CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

California Regional Water Quality Control Board, San Diego Region

February 15, 2013

In reply refer to:
633011 and 629711: amonji

Certified Mail – Return Receipt Requested
Article Number: 7011 0470 0002 8961 9979

Article Number: 7011 0470 0002 8961 9986

Ms. Josephine Axt
Chief Planning Division
915 Wilshire Blvd.
Los Angeles, CA 90017

Mr. Peter Weiss
City Manager
City of Oceanside
300 North Coast Highway
Oceanside, CA 92054

Subject: Amendment No.1 to Water Quality Certification No. 07C-019 for the San Luis Rey River Flood Control Project Operation and Maintenance -Vegetation and Sediment Management

Ms. Axt and Mr. Weiss:

You will find enclosed Amendment No. 1 to Clean Water Act Section 401 Water Quality Certification No. 07C-019 (Certification Amendment) for the San Luis Rey River Flood Control Project Operation and Maintenance -Vegetation and Sediment Management (Project). The Certification Amendment shows changes in redline/strikeout format to indicate added and removed language. Water Quality Certification No. 07C-019 has also been enclosed for your reference.

On February 15, 2008, Certification No. 07C-019 (original Certification) was issued to the U.S. Army Corps of Engineers (USACE) and the City of Oceanside (City) for the Project. By letter dated February 7, 2013, the USACE requested a five year extension of the February 15, 2013 expiration date included in section A.2 of the original Certification. The extension is needed to continue the on-going restoration activities that must occur to meet the habitat mitigation requirements of the original Certification, as well as other permitting agency requirements. Based on the extension request and the limited time staff had to review and prepare the certification amendment, the San Diego Water Board is amending Certification No. 07C-019 to extend the expiration date by two years, to February 15, 2015, instead of the five year extension requested.

The short time frame in which my staff had to process the USACE's amendment request is unacceptable. Certification amendment requests are normally handled in order of receipt, along with all certification applications. Additionally, processing an amendment request

requires time for review of the request and the existing certification in order to assess the need for the amendment, identify any additional changes needed, and evaluate compliance with the current certification. I want to use this opportunity to make clear that the expedited review and processing of this certification amendment request is a one-time exception that the San Diego Water Board will not accommodate in the future, in the absence of extraordinary circumstances. I encourage you to continue your on-going discussions with my staff on how our respective agencies can work better together so that this type of situation can be avoided in the future.

Any petition for reconsideration of this amended Certification must be filed with the State Water Resources Control Board (State Board) within 30 days of certification action (23 CCR § 3867). If a petition is not filed with the State Board within 30 days, USACE and the City will have accepted the changes to Certification No. 07C-019 and must comply with all the certification conditions. Failure to comply with all conditions of this certification may result in enforcement actions against USACE and the City.

In the subject line of any response, please include the reference number 787209:amonji. For questions or comments, please contact Alan Monji by phone at (858) 637-7140, or by email at amonji@waterboards.ca.gov.

Respectfully,

Julie Chan for

David W. Gibson,
Executive Officer
Regional Water Quality Control Board

DG:js:db:kkd:atm

Enclosures:

Amendment No. 1 to Clean Water Act Section 401 Water Quality Certification No. 07C-019

Clean Water Act Section 401 Water Quality Certification No. 07C-019 for the San Luis Rey River Flood Control Project Operation and Maintenance -Vegetation and Sediment Management

Amendment Request letter from USACE for Certification No. 07C-019, dated February 7, 2013.

cc: (via email)

Tiffany Bostwick
US Army Corps of Engineers
Tiffany.Bostwick@usace.army.mil

Robert R.Smith
US Army Corps of Engineers
Robert.R.Smith@usace.army.mil

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

U.S. EPA, OWOW, Region 9
75 Hawthorne St.
San Francisco, CA 94105
R9-WTR8-Mailbox@epa.gov

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

California Regional Water Quality Control Board, San Diego Region

Amendment No. 1 to Clean Water Act Section 401
Water Quality Certification No. 07C-019

PROJECT: San Luis Rey River Flood Control Project Operation and Maintenance - Vegetation and Sediment Management Certification No. 07C-019

APPLICANTS: U.S. Army Corps of Engineers
915 Wilshire Boulevard.
Los Angeles, CA 90017

WDID: 9000001613
Party No. 48076
Person No. 366773
Place Nos. 633011 & 629711
Reg. Measure No. 321491

City of Oceanside
300 North Coast Highway
Oceanside, CA 92054

WDID 9000001613
Party No. 148472
Person No. 123196
Place Nos. 633011 & 629711
Reg. Measure No. 321491

The following changes have been made to Clean Water Act Section 401 Water Quality Certification No. 07C-019, San Luis Rey River Flood Control Project Operation and Maintenance -Vegetation and Sediment Management Project. Changes below are shown in redline/strikeout format to indicate added and removed language.

1. **Page 2, GENERAL CONDITIONS A.2 has been modified as follows:**

   This certification and enrollment under Order No. 2003-017-DWQ expires February 15, 2015 ~~5 years from date of issuance~~.

I, David W. Gibson, Executive Officer, do hereby certify the forgoing is a full, true, and correct copy of Amendment No.1 to Certification No. 07C-082 issued on February 15, 2013.

for Julie Chon
David W. Gibson
Executive Officer
Regional Water Quality Control Board

2/15/2013
Date

California Regional Water Quality Control Board
San Diego Region

Over 50 Years Serving San Diego, Orange, and Riverside Counties
Recipient of the 2004 Environmental Award for Outstanding Achievement from USEPA

9174 Sky Park Court, Suite 100, San Diego, California 92123-4340
(858) 467-2952 • Fax (858) 571-6972
http:// www.waterboards.ca.gov/sandiego

Linda S. Adams
Secretary for Environmental Protection

Arnold Schwarzenegger
Governor

February 15, 2008

In reply refer to: WPC:18-2007019:mporter

Ms. Ruth Villalobos
Chief, Planning Division
U.S. Army Corps of Engineers
915 Wilshire Blvd.
Los Angeles, CA 90017

WDID 9000001613
CIWQS:
Party No. 48076
Person No. 366773
Place Nos. 633011 & 629711
Reg. No. 321491

Mr. Peter Weiss
City Manager
City of Oceanside
300 North Coast Highway
Oceanside, CA 92054

WDID 9000001613
CIWQS:
Party No. 148472
Person No. 123196
Place Nos. 633011 & 629711
Reg. No. 321491

SUBJECT: Action on Request for Clean Water Act Section 401 Water Quality Certification for the *San Luis Rey River Flood Control Project Operation and Maintenance (Vegetation and Sediment Management)* project Water Quality Certification No. 07C-019

Dear Ms. Villalobos and Mr. Weiss:

Enclosed is the Clean Water Act Section 401 Water Quality Certification for the San Luis Rey River Flood Control Project Operation and Maintenance (Vegetation and Sediment Management) project. A description of the project and project location can be found in the project information sheet, project location map, and project site maps which are included as Attachments 1 through 8. Any petition for reconsideration of this Certification must be filed with the State Water Resources Control Board within 30 days of certification action (23 CCR § 3867). If no petition is received, it will be assumed that the U.S. Army Corps of Engineers and the City of Oceanside has accepted and will comply with all conditions of the Certification. Failure to comply with all conditions of this Certification will result in enforcement actions against the U.S. Army Corps of Engineers and the City of Oceanside.

The heading portion of this letter includes a Regional Board code number noted after "In reply refer to:" In order to assist us in the processing of your correspondence please include this code number in the heading or subject line portion of all correspondence and reports to the Regional Board pertaining to this matter.

2/20/2008

Ms. Villalobos
Mr. Weiss
401 Certification 07C-019

February 15, 2008

If you have any questions regarding this notification, please call Mike Porter directly at (858) 467-2726 or by email via mporter@waterboards.ca.gov.

Respectfully,

JOHN H. ROBERTUS
Executive Officer

Enclosure:

Clean Water Act Section 401 Water Quality Certification No. 07C-019 for the *San Luis Rey River Flood Control Project Operation and Maintenance (Vegetation and Sediment Management)* project, with 6 attachments

CC: Refer to Attachment 2 of Certification 07C-019 for Distribution List.

California Regional Water Quality Control Board

San Diego Region

Over 50 Years Serving San Diego, Orange, and Riverside Counties

Recipient of the 2004 Environmental Award for Outstanding Achievement from USEPA

Linda Adams
Secretary for Environmental Protection

9174 Sky Park Court, Suite 100, San Diego, California 92123-4340
(858) 467-2952 • Fax (858) 571-6972
http:// www.waterboards.ca.gov/sandiego

Arnold Schwarzenegger
Governor

Action on Request
for
Clean Water Act section 401 Water Quality Certification
And enrollment in
General Waste Discharge Requirements
for
Discharge of Dredged and/or Fill Materials

PROJECT: San Luis Rey River Flood Control Project Operation and Maintenance -Vegetation and Sediment Management Certification No. 07C-019

APPLICANTS:

Ms. Ruth Villalobos
Chief, Planning Division
U.S. Army Corps of Engineers
915 Wilshire Boulevard.
Los Angeles, CA 90017

WDID 9000001613
CIWQS:
Party No. 48076
Person No. 366773
Place Nos. 633011 & 629711
Reg. No. 321491

Mr. Peter Weiss
City Manager
City of Oceanside
300 North Coast Highway
Oceanside, CA 92054

WDID 9000001613
CIWQS:
Party No. 148472
Person No. 123196
Place Nos. 633011 & 629711
Reg. No. 321491

ACTION:

- ☐ Order for Low Impact Certification
- ☐ Order for Denial of Certification
- ☑ Order for Technically-conditioned Certification
- ☐ Waiver of Waste Discharge Requirements
- ☐ Enrollment in SWRCB Order No. 2004-004-DWQ (Isolated Waters)
- ☑ Enrollment in SWRB Order No. 2003-0017-DWQ (Non-Isolated Waters)

STANDARD CONDITIONS:

The following three standard conditions apply to all certification actions, except as noted under Condition 3 for denials (Action 3).

1. This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to section 13330 of the California Water Code and section 3867 of Title 23 of the California Code of Regulations (23 CCR).

2. This certification action is not intended and must not be construed to apply to any discharge from any activity involving a hydroelectric facility 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. The validity of any non-denial certification action (Actions 1 and 2) must be conditioned upon total payment of the full fee required under 23 CCR section 3833, unless otherwise stated in writing by the certifying agency.

ADDITIONAL CONDITIONS:

In addition to the three standard conditions, the U.S. Army Corps of Engineers and the *City of Oceanside must satisfy the following*:

A. General Conditions

1. The U.S. Army Corps of Engineers and the City of Oceanside must, at all times, fully comply with the engineering plans, specifications and technical reports submitted with this application for Clean Water Act §401 Water Quality Certification and all subsequent submittals required as part of this certification.

2. This certification and enrollment under Order No. 2003-017-DWQ expires 5 years from date of issuance.

3. The U.S. Army Corps of Engineers and the City of Oceanside must maintain a copy of this certification, the application, and supporting documentation at the project site at all times for review by site personnel and agencies.

4. Prior to the start of the project, the U.S. Army Corps of Engineers and the City of Oceanside must educate all personnel on the requirements in this certification, pollution prevention measures, and spill response.

5. The U.S. Army Corps of Engineers and the City of Oceanside must permit the California Regional Water Quality Control Board – San Diego Region (Regional Board) or its authorized representative at all times, upon presentation of credentials:

   a) Entry onto project premises, including all areas on which wetland fill or wetland mitigation is located or in which records are kept.
   b) Access to copy any records required to be kept under the terms and conditions of this certification.
   c) Inspection of any treatment equipment, monitoring equipment, or monitoring method required by this certification.
   d) Sampling of any discharge or surface water covered by this Order.

6. The U.S. Army Corps of Engineers and the City of Oceanside must notify the Regional Board within 24 hours of any unauthorized discharge to waters of the U.S. and/or State; measures that were implemented to stop and contain the discharge; measures implemented to clean-up the discharge; the volume and type of materials discharged and recovered; and additional Best Management Practices (BMPs) or other measures that will be implemented to prevent future discharges.

7. The U.S. Army Corps of Engineers and the City of Oceanside must, at all times, maintain appropriate types and sufficient quantities of materials onsite to contain any spill or inadvertent release of materials that may cause a condition of pollution or nuisance if the materials reached a waters of the U.S. and/or State.

8. This Certification is not transferable to any person(s) except after notice to the Executive Officer of the Regional Board. The U.S. Army Corps of Engineers and the City of Oceanside must submit this notice in writing at least 30 days in advance of any proposed transfer. The notice must include a written agreement between the existing and new owner(s) containing a specific date for the transfer of this Certification's responsibility and coverage between the current discharger and the new discharger(s). This agreement must include an acknowledgement that the existing owner is liable for compliance and violations up to the transfer date and that the new owner(s) is/are liable from the transfer date on.

9. In the event of any violation or threatened violation of the conditions of this certification, the violation or threatened violation must 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.

10. In response to a suspected violation of any condition of this certification, the Regional Board 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 Regional Board deems appropriate, provided that the burden, including costs, of the reports must be a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

11. In response to any violation of the conditions of this certification, the Regional Board may add to or modify the conditions of this certification as appropriate to ensure compliance.

12. The U.S. Army Corps of Engineers and the City of Oceanside must comply with the requirements of State Water Resource Control Board Order No. 2003-0017-DWQ, Statewide General Waste Discharge Requirements for dredged material or fill discharges that have received State Water Quality Certification. These General Waste Discharge Requirements can be accessed at: http://www.swrcb.ca.gov/cwa401/docs/generalorders/go_wdr401regulated_projects.pdf.

