

This letter of verification is valid through March 19, 2012. All nationwide permits expire on March 18, 2012. It is incumbent upon you to remain informed of changes to the nationwide permits. If the Corps of Engineers modifies, reissues, or

revokes any nationwide permit at an earlier date, we will issue a public notice announcing the changes.

A nationwide permit does not grant any property rights or exclusive privileges. Also, it does not authorize any injury to the property or rights of others or authorize interference with any existing or proposed Federal project. Furthermore, it does not obviate the need to obtain other Federal, state, or local authorizations required by law.

Thank you for participating in our regulatory program. If you have any questions, please contact Veronica Chan at 213-452-3292 or via e-mail at Veronica.C.Chan@usace.army.mil.

Please be advised that you can now comment on your experience with Regulatory Division by accessing the Corps web-based customer survey form at: http://per2.nwp.usace.army.mil/survey.html.

Sincerely,

Stephanie Hall
Senior Project Manager
Regulatory Division

Enclosure

LOS ANGELES DISTRICT
U.S. ARMY CORPS OF ENGINEERS

CERTIFICATION OF COMPLIANCE WITH
DEPARTMENT OF THE ARMY NATIONWIDE PERMIT

Permit Number: *SPL-2009-00558-VCC*

Name of Permittee: *Caltrans District 7, Paul Caron*

Date of Issuance: *March 19, 2010*

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

U.S Army Corps of Engineers
Regulatory Division
ATTN: CESPL-RG-SPL-2009-00558-VCC
P.O. Box 532711
Los Angeles, CA 90017-3401

Please note that your permitted activity is subject to a compliance inspection by an Army Corps of Engineers representative. If you fail to comply with this nationwide permit you may be subject to permit suspension, modification, or revocation procedures as contained in 33 CFR 330.5 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit condition(s).

_____ _____
Signature of Permittee Date

Enclosure 1: NATIONWIDE PERMIT NUMBER(S) NWP 27 Aquatic Habitat Restoration, Establishment, and Enhancement Activities. TERMS AND CONDITIONS

1. **Nationwide Permit(s) NWP 27 Aquatic Habitat Restoration, Establishment, and Enhancement Activities and NWP 33 Temporary Construction, Access, and Dewatering. Terms:**

Your activity is authorized under Nationwide Permit Number(s) NWP 27 Aquatic Habitat Restoration, Establishment, and Enhancement Activities and NWP 33 Temporary Construction, Access, and Dewatering subject to the following terms:

27. Aquatic Habitat Restoration, Establishment, and Enhancement Activities. Activities in waters of the United States associated with the restoration, enhancement, and establishment of tidal and non-tidal wetlands and riparian areas and the restoration and enhancement of non-tidal streams and other non-tidal open waters, provided those activities result in net increases in aquatic resource functions and services. To the extent that a Corps permit is required, activities authorized by this NWP include, but are not limited to: the removal of accumulated sediments; the installation, removal, and maintenance of small water control structures, dikes, and berms; the installation of current deflectors; the enhancement, restoration, or establishment of riffle and pool stream structure; the placement of in-stream habitat structures; modifications of the stream bed and/or banks to restore or establish stream meanders; the backfilling of artificial channels and drainage ditches; the removal of existing drainage structures; the construction of small nesting islands; the construction of open water areas; the construction of oyster habitat over unvegetated bottom in tidal waters; shellfish seeding; activities needed to reestablish vegetation, including plowing or discing for seed bed preparation and the planting of appropriate wetland species; mechanized land clearing to remove non-native invasive, exotic, or nuisance vegetation; and other related activities. Only native plant species should be planted at the site. This NWP authorizes the relocation of non-tidal waters, including non-tidal wetlands and streams, on the project site provided there are net increases in aquatic resource functions and services. Except for the relocation of non-tidal waters on the project site, this NWP does not authorize the conversion of a stream or natural wetlands to another aquatic habitat type (e.g., stream to wetland or vice versa) or uplands. This NWP does not authorize stream channelization. This NWP does not authorize the relocation of tidal waters or the conversion of tidal waters, including tidal wetlands, to other aquatic uses, such as the conversion of tidal wetlands into open water impoundments. Reversion. For enhancement, restoration, and establishment activities conducted: (1) In accordance with the terms and conditions of a binding wetland enhancement, restoration, or establishment agreement between the landowner and the U.S. Fish and Wildlife Service (FWS), the Natural Resources Conservation Service (NRCS), the Farm Service Agency (FSA), the National Marine Fisheries Service (NMFS), the National Ocean Service (NOS), or their designated state cooperating agencies; (2) as voluntary wetland restoration, enhancement, and establishment actions documented by the NRCS or USDA Technical Service Provider pursuant to NRCS Field Office Technical Guide standards; or (3) on reclaimed surface coal mine lands, in accordance with a Surface Mining Control and Reclamation Act permit issued by the OSM or the applicable state agency, this NWP also authorizes any future discharge of dredged or fill material associated with the reversion of the area to its documented prior condition and use (i.e., prior to the restoration, enhancement, or establishment activities). The reversion must occur within five years after expiration of a limited term wetland restoration or establishment agreement or permit, and is authorized in these circumstances even if the discharge occurs after this NWP expires. The five-year reversion limit does not apply to agreements without time limits reached between the landowner and the FWS, NRCS, FSA, NMFS, NOS, or an appropriate state cooperating agency. This NWP also authorizes discharges of dredged or fill material in waters of the United States for the reversion of wetlands that were restored, enhanced, or established on prior-converted cropland that has not been abandoned or on uplands, in accordance with a binding agreement between the landowner and NRCS, FSA, FWS, or their designated state cooperating agencies (even though the restoration, enhancement, or establishment activity did not require a section 404 permit). The prior condition will be documented in the original agreement or permit, and the determination of return to prior conditions will be made by the Federal agency or appropriate state agency executing the agreement or permit. Before conducting any reversion activity the permittee or the appropriate Federal or state agency must notify the district engineer and include the documentation of the prior condition. Once an area has reverted to its prior physical condition, it will be subject to whatever the Corps Regulatory requirements are applicable to that type of land at the time. The requirement that the activity result in a net increase in aquatic resource functions and services does not apply to reversion activities meeting the above conditions. Except for the activities described above, this NWP does not authorize any future discharge of dredged or fill material associated with the reversion of the area to its prior condition. In such cases a separate permit would be required for any reversion. Reporting: For those activities that do not require pre-construction notification, the permittee must submit to the district engineer a copy of: (1) The binding wetland enhancement, restoration, or establishment agreement, or a project description, including project plans and location map; (2) the NRCS or USDA Technical Service Provider documentation for the voluntary wetland restoration, enhancement, or establishment action; or (3) the SMCRA permit issued by OSM or the applicable state agency. These documents must be submitted to the district engineer at least 30 days prior to commencing activities in waters of the United States authorized by this NWP. Notification. The permittee must submit a pre-construction

notification to the district engineer prior to commencing the activity (see general condition 27), except for the following activities: (1) Activities conducted on non-Federal public lands and private lands, in accordance with the terms and conditions of a binding wetland enhancement, restoration, or establishment agreement between the landowner and the U.S. FWS, NRCS, FSA, NMFS, NOS, or their designated state cooperating agencies; (2) Voluntary wetland restoration, enhancement, and establishment actions documented by the NRCS or USDA Technical Service Provider pursuant to NRCS Field Office Technical Guide standards; or (3) The reclamation of surface coal mine lands, in accordance with an SMCRA permit issued by the OSM or the applicable state agency. However, the permittee must submit a copy of the appropriate documentation. (Sections 10 and 404) Note: This NWP can be used to authorize compensatory mitigation projects, including mitigation banks and in-lieu fee programs. However, this NWP does not authorize the reversion of an area used for a compensatory mitigation project to its prior condition, since compensatory mitigation is generally intended to be permanent.

33. Temporary Construction, Access, and Dewatering. Temporary structures, work, and discharges, including cofferdams, necessary for construction activities or access fills or dewatering of construction sites, provided that the associated primary activity is authorized by the Corps of Engineers or the U.S. Coast Guard. This NWP also authorizes temporary structures, work, and discharges, including cofferdams, necessary for construction activities not otherwise subject to the Corps or U.S. Coast Guard permit requirements. Appropriate measures must be taken to maintain near normal downstream flows and to minimize flooding. Fill must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. The use of dredged material may be allowed if the district engineer determines that it will not cause more than minimal adverse effects on aquatic resources. Following completion of construction, temporary fill must be entirely removed to upland areas, dredged material must be returned to its original location, and the affected areas must be restored to pre-construction elevations. The affected areas must also be revegetated, as appropriate. This permit does not authorize the use of cofferdams to dewater wetlands or other aquatic areas to change their use. Structures left in place after construction is completed require a section 10 permit if located in navigable waters of the United States. (See 33 CFR part 322.)
Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 27). The pre-construction notification must include a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions. (Sections 10 and 404)

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as appropriate, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP.

2. Nationwide Permit General Conditions:
The following general conditions must be followed in order for any authorization by an NWP to be valid:

1. *Navigation.*

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

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

   (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. *Aquatic Life Movements*. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.

3. *Spawning Areas.* Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. *Migratory Bird Breeding Areas*. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. *Shellfish Beds.* No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48.

6. *Suitable Material.* No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. *Water Supply Intakes.* No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. *Adverse Effects From Impoundments*. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. *Management of Water Flows*. To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the preconstruction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. *Fills Within 100-Year Floodplains*. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. *Equipment*. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. *Soil Erosion and Sediment Controls*. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. *Removal of Temporary Fills*. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. *Proper Maintenance*. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.

15. *Wild and Scenic Rivers.* No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a ''study river'' for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

16. *Tribal Rights.* No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

17. *Endangered Species*.

    (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which ''may affect'' a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

    (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees

must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

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

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add speciesspecific regional endangered species conditions to the NWPs. (e) Authorization of an activity by a NWP does not authorize the ''take'' of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with ''incidental take'' provisions, etc.) from the U.S. FWS or the NMFS, both lethal and non-lethal ''takes'' of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide Web pages at *http://www.fws.gov/* and *http://www.noaa.gov/fisheries.html* respectively.

18. *Historic Properties*.

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

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the preconstruction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

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

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h–2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect

created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, explaining the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

19. *Designated Critical Resource Waters*. Critical resource waters include: NOAA-designated marine sanctuaries, National Estuarine Research Reserves, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment. The district engineer may also designate additional critical resource waters after notice and opportunity for comment.

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

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

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

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

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

    (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10 acre and require preconstruction notification, unless the district engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement. For wetland losses of 1/10 acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

    (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream restoration, to ensure that the activity results in minimal adverse effects on the aquatic environment.

    (e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2 acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2 acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.

    (f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

21. *Water Quality*. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

22. *Coastal Zone Management*. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

23. *Regional and Case-By-Case Conditions*. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

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

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

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

_____ _____

(Transferee) (Date)

26. *Compliance Certification*. Each permittee who received an NWP verification from the Corps must submit a signed certification regarding the completed work and any required mitigation. The certification form must be forwarded by the Corps with the NWP verification letter and will include:

(a) A statement that the authorized work was done in accordance with the NWP authorization, including any general or specific conditions;

(b) A statement that any required mitigation was completed in accordance with the permit conditions; and

(c) The signature of the permittee certifying the completion of the work and mitigation.

27. *Pre-Construction Notification*.

(a) *Timing*. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is

complete within 30 calendar days of the date of receipt and, as a general rule, will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity:

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

(2) If 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 17 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 18 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that is ''no effect'' on listed species or ''no potential to cause effects'' on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) is completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee cannot begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

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

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

(3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided result in a quicker decision.);

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

(5) If the proposed activity will result in the loss of greater than 1/10 acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan;

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

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

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

(d) *Agency Coordination*:

(1) The district engineer will consider any comments from Federal and state agencies concerning the proposed

activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

(2) For all NWP 48 activities requiring pre-construction notification and for other NWP activities requiring preconstruction notification to the district engineer that result in the loss of greater than 1/2-acre of waters of the United States, the district engineer will immediately provide (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy of the PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the preconstruction notification. The district engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each preconstruction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

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

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

(5) For NWP 48 activities that require reporting, the district engineer will provide a copy of each report within 10 calendar days of receipt to the appropriate regional office of the NMFS.

(e) *District Engineer's Decision*: In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If the proposed activity requires a PCN and will result in a loss of greater than 1/10 acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any conditions the district engineer deems necessary. The district engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either:

(1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit;

(2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or

(3) that the project is authorized under the NWP with specific modifications or conditions.

Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan.

28. *Single and Complete Project.* The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

3. Regional Conditions for the Los Angeles District:

In accordance with General Condition Number 23, "Regional and Case-by-Case Conditions," the following Regional Conditions, as added by the Division Engineer, must be met in order for an authorization by any Nationwide to be valid:

1. For coastal watersheds from the southern reach of the Santa Monica Mountains in Los Angeles County to the San Luis Obispo County/Monterey County boundary, all road crossings must employ a bridge crossing design that ensures passage and/or spawning of steelhead (*Oncorhynchus mykiss*) is not hindered in any way. In these areas, bridge designs that span the stream or river, including designs for pier- or pile-supported spans, or designs based on use of a bottomless arch culvert simulating the natural stream bed (i.e., substrate and streamflow conditions in the culvert are similar to undisturbed stream bed channel conditions) shall be employed unless it can be demonstrated the stream or river does not support resources conducive to the recovery of federally listed anadromous salmonids, including migration of adults and smolts, or rearing and spawning. This proposal also excludes approach embankments into the channel unless they are determined to have no detectable effect on steelhead.

2. For the State of Arizona and the Mojave and Sonoran (Colorado) desert regions of California in Los Angeles District (generally north and east of the San Gabriel, San Bernardino, San Jacinto, and Santa Rosa mountain ranges, and south of Little Lake, Inyo County), no nationwide permit, except Nationwide Permits 1 (Aids to Navigation), 2 (Structures in Artificial Canals), 3 (Maintenance), 4 (Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities), 5 (Scientific Measurement Devices), 6 (Survey Activities), 9 (Structures in Fleeting and Anchorage Areas), 10 (Mooring Buoys), 11 (Temporary Recreational Structures), 20 (Oil Spill Cleanup), 22 (Removal of Vessels), 27 (Stream and Wetland Restoration Activities), 30 (Moist Soil Management for Wildlife), 31 (Maintenance of Existing Flood Control Projects), 32 (Completed Enforcement Actions), 35 (Maintenance Dredging of Existing Basins), 37 (Emergency Watershed Protection and Rehabilitation), 38 (Cleanup of Hazardous and Toxic Waste) and 47 (Pipeline Safety Program Designated Time Sensitive Inspections and Repairs), or other nationwide or regional general permits that specifically authorize maintenance of previously authorized structures or fill, can be used to authorize the discharge of dredged or fill material into a jurisdictional special aquatic site as defined at 40 CFR Part 230.40-45 (sanctuaries and refuges, wetlands, mudflats, vegetated shallows, coral reefs, and riffle-and-pool complexes).

3. For all projects proposed for authorization by nationwide or regional general permits where prior notification to the district engineer is required, applicants must provide color photographs or color photocopies of the project area taken from representative points documented on a site map. Pre-project photographs and the site map would be provided with the permit application. Photographs should represent conditions typical or indicative of the resources before impacts.