B. PROJECT CONDITIONS

1. Activity Notification. The U.S. Army Corps of Engineers and the City of Oceanside shall notify the Regional Board prior to project commencement activities, and within 72 hours of project completion.

2. Beach Sand Replenishment. Sediment that is removed from the project area that meets the physical and chemical standards for beach sand replenishment must be used on beaches within the City of Oceanside if there is a need for replenishment.

3. Construction NPDES Requirements. The U.S. Army Corps of Engineers and the City of Oceanside shall enroll in and comply with the requirements of State Water Resources Control Board Water Quality Order No. 99-08-DWQ, the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity.

4. Construction BMPs. The U.S. Army Corps of Engineers and the City of Oceanside shall ensure that adequate management practices are planned for, implemented, and assessed, to address discharges of waste associated with, and not limited to, the following:

    a. Erosion and discharge of sediments to water during clearing activities;
    b. Erosion and discharge of sediments to water during sediment excavation activities.
    c. Spill prevention and containment from fuels and equipment fluids;

d. Equipment storage and maintenance;
e. Material staging and stockpiling;
f. Personnel trash; and
g. Wastewater.

5. Alignment Demarcation. The vegetation clearing and sediment excavation alignments shall be clearly marked (e.g., staked or flagged) by project biologists/engineers prior to activities, and the U.S. Army Corps of Engineers and the City of Oceanside shall ensure that all contracted personnel stay within the marked alignment during clearing activities, except for biological monitoring personnel.

6. Refueling. Refueling of equipment within the flood control channel/river shall be done at least 50 feet away from flowing water and with the use of liners or bladders. Fuel trucks shall not enter the river bottom. All spills shall be immediately controlled, contained, and cleaned up. Spill absorbent materials shall be kept readily available during all refueling and replenishment of equipment fluid activities. "No-fueling zones" shall be designated on construction plans.

7. Discharge Material. This certification is for the discharge of cut and shredded vegetation and the incidental discharge of sediment as proposed in the application.

8. Open Water/Marsh. No mowing shall occur in areas of flowing water or freshwater marsh vegetation. No mowed or chipped material shall be discharged into open water or marsh areas.

9. Rain Events. In the event of an anticipated rain storm predicted to deliver greater than 1.0 inch of rain within the City of Oceanside or 3.0 inches of rain at Palomar Mountain, equipment will be removed from the channel until work can be resumed after the threat from stormflows has ended.

10. Threatened and Endangered Species Protection. The U.S. Army Corps of Engineers (USACE) and the City of Oceanside shall, in accordance with the Biological Opinion issued by the U.S. Fish and Wildlife Service (February 14, 2006), implement the following conservation measures to protect the uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant and animal species established under State or federal law as rare, threatened, or endangered.

    a. A USACE biologist or its designated contract biologist will be present at the project site during all mowing, chipping, and/or sediment removal activities;
    b. Mowing areas will be limited to those described within the Biological Opinion; and

c. The mowing contractor and all field personnel will be educated on the environmental sensitivity of the area, with specific attention to habitat for endangered species.

11. Aquatic Weed Control NPDES Requirements. Invasive species management activities involving aquatic herbicides conducted subsequent to mowing operations shall be conducted in accordance with product labels and, if applicable, in accordance with SWRCB Water Quality Order No. 2004-009-DWQ, *Statewide General NPDES Permit for the Discharge of Aquatic Pesticides for Aquatic Weed Control in Waters of the United States* (NPDES General Permit No. CAG990005).

C. WATER QUALITY MONITORING

1. The U.S. Army Corps of Engineers and the City of Oceanside must continue conducting water quality monitoring for benthic macroinvertebrate species and for water chemistry as required by Water Quality Certification No. 05C-127. Reporting requirements will remain the same. This monitoring requirement will be superseded by a Water Quality Monitoring Plan, in accordance with C.2, below.

2. The U.S. Army Corps of Engineers and the City of Oceanside must prepare and implement a Water Quality Monitoring Plan (WQMP). The purpose of the WQMP plan is to effectively monitor water quality via three methods for as long as sediment and vegetation management is conducted by the U.S. Army Corps of Engineers and/or the City of Oceanside. The WQMP must consist of benthic macroinvertebrate (BMI) analyses, water chemistry, and algal monitoring. A draft WQMP is due to the Regional Board for review and approval by June 15, 2008. The final WQMP must be implemented by September 15, 2008.

3. The WQMP BMI section must propose using the California Stream Bioassessment Procedure (CSBP) or a modification of the CSPS, with approval of the Regional Board.

4. The WQMP water chemistry section must, at a minimum, include sampling, analysis, and monitoring of:

   a) Temperature
   b) pH
   c) Dissolved oxygen
   d) Turbidity
   e) Total suspended solids
   f) Ammonia-N
   g) Nitrate as N
   h) Total Kjeldahl Nitrogen
   i) Orthophosphate-P

j) Total Phosphate as P
k) Total Phosphate as PO_4

The water sampling and analyses must follow the State of California State Water Resource Control Board's Surface Water Ambient Monitoring Program (SWAMP) (http://www.swrcb.ca.gov/swamp/index.html) protocols.

5. The WQMP algal section must propose monitoring for:

   a) Biomass (in chlorophyll and ash free dry mass (AFDM)) for benthic (attached) algae, phytoplankton (the ones in the water column), and macroalgae (attached and floating).

   b) Algal cover.

This monitoring is described in the U.S. EPA's Monitoring and Assessing Water Quality, Chapter 6 – Periphyton Protocols. This document can be found at http://www.epa.gov/owow/monitoring/rbp/ch06main.html.

6. The WQMP must propose and report annual scientific and statistical analyses of the data collected under Certifications 05C-127 and 07C-019. The first annual report is due June 1, 2009.

7. The U.S. Army Corps of Engineers and/or City of Oceanside shall submit quarterly monitoring reports until the Regional Board determines that quarterly reporting is no longer necessary to assess the water quality. Quarterly reports are due January 2nd, April 1st, June 1st, and September 1st. The first WQMP report shall be due September 1, 2008 and include data collected in 2008 as required by Certification 07C-019 and all previous data collected required by Certification 05C-127.

8. The Regional Board can modify the WQMP through an amendment to this Certification or by issuance of individual Waste Discharge Requirements.

D. POST CONSTRUCTION STORM WATER MANAGEMENT

1. Mulch and/or debris from the vegetation clearing activities that accumulates in downstream areas, such as tidal areas and bridges following rain storms, shall be removed by the U.S. Army Corps of Engineers and/or the City of Oceanside as soon as can be safely accomplished. The U.S. Army Corps of Engineers and the City of Oceanside shall notify the Regional Board within 24 hours, following completion of removal activities. The notification shall include information regarding the precise locations, approximate amount of debris removed, disposal locations, and a description of any beneficial uses that were affected by the debris or debris-clearing activities.

2. Excavated sediment areas must be revegetated with native vegetation within one year of disturbance (excavation or grading of sediment) and no later one month before the rainy season begins (October 15).

E. Best Management Practices, Mitigation, and Preservation of Beneficial Uses for Steelhead and Other Species

In 2007, biologists from the State of California Department of Fish and Game observed Southern pacific steelhead salmon (steelhead) in the San Luis Rey River within the project area. Steelhead are an endangered specie pursuant to the federal Endangered Species act. When federally-endangered species are found within a project area that is subject to U.S. Army Corps of Engineers permits, the U.S. Army Corps of Engineers is required to consult with federal wildlife and/or fisheries agencies and incorporate that consultation into permits issued by the U.S. Army Corps of Engineers. That consultation has occurred between the U.S. Army Corps of Engineers and the National Marine Fisheries Service. The National Marine Fisheries Service has put forth a set of recommended actions to minimize potential effects to the steelhead and its habitat within the project area. Those recommendations are contained within a letter from Department of the Army, Los Angeles District Corps of Engineers to National Marine Fisheries Service, Southwest Regional Office, dated February 5, 2008. That letter is part of this certification as Attachment 6.

The recommendations from National Marine Fisheries Service includes best management practices to protect steelhead, its habitat, and the beneficial uses of the surface water for that species. The Regional Board finds these best management practices appropriate to ensure adequate protection of beneficial uses and requires the U.S. Army Corps of Engineers and the City of Oceanside, as a condition of Water Quality Certification, to fully comply with the National Marine Fisheries Service's recommended best management practices, as specified in Attachment 6 of this Certification.

F. Jurisdictional Impacts and Mitigation

1. The proposed project must not:

    a) Permanently impact (fill) more than 128 acres (38,016-linear feet, 7.2-miles total project area) of vegetated waters.

    b) Temporarily impact (fill) more than 46 acres (38,016-linear feet, 7.2-miles total project area) of unvegetated waters.

2. Compensatory mitigation for permanent and temporary impacts to waters of the U.S. and State from the proposed project is proposed by the U.S. Army Corps of Engineers and the City of Oceanside as:

    a) Preserve 50.07 acres of riparian habitat within the Project Area. The U.S. Army Corps of Engineers and/or the City of Oceanside shall actively monitor and manage the preserved areas per the HMP and Restoration Plan in perpetuity.

    b) Restoration of 100.14 acres of riparian habitat within the project area by the removal of stands of *Arundo donax* and other non-native, invasive plant species. Of that 100.14 acres, approximately 45 acres have recently been sprayed with herbicides. After certification is issued, the 45 acres area will be mowed.

    c) Additional mitigation shall be implemented as described in Attachment 7 – Memorandum for the Record, U.S. Army Corps of Engineers, dated February 2008 (revised). This memorandum discusses all impacts to date, proposed impacts, mitigation areas constructed, and mitigation planned.

    d) When all existing/proposed impacts and all mitigation completed/proposed are compared, there will be a net gain of 218 acres of riparian wetlands, waters, and buffer areas, to ensure that this project meets California's Wetland Conservation Policy.

    e) As agreed to by other agencies, the U.S. Army Corps of Engineers and the City of Oceanside shall prepare and implement a Habitat Management Plan for the mitigation areas by November 15, 2008.

3. Mitigation must be implemented as described in the Final Post Authorization Decision Document/Supplemental Environmental Impact Statement/Report for Vegetation and Sediment Management of the San Luis Rey River Flood Control Project, Oceanside, San Diego County, California, prepared by U.S. Army Corps of Engineers, South Pacific Division, dated July 2007.

4. The U.S. Army Corps of Engineers and the City of Oceanside must monitor and maintain the mitigation areas until success criteria is met as described in the Final Post Authorization Decision Document/Supplemental Environmental Impact Statement/Report for Vegetation and Sediment Management of the San Luis Rey River Flood Control Project, Oceanside, San Diego County, California, prepared by U.S. Army Corps of Engineers, South Pacific Division, dated July 2007.

5. The U.S. Army Corps of Engineers and the City of Oceanside must submit a report (including topography maps and planting locations) to the Regional Board within 90 days of completion of mitigation site preparation and planting, describing as-built status of the mitigation project. If the site grading and planting are not completed within six weeks of each other, separate reports will be submitted describing those specific as-built conditions.

6. The construction of proposed mitigation must be completed within the same calendar year as impacts occur, or at least no later than 9 months following the close of the calendar year in which impacts first occur (e.g., if impacts occur in June 2003, construction of mitigation for all impacts must be completed no later than February 2004). Delays in implementing mitigation may result in an increased mitigation ratio by 1.0 acre for each acre of impact for each year, or part thereof, of delay.

7. Mitigation areas must be maintained free of perennial exotic plant species including, but not limited to, pampas grass, giant reed, tamarisk, sweet fennel, tree tobacco, castor bean, and pepper tree. Annual exotic plant species must not occupy more than 5 percent of the onsite or offsite mitigation areas.

8. If at any time during the implementation and establishment of the mitigation area(s), and prior to verification of meeting success criteria, a catastrophic natural event (e.g., fire, flood) occurs and impacts the mitigation area, the U.S. Army Corps of Engineers and the City of Oceanside, or future owners, must be responsible for repair and replanting of the damaged area(s).

9. Mitigation monitoring reports must be submitted annually on March 1, with the first report due on August 1, 2008, until mitigation has been deemed successful by the Regional Board or by Regional Board deference to another resource agency. Monitoring reports must include, but not be limited to, the following:

    a) Names, qualifications, and affiliations of the persons contributing to the report;

    b) Tables presenting the raw data collected in the field as well as analyses of the physical and biological data.

    c) Qualitative and quantitative comparisons of current mitigation conditions with pre-construction conditions and previous mitigation monitoring results.

    d) Photodocumentation from established reference points; Survey report documenting boundaries of mitigation area.

e) Other items specified in the draft and final Wetland and Riparian Mitigation and Monitoring Plan.

10. For the purpose of determining mitigation credit for the removal of exotic/invasive plant species, only the actual area occupied by exotic/invasive plant species must be quantified to comply with mitigation requirements.

11. Compensatory mitigation for this project shall not be performed using any State grant or water bond funds, and cannot be used to fulfill obligations for compensatory mitigation of impacts to other projects (i.e. projects not defined or proposed in this certification).

12. For purposes of this certification, creation is defined as the creation of vegetated or unvegetated waters of the U.S. where they have never been documented or known to occur (e.g., conversion of nonnative grassland to freshwater marsh). Restoration is defined as the creation of waters of the U.S. where they previously occurred (e.g., removal of fill material to restore a drainage). Enhancement is defined as modifying existing waters of the U.S. to enhance functions and values (e.g., removal of exotic plant species from jurisdictional areas and replacing with native species).

G. Photo Documentation Procedure

The U.S. Army Corps of Engineers and the City of Oceanside must conduct photo documentation of the project site and mitigation areas in accordance with procedures described in Attachment 8. Photo documentation must be submitted to the Regional Board annually and with the first report due on August 1, 2008. Following reports are due annually on March 1.

H. Geographic Information System Reporting

The U.S. Army Corps of Engineers and the City of Oceanside must submit Geographic Information System (GIS) shape files of the impact and mitigation areas within 30 days of project impacts and the mitigation areas within 30 days of mitigation installation. All impact and mitigation areas shapefiles must be polygons. Two GPS readings (points) must be taken on each line of the polygon and the polygon must have a minimum of 10 points. GIS metadata must also be submitted.

I. Reporting

1. All information requested in this Certification is pursuant to California Water Code (CWC) section 13267. Pursuant to CWC section 13268, a civil liability may be administratively imposed by the Regional Board for failure to furnish requested information.

2. All reports and information submitted to the Regional Board must submitted in both hardcopy (paper) and electronic formats.

3. All applications, reports, or information must be submitted to:

   Executive Officer
   California Regional Water Quality Control Board [9]
   San Diego Region
   Attn: 401 Certification No. 07C-019, Central Watershed Unit
   9174 Sky Park Court, Suite 100
   San Diego, California 92123

K. Required Reports

The following list summarizes the reports, excluding spill notifications and emergency situations, required per the conditions of this Certification to be submitted to the Regional Board.

Report Topic	Certification Condition	Due Dates
Certification Expiration	A.2	Five years from date of issuance.
Construction Notification	B.1	Within 72 hours prior to commencement of construction.
Enroll in Order No. 99-08-DWQ, Construction Storm Water	B.3	Prior to clearing and sediment excavation activities.
Water Quality Monitoring Plan	C.2	Submit by June 1, 2008; implement by August 15, 2008.
Water Quality Monitoring Plan Annual Analysis Reporting	C.6	Submit by June 1, 2008 and June 1st each year thereafter.
Water Quality Monitoring Plan Quarterly Data Reporting	C.7	Submit by January 2nd, April 1st, June 1st, and September 1st of each year. The first report is due September 1, 2008.
Remove vegetation cuttings from river	D.1	Within 72 hours of discharge.
Revegetate excavated sediment areas.	D.2	No later than 1 month before rainy season begins.

Habitat Management Plan	F.2.e	Implement by November 15, 2008.
Mitigation	F.5	Within 90 days of completion of mitigation site preparation and grading submit as-built report.
Mitigation	F.6	Within 90 days of issuance of Certification.
Mitigation	F.9	First report due August 1, 2008; remaining reports due annually on March 1.
Stream Photo Documentation	G.	Submit annual reports on March 1. First report due August 1, 2008
GIS shape files	H.	Submit within 30 days after mitigation construction ceases and when preserved areas are placed under a conservation easement (or like).

L. SIGNATORY REQUIREMENT

1. All applications, reports, or information submitted to the Regional Board must be signed by the U.S. Army Corps of Engineers and the City of Oceanside as follows:

    a) For a corporation, by a responsible corporate officer of at least the level of vice president.
    b) For a partnership or sole proprietorship, by a general partner or proprietor, respectively.
    c) For a municipality, or a state, federal, or other public agency, by either a principal executive officer or ranking elected official.

2. A duly authorized representative of a person designated in Items 1.a. through 1.c. above may sign documents if:

    a) The authorization is made in writing by a person described in Items 1.a. through 1.c. above.
    b) The authorization specifies either an individual or position having responsibility for the overall operation of the regulated activity.
    c) The written authorization is submitted to the Regional Board Executive Officer.

3. All applications, reports, or information submitted to the Regional Board Executive Officer must be certified as follows:

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

PUBLIC NOTIFICATION OF PROJECT APPLICATION:

On February 27, 2007, receipt of the project application was posted on the Regional Board web site to serve as appropriate notification to the public.

REGIONAL WATER QUALITY CONTROL BOARD CONTACT PERSON:

Mike Porter
Engineering Geologist
Central Watershed Protection Unit
9174 Sky Park Court, Suite 100
San Diego, CA 92123
858-467-2726
mporter@waterboards.ca.gov

WATER QUALITY CERTIFICATION:

I hereby certify that the proposed discharge from the **San Luis Rey River Flood Control Project Operation and Maintenance (Vegetation and Sediment Management)** project (Certification No. 07C-019) will comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. This discharge is also regulated under State Water Resource Control Board Order No. 2003-017 General Waste Discharge Requirements for (non-isolated) Waters of the State. Please note that enrollment under Order No. 2003-017 is conditional and, should new information come to our attention that indicates a water quality problem, the Regional Board may issue individual waste discharge requirements at that time.

Except insofar as may be modified by any preceding conditions, all certification actions are contingent on (a) the discharge being limited and all proposed mitigation being completed in strict compliance with the applicants' project description and/or on the attached Project Information Sheet, and (b) on compliance with all applicable requirements of the Regional Water Quality Control Board's Water Quality Control Plan (Basin Plan).

John H. Robertus

2/15/2008

John H. Robertus
Executive Officer
Regional Water Quality Control Board

Date

Attachments:

1. Project Information
2. Distribution List
3. Location Maps
4. Site Maps
5. Mitigation Maps
6. Letter from Department of the Army, Los Angeles District Corps of Engineers to National Marine Fisheries Service, Southwest Regional Office, dated February 5, 2008.
7. Memorandum from Department of the Army, Los Angeles District Corps of Engineers Regarding Jurisdictional Impacts and Mitigation, dated February 5, 2008
8. Stream Photo Documentation Procedure

ATTACHMENT 1
PROJECT INFORMATION

Applicants :

U.S. Army Corps of Engineers
Ms. Ruth Villalobos
Chief, Planning Division
U.S. Army Corps of Engineers
915 Wilshire Boulevard.
Los Angeles, CA 90017
Telephone: 213-453-3783
Facsimile: 213-452-4204
E-mail : Ruth.Villalobos@usace.army.mil

The City of Oceanside
Mr. Peter Weiss
City Manager
City of Oceanside
300 North Coast Highway
Oceanside, CA 92054
Los Angeles, CA 90017
Telephone: 760-435-5111
E-mail : pweiss@ci.oceanside.ca.us

Applicants' Representative :

Self represented.

Project Name:

San Luis Rey River Flood Control Project Operation and Maintenance (Vegetation and Sediment Management) (07C-019)

Project Location:

The project is located in the north-coastal County of San Diego, City of Oceanside, from College Boulevard west to the Pacific Ocean. The center of the project is approximately located at latitude 32.32° north, longitude 117.39 east.

The Project Area consists of 7.2-miles, encompassing approximately 549-acres of channelized and unchannelized reaches and associated detention/compensation ponds of the San Luis Rey River between the Pacific Ocean and College

Boulevard in the City of Oceanside, northwestern San Diego County as depicted in Figure 1.1 "San Luis Rey River Flood Control Project". The Project Area has been divided into four reaches as follows:

1. Reach 1 extends east approximately 2.2 miles from the Pacific Ocean to the Benet Road Bridge.

2. Reach 2 extends approximately one mile, from Benet Road Bridge to the Foussat Bridge.

3. Reach 3 is divided into Reach 3A and Reach 3B and extends approximately 2.1 miles between the Foussat Road Bridge and the Douglas Drive Bridge.

    a) Reach 3A extends from Foussat Bridge to the Pilgrim Creek confluence, approximately 1.4 miles.

    b) Reach 3B extends from Pilgrim Creek up stream to Douglas Drive Bridge, approximately 0.7 miles.

4. Reach 4 extends approximately 1.7 miles from the Douglas Drive Bridge to the College Boulevard Bridge.

Type of Project: Flood control maintenance.

Project Description: The project consists of mowing and discharge of vegetation in the floodplain and ***potential*** removal of 260,000 cubic-yards of sediment over a 25 year period from the channelized, lower 7.2-miles of San Luis Rey River and floodplain within the Army Corps of Engineer's constructed flood control channel (Channel). Potentially up to 93,000 cubic-yards could be removed during the initial phases and up to 52,000 cubic-yards approximately every 5 years. There is a possibility that no sediment may be removed as the river is incising due to lack of nearby sediment influx, but additional studies will be conducted to confirm that.

The channel was authorized by Congress in 1970, with construction commencing in 1990, and completed in 2000. The channel was designed and constructed with a flood capacity of a 270 year-storm event flood level elevation, or 89,000 cubic feet per second. Currently the channel has a capacity of approximately a 45 year-storm event flood level elevation, or 32,000 cubic feet per second. After all three phases of the project are implemented, the channel will have a capacity of approximately 100-175 year-storm flood level elevation, or about 71,200 cubic feet per second. The project is phased to accommodate sensitive species requirements and is expected that full implementation to this flow conveyance will take approximately 8 years.

The City of Oceanside and the Corps of Engineers propose to alter the floodplain of the San Luis Rey River to accommodate the San Luis Rey Flood Control Operations and Maintenance project. The focus of the Project is vegetation manipulation and potential removal of sediment to allow a flow of 71,200 cubic feet per second (cfs) to provide flood protection.

The initial vegetation removal will be implemented in three phases over an estimated eight-year period. For each phase, the width of vegetation to be managed varies by reach (Attachment 7).

Throughout the project area, to minimize the loss of riparian habitat, the Maintained Areas will incorporate as much as possible (a) open water/freshwater marsh where bendable vegetation less than 0.5 diameter at breast height (DBH) can be left in the channel, and (b) areas containing nonnative species such as giant reed (*Arundo donax*).

Phase 1 will be implemented during the first year of the Project to reach the target flow capacity of 53,000 cfs. Aerial photography taken of the project area after the completion of Phase 1 will be used as a frame of reference to prepare a topographic map of the post-Phase 1 riverbed. The topographic map will be used to 1) identify the current elevation of the River's invert to determine whether the sediment load has breached the design upper bed elevation limit, and 2) provide data for the U.S. Army Corps of Engineers to perform a detailed hydraulic analysis to verify

that there is a minimum capacity of 53,000 cfs within the flow conveyance zone. The U.S. Army Corps of Engineers will determine the extent of any adjustments to the maintenance plan that may be necessary to provide the required flow capacity. The environmental details of any adjustments will be determined by mutual agreement between the U.S. Army Corps of Engineers, California Department of Fish and Game, the U.S. Fish and Wildlife Service, and the Regional Board. However, the U.S. Army Corps of Engineers has the final determination regarding the technical details of the hydraulic analysis, including the general extent of any adjustments to the management plan resulting from the analysis.

Phase 2 will begin after a minimum of one bird-nesting-season after the completion of Phase 1. Removal of sediment will occur in the maintained areas, including rotational areas if determined to be necessary by the hydraulic analysis.

Phase 3 will begin after a minimum of one bird-nesting season after completion of Phase 2. The first mowing of Rotational Area 1 will occur during Year 1 of Phase 3.

The final Operation and Maintenance (OPERATIONS AND MAINTENANCE) phase of the Project, however, will be conducted in perpetuity by the City of Oceanside. Vegetation within the Project Area will be either mowed annually or once every ten years (Maintained Areas), or 2) left intact (Un-maintained Areas).

At the completion of Phase 3 and initial Rotation 2 mowing, approximately year eight of the Project, approximately 224.3 acres of riparian vegetation will have been manipulated. At the end of Phase 2 (year 2), approximately 93,600 cubic yards of sediment may be removed from the River if the "upper bed limit" is breached (as defined by the U.S. Army Corps of Engineers Hydraulic Report 2007), and an additional, approximately 52,000 cubic yards may be removed every approximately 5 years on average as part of the Operator's operations and maintenance responsibilities.

Sediment Removal

Since sediment deposition is variable over the long-term maintenance of the project area, the amount and location of sediment deposition within the Project Area is currently

unknown. Upon review of the hydraulic analysis to be conducted after the completion of Phase 1, the U.S. Army Corps of Engineers will determine if sediment removal is necessary using the criterion of the average bed elevation exceeding the upper bed limit by more that 0.5 foot as over a 100-foot (longitudinal) interval, in consultation with the Operator, the California Department of Fish and Game, the U.S. Fish and Wildlife Service, and the Regional Board. If sediment removal is required, it would occur during Phase 2 or as soon after the implementation of Phase 2 as practical to minimize environmental disturbance.
Topographic surveys within the River will be completed every five years after the completion of Phase 1 or after any year with a peak discharge event greater than 5,000 cfs. The Operator will apply the criteria used for the initial sediment removal as described in paragraph 139 of the Hydraulics Report in the FEIR to determine where and how much sediment to remove.

When sediment removal is required, to prevent disturbance and trampling of riparian vegetation outside of the project footprint, Un-maintained Areas will be demarcated using Geographic Information System (GIS)/Global Positioning System (GPS) and flagged by a qualified biologist prior to initiation of the sediment removal. Staff and contractors will be informed of the significance of Un-maintained areas relative to their preservation. Heavy equipment, such as bulldozers, loaders, truck haulers, and conveyer belts may be utilized for the sediment removal activities. Other alternative measures to remove sediment include the use of matting material, such as AM2 aluminum, US Army PSP (Pierced Steel Planking) "Marston Matt", folded fiberglass, or Geo-textile matting that disperses the weight of vehicles, especially in areas that are wet or sandy. A total of 21 in-channel staging sites have been identified within the Project Area. Trucks will transport sediment using existing roads, either to a beach in the City of Oceanside or a licensed landfill. Handling, transport, and disposal of sediment will comply with all applicable Federal, State and local laws. Appropriate coordination for these activities will be completed prior to disposal activities.