4. Notification pursuant to general condition 27 shall be required for projects in all special aquatic sites as defined at 40 CFR Part 230.40-45 (sanctuaries and refuges, wetlands, mudflats, vegetated shallows, coral reefs, and riffle-and-pool complexes), and in all perennial waterbodies in the State of Arizona and the Mojave and Sonoran (Colorado) desert regions of California in Los Angeles District (generally north and east of the San Gabriel, San Bernardino, San Jacinto, and Santa Rosa mountain ranges, and south of Little Lake, Inyo County), excluding the Colorado River from Davis Dam downstream to the north end of Topock and downstream of Imperial Dam (Federal Register dated March 12, 2007 (72 FR 11092) - regional conditions requiring notification do not apply to Nationwide Permit 47).

5. Notification pursuant to general condition 27 shall be required for projects in all areas designated as Essential Fish Habitat by the Pacific Fishery Management Council (i.e., all tidally influenced areas - Federal Register dated March 12, 2007 (72 FR 11092), regional conditions requiring notification do not apply to Nationwide Permit 47).

6. Notification pursuant to general condition 27 shall be required for projects in all watersheds in the Santa Monica Mountains in Los Angeles and Ventura counties bounded by Calleguas Creek on the west, by Highway 101 on the north and east, and by Sunset Boulevard and Pacific Ocean on the south (Federal Register dated March 12, 2007 (72 FR 11092) - regional conditions requiring notification do not apply to Nationwide Permit 47).

7. Individual permits shall be required for all discharges of fill material in jurisdictional vernal pools.

8. Individual permits shall be required in Murrieta Creek and Temecula Creek watersheds in Riverside County for new permanent fills in perennial and intermittent watercourses otherwise authorized under NWPs 29, 39, 42 and 43, and in ephemeral watercourses for these NWPs for projects that impact greater than 0.1 acre of waters of the United States. In addition, when NWP 14 is used in conjunction with residential, commercial, or industrial developments the 0.1 acre limit would also apply.

9. Individual permits shall be required in San Luis Obispo Creek and Santa Rosa Creek in San Luis Obispo County for bank stabilization projects, and in Gaviota Creek, Mission Creek and Carpinteria Creek in Santa Barbara County for bank stabilization projects and grade control structures.

10. Notification pursuant to general condition 27 shall be required for projects in the Santa Clara River watershed in Los Angeles and Ventura counties, including but not limited to Aliso Canyon, Agua Dulce Canyon, Sand Canyon, Bouquet Canyon, Mint Canyon, South Fork of the Santa Clara River, San Francisquito Canyon, Castaic Creek, Piru Creek, Sespe Creek and the main-stem of the Santa Clara River (Federal Register dated March 12, 2007 (72 FR 11092) - regional conditions requiring notification do not apply to Nationwide Permit 47).

4. Further information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:
   ( ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
   (X) Section 404 of the Clean Water Act (33 U.S.C. 1344).
   ( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.
   (a) This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
   (b) This permit does not grant any property rights or exclusive privileges.
   (c) This permit does not authorize any injury to the property or rights of others.
   (d) This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
   (a) Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
   (b) Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
   (c) Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
   (d) Design or construction deficiencies associated with the permitted work.
   (e) Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
   (a) You fail to comply with the terms and conditions of this permit.
   (b) The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
   (c) Significant new information surfaces which this office did not consider in reaching the original public interest decision.

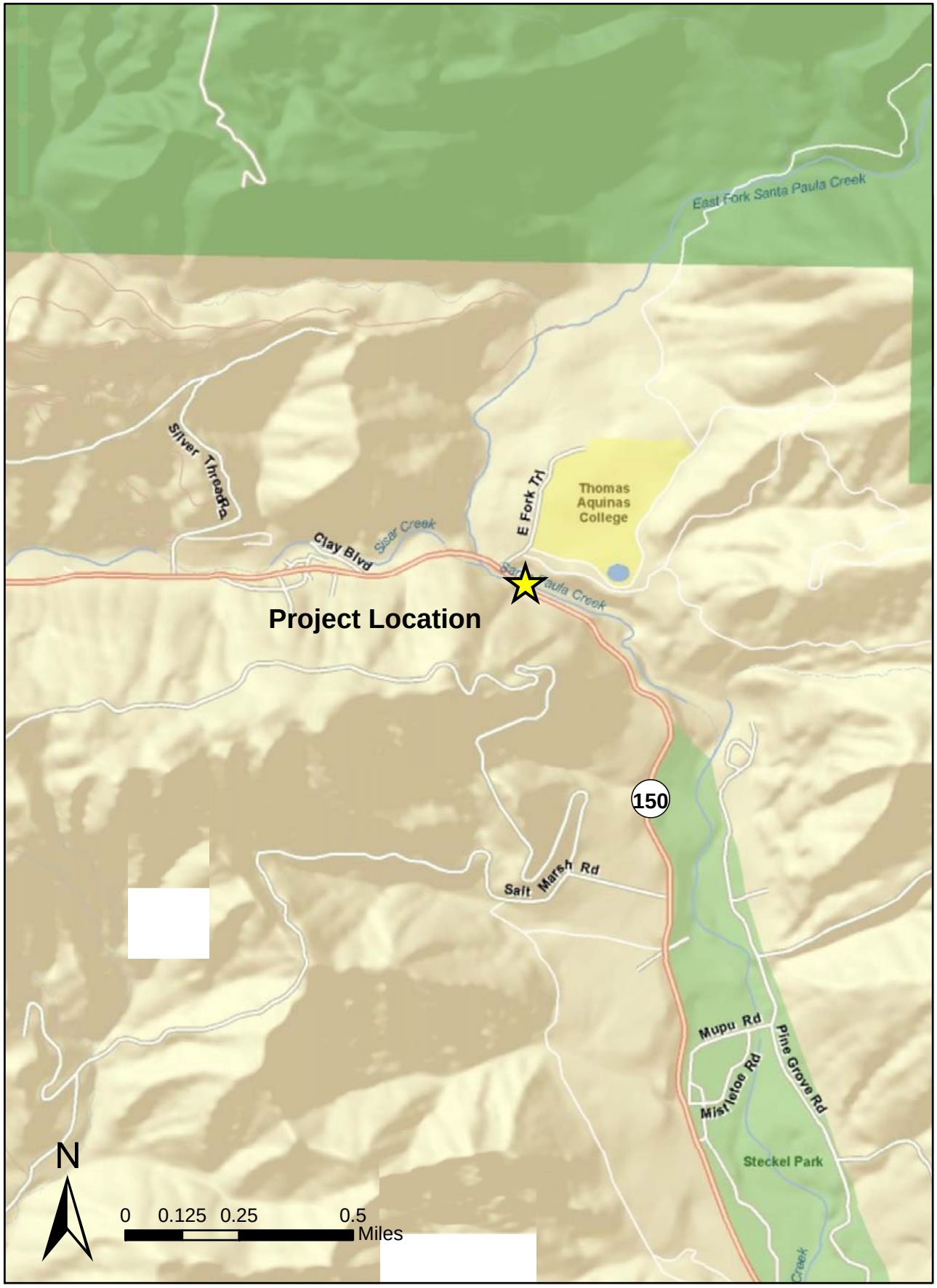
   Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 330.5 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measure ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you

for the cost.

6. This letter of verification is valid for a period not to exceed two years unless the nationwide permit is modified, reissued, revoked, or expires before that time.

7. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition H below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

8. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished with the terms and conditions of your permit.



Project Location Map

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	Ven	33,150	48.0/50.8, 46.0/46.2		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

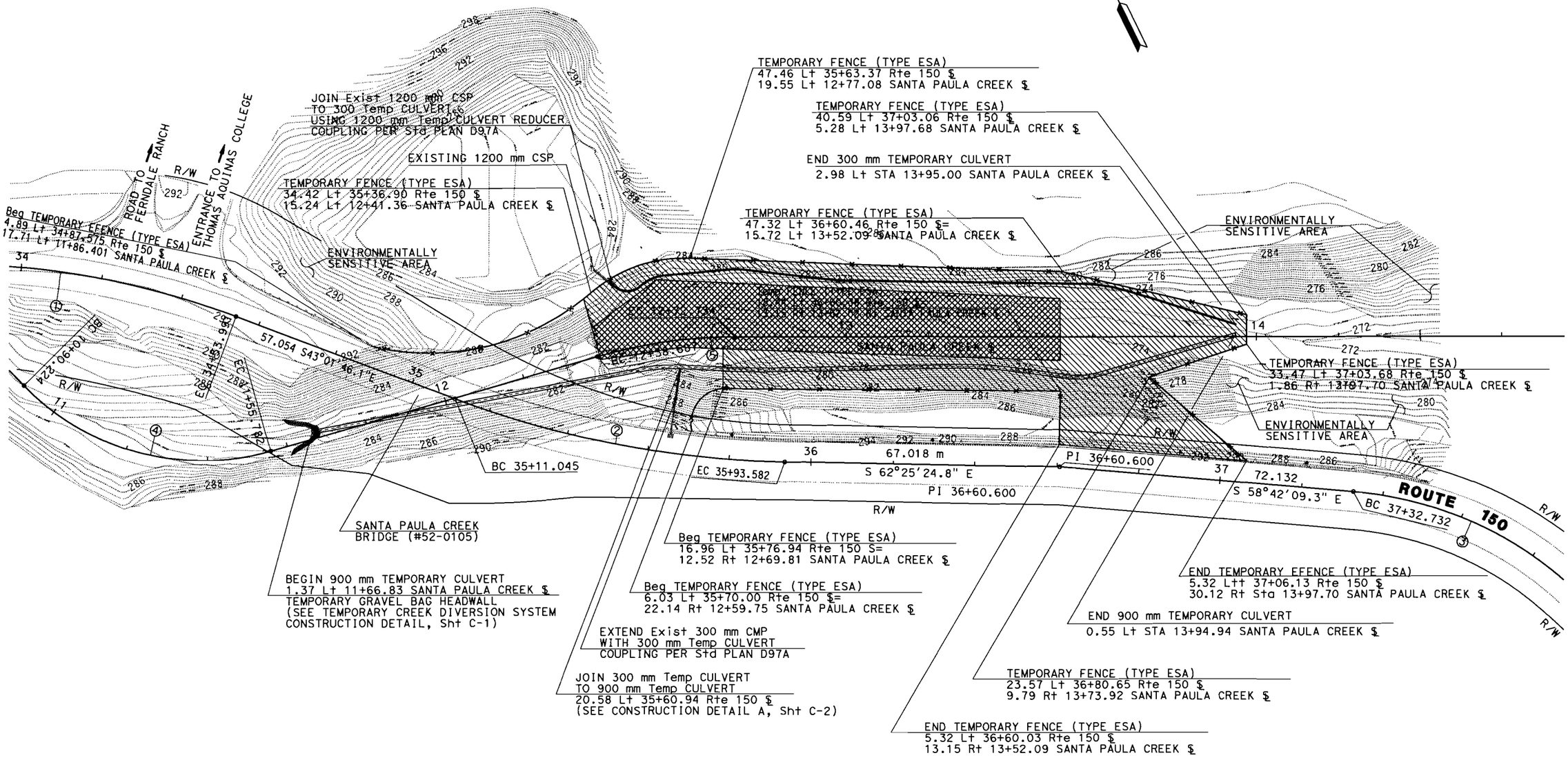
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

Caltrans Metric

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS PRIOR TO COMMENCEMENT OF WORK.
3. CONTRACTOR SHALL ANCHOR PIPE CULVERTS IN PLACE PER Std PLAN D87A AND D87B AND DETERMINE THE CULVERT LOCATION IN THE FIELD, OR AS DIRECTED BY THE ENGINEER.
4. ENVIRONMENTALLY SENSITIVE AREA TEMPORARY FENCE (TYPE ESA) SHALL BE LOCATED TO BE UNOBSTRUCTED FROM VIEW AS SHOWN ON THE PLAN AND AS DIRECTED BY THE ENGINEER.
5. EXISTING UTILITY FACILITIES HAS NOT BEEN PLOTTED ON THIS PLANS.
6. CMP, CSP AND TEMPORARY CULVERT PIPE JOINT SHALL BE WATERTIGHT. SEE STANDARD PLANS D87A, D97A, D97E AND D97F.



LEGEND

PERMANENT IMPACTED AREA = 0.428 ACRES = 18,660 SF
AMOUNT OF EXCAVATION = 9,670 CY
AMOUNT OF BACKFILL/INFILL = 27,860 CY

TEMPORARY IMPACTED AREA = 0.704 ACRES = 30,680 SF

CURVE DATA

NO	R	Δ	T	L
①	204.216	80°11'45.9"	171.954	285.839
②	243.840	19°23'38.7"	41.667	82.538
③	91.440	37°29'17.2"	31.029	59.829
④	60.960	61°37'02.4"	36.352	65.558
⑤	121.920	16°00'00.3"	17.135	34.047

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

LAYOUT PLAN

SCALE 1 : 500

L-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN

FUNCTIONAL SUPERVISOR: OC LEE
CALCULATED-DESIGNED BY: BARNABAS F. VORREITER
CHECKED BY
REVISED BY
DATE REVISED

LAST REVISION 02-09-10
DATE PLOTTED => 10-FEB-2010
TIME PLOTTED => 14:06

California Natural Resources Agency
DEPARTMENT OF FISH AND GAME
South Coast Region
4949 Viewridge Avenue
San Diego, CA 92123
(858) 467-4201
www.dfg.ca.gov

ARNOLD SCHWARZENEGGER, Governor
JOHN McCAMMAN, Director

March 16, 2010

Mr. Paul Caron
California Department of Transportation
100 South Main Street
Los Angeles, California 90012

Subject: Final Lake or Streambed Alteration Agreement
Notification No. 1600-2010-0038-R5
Santa Paula Creek Fish Weir Modification Project

Dear Mr. Caron:

Enclosed is the final Streambed Alteration Agreement (Agreement) for the Santa Paula Creek Fish Weir Modification Project (Project). Before the Department may issue an Agreement, it must comply with the California Environmental Quality Act (CEQA). In this case, the Department, acting as a responsible agency, determined your project is exempt from CEQA and filed a notice of exemption (NOE) on the same date it signed the Agreement.

Under CEQA, filing a NOE starts a 35-day period within which a party may challenge the filing agency's approval of the project. You may begin your project before the 35-day period expires if you have obtained all necessary local, state, and federal permits or other authorizations. However, if you elect to do so, it will be at your own risk.

If you have any questions regarding this matter, please contact Ms. Jamie Jackson at 626-296-3430 or jjackson@dfg.ca.gov.

Sincerely,

Marilyn Hubasty for:

Helen Birss
Environmental Program Manager

ec: Jamie Jackson, Staff Environmental Scientist

CALIFORNIA DEPARTMENT OF FISH AND GAME
4949 Viewridge Avenue
San Diego, CA 92123

March 15, 2010

AGREEMENT REGARDING PROPOSED STREAM OR LAKE ALTERATION

THIS AGREEMENT, entered into between the State of California, Department of Fish and Game, hereinafter called the Department, and California Department of Transportation, 100 South Main Street, Los Angeles, California, 90012, represented by Paul Caron, (213) 897-0610, hereinafter called the Applicant, is as follows:

WHEREAS, pursuant to Section 1602 of the California Fish and Game Code, the Applicant, on the 8th day of February, 2010, notified the Department that they intend to divert or obstruct the natural flow of, or change the bed, channel, or bank of, or use material from the streambed(s) of the following water(s): Santa Paula Creek a tributary to the Santa Clara River, Los Angeles County, California. Areas of jurisdictional streambed to be impacted may be located using the following information: Latitude: N 34.4267; Longitude: W 119.0890.