Nonnative Species Removal
The 1987 Biological Opinion required the ACOE to keep the Project Area, including the compensation/preservation areas,

free of invasive nonnative plant species such as giant reed, saltcedar (*Tamarix ramosissima*), castor bean (*Ricinus communis*), tree tobacco (*Nicotiana glauca*), and pampas grass (*Cortaderia selloana*). Therefore, nonnative species eradication activities will continue in perpetuity within the Project Area on an annual basis. Once Phase 3 is complete, the Operator will be responsible for the annual nonnative plant removal as part of the operations and □maintenance.

Eradication methods employed may include but are not limited to: 1) a combination of mowing and spraying; 2) herbicide treatment by foliar spraying; and/or 3) physical removal with sediment. Invasive exotic plant management would be managed on an annual basis as necessary in the project area. Since Phase 1 vegetation management would occur as soon as all required permits and approvals are obtained, outside of the vireo and flycatcher breeding season (March 15 to September 15), herbicide treatment of invasive exotic plants including Arundo, may not occur till after the Phase 1 vegetation management is completed. Therefore, in areas where invasive exotic plants such as Arundo are within the Phase 1 vegetation management alignment, the invasive exotic plants would be initially mowed/shredded, along with the other in-channel vegetation. The Arundo would be mowed/shredded to prevent re-sprouting of cut segments. Following Phase 1 vegetation management, those areas infested with invasive exotic plants would be treated with herbicide or other appropriate method. In general, during subsequent phases and long-term management, invasive exotic species would be managed based on current field science and best management practices within the discipline of exotic plant species eradication from knowledgeable and experienced field people.

Federal Agency/Permit:	Army Corps of Engineers CWA section 404
	U.S. Fish and Wildlife Service, Section 7 Consultation
	National Marine Fisheries, Letter of Concurrence
Other Required Regulatory Approvals:	California Department of Fish and Game, Streambed Alteration Agreement

	California Department of Fish and Game, California Endangered Species Act Permit California Coastal Commission, Consistency Determination
California Environmental Quality Act (CEQA) Compliance:	Final Post Authorization Decision Document/Supplemental Environmental Impact Statement/Report for Vegetation and Sediment Management of the San Luis Rey River Flood Control Project, Oceanside, San Diego County, California, prepared by U.S. Army Corps of Engineers, South Pacific Division, dated July 2007, SCH No. 2005124001. A Resolution of the City Council of then City of Oceanside, California Certifying the Final Environmental Impact Report for the San Luis Rey Flood Control Project, Resolution No. 07-R0558-1, dated August 15, 2007.
Receiving Water:	San Luis Rey River. San Luis Rey Hydrologic Unit, Lower San Luis Rey hydrologic area, Mission hydrologic subarea (903.11).
Impacted Waters of the United States and State:	The proposed project will: ▪ Permanently impact (fill) 128-acres (38,016-linear feet, 7.2-miles total project area) of vegetated waters. ▪ Temporarily fill 46-acres (38,016-linear feet, 7.2-miles total project area) of unvegetated waters.
Impacted Isolated Waters of the State:	None
Dredge Volume:	None

Related Projects Implemented/to be Implemented by the Applicant(s):	U.S. Army Corps of Engineers mowed 55-acres of vegetation in 2006, pursuant to Water Quality Certification No. 05C-127.
Compensatory Mitigation:	A total of approximately 295 acres have been developed for mitigation for the construction, operation, and maintenance of the San Luis Rey River flood control project in advance of impacts, with a temporal gain since 1994 to 2008 of approximately 233 acres of wetlands/water/riparian buffer. Within this area: 1) The U.S. Army Corps of Engineers and the City of Oceanside shall preserve 50.07 acres of riparian habitat within the Project Area. The U.S. Army Corps of Engineers and/or the City of Oceanside shall actively monitor and manage the preserved areas per the HMP and Restoration Plan. 2) The U.S. Army Corps of Engineers and the City of Oceanside shall restore/enhance 100.14 acres of onsite riparian habitat. Some of the required restoration/enhancement within the 100.14 acres has occurred prior to the issuance of this certification. The remainder of the restoration/enhancement within the 100.14 acres shall be provided by removing *Arundo donax* from the restoration/enhancement lands and either replanting with appropriate native vegetation or allowing passive restoration where appropriate. In addition, another 45.5 acres will be restored/enhanced to wetlands/waters/buffer areas for listed species mitigation outside the project area as a requirement of the California Endangered Species Act permit. Mitigation is described in the Final Post Authorization Decision Document/Supplemental Environmental Impact Statement/Report for Vegetation and Sediment Management of the San Luis Rey River Flood Control Project, Oceanside, San Diego County, California, prepared by U.S. Army Corps of Engineers, South Pacific Division, and dated July 2007; SCH No. 2005124001 and the in Attachment 8 –

Memorandum for the Record, U.S. Army Corps of Engineers, revise dated February 2008. This memorandum discusses all impacts to date, proposed impacts, mitigation areas constructed, and mitigation planned. In summary, when all existing/proposed impacts and all mitigation completed/proposed are compared, there will be a net gain of 218-acres of riparian wetlands, waters, and buffer areas. This project meets California's Wetland Conservation Policy.

Best Management Practices (BMPs):

This project is subject to the General Storm Water Permit for Construction Activity (SWRCB Order 99-08). This Order requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

Some of these BMP categories include:

- Housekeeping.
- Solid waste containment.
- Erosion control.
- Sediment control.
- Construction materials delivery and storage.
- Hazardous materials and waste management and storage.
- Concrete waste management.
- Vehicle and equipment maintenance.
- Re-planting grubbed/cleared areas.

Public Notice: February 27,2007

Fees:

Total Due:	$40,000.00	
Total Paid:	$500.00	(check No. 00987415)
Total Paid:	$39,500.00	(check No. 01006020)

ATTACHMENT 2
DISTRIBUTION LIST

Mr. Robert Smith
U.S. Army Corps of Engineers
San Diego Field Office
16885 West Bernardo Drive
Suite 300A
San Diego, CA 92127

Ms. Jodi Clifford
Chief, Environmental Resources Branch
U.S. Army Corps of Engineers
Los Angeles District
915 Wilshire Boulevard
Los Angeles, CA 90017

Ms. Tiffany Bostwick
Project Environmental Coordinator
U.S. Army Corps of Engineers
915 Wilshire Boulevard
Los Angeles, CA 90017

Ms. Tamara Spear
California Department of Fish and Game
South Coast Region
Habitat Conservation Planning – South
4949 Viewridge Avenue
San Diego, CA 92123

Mr. Kevin Hunting
Deputy Director
California Department of Fish and Game
Regional Operations Division
1416 Ninth Street, Suite 1208 Sacramento, CA 95814

Mr. Edmund J. Pert
Regional Manager
California Department of Fish and Game
South Coast Region
4949 Viewridge Avenue
San Diego, CA 92123

Ms. Elizabeth Goldmann
Wetlands Regulatory Office
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105

Mr. Jerry Hittleman
City of Oceanside
300 North Coast Highway
Oceanside, CA 92054

Mr. Larry Simon
California Coastal Commission
45 Fremont St., Suite 2000
San Francisco, CA 94105

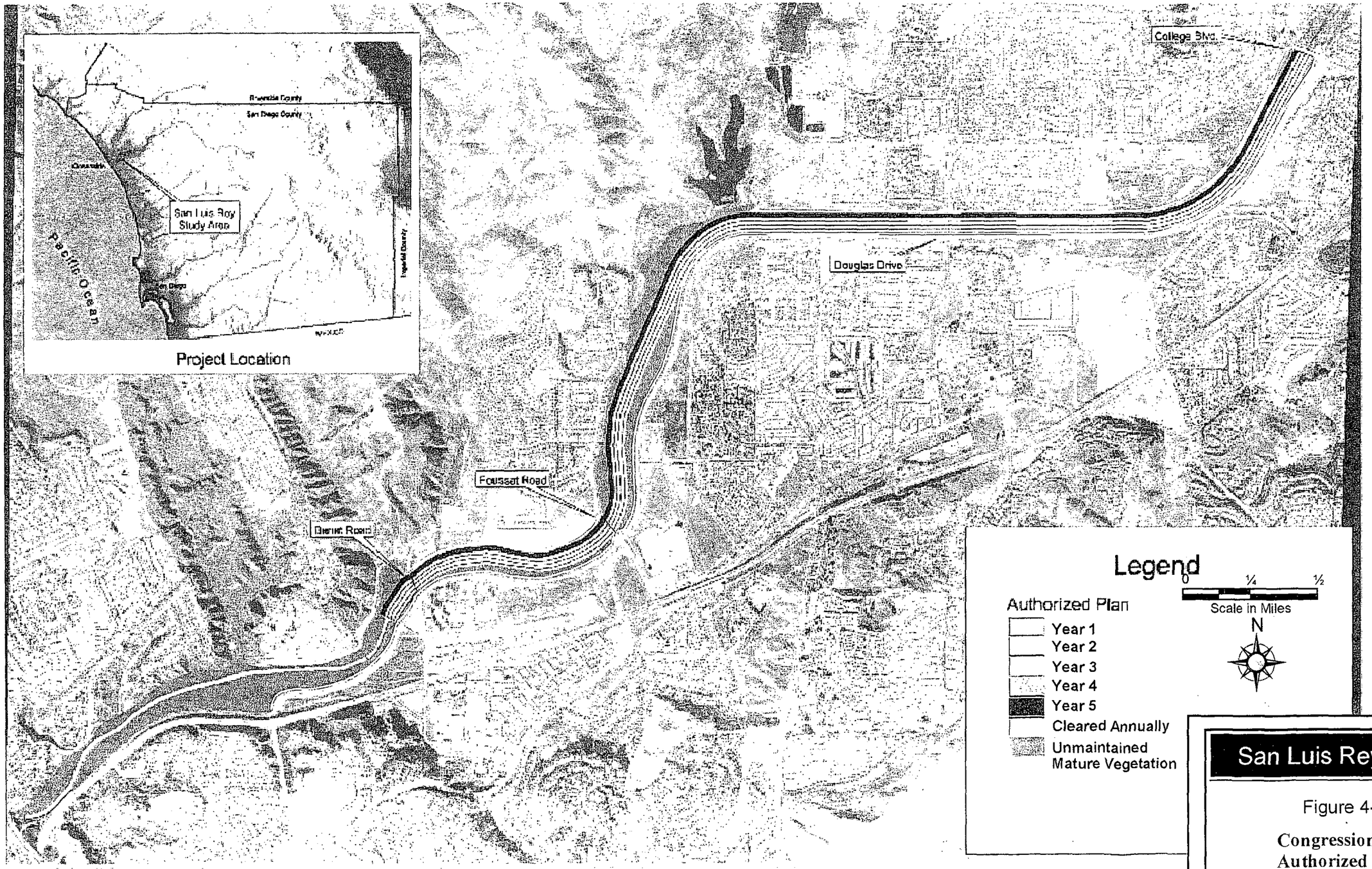
Mr. Stan Glowacki
National Marine Fisheries Service
501 W. Ocean Blvd. Suite 4200
Long Beach, CA 90802

State Water Resources Control Board
Division of Water Quality
401 Water Quality Certification and Wetlands Unit
P.O. Box 100
Sacramento, CA 95812-0100

U.S. Department of the Interior
Fish and Wildlife Service
6010 Hidden Valley Road
Carlsbad, CA 92011

ATTACHMENT 3

Location Maps



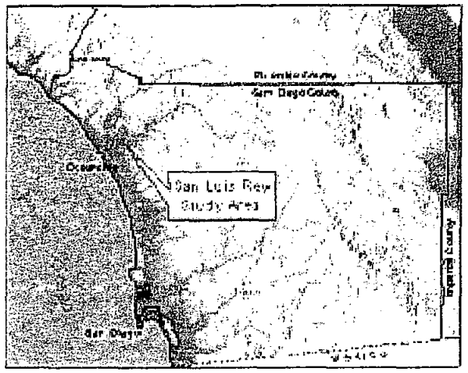
San Luis Rey River

Figure 4-4

Congressionally Authorized Plan

ATTACHMENT 4

Site Maps



PROJECT LOCATION

REACH 1

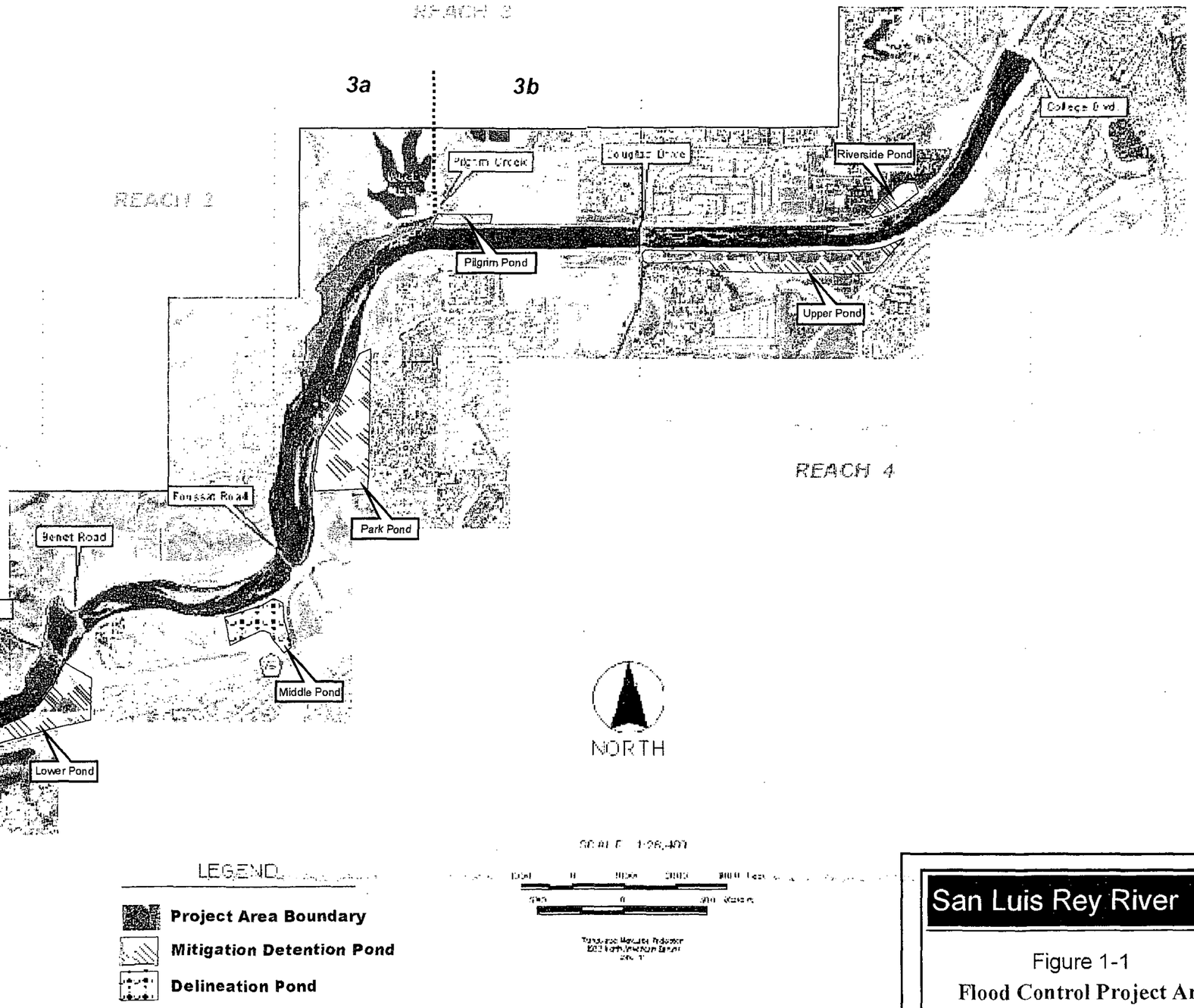
REACH 2

3a

3b

REACH 3

REACH 4



NORTH

LEGEND

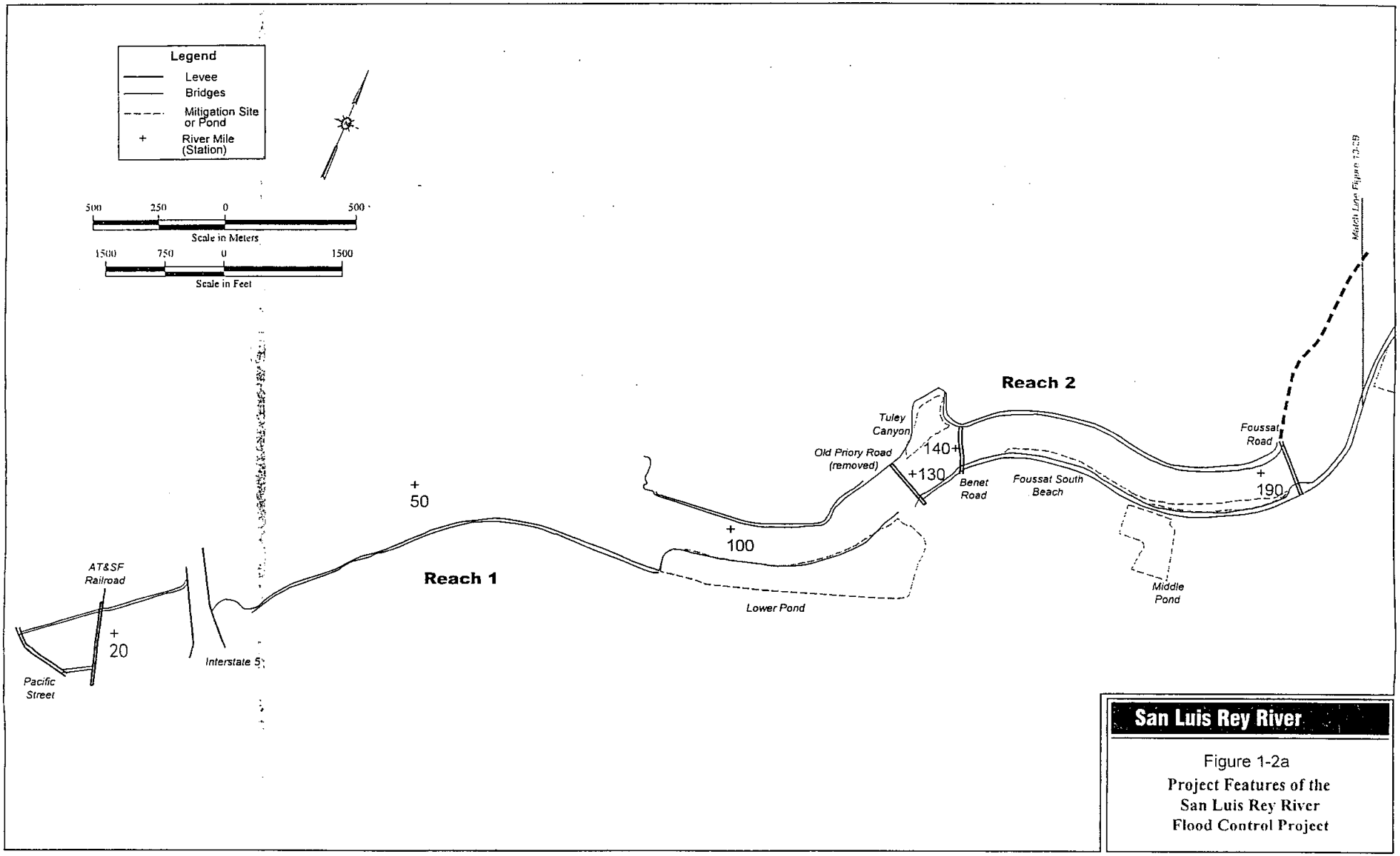
- Project Area Boundary
- Mitigation Detention Pond
- Delineation Pond