WHEREAS, the Department (represented by Jeff Humble) has determined that such operations may substantially adversely affect existing fish and wildlife resources specifically including: **fishes**: Southern California coastal steelhead (*Oncorynchus mykiss)*, Santa Ana sucker (*Catostomus santaanae*), arroyo chub (*Gila orcutti)*; **amphibians:** coast range newt (*Taricha t. torosa*), western toad (*Bufo boreas*), Pacific treefrog (*Pseudacris regilla*); **reptiles**: two-striped garter snake (*Thamnophis hammondii)*, southwestern pond turtle (*Actinemys marmorata pallida*), San Diego coast horned lizard (*Phrynosoma coronatum blainvillii*), coast patch-nosed snake (*Salvadora hexalepis*); **birds**: yellow warbler (*Dendroica petechia brewsteri*), yellow-breasted chat (*Icteria virens*), least Bell's vireo (*bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*); **mammals**: San Diego desert woodrat (*Neotoma lepida intermedia),* ringtail cat *(Bassariscus astutus)*; **native plant species:** Mulefat (*Baccharis salicifolia*), white alder (*Alnus rhombifolia*), Arroyo willow (*Salix lasiolepis*) and all other aquatic and wildlife resources in the area, including the riparian vegetation which provides habitat for such species in the area.

THEREFORE, the Department hereby proposes measures to protect fish and wildlife resources during the Applicant's work. The Applicant hereby agrees to accept the following measures/conditions as part of the proposed work. The following provisions constitute the limit of activities agreed to and resolved by this Agreement. The signing of this Agreement does not imply that the Applicant is precluded from doing other activities at the site. However, activities not specifically agreed to and resolved by this Agreement shall be subject to separate notification pursuant to Fish and Game Code Sections 1600 *et seq*.

If the Applicant's work changes from that stated in the notification specified above, this Agreement is no longer valid and a new notification shall be submitted to the Department of Fish and Game. Failure to comply with the provisions of this Agreement and with other pertinent code sections, including but not limited to Fish and Game Code Sections 5650, 5652, 5901, 5931, 5937, and 5948, may result in prosecution.

Nothing in this Agreement authorizes the Applicant to trespass on any land or property, nor does it relieve the Applicant of responsibility for compliance with applicable federal, state, or local laws or ordinances. A consummated Agreement does not constitute the Department's endorsement of the proposed operation, or assure the Department's concurrence with permits required from other agencies.

Term and Effective Date

This Agreement becomes effective the date of the Department's signature and the construction portion terminates on **12/31/2014**. This Agreement shall remain in effect to satisfy the terms/conditions of this Agreement. Any provisions of the Agreement may be amended at any time provided such amendment is agreed to in writing by both parties. Mutually approved amendments become part of the original Agreement and are subject to all previously negotiated provisions.

Extension

Pursuant to Section 1600 *et seq.*, the Applicant may request one extension of the Agreement; the Applicant shall request the extension of this Agreement prior to its termination. The one extension may be granted for up to five years from the date of termination of the Agreement and is subject to Departmental approval. The extension request and fees shall be submitted to the Department's South Coast Office at the above address. If the Applicant fails to request the extension prior to the Agreement's termination, then the Applicant shall submit a new notification with fees and required information to the Department. Any construction/impacts conducted under an expired Agreement are a violation of Fish and Game Code Section 1600 *et seq*. For complete information see Fish and Game Code Section 1600 *et seq*.

Project Description

The Applicant intends to alter the streambed by constructing a fish passage facility in a project that will construct rock weir and rock slope protection (RSP) along Santa Paula Creek. A temporary water diversion will be used to remove the existing check dams and rock slope protection along the creek.

The project will include these activities: a) excavating the main channel to bedrock (2.5-3.5 meters) to reach existing dense shale (bedrock), b) placing 102 millimeter of concrete over the dense shale for protection against saturation, c) placing permeable gravel over the concrete that will promote groundwater conveyance, d) placing 2-ton class rock layer with native substrate filling their voids over the permeable gravel that will serve as a scour protection and primary foundation layer for the rock weirs and step pools, e) placing a single layer and row of 4-ton class rock along new toes of slope for their protection filling 4-ton rock voids with small boulders and native substrate, f) placing one layer of 1.5 meter (approximate 6-ton) diameter rocks, comprising the 14 arc-shaped rock weirs, over the 2-ton class layer filling rock weir voids with small boulders and native substrate, g) chaining individual rocks comprising the rock weirs in 2 or 3-rock groups to increase mass resistance, h) constructing engineered step-pools between rock weirs by placing small boulders, cobbles, gravel, fines, and one or two boulder clusters per pool consisting of three boulders per cluster to create flow diversity.

The fish passage design that is implemented and constructed for this project shall be the one formally approved by both the Department and the National Marine Fisheries Service. Any changes to the approved project design shall be submitted to the Department for evaluation PRIOR to implementation.

Project Location

The project area is at State Route 150, downstream of bridge number 52-105, at post-mile marker 28.7 located in Ventura County (2007 Thomas Guide Page 453, grid H-2).

Impacts:

The Applicant shall not temporarily impact more than 0.428 acres of southern willow scrub, alder and cottonwood habitats, and shall not permanently impact more than 0.43 acres southern willow scrub, alder and cottonwood habitats due to the construction of the weirs and bank protection activities.

General

1. The agreed work includes activities associated with the Project Location and Project Description that is provided above. Specific work areas and mitigation measures are described on/in the plans and documents submitted by the Applicant, including the Technical Memorandum Design Summary (January 2010), Addendum to the Natural Environmental Study (November 2008), U.S. Fish and Wildlife Biological Opinion, National Marine Fisheries Biological Opinion, and the Notification Package for the Santa Paula Creek Fish Weir modification Project and shall be implemented as proposed unless directed differently by this Agreement.

2. The Applicant shall provide a copy of this Agreement to all contractors, subcontractors, and the Applicant's project supervisors. Copies of the Agreement shall be readily available at work sites at all times during periods of active work and must be presented to any Department personnel, or personnel from another agency, upon demand.

3. The Applicant shall notify the Department, in writing, at least five (5) days prior to initiation of construction (project) activities and at least five (5) days prior to completion of construction (project) activities. Notification shall be sent to the South Coast Region office at the above address, Attn: Streambed, SAA#1600-2009-0038-R5.

4. In the event that the project scope, nature, or environmental impact is altered by subsequent permit conditions by a local, state or federal regulatory authority, the Applicant shall either submit an Amendment request or re-Notify the Department of any project modification which conflicts with current conditions or project description.

Compensatory Mitigation

Mitigation for areas of temporary disturbance—The Applicant shall mitigate with the on-site restoration of 0.428 acres of southern willow scrub, with an alder component. Mitigation shall include the revegetation of stripped or exposed work areas within the banks, bed, and channel of the stream (including construction areas, access roads, etc.) with native vegetation local to the area. On-site mitigation shall be initiated no later than the completion of project activities within the jurisdictional areas or **December 31, 2012**. The Habitat Mitigation and Monitoring Plan Titled "VEN 150 Santa Paula Creek Channel Stabilize Santa Paula Creek, Ventura County 07-Ven-150/33 46.2(28.7)/48(29.8)&50.8(31.5) EA: 4L5701" dated January 2010 prepared by Caltrans shall be implemented as proposed, including all attachments and exhibits. If mitigation initiation is delayed additional measures or mitigation may be required.

Mitigation for areas of permanent disturbance—The Applicant shall provide proof of payment of $121,500.00 to Ojai Valley Land Conservancy for the creation of 0.856 acres of riparian habitat within the adjacent Ventura River watershed by **December 31, 2011**. The Habitat Mitigation and Monitoring Plan Titled "VEN 150 Santa Paula Creek Channel Stabilize Santa Paula Creek, Ventura County 07-Ven-150/33-46.2(28.7)/48(29.8)&50.8(31.5) EA: 4L5701" dated January 2010 prepared by Caltrans shall be implemented as proposed, including all attachments and exhibits. All trees (at or above 3" diameter breast height) that are removed shall be replaced at a 1:1 ratio on-site and a 2:1 ratio at an off-site location.

The Applicant shall also remove any non-native aquatic animals from the work area as part of the restoration of the site. Target animals include bullfrog, African clawed frog, non-native turtles, and crayfish. This activity shall be monitored by a qualified biologist, approved by the Department.

Mitigation/Restoration Criteria

5. If a stream's low flow channel, bed or banks have been altered above and/or below the work area, these shall be returned as nearly as possible to their original configuration and width, without creating future erosion problems and shall be re-configured in a way that allows for aquatic wildlife to utilize a low-flow channel. The low-flow channel can be designed, on average, as a 2 foot deep by 4 feet wide channel with a standard S-curve configuration. This design shall be included as part of the on-site restoration of the project area. On-site restoration shall include the elimination of any areas that, as a result of grading, may cause entrapment or stranding of aquatic wildlife in depression-like areas.

6. An annual mitigation and monitoring report shall be submitted to the Department by April 30th of each year for 4 years after planting. This report shall include the survival, % cover, and height by species of both trees and shrubs. The number by species of plants replaced, an overview of the revegetation and exotic plant control efforts, and the method used to assess these parameters shall also be included. Photos from designated photo stations shall be included.

7. After the 4th monitoring year, if the site has met the success criteria, the Department shall request a site visit to determine if the mitigation portion of the Agreement is deemed complete. The site should be free of trash and the irrigation infrastructure shall be removed (unless there is an acceptable justification for leaving the irrigation system in place).

8. No restoration/mitigation shall occur in fuel modification zones, future project areas or areas of maintenance.

9. Planting, maintenance, monitoring and reporting activities shall be overseen by a specialist familiar with restoration of native plants.

10. All plants shall be planted in randomly spaced, naturally clumped patterns and shall consist of a diverse planting palette of both over-story and ground cover species.

11. All planting shall have a minimum of 60% survival, by species, the first year and 80% survival thereafter and/or shall attain 60% cover after 4 years for the life of the project. No woody invasive species shall be present, and herbaceous invasive species shall not exceed 5% cover. If the survival and cover requirements have not been met, the Applicant is responsible for replacement planting to achieve these requirements. Replacement plants shall be monitored with the same survival and growth requirements for 5 years after planting.

12. Plant material for revegetation shall be derived from cuttings, materials salvaged from disturbed areas, and/or seeds obtained from randomly selected native trees and shrubs occurring locally within the same drainage.

13. Any replacement tree/shrub stock, which cannot be grown from cuttings or seeds, shall be obtained from a native plant nursery, be ant free and shall not be inoculated to prevent heart rot. The Applicant shall provide a list of all materials which must be obtained from other than onsite sources.

14. Monitoring of steelhead/smolt movement and migration through and directly adjacent to the Santa Paula Creek weir modification section of the creek shall occur for a minimum of 3 years after project completion and at the appropriate time to monitor for steelhead. Surveys will take place after the rainy season, generally May. Observations shall be made for any steelhead and other aquatic species located in the project area and also shall include conclusions as to the function and existing state of the weirs in relation to fish passage.

Exotic Species Removal and Control

15. The Applicant shall remove any non-native vegetation (tree tobacco, castor bean, giant cane, cape ivy, periwinkle, etc.) from the restoration/mitigation areas and shall dispose of it in a manner and a location which prevents its reestablishment. Removal and subsequent treatments shall be done at least three times annually through the term of restoration.

Giant cane (*Arundo*), if present, shall be cut to a height of 6 inches or less, and the stumps painted with an herbicide approved for aquatic use within 5 minutes of cutting. After this initial treatment, foliar herbicides shall be applied at least three times during the period from May 1st to November 1st to eradicate these plants. Where proposed methods for removing giant cane deviate from this procedure, the Applicant shall present the alternate methods, in writing, to the Department for review and approval, prior to construction.

16. Whenever possible, invasive species shall be removed by hand or by hand-operated power tools rather than by chemical means. Where control of non-native vegetation is required within the bed, bank, or channel of the stream, the use of herbicides is necessary, and there is a possibility that the herbicides could come into contact with water, the Applicant shall employ only those herbicides, such as Rodeo/Aquamaster (Glyphosate), which are approved for aquatic use. If surfactants are required, they shall be restricted to non-ionic chemicals, such as Agri-Dex, which are approved for aquatic use.

17. The Applicant shall apply any herbicides in accordance with state and federal law. No herbicides shall be used where Threatened or Endangered species occur. No herbicides shall be sprayed when wind velocities are above 5 miles per hour. No herbicides shall be used on native vegetation unless specifically authorized, in writing, by the Department.

18. A small amount of selective trimming of native species (e.g. willow, oak and sycamore) may occur to prevent overspray of herbicide from reaching these branches, but only as provided within the conditions of this Agreement. Native vegetation may only be trimmed; individual plants shall not be removed. Material in excess of three (3) inches DBH shall require specific notice to and consultation with the Department.

Resource Protection

19. Swallows-It is anticipated that swallows may nest in crevices, on bridges and other structures between February 15th and September 01st. Caltrans shall take such measures as necessary to prevent nesting on portions of rock surfaces and structures that will cause a conflict between performing necessary work and nesting swallows. Swallows shall be allowed to nest on portions of rock faces and bridges were conflicts are not anticipated. Prior to January 15th existing nests (from previous years) shall be removed. If new nests are built to completion or existing nest become occupied, then any work that would interfere with or discourage swallows from returning to their nests is not permitted. Caltrans shall submit to the Department for approval the proposed exclusionary method to prevent swallows from nesting in the open rock face adjacent to the project location PRIOR to implementation.

20. Bats-Caltrans shall avoid work on or near bridges when it would disturb roosting bats (February 15th – September 30th). If Caltrans determines that work must be conducted during this sensitive time period for roosting bats a qualified biologist familiar with the life history of bats shall conduct at minimum a presence absence survey of the proposed work area and submit surveys, including negative results, to the Department for concurrence PRIOR to any work being completed.

21. The Applicant shall not remove or otherwise disturb vegetation or conduct any other project activities on the project site from March 1st to September 15th to avoid impacts to breeding/nesting birds. If work during the breeding/nesting season can not be avoided then, prior to construction or site

preparation activities, the Applicant shall have a qualified biologist survey all breeding/nesting habitat within the project site and adjacent to the project site for breeding/nesting birds. Surveys shall be conducted every 2-3 days for two consecutive weeks with the last survey no more that three days prior to project implementation. Documentation of findings, including a negative finding must be submitted to the Department for review and concurrence. If no breeding/nesting birds are observed and concurrence has been received from the Department, site preparation and construction activities may begin. If breeding activities and/or an active bird nest is located and concurrence has been received from the Department, the breeding habitat/nest site shall be fenced a minimum of 150 feet (500 feet for raptors) in all directions, and this area shall not be disturbed until the nest becomes inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, and the young will no longer be impacted by the project.

After the initial bird surveys, if work continues during the bird nesting season detailed above, then the Applicant shall conduct weekly surveys throughout the project term to ensure there are no impacts to sensitive bird species in the area. This includes an emphasis for least Bell's vireo and southwestern willow flycatcher to determine presence/absence. A single survey shall be conducted once a week for the duration of the project as it coincides with the nesting season.

If threatened or endangered bird species are observed in the area, no work shall occur during the breeding season (March 1st through September 15th) to avoid direct or indirect (noise) take of listed species and State and/or Federal threatened/endangered species permits may be required prior to commencing project activities. This Agreement does not authorize take of species listed as Threatened and/or Endangered.