SCALE 1:26,400

San Luis Rey River

Figure 1-1

Flood Control Project Area



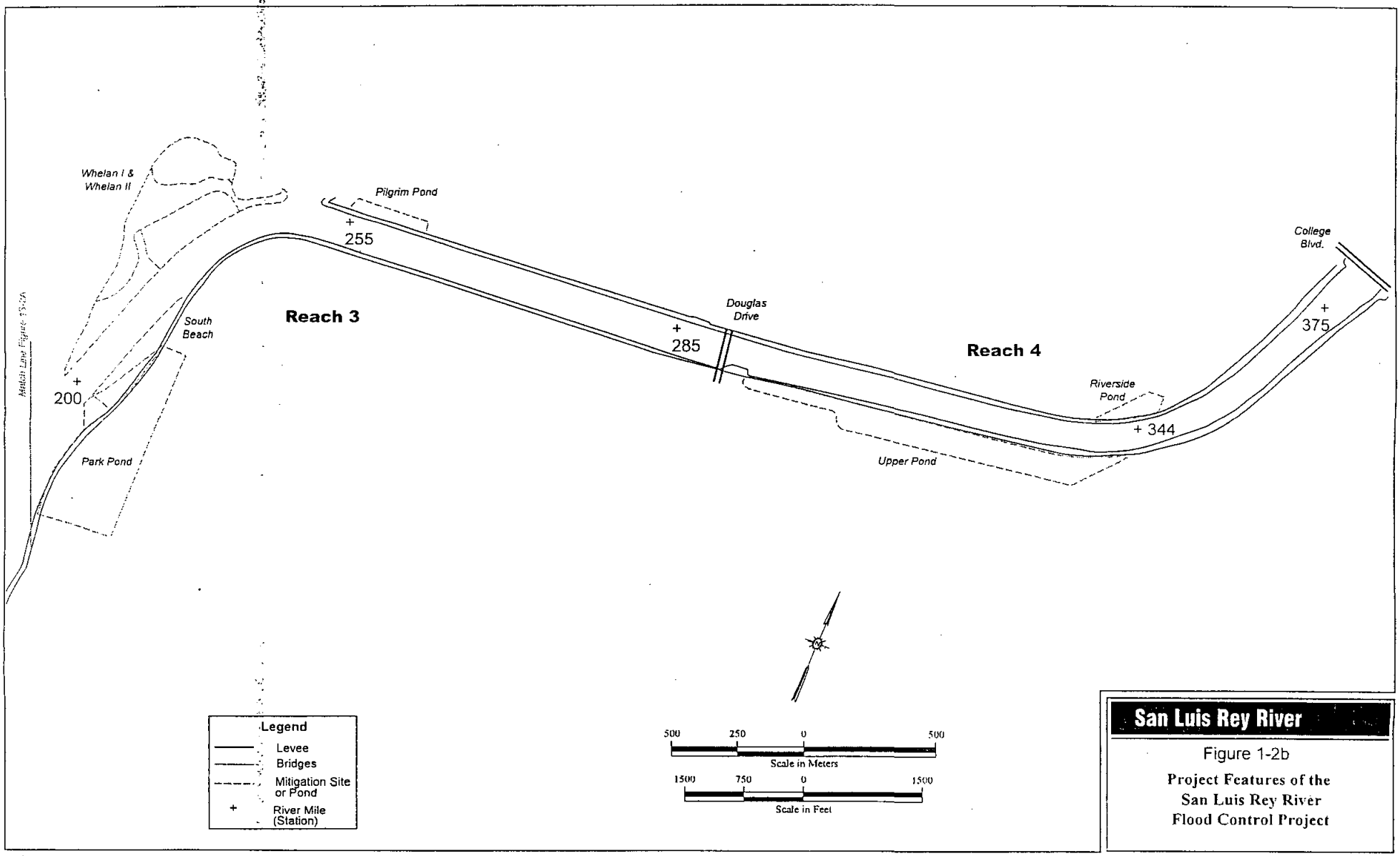
San Luis Rey River

Figure 1-2a
Project Features of the
San Luis Rey River
Flood Control Project

Draft

October 2005

2/20/2008



San Luis Rey River

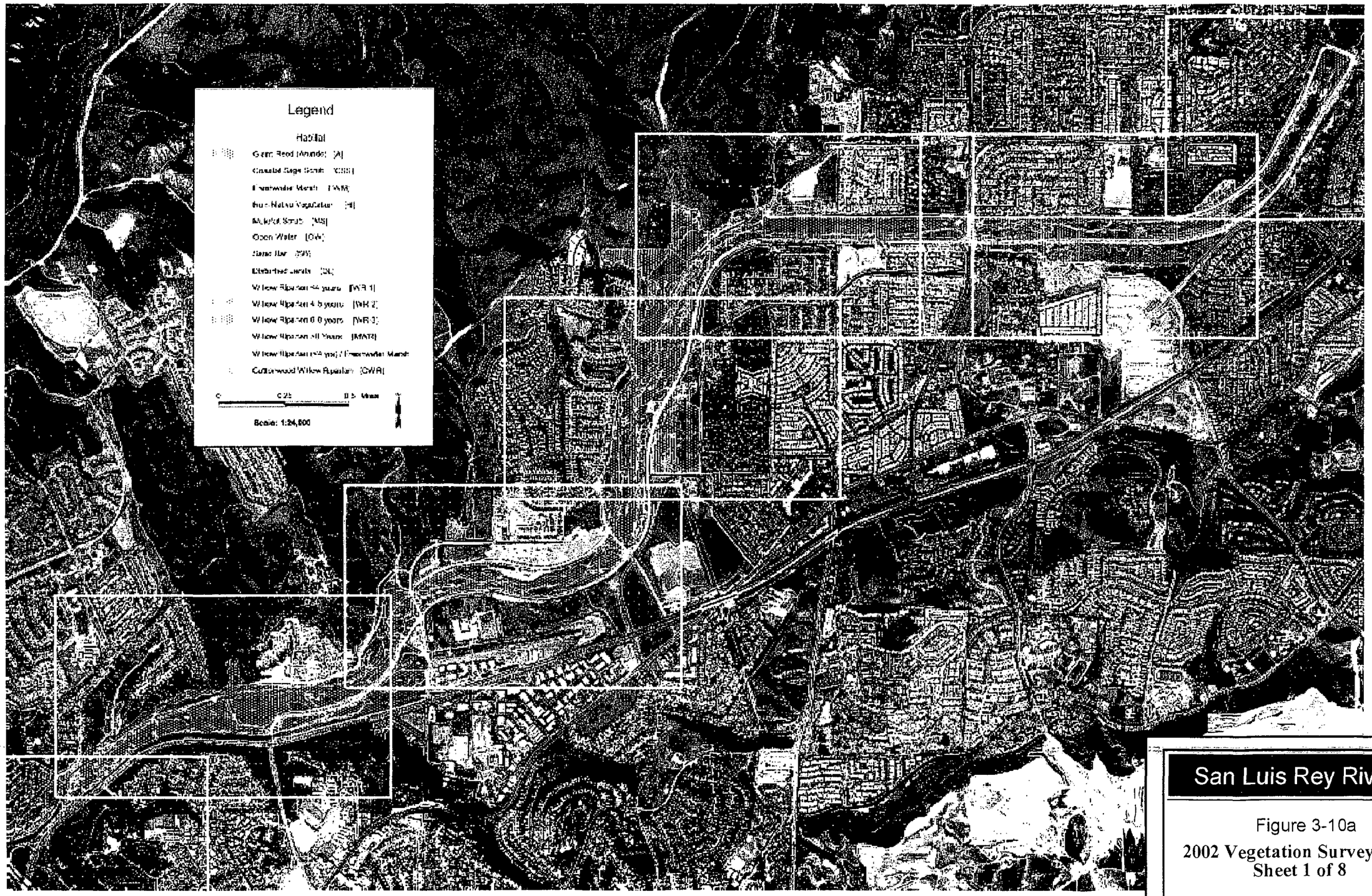
Figure 1-2b

Project Features of the San Luis Rey River Flood Control Project

Draft

October 2006

2/20/2008

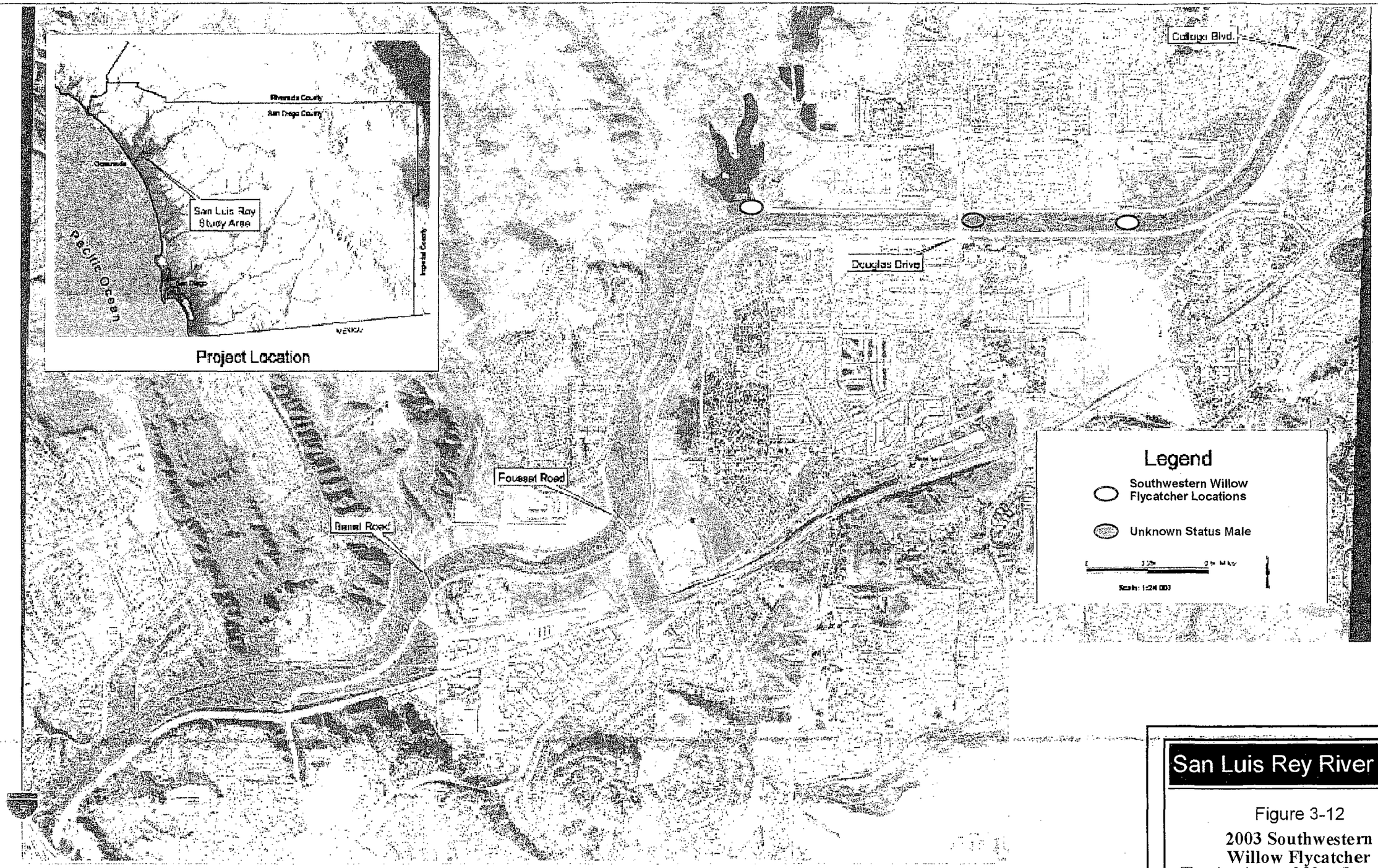


Source: 2002 aerial photos from Aerial Photo Bank/Landis Corp; State Plane (feet), NAD 83, Zone 6; Original Scale 1:13300 and reproduced at a resolution of 1.8 feet

San Luis Rey River

Figure 3-10a

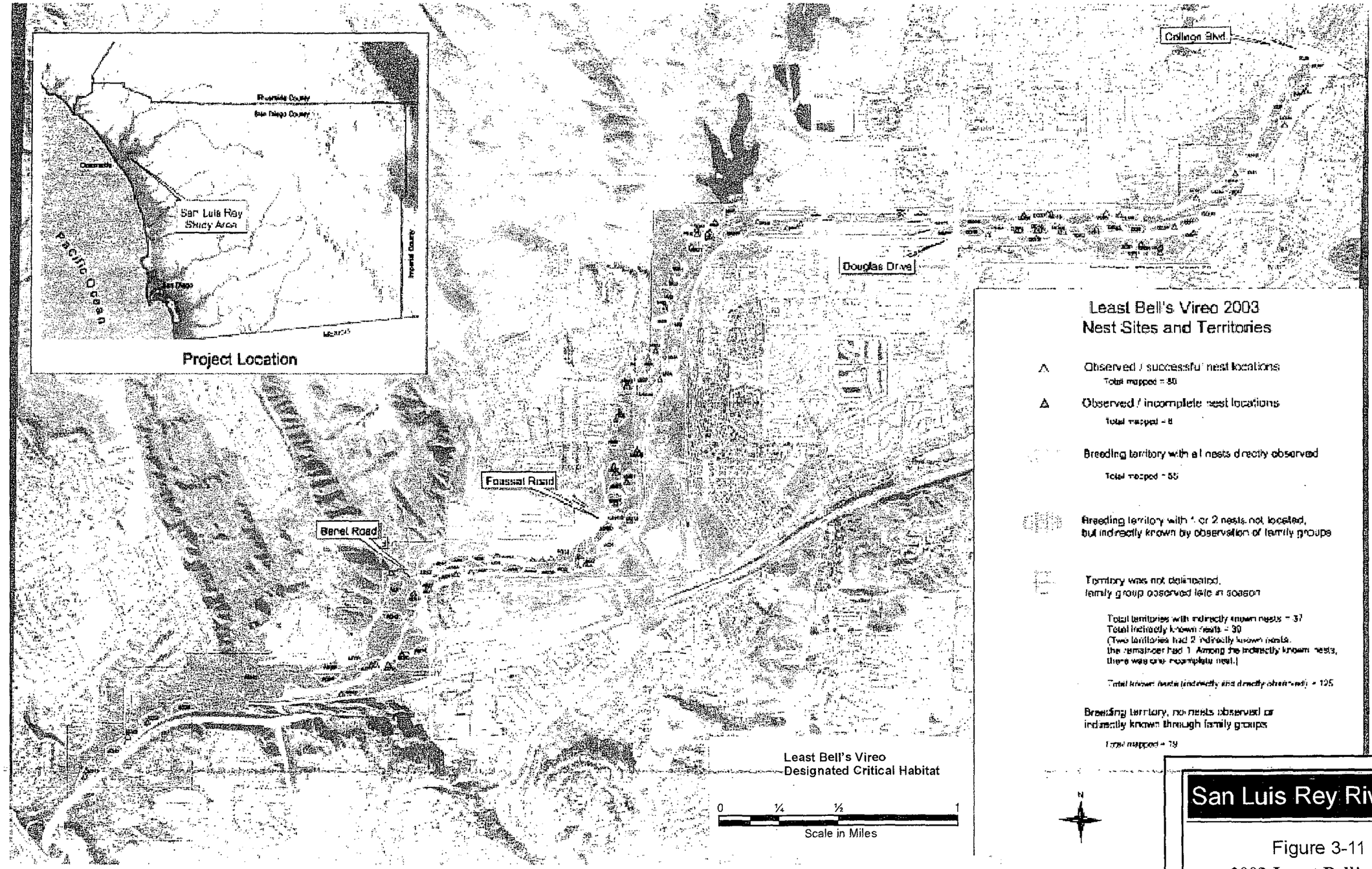
2002 Vegetation Survey Map
Sheet 1 of 8



San Luis Rey River

Figure 3-12

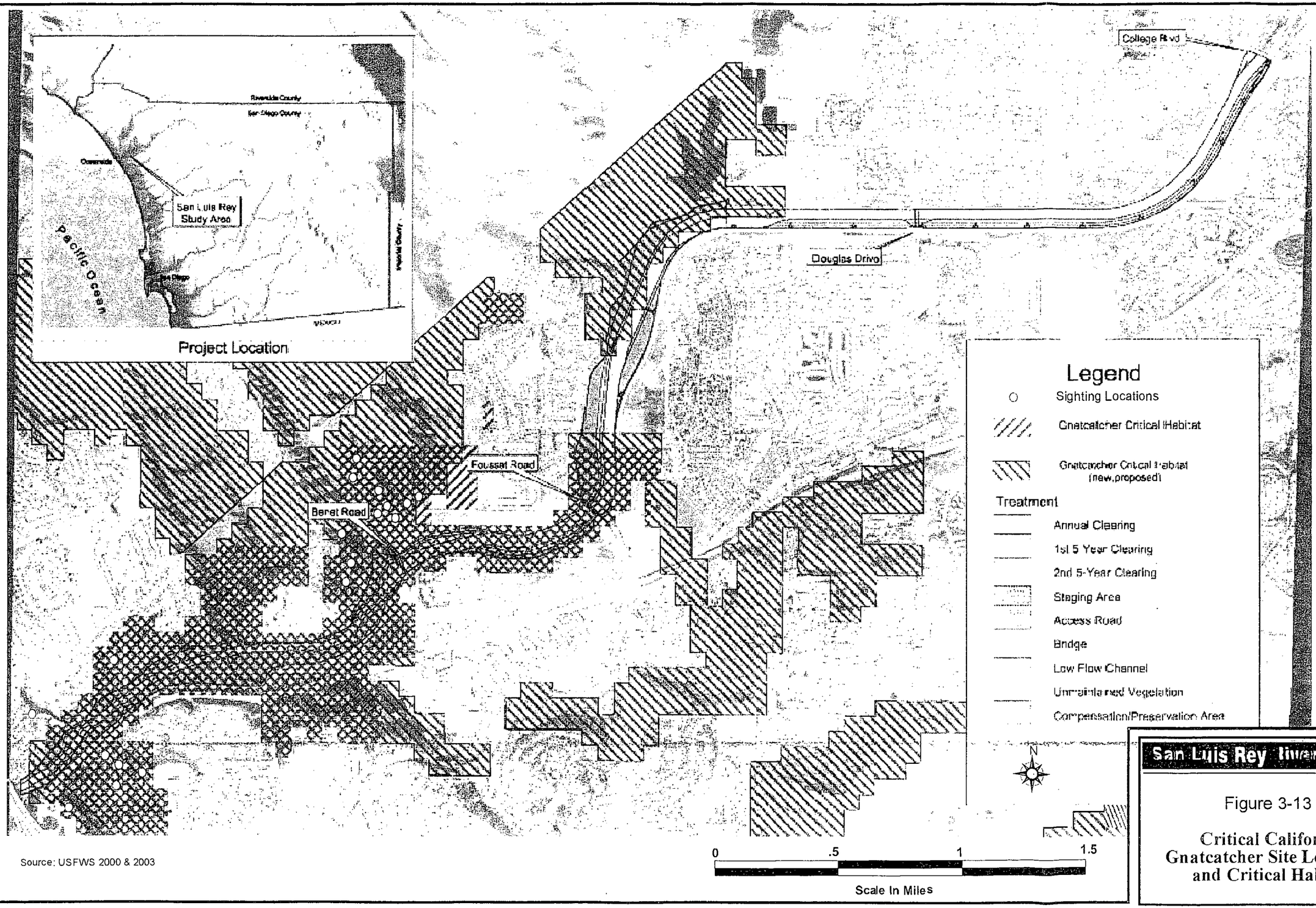
2003 Southwestern Willow Flycatcher Territories and Nest Locations



San Luis Rey River SEIS

Figure 3-11

2003 Least Bell's Vireo Territories, Nest Locations, and Critical Habitat



Source: USFWS 2000 & 2003

San Luis Rey River

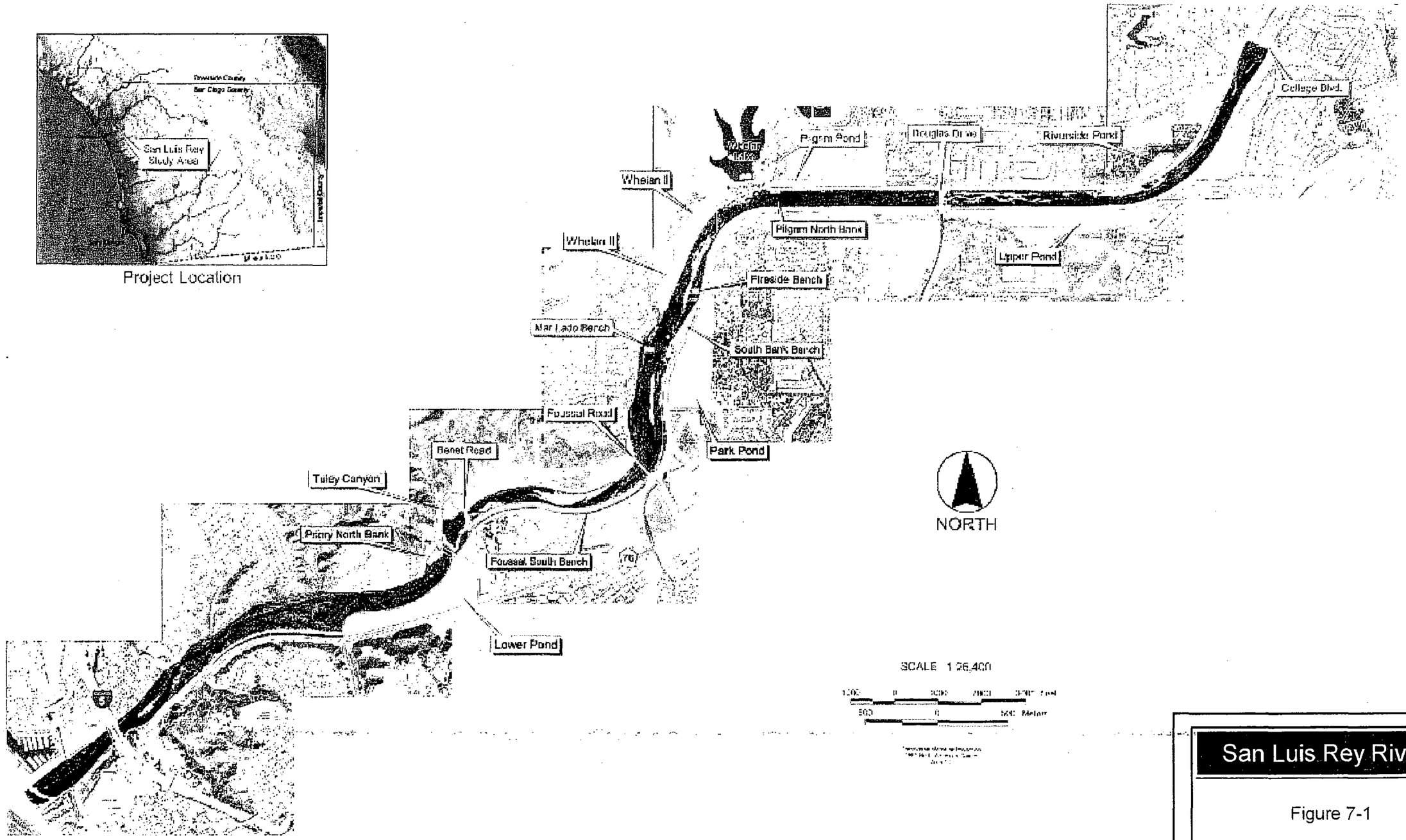
Figure 3-13

Critical California Gnatcatcher Site Locations and Critical Habitat

ATTACHMENT 5

Mitigation Maps

Project Location



Source: USGS 1997 Color Infrared (CIR), Digital Orthophoto Quads (DOQs) with information provided by Corps.

San Luis Rey River

Figure 7-1

Mitigation Sites

ATTACHMENT 6

Letter from Department of the Army, Los Angeles District Corps of Engineers to National Marines Fisheries Service, Southwest Regional Office, dated February 5, 2008

DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT CORPS OF ENGINEERS
P.O. BOX 532711
LOS ANGELES, CALIFORNIA 90053-2325

REPLY TO
ATTENTION OF

February 5, 2008

Office of the Chief
Planning Division

Porter

2008 FEB 14 A 10:0

Mr. Rodney McInnis
Regional Administrator
Southwest Regional Office
National Marine Fisheries Service
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213

Dear Mr. McInnis:

The U.S. Army, Corps of Engineers (Corps), Los Angeles District, sought concurrence from NOAA's National Marine Fisheries Service (NMFS) in a letter dated September 21, 2004 for our determination that 1) the construction and operation and maintenance (O&M) of the San Luis Rey River Flood Control Project (Project) San Diego County, California (Figure 1) would have "no effect" on the Distinct Population Segment (DPS) of the southern California steelhead (*Oncorhyncus mykiss*), a Federally-listed endangered species, and 2) formal consultation with NMFS, in accordance with Section 7 of the Endangered Species Act (ESA) of 1973, as amended, was not required for the above project. The Corps' intent was to satisfy requirements of the ESA for Section 7 consultation through the informal consultation process, as provided in 50 CFR 402.13. NMFS concurred with the Corps "no effect" determination concerning the O&M Project recommended alternative (Alternative 10) in a letter dated August 31, 2005.

NMFS has indicated that, since the August 31, 2005 letter concurring with the Corps' "no affect" determination, several occurrences have caused a change in the determination. In 2006, NMFS Steelhead Technical Recovery Team (TRT) released a technical memorandum (NOAA-TM-NMFS-SWFSC-394) which included the San Luis Rey River (SLRR) in the Santa Catalina Gulf Coast group of streams which NMFS selected for steelhead recovery planning. In the same document, NMFS' TRT catalogued potential rearing habitat within the SLRR watershed and its tributaries that was valuable for steelhead in this portion of the recovery planning area. On May 2, 2007, California Department of Fish and Game field biologists observed an adult steelhead approximately 20 inches long in a pool surrounded by riparian cover within the upper reaches of the project area (Reach 4) downstream of College Avenue. On May 8, 2007, a U.S. Geological Survey field technician performing bird surveys observed two steelhead within the same vicinity as the first sighting. These second sightings were discussed by CDFG biologists and the USGS technician in the field, and it was verified that the second

Doc Scanned On: 2.14.08
R. J. Stewart Time: 0900

2/20/2008

steelhead sightings by the USGS field technician occurred in approximately the same location as the first steelhead sighting.

To address the recent changes in the status of the SLRR per NMFS Technical Memo 394, and the finding of steelhead in the project area, the Corps met informally with the NMFS between May 2007 and January 2008 at their NMFS' Long Beach offices, CDFG offices, and in the field at the SLRR. During these meetings, the Corps, NMFS, and CDFG have had detailed discussions regarding the project and the effects of the project on steelhead and steelhead habitat. During these discussions, the NMFS, CDFG, and Corps have cooperatively developed impact avoidance and minimization measures for steelhead and steelhead habitat to be implemented during all phases of the project. Based on these discussions, the Corps has agreed to incorporate the avoidance and minimization measures as part of the proposed action to avoid adverse effects to steelhead and steelhead habitat within the Project area. Given the new avoidance and impact minimization measures agreed to by the Corps and NMFS, the Corps has determined that the Proposed Action "may effect, but is not likely to adversely affect" steelhead or steelhead habitat. Therefore, pursuant to Section 7 of the Endangered Species Act, as amended, the Los Angeles District of the Corps hereby requests NMFS concurrence with our "not likely to adversely affect" determination for the proposed action for vegetation and sediment management in the San Luis Rey River Flood Control Project. Pursuant to 50 CFR 402.13, the Corps is providing, enclosing, or otherwise identifying the following information for NMFS as required for initiation of Section 7 consultation.

1. **Description of the action considered:** The project consists of vegetation treatment within the lower 7.2 miles of the San Luis Rey River Flood Control Channel to maintain a flood conveyance of 71,200 cubic feet per second (cfs). The Project will be accomplished in three phases, and subsequent operations and maintenance, as described in enclosed Biological Assessment and the Post Authorization Decision Document and Final EIS/EIR (Corps 2007) included here by reference. The proposed action will manage vegetation and sediment between September 15 and March 15 of each year such that the channel may pass a 71,200 cfs flow conveyance. Initial work in the action area will be accomplished in three phases over approximately eight years to minimize impacts to sensitive habitats and the endangered least Bell's vireo, southwestern willow flycatcher, and their critical habitats. If necessary, the Project may include sediment removal from portions of the channel for the purpose of flow conveyance. This will be based upon recent hydrologic analysis of the project area. Please refer to the enclosed biological assessment for detailed information on the specific areas and methods for vegetation clearing from the annually maintained areas, rotational areas, the un-maintained areas, and other areas of significance within the project site.

2. Description of the specific areas that may be affected by the action: The proposed action is approximately 7.2 miles long and includes the SLRR between the College Avenue Bridge and the ocean. Details where vegetation or sediment management may occur are included in the enclosed biological assessment and figures and the Post Authorization Decision Document and Final SEIS/EIR (Corps 2007). The vegetation management includes Annually Maintained Areas where the vegetation will be mowed annually, Rotational Areas where the vegetation will be mowed every ten years, and Un-maintained Areas (within the original flow conveyance zone) and Conservation/Preservation Areas (outside the flow conveyance zone but within the project area) that will not be subject to vegetation or sediment management, but will be managed in perpetuity to provide habitat for the least Bell's vireo, southwestern willow flycatcher, and other endangered and sensitive species. Please refer to the enclosed biological assessment for detailed information on the specific areas and methods for vegetation clearing from the Annually Maintained areas, Rotational areas, the Un-maintained areas, and other areas of significance within the project site.

3. Description of any listed species or critical habitat that may be affected by the action: The proposed project may affect, but is not likely to adversely affect, the endangered Southern California DPS of steelhead. The proposed Project action area is not designated critical habitat for steelhead at this time. Southern steelhead adults or juveniles have a low to moderate probability of being found in the Project area based on the time of year when the project implementation is planned to occur (i.e., fall and winter) (Boughton et. al. 2006), and other recent steelhead sightings in San Diego and Orange County coastal streams.

The project has impacts to the endangered least Bell's vireo, the endangered southwestern willow flycatcher, and their critical habitat, among others, as discussed in the PADD/SEIS/EIR/PAC (Corps 2007). As a consequence of the Section 7 consultation that was completed on February 14, 2006 with receipt of an amended Final Biological Opinion and a clarification letter dated May 23, 2006, the Corps identified numerous measures to be incorporated into a revised plan for phased vegetation management and periodic and localized sediment removal to minimize or avoid impacts to the habitat of the vireo and flycatcher. The Proposed Action reduces target flow conveyance in the channel to 71,200 cfs and retains additional vireo and flycatcher habitat in the channel over the previously approved plan.

4. Description of the manner in which the action may affect any listed species or critical habitat and an analysis of any cumulative impacts: Immigration of anadromous adult steelhead may occur, following significant rainfall events, beginning in January and continuing into May within the Southern California Steelhead DPS. Emigration of juvenile steelhead smolts may occur at any time, but is most likely during March through June. It is possible that both steelhead adults and juveniles could become

trapped within the action area and be forced to rear within pools or other perennial areas within the project site until connectivity is restored by increased flows. Since the project involves the maintenance of riparian vegetation as it is related to flood conveyance within the SLRR Flood Control Project channel, riparian vegetation, which provides cover, shade, and in-stream habitat for steelhead along portions of the project is the primary constituent element of steelhead habitat that will be most affected by the project.

Direct effects to steelhead

The treatment of the vegetation is in two parts: invasive exotic plant eradication and O&M mowing. Vegetation treatment through mowing, chipping and shredding will not have a direct impact on steelhead individuals with the implementation of the avoidance and minimization measures discussed below. The most crucial time period that would directly affect steelhead will be during the May through August period when the ambient water temperature could exceed the upper limits of steelhead survivability. This is also the same time period which the San Luis Rey River may not have connective flow conveyance to the ocean or to upstream areas. Minimization measures are included in the project description (PADD/SEIS/EIR/PAC; Corps 2007) to minimize the effect of invasive exotic eradication. They include such measures as keeping foliar spray from entering the water, mowing machinery that will not work in the primary thalweg and or areas immediately adjacent to the thalweg. Therefore, the process for eradication of invasive exotic plants (*Arundo*) is not expected to directly affect steelhead or their in-stream habitat.

Direct effects to steelhead habitat may also include the mowing of riparian vegetation throughout the annually mowed and rotationally mowed (every 10-year) areas of the project. The direct result is a potential reduction in mature riparian canopy cover and a potential reduction in shade throughout the project reach. As discussed in the project description, the annually maintained areas are mowed annually, and the rotational areas are mowed once every ten years. Impacts to riparian vegetation in the annually maintained areas will occur yearly but will be temporary as the riparian vegetation is expected to re-grow from the root mass for the remainder of the year. Potential impacts to riparian vegetation in the rotational areas are less frequent and temporary, as the riparian vegetation is expected to re-grow from the root mass for up to ten years. The extent of this impact will depend on the natural position of the thalweg within the channel and its extent in the annually maintained, rotational, or un-maintained areas of the channel. Depending on the natural thalweg position, shade from vegetation will be present within the un-maintained vegetation areas, and the rotational vegetation parcels in most years, as well as in the annually maintained area as a consequence of the bendable vegetation in the buffer, which may grow up to 15-ft in one season. In some reaches, shade in the form of mature trees may be not present naturally due to the geomorphology of the locale, but native wetland or riparian buffer edge composed of dense stands of

young/sapling cottonwood/ willow shrubs 10-15 feet in height or with mature tall freshwater marsh vegetation may be present.