Be advised, migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918(50 C.F.R. Section 10.13). Sections 3503, 3503.5 and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA).

22. Prior to any construction during the raptor nesting season, January 31st to September 1st, a qualified biologist shall conduct a site survey for active nests two weeks prior to any scheduled development. If an active nest is located, then no construction work shall be conducted within a 500 foot radius from the nest until the young have fledged and are independent of the adults.

23. If an inactive raptor nest is observed at or adjacent to the project site, the Applicant shall contact the Department to discuss mitigation measures should the nest become active during the project term. If an inactive raptor nest is to be removed, the Applicant shall contact the Department to discuss the possibility of mitigating for the loss of the nest (raptors are known to, and will likely, use the same nesting site year after year).

24. The Applicant shall have a qualified wildlife biologist conduct pre-construction surveys of the project area to confirm the presence/absence of Southern California coastal steelhead, Santa Ana sucker, arroyo chub, two-striped garter snake, southwestern pond turtle, San Diego coast horned lizard, coast patch-nosed snake, yellow warbler, yellow-breasted chat, least Bell's vireo, southwestern willow flycatcher, San Diego desert woodrat, and/or other species of concern likely to be found in the area during the proposed operations. If evidence exist that additional surveys are required, survey techniques, timing, and schedule shall be approved by the Department. Survey results, analysis, and recommendations, along with the field notes shall be provided to the Department prior to commencing construction or within two weeks of completion of field surveys, whichever is earlier.

25. If flowing or ponded water is within the proposed work limits, the Applicant shall have a qualified fisheries biologist survey the proposed work area to verify presence/absence of the any sensitive fish species and any other species of special concern which may occur within the area. Survey methods

shall be approved by the Department. If any sensitive species are found, the Applicant shall cease all work and shall contact the Department immediately within 24 hours of the sighting and shall request an on-site inspection by the Department representative (to be done at the discretion of the Department) to determine if work shall proceed. The results of the surveys shall be provided to the Department, along with copies of all field notes, prior to the completion of work or as otherwise specified. The survey techniques shall be approved by the Department, in writing, and the researcher shall have the required State and federal permits.

26. Should any sensitive species be found during pre-project surveys and work must be done in identified areas during sensitive periods, the Applicant shall develop and implement a plan for the protection of these species. This plan shall be approved by the Department prior to commencing work. The results of any surveys and any protective measures instituted, as a part of the protection and monitoring plan, shall be provided to the Department within one week from implementation.

27. The Applicant shall be responsible for reporting all observations of threatened, endangered or species of special concern to the Departments Natural Diversity Data Base (CNDDB) within ten (10) days of the sighting. This includes sightings that occurred during pre-project surveys and throughout the project and restoration term. Please include local Department personnel on any documents that are submitted to the CNDDB staff to ensure the data is recorded.

28. A qualified fisheries biological monitor with all required collection permits shall be on site during all vegetation removal, water diversion, and excavation operations. The monitor shall then remain at the work area for at least 3 times per week at no less than 4 hour periods. The monitor shall occasionally survey for species prior to construction on that particular day. This on-site monitoring shall be independent to the biologist that conducts weekly nesting surveys, if these surveys are conducted.

29. If any life stages of any native vertebrate species are found in the path of construction, the monitor shall relocate the species to a pre-determined, safe location. Exclusionary devices shall be erected to prevent the migration into or the return of species into the work site.

30. An environmental education program(s) shall be created and conducted for ALL project personnel entering the work area. The Applicant shall keep records of all personnel that attended the educational program. Any project personnel, not having attended the educational program, will not be allowed on the project site. The educational program will show illustrations of the sensitive native species and its habitat, discuss measures to protect the species, what to do if the species is observed, etc. The Educational Program information shall be submitted to the Department for review and comments shall be provided by the Department to the Applicant within ten (10) working days of receipt of the educational program.

31. If the Department determines that any threatened or endangered species will be impacted by the work proposed the Applicant shall obtain the appropriate state permits for take of threatened or endangered species. The Applicant shall contact the Department at (805) 640-3677 to obtain information on applying for the Incidental Take Permit for State listed species.

32. All required documentation, reports and surveys described above shall be submitted to the Department's local staff working on the project and a hard copy shall also be sent to the Department's San Diego Fish and Game office at 4949 Viewridge Ave., San Diego, CA, 92123, Attn: Streambed Alteration Staff. Please note the Streambed Alteration Agreement number in the subject line.

33. If measurable rain is predicted within 24 hours during construction, all activities shall cease and protective measures to prevent siltation/erosion shall be implemented/maintained. No work shall be conducted during rain events.

34. The Applicant's activities shall be limited to the period of daylight hours; no night work is authorized unless deemed an emergency situation.

35. The Applicant shall install and use fully covered trash receptacles with secure lids (wildlife proof) to contain all food, food scrapes, food wrappers, beverage and other miscellaneous trash.

Fish Passage

36. When any dam or other artificial obstruction is being constructed, maintained, or placed in operation, sufficient water shall at all times be allowed to pass downstream to maintain aquatic life below the dam pursuant to Fish and Game Code section 5937.

37. The temporary water diversion shall include a fish friendly design (including temperature, depth, velocity, etc.) and measures shall be implemented to protect aquatic resources above, below and through the diversion or prevention of organisms from entering the work area. Water diversion plans are discussed in more detail below and shall be submitted to the Department for review and approval prior to the start of work. The temporary diversion shall not constitute a barrier to steelhead movement during the steelhead migration period from January to July.

38. Permanent structures shall be designed, constructed, and maintained such that they do not constitute a barrier to upstream or downstream movement of aquatic life, or cause an avoidance reaction by fish that impedes their upstream or downstream movement.

39. If flowing or ponded water is within the proposed work limits, the Applicant shall telephone the fishery biologist Mary Larson at (562) 342-7186, prior to commencing activities within the bed, bank, and channel. The Applicant shall leave his/her name, date and time called, telephone number, the stream name, work location, nature of planned activities and proposed schedule. The Applicant shall also report any rainbow trout/southern coastal steelhead to Mary Larson...

Work Areas and Vegetation Removal

40. The work area shall be flagged to identify its limits within the stream. Vegetation shall not be removed or intentionally damaged beyond these limits.

41. In areas of temporary disturbance, where vegetation must be removed, native trees and shrubs, with DBH's of 3 inches or less, shall be cut to ground level with hand operated power tools rather than by grading.

42. Temporary storage of native stream composition (native material) excavated from the main channel be may be allowed in the diverted portion of the stream, after dewatering. A significant amount of this native material will be re-used in the reconstruction of the creek bed. The stockpile of native material shall be covered and wrapped with a plastic, impermeable liner until it is needed in the creek bed reconstruction. Excess native material shall be removed and disposed of appropriately after excavation.

43. A complete inventory of plants, by species and Diameter at Breast Height over 3" (DBH), which will be removed shall be submitted to the Department within 30 days of signing this Agreement.

44. No equipment shall be operated within the dripline of oak trees. If work occurs within the vicinity of oak trees then protective fencing shall be placed around the dripline of oaks to prevent compaction of the root zone.

Equipment and Access

45. Staging/storage areas for equipment and materials shall be located outside of the stream.

46. Vehicles shall not be driven or equipment operated in water covered portions of a stream, or where wetland vegetation, riparian vegetation, or aquatic organisms may be destroyed, except as otherwise provided for in the Agreement and as necessary to complete authorized work.

47. Access to the work site shall be via existing roads and access ramps. If no ramps are available in the immediate area, the Applicant may construct a ramp in the footprint of the project. Any ramp shall be removed upon completion of the project.

Structures

48. Structures and associated materials not designed to withstand high water flows shall be moved to areas above high water before such flows occur.

49. Any materials placed in seasonally dry portions of a stream or lake that could be washed downstream or could be deleterious to aquatic life shall be removed from the project site prior to inundation by high flows.

50. Areas of disturbed soils with slopes toward a stream or lake shall be stabilized to reduce erosion potential. Planting, seeding and mulching is conditionally acceptable. Where suitable vegetation cannot reasonably be expected to become established, non-erodible materials, such as coconut fiber matting, shall be used for such stabilization. Any installation of non-erodible materials not described in the original project description shall be coordinated with the Department. Coordination may include the negotiation of additional Agreement provisions for this activity.

51. If vacuum trucks are used to clean up any contamination, the vacuum hose shall be placed in a 3 to 4 square foot area, protected on all sides by exclusionary fencing to prevent the uptake of any aquatic life.

Pollution, Sedimentation, and Litter

52. No debris, soil, silt, sand, bark, slash, sawdust, rubbish, construction waste, cement or concrete or washings thereof, asphalt, paint, oil or other petroleum products or any other substances which could be hazardous to aquatic life, or other organic or earthen material from any logging, construction, or other associated project-related activity shall be allowed to contaminate the soil and/or enter into or placed where it may be washed by rainfall or runoff into, waters of the State. Any of these materials, placed within or where they may enter a stream or lake, by the Applicant or any party working under contract, or with the permission of the Applicant, shall be removed immediately. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high water mark of any stream or lake.

53. The Applicant shall comply with all litter and pollution laws. All contractors, subcontractors and employees shall also obey these laws and it shall be the responsibility of the Applicant to insure compliance.

54. Temporary and permanent spoil storage sites shall not be located within a stream, where spoil can be washed back into a stream/lake, or where it will cover aquatic or riparian vegetation.

55. Any equipment or vehicles driven and/or operated within or adjacent to the stream shall be checked and maintained daily, to prevent leaks of materials that if introduced to water could be

deleterious to aquatic life.

56. Stationary equipment such as motors, pumps, generators, and welders, located within or adjacent to the stream/lake shall be positioned over drip pans. Stationary heavy equipment shall have suitable containment to handle a catastrophic spill/leak. Clean up equipment such as extra boom, absorbent pads, skimmers, shall be on site prior to the start of construction.

57. No equipment maintenance shall be done within or near any stream channel or lake margin where petroleum products or other pollutants from the equipment may enter these areas under any flow.

58. The clean-up of all spills shall begin immediately. The Department shall be notified immediately by the Applicant of any spills and shall be consulted regarding clean-up procedures.

59. Raw cement/concrete or washings thereof, asphalt, paint, construction waste, or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from project-related activities, shall be prevented from contaminating the soil and/or entering the waters of the state. Any of these materials, placed within or where they may enter a stream or lake, by the Applicant or any party working under contract, or with the permission of the Applicant, shall be removed immediately.

60. Precautions to minimize turbidity/siltation shall be taken into account during project planning and shall be installed prior to construction. Precautions may include placement of silt fencing, certified weed-free straw bales, sand bags, and/or the construction of silt catchment basins, so that silt or other deleterious materials are not allowed to pass to downstream reaches. The method used to prevent siltation shall be monitored and cleaned/repaired weekly. The placement of any structure or materials in the stream for this purpose shall be included in the Department approved water diversion plan.

61. Flow diversions shall be done in a manner that shall prevent pollution and/or siltation and which shall provide flows to downstream reaches. Flows to downstream reaches shall be provided during all times that the natural flow would have supported aquatic life. Said flows shall be sufficient quality and quantity, and of appropriate temperature to support fish and other aquatic life both above and below the diversion. Normal flows shall be restored to the affected stream immediately upon completion of work at that location.

62. Prior to commencing construction, the Applicant shall submit to the Department for review and approval, the proposed water diversion plan for this project. The plan shall be consistent with the terms and conditions of this Agreement. Construction of the barrier and/or the new channel shall normally begin in the downstream area and continue in an upstream direction, and the flow shall be diverted only when construction of the diversion is completed. Channel bank or barrier construction shall be adequate to prevent seepage into or from the work area. Diversion berms shall be constructed of onsite alluvium of low silt content, inflatable dams, sand bags, or other approved materials. Channel banks or barriers shall not be made of earth or other substances subject to erosion unless first enclosed by sheet piling, rock rip-rap, or other protective material. The enclosure and the supportive material shall be removed when the work is completed and removal shall normally proceed from downstream in an upstream direction. Location of the upstream and downstream diversion points shall be approved by the Department and the Applicant shall obtain a written approval from the Department prior to initiation of construction activities. This plan shall also discuss the need to relocate stranded aquatic species from the de-watered area.

63. The Applicant shall take all necessary steps to contain sediment and reduce stream turbidity when the work area(s) are rewatered. The Applicant shall install an appropriate sediment control device downstream of the work area to filter sediment. Acceptable materials include silt fence, straw bales, or other appropriate devices to prevent sediment runoff during rewatering activities. Silt control shall

remain in place only until the water running through the work area is clear of sediment.

64. Upon Department determination that turbidity/siltation levels resulting from project-related activities constitute a threat to aquatic life, activities associated with the turbidity/siltation, shall be halted until effective Department approved control devices are installed, or abatement procedures are initiated.

65. Preparation shall be made so that runoff from steep, erodible surfaces will be diverted into stable areas with little erosion potential. Frequent water checks shall be placed on dirt roads, cat tracks, or other work trails to control erosion.

66. Water containing mud, silt, or other pollutants from equipment washing or other activities, shall not be allowed to enter a lake or flowing stream or placed in locations that may be subjected to high storm flows.

67. If silt catchment basin/s is/are used, the basin/s shall be constructed across the stream immediately downstream of the project site. Catchment basins shall be constructed of materials which are free from mud and silt. Upon completion of the project, all basin materials along with the trapped sediments shall be removed from the stream in such a manner that said removal shall not introduce sediment to the stream.

68. If a stream's low flow channel, bed or banks have been altered above and/or below the work area, these shall be returned as nearly as possible to their original configuration and width, without creating future erosion problems and shall be re-configured in a way that allows for aquatic wildlife to utilize a low-flow channel that can be on average, a 2 foot deep and 4 foot wide channel with a standard S-curve configuration.

69. The work area shall be secured from trespass when (as determined by the Department) fish or wildlife resources are vulnerable to damage from unsupervised public access.

70. Cement and concrete shall not be poured in an area where wet concrete may come in contact with the surface and/or subsurface flows. The Applicant shall monitor the 3-day forecast; cement or concrete materials may be poured only if a 3-day clear window is predicted. Cement shall not be poured in a flowing stream, to reduce the potential for significant adverse impacts to the stream, water, or biota.

Maintenance

71. The Applicant may remove dead vegetation and debris, including sediment and rocks, which directly interfere with the proper function and operation of the weir structure. Removal should occur by hand work or the use of heavy equipment if it can be operated outside of the channel.

Administrative

72. All provisions of this Agreement remain in force throughout the term of the Agreement. Any provisions of the Agreement may be amended or the Agreement may be terminated at any time provided such amendment and/or termination is agreed to in writing by both parties. Mutually approved amendments become part of the original Agreement and are subject to all previously negotiated provisions.

73. All CalTrans project resident engineers, project engineers, project inspectors, contractors, and subcontractors, participating in this project, must read and understand all terms and conditions of this agreement and shall abide by the terms and conditions stated herein.

74. If the Applicant or any employees, agents, contractors and/or subcontractors violate any of the terms or conditions of this Agreement, all work shall terminate immediately and shall not proceed until the Department has taken all of its legal actions.

75. The Applicant agrees that it shall be responsible for any violations of this Agreement, whether committed by the Applicant or any person acting on behalf of the Applicant, including its agents, officers, and employees, representatives, or contractors and subcontractors, to complete the Project Activity authorized by this Agreement. This Agreement does not constitute the Department's endorsement of the authorized Project Activity.

76. It is understood the Department has entered into this Agreement for purposes of establishing protective features for fish and wildlife. The decision to proceed with the project is the sole responsibility of the Applicant, and is not required by this Agreement. It is further agreed that all liability and/or incurred cost related to or arising from the Applicant's project and the implementation of the fish and wildlife protective conditions of this Agreement remain the sole responsibility of the Applicant. The Applicant agrees to hold harmless the State of California and the Department against any related claim made by any party or parties for personal injury or any other damages.

77. A pre-construction meeting/briefing shall be held involving all the contractors and subcontractors, concerning the conditions in this Agreement.

78. The Applicant herein grants to Department employees and/or their consultants (accompanied by a Department employee) the right to enter the project site at any time, to ensure compliance with the terms and conditions of this Agreement and/or to determine the impacts of the project on wildlife and aquatic resources and/or their habitats.

79. The Department reserves the right to cancel this Agreement, after giving notice to the Applicant, if the Department determines that the Applicant has breached any of the terms or conditions of the Agreement.

80. Before any suspension or cancellation of the Agreement, the Department will notify the Applicant in writing of the circumstances which the Department believes warrant suspension or cancellation. The Applicant will have seven (7) working days from the date of receipt of the notification to respond in writing to the circumstances described in the Department's notification. During the seven (7) day response period, the Applicant shall immediately cease any project activities which the Department specified in its notification as resulting in a substantial adverse effect on the environment and which will continue to substantially adversely affect the environment during the response period. The Applicant may continue the specified activities if the Department and the Applicant agree on a method to adequately mitigate or eliminate the substantial adverse effect.

CONCURRENCE

California Department of Transportation
represented by Paul Caron
100 South Main Street,
Los Angeles, California, 90012
(213) 897-0610

Barbara Mey 3/15/10
Name (signature) Date

Paul Caron
for Name (printed)

Senior Environmental Planner
Title

California Department of Fish and Game

Marilyn J Luhardy for: 3-16-10
Helen R. Birss Date
Environmental Program Manager
South Coast Region

This Agreement was prepared by Jamie Jackson, Staff Environmental Scientist, South Coast Region

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213

In response refer to:
F/SWR/2009/02689

NOV 30 2009

Aziz Elattar
Division of Environmental Planning
California Department of Transportation
District 7, Los Angeles District
Main Street, Suite 100
Los Angeles, California 90012-3606

Dear Mr. Elattar:

Enclosed is NOAA's National Marine Fisheries Service's (NMFS) Biological Opinion for the California Department of Transportation's (Caltrans) implementation of the proposed State Route 150 Santa Paula Creek Rock Weir Fish Passage Project (project), near the City of Santa Paula, in Ventura County, California (Project # 07-Ven-150/KP48). The Biological Opinion addresses effects of this action on endangered steelhead and critical habitat in accordance with section 7 of the Endangered Species Act of 1973, as amended (16 U. S. C. 1531 *et seq.*).

The Biological Opinion concludes that Caltrans' actions and resulting construction of the project are not likely to jeopardize the continued existence of the endangered Southern California Distinct Population Segment of steelhead or adversely modify critical habitat for this species. NMFS believes the proposed action may result in the incidental take of steelhead, therefore, an Incidental Take Statement is included in the Biological Opinion. The Incidental Take Statement includes Reasonable and Prudent Measures that are necessary and appropriate to minimize the incidental take of steelhead. Stan Glowacki is the principal contact for this consultation. Please contact him at (562) 980-4061 or via email at Stan.Glowacki@noaa.gov if you have any questions concerning the Biological Opinion or if you would like additional information.

Sincerely,

For Rodney R. McInnis
Regional Administrator

Enclosure

cc: Mary Larson, CDFG

BIOLOGICAL OPINION

AGENCY: California Department of Transportation

ACTION: Permit for construction of multiple rock weirs within Santa Paula Creek adjacent to State Route 150, in Ventura County, California

CONSULTATION CONDUCTED BY: National Marine Fisheries Service, Southwest Region

FILE NUMBER: 151422SWR2009PR00263

TRACKING NUMBER: SWR/2009/02689

DATE ISSUED: NOV 30 2009

I. CONSULTATION HISTORY

On May 19, 2009, NOAA's National Marine Fisheries Service (NMFS) received a package containing a written request for initiation of section 7 consultation, a Natural Environment Study (NES), a steelhead habitat assessment, and project design plans from the California Department of Transportation's (Caltrans) office in Los Angeles, California. Caltrans requested initiation of formal consultation for the construction of a series of rock weir grade control structures to restore steelhead passage and repair a damaged portion of Santa Paula Creek adjacent to State Route (SR) 150, near the City of Santa Paula, in Ventura County, California (Project # 07-Ven-150/KP48). Caltrans was taking responsibility as the lead Federal Agency in accordance with the pilot program with the Federal Highway Administration. Santa Paula Creek is within the endangered Southern California Distinct Population Segment (DPS) of steelhead (*Oncorhynchus mykiss*), and is designated critical habitat for this species. The purpose of the project is to replace a series of grade control structures that were destroyed during winter 2005 floods. Grade control structures were originally installed in this area of Santa Paula Creek to protect abutments of the large bridge immediately upstream of the project area near the entrance to Thomas Aquinas College. Prior to the 2005 floods that destroyed the previous grade control structures, NMFS and Caltrans were engaged in a consultation to alter the grade control structures to make them more easily passable for steelhead. The consultation was part of an administrative settlement agreement between NMFS and Caltrans for illegal take of juvenile steelhead that resulted from unauthorized actions of a Caltrans contractor during a project on Tule Creek. This project is a continuation of Caltrans' commitment to conclude the settlement agreement.

This biological opinion is based on the best scientific and commercial data available, including information included in the Caltrans' consultation packet, a NES, a steelhead habitat survey and assessment performed by Dr. Jonathon Baskin, observations of the creek and instream habitat

noted by a NMFS biologist during an on-site meeting with Caltrans, expected effects of the project on steelhead and critical habitat, and the ecological literature. A complete administrative record for this consultation is maintained on file at NMFS' Southwest Regional Office (501 W. Ocean Blvd., Suite 4200, Long Beach, California 90802).

II. DESCRIPTION OF PROPOSED ACTION

A. Proposed Action

Caltrans proposes to install a series of 22 rock weir grade control structures and repair grouted rock-slope protection on an approximately 250-foot section of Santa Paula Creek adjacent to SR-150. This section of the creek was heavily damaged in major flood events estimated to be close to the 100-year level during the winter of 2005. The storms destroyed several grade control structures and created an 8-foot high waterfall that is impassable to upstream migrating steelhead. The objective of the project is to stabilize this portion of Santa Paula Creek and to permanently remedy the steelhead migration barrier that has been present since the 2005 winter.

To construct the project, a water diversion will be created using a coffer dam made from sand bags and a plastic corrugated pipe/culvert. Prior to water diversion the creek will be blocked off with block nets to ensure steelhead juveniles cannot enter the water diversion area. After the construction area is blocked off, a biologist will survey the aquatic habitat for steelhead. Steelhead will be captured via seine and/or dip nets and relocated prior to dewatering and water diversion. The construction area will then be dewatered, and creek flows will be diverted around the construction area for the duration of project construction, which is expected to be about 6 months.

After the project area is dewatered, the main creek channel will be excavated to a depth of about 2.5 to 3.5 meters to reach underlying bedrock through the project reach. Concrete debris leftover from the damaged grade control structures and damaged grouted rock slope protection will be removed from the creek channel as necessary. A layer of concrete and rock will be placed over the existing bedrock to create a foundation for the rock weirs. two-ton rock will be placed over the foundation and the voids within the rock will be filled with concrete. Using 3 to 5 ton boulders, the bottom portion of the rock weirs will be constructed and voids between the boulders will be filled with concrete. Pools between the rock weirs will be constructed and concreted in place. The top layer of the rock weirs will be placed and concreted in place. To repair damaged rock slope protection and stabilized banks, 2-ton rock will be placed as necessary on the banks and will be grouted in place. The bottom portion of the engineered pools and areas between the weirs will be filled with natural creek substrate (gravels, cobbles and small boulders) to form a natural channel bottom throughout the project area that will recruit vegetation. Creek flows will be restored through the main channel after construction is complete.

Construction equipment to be used during project construction includes excavators, loaders, dump trucks, rollers, backhoes, bulldozers, graders, cranes, concrete mixing trucks and pickup trucks. Project construction is slated to begin in late May and conclude in late October or early November 2010.

B. Action Area

The action area is approximately 500 feet long, and it encompasses the creek channel and riparian zone within the construction areas on Santa Paula Creek, and downstream. The action area begins approximately 50 feet upstream of the Thomas Aquinas Bridge and downstream about 200 feet below the construction area where effects of construction, mainly in the form of turbidity, are anticipated to cease.

III. STATUS OF THE SPECIES AND CRITICAL HABITAT

This Biological Opinion considers the potential effect of the emergency project action on the Southern California steelhead DPS and their designated critical habitat. The status of the Southern California steelhead DPS, their life history and habitat requirements, value of critical habitat, and recent factors affecting populations are described as follows.

A. Status of Southern California Steelhead

The Southern California steelhead DPS extends from the Santa Maria River in Santa Barbara County to the Mexican border (inclusive). NMFS characterized the abundance of steelhead in the DPS when the species was originally listed (August 18, 1997, 62 FR 43937) and cited this information as the basis for the recent relisting of this Southern California steelhead (71 FR 834). Estimates of historical (pre-1960s) and recent (1990s) abundance show a considerable drop in numbers of spawning adults for major rivers in the Southern California steelhead DPS. A recent updated status report states that the chief causes for the numerical decline of steelhead in southern California include urbanization, water withdrawals, channelization of creeks, human-made barriers to migration, and the introduction of exotic fishes and riparian plants (Good *et al.* 2005). Historical data on steelhead numbers for this region are sparse. The historic and recent steelhead abundance estimates, and percent decline are summarized in Table 1 below. The run size estimates illustrate the severity of the numerical decline for the major rivers in the Southern California steelhead DPS (Busby *et al.* 1996).

Table 1. Historical and current estimates of adult steelhead in the Southern California DPS. Data from Busby *et al.* 1996.

	Pre-1950	**1990s**	**% Decline**
Santa Ynez River	20,000-30,000 Adults	< 100	99.6
	Pre-1960	**1990s**	**% Decline**
Ventura River	4,000-5,000 adults	< 100	96
Santa Clara River	7,000-9,000 adults	< 100	99
Malibu Creek	1,000 adults	< 100	90

Efforts to document the species' current pattern of occurrence indicate that steelhead are still widespread across the northern portions of the DPS, although the steelhead components (i.e., anadromy) of *O. mykiss* populations appear to have been lost in about one third of the basins,

mostly in the southern portion of the DPS (Boughton *et al.* 2006). Recent surveys have concluded that of the 46 basins in which steelhead were known to have occupied historically, *O. mykiss* (either resident or anadromous) only occupied about 40 to 50% of these basins currently (NMFS 2007). Even though population estimates of steelhead have decreased substantially from historic estimates, fish surveys by NOAA Southwest Fisheries Science Center (SWFSC), direct observations by NMFS biologists, and anecdotal information from major rivers and creeks throughout the DPS suggest that steelhead populations, although small, continue to persist in many coastal watersheds (see Table 2, Titus *et al.* 2003, Good *et al.* 2005). On a positive note, there have been recent observations of steelhead recolonizing vacant watersheds during years with abundant rainfall, notably San Mateo Creek and Topanga Creek (Good *et al.* 2005).

During the 2005 updated status review, NMFS' Biological Review Team (BRT) assessed the viability of the Southern California DPS on the basis of available information about the species abundance, population growth rate, spatial structure, and diversity (McElhany *et al.* 2000). The viability analyses found that while many steelhead populations were still present in watersheds they inhabited historically, the viability of these populations and the DPS as a whole was questionable given the current degraded habitat conditions and depleted state of the populations (Boughton *et al.* 2006). Additionally, climate change is expected to result in a decrease in rainfall in the Southern California region of between 5% and 15% over the next 100 years (Hayhoe *et al.* 2004), and other factors of climate change could lead to more severe weather patterns and changes in oceanic conditions, all of which are expected to negatively influence southern California steelhead survival, viability and spatial structure (Boughton *et al.* 2007). Consequently, the 2005 updated status review completed by the BRT concluded that the Southern California steelhead DPS was in danger of extinction (Good *et al.* 2005). The biggest threat to the viability of the southern populations of steelhead in coastal basins appears to be climate related, as the BRT found a high degree of correlation between the risk of extinction and environmental stochasticity for the coastal basins (Boughton *et al.* 2006).

B. Life History and Habitat Requirements

The major freshwater life history stages of steelhead involve freshwater rearing and emigration of juveniles, upstream migration of adults, spawning, and incubation of embryos (Shapovalov and Taft 1954, Moyle 2002, Cederholm and Martin 1983, Barnhart 1991, Meehan and Bjornn 1991, Busby *et al.* 1996). Steelhead juveniles rear in freshwater for 1-3 years before migrating to the ocean, usually in the spring, where they may remain for up to 4 years. Steelhead grow and reach maturity at age 2 to 4 while in the ocean. In southern California, adults immigrate to natal streams for spawning during January through March, but some adults may not enter coastal streams until late spring, depending on flow conditions. Adults may migrate several miles to hundreds of miles in some watersheds to reach their spawning grounds. Although spawning may occur during January through April, the specific timing of spawning may vary a month or more among streams within a region. Steelhead do not necessarily die after spawning and may return to the ocean, sometimes repeating their spawning migration two or more years. Female steelhead dig a nest in the streambed and then deposit their eggs. After fertilization by the male, the female covers the nest with a layer of gravel; the embryos incubate within the gravel pocket. Hatching time varies from about 3 weeks to 2 months depending on water temperature. The young fish emerge from the nest about 2 to 6 weeks after hatching.

Table 2. Southern California coastal streams and rivers historically and currently occupied by steelhead (N to S) based on historical data and recent surveys[1] (adapted from Boughton *et al.* 2006).

	Presence		Presence
Southern Cal. DPS			
Santa Maria River	Y	Montecito Creek	Y
Santa Ynez River	Y	Oak Creek	Barrier
Jalama Creek	Historical Presence	San Ysidro Creek	Y
Cañada de Santa Anita	Y	Romero Creek	Y
Cañada de la Gaviota	Y	Arroyo Paredon	Y
Arroyo Hondo	Y	Carpinteria Creek	Y
Arroyo Quemado	Barrier	Rincon Creek	Y
Tajiguas Creek	Barrier	Ventura River	Y
Cañada del Refugio	Y	Santa Clara River	Y
Cañada del Venadito	Barrier	Big Sycamore Canyon	Negative obs.
Cañada del Corral	Y	Arroyo Sequit	Y
Cañada del Capitan	Historical Presence	Malibu Creek	Y
Gato Canyon	Not determined	Topanga Canyon	Y
Dos Pueblos Canyon	Y	San Juan Creek	Y
Eagle Canyon	Not determined	San Mateo Creek	Y
Tecolote Creek	Y	San Onofre Creek	Dry
Bell Canyon	Barrier	Santa Margarita River	Historical Presence
Goleta Slough Complex	Y	San Luis Rey River	Y
Arroyo Burro	Y	San Dieguito River	Y
Mission Creek	Y	Sweetwater River	Y

[1]Historical Data : Titus *et al.* (2003); Sleeper (2002) ; Franklin (1999). Recent data: Boughton *et al.* (2005).
[2]No data on historical occurrence, but recent occurrence documented by Boughton *et al.* (2005).
[3] "Negative obs." Means juveniles were observed to be absent during a spot-check of best-occurring summer habitat in 2002. "Dry" indicates the stream had no discharge in anadromous reaches during summer of 2002. "Barrier" indicates that all over-summering habitat was determined to be above an anthropogenic barrier, believed to be impassable. See Boughton *et al.* (2005).

Habitat requirements of steelhead in streams generally depend on the life history stage (Cederholm and Martin 1983, Bjornn and Reiser 1991). Habitat for southern California steelhead consists of water, substrate, and adjacent riparian zone of estuarine and riverine reaches of coastal river basins, and major rivers. Generally, streamflow volume, water temperature, and water chemistry must be appropriate for adult immigration and juvenile emigration (specific habitat requirement data can be found in Bjornn and Reiser 1991). Low streamflow, high water temperature, physical barriers, low dissolved oxygen, and high turbidity may delay or halt upstream migration of adults and timing of spawning, and downstream

migration of juveniles and subsequent entry into estuary, lagoon, or ocean. These factors are affecting steelhead to varying degrees in Southern California watersheds, depending on the conditions of the watershed, and because there is a broad range of stream condition and levels of anthropogenic disturbance within the Southern California DPS. Suitable water depth and velocity, and substrate composition are the primary requirements for spawning, but water temperature and turbidity are also important. Dissolved oxygen concentration, pH, and water temperature are factors affecting survival of incubating embryos. Fine sediments, sand, and smaller particles may fill interstitial spaces between substrate particles, thereby reducing water-flow through and dissolved oxygen levels within a nest. The degree to which this is occurring in individual watersheds depends on the microhabitat conditions, and conditions within individual watersheds and their level of anthropogenic disturbance. Juvenile steelhead require living space (different combinations of water depth and velocity), shelter from predators and harsh environmental conditions, adequate food resources, and suitable water quality and quantity, for ontogeny and survival during summer and winter. Young-of-the-year and yearling steelhead generally use riffles and runs during much of a given year where these habitats exist (Roper *et al.* 1994). However, young-of-the-year and older juveniles may seek cover and cool water in pools during periods of elevated water temperature (Matthews and Berg 1997) or low flows (Kraft 1972, cf Spina 2007).

C. Status of Critical Habitat

Critical habitat for the Southern California steelhead DPS was designated on September 2, 2005, and consists of the stream channels listed in 70 FR 52488. Critical habitat has a lateral extent defined as the width of the channel delineated by the ordinary high-water line as defined by the Corps in 33 CFR 329.11, or by its bankfull elevation, which is the discharge level on the streambank that has a recurrence interval of approximately 2 years (September 2, 2005, 70 FR 52522). NMFS' Critical Habitat Analytical Review Teams (CHARTs) developed a list of Primary Constituent Elements (PCEs) specific to steelhead and their habitat, and relevant to determining whether occupied stream reaches within a Hydrologic Sub Area (HSA) fit the definition of critical habitat. Primary constituent elements (PCE) within these streams essential for the conservation of the Southern California steelhead DPS are those sites and habitat components that support one or more steelhead life stages and in turn contain physical or biological features essential to steelhead survival, growth, and reproduction, and the conservation of the DPS. These include:

1. **Freshwater spawning sites** with sufficient water quantity and quality and adequate substrate (i.e., spawning gravels of appropriate sizes) to support spawning, incubation and larval development.

2. **Freshwater rearing sites** with sufficient water quantity and floodplain connectivity to form and maintain physical habitat conditions and allow salmonid development and mobility; sufficient water quality to support growth and development; food and nutrient resources such as terrestrial and aquatic invertebrates and forage fish; and natural cover such as shade, submerged and overhanging large wood, log jams, beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks.

3. **Freshwater migration corridors** free of obstruction and excessive predation with adequate water quantity to allow for juvenile and adult mobility; cover, shelter, and holding areas for juveniles and adults; and adequate water quality to allow for survival.

4. **Estuarine areas** that provide uncontaminated water and substrates; food and nutrient sources to support steelhead growth and development; and connected shallow water areas and wetlands to cover and shelter juveniles.

5. **Marine areas** with sufficient water quality to support salmonid growth, development, and mobility; food and nutrient resources such as marine invertebrates and forage fish; and near-shore marine habitats with adequate depth, cover, and marine vegetation to provide cover and shelter.

Streams designated as critical habitat in the Southern California steelhead DPS contain the above PCE attributes in differing amounts and to varying degrees, depending on the particular stream and the characteristics of the watershed. Perennial streams with conditions suitable for steelhead are less abundant in the southern portion of DPS critical habitat area compared to the northern portion. Some of this is due to the amount of coastal development in the southern region. During the summer many creeks at the southern edge of the range become intermittent in sections or dry up completely (in some cases this occurrence is natural and in other cases it is due to anthropogenic factors), and stream temperatures may become a factor in terms of suitability for rearing steelhead. Overall, steelhead oversummering habitat is thought to have a restricted distribution more so than winter spawning and rearing habitat in the Southern California DPS range (Boughton *et al.* 2006).

As part of the process to gather and analyze information to finalize this most recent designation of critical habitat several CHARTs compiled all available information regarding the distribution and habitat use of steelhead within the Southern California DPS, as well as habitat condition. The CHARTs also performed conservation assessments for all occupied watersheds, including riverine reaches and estuarine areas within each DPS. Essential features of critical habitat for steelhead spawning, rearing, and migration were found to be contained in 741 miles (1,186 km) of occupied stream habitat within the 32 HSAs of the Southern California Steelhead DPS. Streams with high conservation value were found to have most or all of the PCEs of critical habitat and extensive areas that were suitable for steelhead spawning, rearing, and migration, despite negative effects of human factors. Streams with medium or low conservation value were less suitable for steelhead in terms of spawning rearing and migration, and had less of the PCEs necessary for steelhead survival growth and reproduction, generally due to anthropogenic factors. Matilija Creek was found to have high conservation value for the survival and recovery of the Southern Steelhead DPS.

D. Population Viability

One prerequisite for predicting the effects of an action on a species (including establishing a point of reference for the effects analysis) involves an understanding of whether the broad population is likely to experience a reduction in the likelihood of being viable, i.e., the

hypothetical state(s) in which extinction risk of the broad population is negligible and full evolutionary potential is retained (Boughton *et al.* 2006). By definition, a viable salmonid population (VSP) is an independent population of any Pacific salmonid (genus *Oncorhynchus*) that has a negligible risk of extinction due to threats from demographic variation (random or directional), local environmental variation, and genetic diversity changes (random or directional) over a 100-year time frame. Other processes contributing to extinction risk (catastrophes and large-scale environmental variation) are also important considerations, but by their nature they need to be assessed at the larger temporal and spatial scales represented by DPSs or other entire collections of populations. The crux of the population definition used here is what is meant by "independent." An independent population is any collection of one or more local breeding units whose population dynamics or extinction risk over a 100-year time period is not substantially altered by exchanges of individuals with other populations. Generally, an independent population is contained within a distinct stream or possibly an entire watershed, and represents a subunit of the entire DPS.

Four principal parameters are used to evaluate the long term viability and conversely the extinction risk for the endangered Southern California DPS of steelhead. They are: (1) abundance; (2) population growth rate; (3) population spatial structure; and (4) population diversity. These specific parameters are important to consider because they are predictors of extinction risk and reflect general biological and ecological processes that are critical to the growth and survival of steelhead populations, and they are measurable (McElhany *et al.* 2000). To asses viability, guidelines or decision criteria are defined for each of the four parameters to further the viability evaluation (McElhany *et al.* 2000). Population viability for steelhead is based on four key concepts that provide the basis for judging the persistence of a population in the wild. The bases for these concepts can be found in the many publications regarding population ecology, conservation biology, and extinction risk (e.g., Pimm *et al.* 1988, Berger 1990, Primack 2004, see also McElhany *et al.* 2000 and Boughton *et al.* 2006). The four concepts are outlined below.

1. Abundance

Information about a population's size or abundance provides an indication of the sort of extinction risk a population faces. Small populations face a host of risks intrinsic to their low abundance; conversely, large populations exhibit a greater degree of resilience. All else being equal, small populations are at greater risk of extinction than large populations primarily because several processes that affect population dynamics operate differently in small populations than they do in large populations. These processes are deterministic density effects, environmental variation, genetic processes, demographic stochasticity, ecological feedback and catastrophes. Deterministic effects of population density fall into two opposing processes: compensation (an increase in productivity with decreasing density) and depensation (a decrease in productivity with decreasing density). Compensation occurs because there is an increasing need to compete for limited resources as a population expands to fill (or exceed) available habitat. The negative relationship between productivity and abundance observed under compensation can give a population substantial resilience. This resilience occurs because any decline in abundance is offset by an increase in productivity, which tends to restore a population to some equilibrium level (McElhany *et al.* 2000). Generally, the greater the size of a steelhead population, the

greater the chance of it being viable in the long term. Within the Southern California Steelhead DPS, abundance has been severely reduced from historic levels (Good *et al.* 2005) and this has negative implications for long term viability for this DPS.

2. Population Growth Rate

Population growth rate (a.k.a., productivity) and factors that affect population growth rate provide information on how well a population is "performing" in the habitats it occupies during the life cycle. These parameters, and related trends in abundance, reflect conditions that drive a population's dynamics and thus determine its abundance. Changes in environmental conditions, including ecological interactions, can influence a population's intrinsic productivity or the environment's capacity to support a population, or both. Such changes may result from random environmental variation over a wide range of temporal scales (environmental stochasticity). In regards to steelhead, the greater the productivity of a steelhead population the greater its ability to recover from environmental disturbance and the greater its viability. Because of the very low abundance of steelhead in the Southern California Steelhead DPS, the population growth rate has also been reduced by making the DPS less resilient to disturbance, and this has further reduced the long term viability of the DPS.

3. Spatial Structure

A population's spatial structure is made up of both the geographic distribution of individuals in the population and the processes that generate that distribution. A population's spatial structure depends fundamentally on habitat quality, spatial configuration, and dynamics as well as the dispersal characteristics of individuals in the population. Understanding the spatial structure of a population is important because the population structure can affect evolutionary processes and, therefore, alter the ability of a population to adapt to spatial or temporal changes in the species' environment over the long term (McElhany *et al.* 2000). Generally, steelhead populations that are thinly distributed over space are susceptible to experiencing poor population growth rate and loss of genetic diversity which result in lowered viability (Boughton *et al.* 2007). Within the Southern California Steelhead DPS, the existence of hundreds of adult and juvenile steelhead migration barriers and impediments (*i.e.*, culverts, "Arizona" crossings) has substantially reduced the number of watersheds (or portions of watersheds) that steelhead had historical access to. This has significantly reduced the spatial structure of the DPS and has led to steelhead already becoming extinct from a large portion of their former range (Boughton *et al.* 2007).

4. Diversity

Steelhead populations possess a suite of life history traits that exhibit considerable diversity within and among populations, and this variation has important effects on population and DPS viability. Some of these varying traits are anadromy, timing of spawning, emigration, and immigration, fecundity, age-at-maturity, behavior, physiological and genetic characteristics, to mention a few. There are three general reasons why diversity is important for species and population viability. First, diversity allows a species to use a wider array of environments than they could without it. Second, diversity protects a species against short-term spatial and temporal changes in the environment. Third, genetic diversity provides the raw material for

surviving long-term environmental changes. Salmonids regularly face cyclic or directional changes in their freshwater, estuarine, and ocean environments due to natural and human causes, and genetic diversity allows them to adapt to these changes. In terms of steelhead population viability, the more diverse the assortment of life history traits (or the more these traits are not restricted), the more likely the steelhead population is to survive a spatially and temporally fluctuating environment over the long term. Because of the reduction in abundance, productivity, and spatial structure that has occurred in the Southern California DPS, diversity has been negatively impacted as well, which has further reduced the long term viability of the DPS.

In summary, the Southern California Steelhead DPS has been severely impacted by anthropogenic factors, and this has negatively affected the abundance, productivity, spatial structure, and diversity of the entire DPS. This has led to an overall decline of the Southern California Steelhead DPS estimated to be as much as 99% (Busby *et al.* 1996, Good *et al.* 2005). Applying the foregoing evaluation and the guidelines as described by McElhany *et al.* (2000) suggests that the Southern California Steelhead DPS is currently not viable and is at a high risk of extinction. This finding is consistent with conclusions of past and recent technical reviews (Busby *et al.* 1996, Good *et al.* 2005), and the formal listing determination for the species (NMFS 1997, 2006).

IV. ENVIRONMENTAL BASELINE

A. Status of Steelhead and Critical Habitat in the Action Area

Santa Paula Creek is a perennial stream located in the mountains between the cities of Ojai and Santa Paula originating below Nordhoff Ridge and Topatopa Bluff. The Santa Paula/Sisar Creek hydrologic subarea includes about 7,000 acres of the Santa Paula Creek subwatershed (CDWR 1989). Santa Paula Creek runs adjacent to Highway 150 in the vicinity of the action area. Santa Paula Creek eventually drains into the Santa Clara River near the city of Santa Paula about 2 miles downstream of the action area. Santa Paula Creek has been preliminarily designated as a Core 1 stream in the draft NMFS Recovery Plan for Southern California Steelhead. Thus, Santa Paula Creek is deemed very important for recovery of the endangered Southern California Steelhead DPS.

Santa Paula Creek within the project area is heavily impacted by the construction of the Thomas Aquinas SR-150 Bridge. The channel has been concreted but has a layer of natural cobble and gravel substrate several feet thick which is held in place by 2 or 3 grade control structures still in place below the bridge. There is some riparian vegetation (mostly willows and mulefat) present in the channel bed in this area. The banks of the creek below the bridge and in the project reach are composed of grouted riprap. A few hundred feet upstream and downstream of the project area, Santa Paula Creek exhibits streambanks that appear natural (*i.e.*, least disturbed) and mature native riparian vegetation creating a thick canopy is present. During a site visit on July 21, 2009, the creek was flowing at about 2 to 3 cfs. The channel-bed material of Santa Paula Creek was mostly cobble and boulder, with some gravel and sand. The aquatic habitat in the project area and vicinity is generally high gradient with pools, runs, and riffles all being present (S. Glowacki, NMFS, 2009, pers. obs.). The aquatic habitat in the action area appeared suitable for juvenile steelhead use as a freshwater rearing site and migration corridor.

Although there is no estimate of steelhead numbers within Santa Paula Creek, there have been numerous sightings of steelhead recently, and it is believed that the creek has always supported a small population of steelhead, with adults migrating into Santa Paula Creek from the Santa Clara River (M. Capelli, NMFS recovery coordinator, 2007, pers. comm.). During a site visit in July 2009, several juvenile steelhead were observed in the action area below the 8-foot waterfall in a deep pool (S. Glowacki, NMFS, 2009, pers. obs.). Caltrans' contract biologists also observed numerous steelhead juveniles within the project area and upstream during steelhead surveys (Baskin and Haglund 2006). Given the timing of the proposed action (June through September), only juvenile steelhead are expected to be present in the action area during construction.

B. Factors Affecting Species Environment in the Action Area and Vicinity

The action area within Santa Paula Creek is affected by Highway 150 and the Thomas Aquinas bridge crossings present on the creek. The presence of the highway and bridge has resulted in stabilized stream banks with little or no riparian vegetation. The stream banks in many areas upstream and downstream of the project area have been stabilized with rock riprap, in some cases grouted. These numerous bank-stabilization projects have been undertaken to counteract the effects of SR-150 on creek bank stability. The grouted riprap and retaining walls present in the action area and vicinity artificially restrict lateral migration of Santa Paula Creek channel, and do not favor the creation and maintenance of riparian vegetation or freshwater rearing sites for steelhead. About 1.5 miles downstream of the action area, there are several apparent barriers to steelhead migration, including the Harvey Dam and the Army Corps of Engineers Flood Control Project Fishway. Both facilities have fishways that are presently non-functional (S. Glowacki, NMFS, 2009, pers. obs.). These barriers prevent upstream movement of adult and juvenile steelhead from the lower reaches of Santa Paula Creek.

Within the action area, there are natural oil seeps, and oil is sometimes present on the surface of the water and on the banks in the action area (S. Glowacki, NMFS, 2009, pers.obs.). The effects of the seeps on water quality or steelhead are not known to NMFS, but steelhead were observed within the action area in a deep pool with oil sheen present on the surface of the pool (S. Glowacki, NMFS, pers. obs.). The juvenile steelhead seemed to be unaffected, ecologically, by the oil, rising to feed on the surface and otherwise behaving normally (S. Glowacki, NMFS, 2009, pers. obs.).

Upstream of the action area, there are private residences and some small ranches adjacent to Santa Paula Creek. It is unknown to what degree these residences are affecting the quantity of surface discharge, water quality, or other essential features of steelhead habitat in the action area. The creek continues to be perennial during the dry season (S. Glowacki, NMFS, 2009, pers. obs.)

V. EFFECTS OF THE PROPOSED ACTION

This section describes potential effects of the proposed action on steelhead and critical habitat for this species. To identify the potential effects, NMFS reviewed the proposed action and ecological literature concerning the effect of habitat changes on steelhead and aquatic habitat, and carefully considered the type, amount and extent of habitat changes that are expected to

result from the proposed action. A general knowledge of physical and biological processes,

population dynamics, life history, and habitat requirements of steelhead supplemented the literature review, particularly where there was little or no information concerning effects of an impact on steelhead or the aquatic environment.

A. Effects on Critical Habitat

1. Alteration of Aquatic Habitat and Streambed

An approximately 250-foot section of Santa Paula Creek within the action area will be dewatered for approximately 6 months during the dry season (Late May through October) to allow construction work to proceed without flowing water in or near the construction site. To divert water, surface flows will be placed within a plastic culvert which will be routed outside of the creek channel. Stream flow diversion and dewatering of the construction area are expected to cause temporary reduction, loss of service, and alteration of aquatic habitat in the action area, as well as the loss of invertebrate forage for steelhead within the dewatered section of the creek. Areas of freshwater rearing habitat and food producing areas upstream and downstream of the action area will be unaffected by the proposed action.

The proposed action will disturb the streambed and heavy equipment will completely alter the project reach from its current condition. The streambed will need to be excavated and regraded to allow for construction of the weirs. Concrete will be placed in the stream channel to create a foundation for the rock weirs, and the 22 rock weirs will be permanently concreted into the channel bed. After the project construction is complete, the streambed in the project reach will be altered by the permanent placement of the weirs, and the creek will have a gentler slope than what is currently present. The large 8 foot drop-off that results in an impassable waterfall will be eliminated during project implementation. There will be a greater amount of shallow pool habitat due to the 22 resting pools on the downstream end of each of the weirs. Additionally, after construction is complete the grade of the creek will be similar to areas upstream and downstream. Steelhead migratory habitat will be restored through the project reach for both adult and juvenile steelhead.

Aquatic macroinvertebrate forage will be temporarily reduced when creek habitat is dewatered (Cushman 1985). Effects to aquatic macroinvertebrates resulting from stream flow diversions and dewatering will be temporary because construction activities will be temporary, and rapid recolonization (about one to two months) of the restored channel area by macroinvertebrates is expected following rewatering (Cushman 1985, Thomas 1985, Harvey 1986). In addition, the effect of macroinvertebrate loss on juvenile steelhead is expected to be negligible because food from upstream sources (via drift) would be available downstream of the dewatered areas since stream flows will be routed around the project work site and would reenter the creek at the downstream end of the construction area. Based on the foregoing, the loss of aquatic macroinvertebrates as a result of dewatering activities is not expected to adversely affect steelhead or critical habitat.

2. Effects to Riparian Vegetation

A diminutive amount of riparian vegetation within the action area will be lost due to the proposed action. However, the loss of vegetation is expected to be mostly temporary and is not expected to translate into an appreciable reduction in the functional value of the action area as a migratory corridor and freshwater rearing site. Within the upstream end of the construction area, only a small amount (0.01 acre) of scrub willow immediately within the footprint of the weirs will be removed during excavation. At the downstream end of the construction area some riparian vegetation (about 0.05 acres) will be removed to allow for construction. Similar amounts of native riparian vegetation will be planted near the disturbed areas to minimize impacts from project construction. The riparian zone is expected to recover from the project in about 1 to 2 years. Overall, only a small amount of riparian vegetation is expected to be affected by the proposed action, and this is not expected to diminish the overall functional value of the migratory corridor and freshwater rearing sites within the action area.

3. Alteration of Water Quality

Although the project area will be dewatered during the time of construction, heavy equipment and people working within the stream channel and on the streambank will likely cause turbidity and the release of fine sediments. Short-term increases in turbidity are anticipated to occur during water diversion and dewatering activities, during the first flush of the stream channel when it is re-watered, and during the first rainstorms which may mobilize disturbed sediments within the project area. This could affect water quality, and this is a concern to NMFS because water quality is an important feature of steelhead critical habitat (Bjornn and Reiser 1991). Sedimentation and turbidity in streams may affect steelhead by a variety of mechanisms. High concentrations of suspended sediment can disrupt normal feeding behavior, reduce feeding efficiency, and decrease food availability (Cordone and Kelly 1961, Bjornn *et al.* 1977, Berg and Northcote 1985). Chronic elevated sedimentation and turbidity can also reduce salmonid growth rates (Crouse *et al.* 1981), increase salmonid plasma cortisol levels (Servizi and Martens 1992), cause salmonid mortality (Cordone and Kelly 1961, Sigler *et al.* 1984), and reduce the survival and emergence of salmonid eggs and fry (Chapman 1988). Even small pulses of turbid water will cause salmonids to disperse from established territories, which can displace salmonids into less suitable habitat and/or increase competition and predation, decreasing chances of survival (Waters 1995).

As a result of the proposed action, some short-term increases in sedimentation and turbidity, with their associated impacts on steelhead, are expected to occur. However, NMFS does not expect acute effects on critical habitat in Santa Paula Creek like the aforementioned because much of the research mentioned above created turbidity artificially in the laboratory to levels significantly higher than those which are expected to result from project activities. Generally, increases in sedimentation and turbidity levels resulting from project activities are expected to be temporary (*i.e.*, a few hours after rewatering to about 1 day during the first storm; Stan Glowacki, NMFS, personal observations, 2006-2007) and discountable because BMPs and sediment control devices deployed during construction (*i.e.*, haybales, siltation curtains, fiber rolls, hydro-seeding,

geosynthetic reinforcement layers) are expected to minimize sedimentation and turbidity effects to water quality. The success of these measures has been documented during other similar projects (Mary Larson, CDFG, personal communication, 2008). Additionally, because the engineered creek channel and rock weir complex will be concreted and then filled with coarse creek substrate, substantial increases in turbidity and sedimentation caused by the reintroduction of flows into the dewatered channel are not expected. Furthermore, increases in sedimentation and turbidity during the first wet-season rains are not expected to be significantly higher than background levels because streams within the Southern California Steelhead DPS naturally have very high sediment concentrations during storm events (Corps 2004). NMFS expects that the construction within the stream channel and subsequent revegetation at the downstream end of the project area will not result in increased sedimentation within Santa Paula Creek in the long term, and the project is not expected to adversely affect critical habitat or diminish the conservation value of the migratory corridor or the freshwater rearing sites within the action area.

B. Effects on Steelhead

1. Water Diversion and Steelhead Relocation

Dewatering of the construction area is expected to temporarily disrupt steelhead behavior patterns (*i.e.*, rearing, migrating) within Santa Paula Creek in the action area. Juvenile steelhead will not be able to rear in the dewatered area during project construction. The ability of juvenile steelhead to migrate upstream through the construction area will also be impaired because creek flows will be confined within a temporary culvert and it is unlikely that juvenile steelhead will be able to migrate upstream for the period of water diversion since high water velocities beyond the swimming capabilities of juvenile steelhead may be present within the water diversion culvert. During the dewatering process, the water diversion could harm rearing juvenile steelhead by concentrating or stranding them in residual wetted areas before they are relocated (Cushman 1985), and rearing juvenile steelhead could be killed if they become stranded and are not moved out of the diversion area. In addition, steelhead will be forced to move to adjacent areas of aquatic habitat during water diversion (Clothier 1953, Clothier 1954, Kraft 1972, Campbell and Scott 1984).

To prevent the harm and mortality of juvenile steelhead in the water diversion area, biologists will survey the stream within the diversion area prior to and during the water diversion, and will capture and relocate steelhead that are stranded in the diversion area to the nearest suitable habitat adjacent to the action area in Santa Paula Creek. The death of steelhead due to stranding and being missed by the biologist is not anticipated because the diversion area is small and the biologists are expected to be able to thoroughly survey beneath boulders and areas where juvenile steelhead can hide. Mortality of steelhead during capture and relocation under these conditions is unlikely and is not expected. NMFS expects a small number of juvenile steelhead (50 or less) to be present in the dewatered area and to be relocated, with up to two mortalities expected. While termination of flow will occur within the dewatered area, steelhead rearing within Santa Paula Creek upstream and downstream of the diversion site are not expected to be affected. Steelhead may still migrate downstream through the temporary culvert, though it is uncertain if they will do so. It is not expected that steelhead juveniles will need to move upstream during the project action because the habitat is of sufficient quality and quantity for

over-summering. Ultimately, any effects to upstream or downstream steelhead migration will last approximately 6 months, as connectivity between the upstream and downstream will be restored after the water diversion is removed and creek flows are placed back into the Santa Paula Creek channel. Water diversion and dewatering will not affect juvenile steelhead residing upstream or downstream of the dewatered area. Loss of aquatic habitat associated with dewatering, and the impedance of migration through the project site will be temporary and is not expected to result in harm, as steelhead will be able to use all aquatic habitat in the vicinity of the dewatered portion of the creek, which is of similar quality as the dewatered area (S. Glowacki, NMFS, 2009, pers. obs.). Overall, effects to steelhead from water diversion are expected to be non-lethal, temporary, and confined to a small number of fish. The effects of the water diversion and relocation on steelhead are not expected to give rise to population-level effects.

2. Channel Alteration and Riparian Removal

Effects to steelhead from channel excavation and alteration are expected to be discountable because the migratory habitat through the action area will be restored, which will provide a benefit for steelhead, and rearing habitat of similar quality and quantity will still be available in the action area after project completion. In addition, the loss of riparian vegetation will be mostly transitory, and the affected area is small and does not contribute substantially to the observable cover and shade to the stream. Large riparian trees at the downstream end of the action area are creating most of the cover and shade for steelhead within the action area, and such trees are not expected to be affected by the proposed action. The alteration of water quality from the proposed action is not expected to translate into adverse effects to steelhead in the action area because the effects are expected to be local, temporary and discountable, and few steelhead are expected to be in the affected area.

C. Summary of Effects

The effects of the proposed action on steelhead and critical habitat are: (1) the temporary loss and alteration of aquatic habitat for the approximate 6 month period of water diversion; (2) alteration and temporary (1 to 2 year) reduction in riparian habitat; (3) the regrading of the stream channel and permanent placement of the 22 rock weirs within the stream channel and; (4) the temporary harassment of steelhead during water diversion and fish relocation and temporary obstruction of upstream migration through the action area. NMFS expects the effects to steelhead from disrupting migration and the loss and alteration of aquatic habitat during water diversion will be temporary and discountable since: (1) migration through the project site by steelhead will be unimpaired after the water diversion is removed and the project is complete; (2) continued use of aquatic habitat by steelhead in areas adjacent to the dewatered area of the creek will not be affected during project action; and (3) steelhead will be able to use the aquatic habitat throughout the action area after the project is complete. NMFS reasons that the impacts to the riparian zone will be temporary, and the revegetation plan is expected to recreate a healthy functioning riparian zone that provides cover and shelter for steelhead within Santa Paula Creek at the downstream end of the project area. NMFS also reasons that the impacts from stabilization of the streambed are not expected to adversely affect the quality or quantity of aquatic habitat, or habitat forming geomorphic processes downstream of the project area. NMFS reasons that the proposed action will actually produce a tangible benefit for steelhead in Santa

Paula Creek by restoring passage through a portion of the creek that has been impassable since winter 2005. While the environment within the action area currently provides rearing habitat for juvenile steelhead, there is no upstream migration possible through this reach at this time. After project completion, the action area will provide similar amounts of rearing habitat for steelhead, and migratory habitat will be restored.

The steelhead population in the Santa Paula Creek drainage is susceptible to activities that destroy or alter rearing, spawning, or migratory habitat within the watershed. The analysis within this biological opinion indicates that the aggregate effects of the environmental baseline (i.e., the effects of past and ongoing activities) and the proposed action are not expected to combine such that they will exacerbate habitat loss and destruction or preclude formation of a viable steelhead population in the Santa Paula Creek watershed and the larger Santa Clara River watershed. No reasonably certain future non-federal actions are expected within the action area. Additionally, the project action is not expected to appreciably reduce the steelhead population or substantially reduce the quantity or quality of aquatic habitat used by the steelhead population in Santa Paula Creek, and thus is not expected to create an added risk of DPS extinction. As a result, the effects of the proposed action combined with the environmental baseline and the status of the Southern California steelhead DPS as a whole are also not expected to appreciably reduce the likelihood of both the survival and recovery for the steelhead population within Santa Paula Creek watershed, the Santa Clara River population unit of steelhead, and the endangered Southern California DPS of steelhead (i.e., reduce the likelihood of the species achieving viability). Additionally, the effects of the proposed action combined with all the other aggregate effects within the Santa Paula Creek and Santa Clara River watersheds are not expected to reduce the current function of the freshwater migration corridor and freshwater rearing sites within the action area, and are not expected to reduce the functionality and conservation value of critical habitat within the greater Santa Paula Creek watershed, the Santa Clara River watershed or the Southern California DPS. The project is actually expected to significantly increase the current function of the freshwater migration corridor and increase the conservation value of critical habitat in Santa Paula Creek.

VI. CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, local or private actions that are reasonably certain to occur in the action area considered in this Biological Opinion. NMFS is generally familiar with activities occurring in the action area, and at this time is unaware of such actions that would be reasonably certain to occur. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Endangered Species Act. Consequently, NMFS believes no cumulative effect, beyond the continuing effects of present land uses, is likely.

VII. CONCLUSION

After reviewing the best scientific and commercial information available, the status of the Southern California steelhead DPS, the environmental baseline for the action area, expected

effects of the proposed action, and cumulative effects, NMFS concludes the proposed action is

not likely to jeopardize the continued existence of the Federally endangered Southern California steelhead DPS, or destroy or adversely modify critical habitat for this species.

VIII. INCIDENTAL TAKE STATEMENT

Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or to attempt to engage in any such conduct. Harm is further defined by NMFS to include significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding, or sheltering. Incidental take is defined as take of listed animal species that results from, but is not the purpose of, carrying out an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not the purpose of the agency action is not considered a prohibited taking provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The measures described below are non-discretionary and must be undertaken by Caltrans for the exemption in section 7(o)(2) to apply. Caltrans has a continuing duty to regulate the activity covered by this incidental take statement. If Caltrans (1) fails to assume and implement the terms and conditions or (2) fails to adhere to the terms and conditions of this incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, Caltrans must report the progress of the action and its impact on the species to NMFS as specified in the incidental take statement (50 CFR §402.14(i)(3)).

A. Amount or Extent of Take

NMFS anticipates the proposed action that will occur in Santa Paula Creek, Ventura County, California, may result in the incidental take of steelhead. Incidental take would be in the form of harassment or harm due to the water diversions, and steelhead capture or collection due to relocation procedures, if such procedures become necessary. Based on field surveys of the project area, and the depth, size, and amount of cover in the aquatic habitat immediately within the action area, few steelhead are expected in the action area. Therefore, NMFS anticipates the following amount of incidental take: All steelhead in the action area, anticipated to be no more than 50 juveniles that are captured or harassed during relocation efforts. Mortality of no more than 2 juveniles, or 4% of all fish captured and relocated, is expected. No other incidental take of steelhead is anticipated as a result of the proposed action. The accompanying Biological Opinion does not anticipate any form of take that is not incidental to the proposed action.

B. Effect of Take

In the Biological Opinion, NMFS concluded that the anticipated level of take associated with the proposed action is not likely to result in jeopardy to the endangered Southern California DPS of steelhead or destroy or adversely modify designated critical habitat for this species.

C. Reasonable and Prudent Measures

NMFS believes that the following reasonable and prudent measures are necessary and appropriate to minimize and monitor incidental take of steelhead:

1. Employ a qualified biologist for the purposes of monitoring the action area.

2. Implement effective concrete and road building material spill control measures.

3. Avoid and minimize impacts to steelhead from heavy equipment.

4. Notify NMFS of the work timetable and prepare a monitoring report.

D. Terms and Conditions

In order to be exempt from any prohibitions of section 9 of the ESA, Caltrans must ensure that it complies with the following terms and conditions, which implement the reasonable and prudent measures described above. These terms and conditions are non-discretionary:

1. The following terms and conditions implement reasonable and prudent measure No. 1.

   A. Caltrans shall retain a biologist with expertise in the areas of resident or anadromous salmonid biology and ecology; fish/habitat relationships; biological monitoring; and, handling, collecting, and relocating salmonid species. The biologist will continuously monitor the work area during water diversion, excavation and construction activities.

   B. Caltrans' biological monitor shall oversee and/or help implement the water diversion, and shall isolate the work area upstream and downstream of the diversion with block netting of mesh size 0.5-inches or less. The biological monitor will also survey the diversion area of the creek for steelhead (including beneath boulders) before diversion takes place, and at least 3 times during the dewatering process and after the diversion is in to make sure no steelhead are stranded in the diversion area before any construction work begins. The biologist shall capture steelhead in the isolated wetted work areas, and then relocate steelhead to a suitable instream location (preferably pool habitat with boulder refuge areas) upstream of the workspace. The biologist shall note the number of steelhead observed in the affected area, the number of steelhead relocated, and the date and time of the collection and relocation. One or more of the following methods shall be used to capture steelhead: seine, dip net, throw net, minnow trap, hand. Electrofishing is prohibited.

   C. Caltrans' biological monitor shall continuously monitor construction activities, instream habitat, and performance of sediment control/detention devices for the purpose of identifying and reconciling any condition that could adversely affect steelhead or their habitat. The biologist shall be empowered to halt work activity and to recommend measures for avoiding adverse effects to steelhead and their habitat. The biological

monitor shall contact NMFS (Stan Glowacki, 562-980-4061) immediately for further

guidance if any unanticipated problem, which could have an adverse effect on steelhead or critical habitat, occurs.

D. Caltrans' biologist shall contact NMFS (Stan Glowacki, 562-980-4061) immediately if one or more steelhead are found dead or injured. The purpose of the contact shall be to review the activities resulting in take and to determine if additional protective measures are required, and to discuss procedures to be used to handle or dispose of any dead steelhead. Subsequent notification must also be made in writing to NMFS' Office of Enforcement (telephone: 562-980-4050; 501 W. Ocean Blvd., Suite 4400A, Long Beach, California 90802) within five days of noting dead or injured steelhead. The written notification shall include the date, time, and location of the carcass or injured specimen, a color photograph, cause of injury or death, and name and affiliation of the person who found the specimen.

2. The following terms and conditions implement reasonable and prudent measure No. 2.

A. Because the pouring and curing of concrete near the streambed could potentially result in cement spills and or cement water leakage, Caltrans shall implement best management practices to isolate the stream and the stream bed from fresh concrete. Such practices shall be strictly followed. No fresh concrete shall be utilized for construction if any rain is forecast to occur within four days.

B. When working on upland sites or building road surfaces adjacent to the streambank and streambed, BMPs shall be implemented to minimize spillage of road building materials (i.e., asphalt, concrete, heavy tar oil, aggregates) into Santa Paula Creek, the streambanks, the riparian zone, and general vicinity.

3. The following terms and conditions implements reasonable and prudent measure No. 3.

A. Any heavy equipment used in or near the creek channel shall be removed from the channel at the end of each workday. All heavy equipment shall be checked for leaks of oil, gas, hydraulic fluid and any other pollutant which could impact water quality and instream habitat each workday prior to being deployed into the creek. Such leaks shall be controlled for the purpose of avoiding water-quality impacts to surface water.

4. The following terms and condition implements reasonable and prudent measure No. 4.

A. Caltrans' biological monitor shall notify NMFS when the proposed action will take place 14 days prior to the beginning of construction work so NMFS, at its discretion, may periodically observe project construction and other activities. These observations may help in devising ways to reduce adverse impacts to steelhead and their habitat for this project and for future projects of similar nature.

B. Caltrans' biological monitor shall provide a written monitoring report to NMFS within 30

working days following completion of the proposed action. The report shall include the number and size of any and all steelhead relocated during the project action or fish relocation; a description of any problem encountered during the project or when implementing terms and conditions; any effect of the project action on steelhead that was not previously considered; and, photographs of the road crossing and vicinity after project action is complete. Caltrans' biological monitor shall also provide NMFS with a monitoring report of the revegetation plan after the conclusion of construction and revegetation activities. Reports are to be sent to Stan C. Glowacki, NMFS, 501 W. Ocean Blvd., Suite 4200, Long Beach, California 90802-4213.

IX. CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the ESA directs Federal agencies to utilize their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of threatened and endangered species. Conservation recommendations are discretionary measures suggested to minimize or avoid adverse effects of a proposed action on listed species, minimize or avoid adverse modification of critical habitat, to help implement recovery plans, or to develop additional information. NMFS believes the following conservation recommendations are consistent with these obligations, and therefore should be implemented by Caltrans.

1. As noted on page 2 of Caltrans' Technical Memorandum Design Summary for the project, the Highway 150 (Thomas Aquinas) Bridge contributes to problems with geomorphic stability, scour, and channel degradation downstream of the bridge (*i.e.*, in the action area). According to the *Santa Paula Creek Watershed Planning Project: Geomorphology and Channel Stability Assessment* (Stillwater Sciences 2007), the bridge is believed to be causing these problems because it is a constriction point in the stream channel, and this is resulting in aggradation of sediment upstream of its location, and degradation and local scour in the reach downstream of the bridge. The area beneath Highway 150 Bridge currently has sloped banks covered with grouted riprap, and constriction of the channel is apparent. To minimize the impacts of the Highway 150 Bridge on the Santa Paula Creek channel and watershed, NMFS recommends that Caltrans investigates and implements a plan to remove the riprapped bank constriction beneath the Highway 150 Bridge, and widen the creek channel beneath the bridge to increase flow conveyance and sediment transport. NMFS also recommends that Caltrans widen the areas beneath the two bridges immediately upstream near the confluence of Santa Paula and Sisar Creeks. The construction of vertical retaining walls beneath the bridge, the widening of the bridge abutments, or some other means of increasing channel width, flow conveyance and sediment transport through this portion of Santa Paula Creek should be undertaken by Caltrans in the immediate future.

   In order for NMFS to be kept informed of Caltrans'actions minimizing or avoiding adverse effects or benefiting listed species or their habitat, NMFS requests Caltrans consults with NMFS prior to the implementation of any conservation recommendation.

X. REINITIATION OF CONSULTATION

This concludes formal consultation on the actions outlined in the project proposal. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded, (2) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered in this opinion, (3) the action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion, or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, formal consultation shall be reinitiated immediately.

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:
81440-2010-I-0068

November 25, 2009

Paul Caron, Office Chief
Division of Environmental Planning
California Department of Transportation, District 7
100 South Main Street
Los Angeles, California 90012-3606

Subject: State Route 150 Santa Paula Creek Fish Ladder Project, Ventura County, California

Dear Mr. Caron:

We are responding to your request, dated October 13, 2009, and received in our office on October 30, 2009, for our concurrence with your determination that the proposed construction of a rock weir system and concrete rock slope protection for fish passage improvement in Santa Paula Creek along State Route 150 may affect, but is not likely to adversely affect, the federally endangered least Bell's vireo (*Vireo bellii pusillus*) and southwestern willow flycatcher (*Empidonax traillii extimus*), and the threatened California red-legged frog (*Rana aurora draytonii*). As a designated non-Federal representative of the Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans) made this request on behalf of the FHWA, the lead Federal agency for the project.

Caltrans proposes to replace destroyed check dams, also known as channel stabilizers, and concreted rock slope protection that were originally constructed to protect the abutments of the Santa Paula Bridge on Route 150 along Santa Paula Creek. The check dams and concreted rock slope protection were destroyed during heavy rain storm events of January 2005. As part of the administrative settlement agreement between the National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries) and Caltrans, the check dams would be replaced with a rock weir system designed with the capacity to allow passage of the federally endangered southern steelhead (*Oncorhyncus mykiss*) to the upstream portions of Santa Paula Creek. Approximately 0.439 acre of riparian habitat would be permanently impacted by the project activities and approximately 1.3 acres of riparian habitat would be temporarily impacted by the project activities.

We understand you have initiated formal interagency consultation with NOAA Fisheries on the potential adverse effects of the project on the federally endangered southern steelhead (*Oncorhynchus mykiss*), which occurs in Santa Paula Creek. Because the southern steelhead is

not within the U.S. Fish and Wildlife Service's (Service) regulatory jurisdiction, it will not be mentioned further in this document.

The project site is located within the historical range of the least Bell's vireo and southwestern willow flycatcher and suitable habitat for these species occurs onsite. Surveys according to Service protocol were conducted by Sapphos Environmental, Inc., biologists from April 2009 to July 2009. Least Bell's vireos and southwestern willow flycatchers were not detected during these surveys. The nearest known breeding location for the least Bell's vireo and southwestern willow flycatcher is approximately 6 miles downstream of the proposed project site, at the confluence of Santa Paula Creek and the Santa Clara River near the city of Santa Paula.

The project site is located within the historical range of the California red-legged frog and suitable habitat for this species occurs onsite. Surveys according to Service protocol were conducted by Entrix biologists from March 2009 to May 2009. California red-legged frogs were not detected during these surveys. The nearest known occurrence of the California red-legged frog is approximately 10 miles to the west in San Antonio Creek near the city of Ojai.

Caltrans has proposed the following minimization measures to avoid adverse effects to least Bell's vireos, southwestern willow flycatchers, and California red-legged frogs:

1. Biological surveys of the project area will be performed in locations having increased biological sensitivity as determined by the Caltrans District Biologist. Surveys will be conducted at most 2 weeks prior to the clearing and grubbing of vegetation;

2. If least Bell's vireos, southwestern willow flycatchers, or California red-legged frogs are detected in or adjacent to the project area prior to or during construction, activities adversely affecting these species will be halted and the Service will be contacted for further consultation and guidance;

3. Surveys for nesting birds will be conducted when clearing and grubbing of vegetation, having the potential to support nesting birds, cannot be avoided during the nesting season between March 1 and September 1. The bridge will also be surveyed for nesting birds and exclusionary measures will be implemented to prevent nesting during construction activities;

4. All applicable Construction Best Management Practices for water quality will be implemented to minimize project effects to drainages. All Federal and State litter laws will be followed by the contractors;

5. Native trees will be replaced at a ratio of at least 1 to 1. Tree replacement will be coordinated between the Caltrans District Landscape Architect and District Biologist and incorporated into the plans;

6. Access will be limited to one pathway only. The designated pathway will be oriented to have the least impact to the native plants and riparian habitat. Access limits will be flagged or marked. The access path will be re-contoured back to original topography if necessary, and blocked so as not to allow public access following project completion;

7. Work will be conducted during the dry season from April 1 to November 1. This will decrease the risk of a contamination spill, or other water quality degradations. Work will occur during daylight hours only, to minimize impacts on nocturnal wildlife activity;

8. Vehicle maintenance will not be conducted in the streambed. Staging and storage of materials will be at a minimum of 100 feet from edge of top of bank;

9. A water diversion plan will be submitted to NOAA Fisheries, California Department of Fish and Game (CDFG), Service, U.S. Army Corps of Engineers (Corps) and Los Angeles Regional Water Quality Control Board (RWQCB) for their approval prior to implementation;

10. An environmentally sensitive area (ESA) shall consist of an area within and near the limits of construction where access is prohibited or limited for the preservation of archeological sites or existing vegetation, or protection of biological habitat as shown on the plans; and

11. Regulatory permits from the Corps, RWQCB, and CDFG will be obtained for project impacts to jurisdictional drainages. Impacts to riparian habitat will be mitigated in consultation with the regulatory agencies once drainages design details are finalized.

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Department of the Interior. While the MBTA has no provision for allowing take, we recognize that some birds may be killed even if all reasonable measures to avoid it are implemented. The Service's Division of Law Enforcement carries out its mission to protect migratory birds not only through investigations and enforcement, but also through fostering relationships with individuals and industries that actively seek to eliminate their impacts on migratory birds. Although individuals or companies cannot be absolved from liability under the MBTA, the Division of Law Enforcement and Department of Justice have used enforcement and prosecutorial discretion in the past regarding individuals or companies who have made good faith efforts to avoid the take of migratory birds.

We concur with your determination that the project may affect, but is not likely to adversely affect, the least Bell's vireo, southwestern willow flycatcher, and California red-legged frog for the following reasons: (1) the nearest known occurrences of least Bell's vireos and southwestern willow flycatchers are approximately 6 miles downstream of the project area; (2) least Bell's vireos, southwestern willow flycatchers, and California red-legged frogs were not detected during surveys according Service protocol; (3) the nearest known occurrence of California red-legged frogs is approximately 10 miles away; and (4) Caltrans will implement the aforementioned minimization measures.

Further consultation pursuant to section 7 of the Endangered Species Act of 1973, as amended, is not required at this time. If the proposed action changes in any manner or if new information reveals the presence of listed species in the project area, you should suspend all activities and

contact us immediately until the appropriate level of consultation is completed. If you have any questions regarding this matter, please contact Chris Dellith of my staff at (805) 644-1766, extension 227.

Sincerely,

Roger P. Root
Assistant Field Supervisor

cc:
Anthony Spina, National Marine Fisheries