A 10-ft buffer of bendable native and riparian and wetland vegetation not greater than 0.5 inches diameter at breast height will be left on both sides of the thalweg to avoid or reduce direct effects of the mowing on steelhead. Though this buffer may be mowed to remove larger vegetation, the machinery will not work close to the edge of the thalweg, and hand crews will remove vegetation in areas where machinery is unable to maneuver (*i.e.,* adjacent to the thalweg). The suite of measures developed for each reach, including potential realignment of the mowing, in-stream habitat enhancement, and re-location of the thalweg if necessary, to be worked out cooperatively through the adaptive habitat management plan (AHMP), are also designed to minimize effects of the project on in-stream steelhead habitat. In particular, the realignment of the mowing and the in-stream habitat enhancement (root wads, boulder clusters, etc.) will provide those functions of cover and shade that may be impacted in certain reaches by the mowing of vegetation.

Other avoidance and minimization measures for steelhead include the placement of matting at primary thalweg crossings for heavy equipment, which will minimize potential disturbance to the streambed. In addition, the Corps has agreed with NMFS on measures assuring passage opportunities under the bridges that are expected to allow any steelhead in the project area to move through the area unimpeded under passage-flow conditions.

Sediment management could have a direct affect on steelhead and the in-stream habitat depending on where in the project area it is accomplished and how much sediment must be removed. Several minimization measures already in the project description, such as performing the hydrologic analysis every five years to ascertain the channel invert, and sediment management based on specific triggers along longitudinal sections of the channel, and other measures as described in the PADD/SEIS/EIR/PAC (Corps 2007) will minimize potential impacts to in-stream habitat. Additional avoidance and minimization measures described below, including diverting the thalweg if necessary around the area subject to sediment management, will further minimize potential impacts to in-stream habitat.

Direct impacts to steelhead individuals from the vegetation and sediment management and other channel work are not expected with the implementation of the avoidance and minimization measures discussed below. With these minimization measures, steelhead streambank presence/absence surveys will be conducted by a qualified biologist before maintenance activities occur in the channel and at crossings of the thalweg. If any steelhead are found, the area will be marked and avoided and, if necessary, block -netting will be placed in the stream to keep the steelhead from moving into the areas where vegetation management activities will occur. This is expected to preclude take of steelhead, including direct harassment, harm, or mortality. Please refer to the enclosed Biological Assessment for further information

Effects to Least Bell's Vireo

One of the minimization measures developed for protection of steelhead habitat to be resolved through the AHMP, is the realignment of the annually mowed, rotational, and un-maintained areas in Reaches 3B and 4, which may directly affect least Bell's vireo nest substrate. This measure has been discussed with USFWS and CDFG and, although it is not preferred by these agencies, the measure is included in this document, and preferred by NMFS because it would keep the current natural thalweg intact on the north side of the river channel in Reaches 3b and 4.

The measure for realigning Rotation Area 1 to the north levee in Reaches 3B and 4, to be resolved in the AHMP, would keep the current natural thalweg intact on the north side of the levee, and at the same time would not affect vireo nest substrate on either side of the river channel. This measure has not been coordinated with USFWS or CDFG however; the USFWS has indicated that the Rotation Area realignment may be acceptable to their agency as it leaves approximately 60-feet of riverine habitat in the form of willow/cottonwood vegetation type in the river channel next to the levees. Please refer to the avoidance and minimization measures below and the enclosed Biological Assessment for additional information.

Indirect effects to steelhead

Indirect effects to steelhead include the potential loss of shade in the stream along the thalweg, depending on whether the thalweg occurs in the annually maintained, rotational, un-maintained or conservation/preservation areas. Other indirect effects from the project also include possible higher water temperatures within aquatic habitat (May to August) caused by the loss of shade, and the potential reduction in the amount of woody debris recruitment which could result in changes to the amount of in stream cover and pool habitat available for steelhead.

Indirect effects on steelhead and their habitat are expected to be avoided or minimized with implementation of the measures discussed below. Maintaining the best habitat possible for steelhead while at the same time minimizing the manipulation of the thalweg and the multi-agency adaptive habitat management plan development and implementation are key factors for avoiding and minimizing indirect effects to steelhead and their habitat. By avoiding the thalweg developed through the natural flow processes to the maximum extent feasible, only lesser portions of thalweg segments within the project are expected to the impacted by the proposed action. With the implementation of an adaptive habitat management plan, placement of impact minimization devices or materials at thalweg crossings, placement of block nets around avoidance of pools and aquatic habitat that may have a steelhead, steelhead streambank presence/absence surveys, a 10-foot buffer of bendable native riparian and wetland vegetation, placement of in-stream habitat enhancements *(to counter potential reduction in woody debris)*, realignment of the mowing area or the thalweg as worked out through the habitat management plan, and other avoidance and minimization measures discussed below, the Corps expects to avoid or minimize indirect effect of the projects O&M vegetation management or sediment treatments to steelhead and their in-stream habitat. Please refer to the enclosed Biological Assessment for further information.

Cumulative impacts

The Corps is not aware of any cumulative impacts from any non-Federal actions at this time. Please refer to the cumulative impacts section in the enclosed biological assessment and the PADD/SEIS/EIR/PAC (Corps 2007) for further information.

5. Relevant reports, including any environmental impact statement, environmental assessment, or biological assessment prepared: The Corps has included a biological assessment for the project which includes a detailed project description and table and figures related to the proposed action. The Corps provided NMFS with the Final Environmental Impact Statement for the Project in a letter and enclosure dated July 5, 2007.

6. Any other relevant available information on the action, the affected listed species, or critical habitat: The Corps provided NMFS with the Draft Environmental Impact Statement for the Project in a letter and enclosure dated July 5, 2007.

7. Avoidance and minimization measures: Based on the discussion above, the Corps has determined that the Proposed Action may affect, but is not likely to adversely affect, steelhead (O. mykiss) with the implementation of the following avoidance and minimization measures.

These measures were developed in coordination with NMFS and are designed to balance flow conveyance requirements for the flood control project, in stream requirements for the endangered southern California steelhead, and habitat requirements for the endangered least Bell's vireo, endangered southwestern willow flycatcher, and endangered coastal California gnatcatcher (among others) and critical habitat requirements for the vireo, flycatcher, and gnatcatcher. The vireo and flycatcher currently nest, and the gnatcatcher forages, in the channel. These measures were developed to be implemented through the Adaptive Habitat Management Plan (HMP) in coordination with Corps, City, NMFS, and other responsible agencies.

1. Buffer.

a. A corridor of native wetland and/or riparian vegetation will be left on either side of the primary thalweg in the channel.

b. During project implementation, an approximate 10-foot-wide buffer will be left in place on either side of the primary thalweg for steelhead shade requirements. However, when this vegetation is no longer bendable or flexible, or if woody vegetation (e.g., willows, cottonwoods, mulefat, etc.) becomes greater than 0.5 inches diameter at breast height (dbh), those areas of vegetation meeting this criteria within the 10-foot-wide buffer would be removed.

2. Avoidance of Steelhead.

a. A qualified biologist will perform field reconnaissance for steelhead prior to disturbance from project activities during Phases 1-3 and subsequent operations and maintenance actions associated with the proposed action. Field reconnaissance will consist of presence/absence surveys for steelhead juveniles and adults performed from the streambanks.

b. If steelheads are found in the Annually Maintained or Rotational Areas, no vegetation mowing will occur in the approximate 10-foot-wide buffer. The location coordinates shall be recorded (preferably in GPS), and the NMFS shall be notified immediately. The areas shall be flagged and avoided. Flagging will be removed at the end of the construction or maintenance activity.

c. If steelhead were found within the project area in stream segments that are not isolated pools, block-netting or other similar devices will be used 50-feet upstream and 50- feet downstream of their location to prevent steelhead from moving into the area of disturbance. No vegetation mowing will occur in the approximate 10-foot-wide-buffer and the area will be flagged and avoided. Flagging and block-netting or other devices will be removed at the end of the construction or maintenance activities.

3. Fish passage beneath bridges.

Fish passage beneath all bridges within the project area will be maintained. Rock riprap beneath Douglas Ave. and College Blvd bridges will be reconfigured to allow for steelhead passage per NMFS Fish Passage Guidelines, in coordination with NMFS hydraulic engineers.

4. Matting.

When crossing the primary thalweg with heavy equipment such as bulldozers, loaders, or truck haulers is unavoidable, a reconnaissance for presence of steelhead shall be conducted. If steelhead are found, the procedures in measure 2, above, shall apply and the crossing shall not be undertaken. When heavy equipment is utilized, matting material such as AMZ aluminum, U.S. Army PSP (Pierced Steel Planking), "Marston Matt," folded fiberglass, or Geotextile matting that disperses the weight of

5. In-stream habitat function.

General measures developed, in order of preference by NMFS, for the preservation or enhancement of in-stream habitat potentially affected by project activities, include potential realignment of the mowing plan in reaches 3B and 4, potential realignment of the rotational areas in reaches 3B and 4, in-stream habitat enhancement, and relocation of the channel thalweg in select locations in Reaches 3A, 3B, and 4. This suite of measures was developed to be implemented pursuant to the AHMP. Modifications to the alignment affecting critical habitat or vireo or flycatcher nest sites beyond those effects displayed in the SEIS/EIR would be resolved in the AHMP in consultation with the Corps, City of Oceanside, NMFS, and other responsible agencies, via field reconnaissance and in compliance with applicable laws and regulations.

a. Reach 3B-4 (Station 263+00 above Pilgrim Creek confluence to Station 385+00 College Blvd. Bridge).

For this reach, a suite of potential measures were developed, based on current stream characteristics.

1. Re-alignment of the annually maintained, rotational, and un-maintained areas would be implemented such that the widths of the un-maintained and rotational areas occur on the north side of the channel, over the existing thalweg and the annually cleared area occurs on the south side of the channel, from College Blvd Bridge to transition with the annually maintained area just upstream of Pilgrim Creek confluence. Portions of the thalwag that were not located within the Rotational or Un-maintained

areas after this realignment would be subject to in-stream habitat enhancement or relocation, if necessary, to be adjacent to the Rotational or Un-maintained area based on existing thalweg sinuosity and natural geomorphology, and be hydraulically acceptable (for the flow conveyance requirements of the flood control project) in accordance with the multi-agency adaptive HMP. NMFS understands that this measure may have some additional effect on the endangered vireo and flycatcher and their critical habitat. A meeting was held on January 17, 2008 attended by the Corps, City, NMFS and other responsible agencies. This measure was not considered favorable by the USFWS or the CDFG during the January 17, 2008 meeting.

2. Re-alignment Rotation Area 1 would be implemented such that the width of the Rotation 1 (60-ft), which is currently between Rotation 2 and the Annually Maintained area occur on the north side of the channel, over the existing thalweg, from College Blvd Bridge to transition with the annually maintained area just upstream of Pilgrim Creek confluence. From north levee to south levee, the channel in this reach would then include 60 feet of Rotation Area 1, 230 feet of Annually Maintained Area, 60 feet of Rotation 2, and 50 feet of Un-maintained Vegetation after this realignment. Portions of the thalwag that was not located within Rotational or Un-maintained areas after this realignment would be subject to in-stream habitat enhancement, if necessary, to provide appropriate shade and cover requirements for steelhead. NMFS acknowledges that this measure may have some addition effect on the endangered vireo and flycatcher and their critical habitat and would require concurrence from the CDFG, USFWS, and other responsible agencies.

3. Techniques for in-stream habitat enhancement will be implemented using criteria and standards set forth in the California Salmonid Streambed Habitat Restoration Manual (i.e., rootwads, tree boulder complexes, etc.) or other techniques as agreed upon through coordination with NMFS. The instream habitat enhancement measures may have minimal to no additional impacts to vireo or flycatcher, and ensure that in-stream cover and shelter (*i.e.*, primary constituent elements) for steelhead are maintained with minimal disturbance to the current thalweg.

4. If the above measures prove unsuccessful or are not implementable, portions of the thalwag occurring in the Annually Maintained Areas shall be moved to be adjacent to the Rotational or Un-maintained Area, based on existing thalweg, sinuousity and natural geomorphology, and will be hydraulically acceptable (for the flow conveyance requirements of the flood control channel) and in accordance with the multi-agency AHMP. Any relocation of the thalweg would be coordinated with the City, Corps, NMFS, and other responsible agencies via field reconnaissance.

b. Reach 3b to 3A Foussat Street Bridge (Station 181+00) to Pilgrim Creek (Station 256+00).

1. Techniques for in-stream habitat enhancement will be implemented using criteria and standards set forth in the California Salmonid Streambed Habitat Restoration Manual (i.e., rootwads, tree boulder complexes, etc.) or other techniques as agreed upon through coordination with NMFS. The instream habitat enhancement measures are not expected to have additional impacts to vireo or flycatcher and ensure that in-stream cover and shelter (*i.e.*, primary constituent elements) for steelhead are maintained with minimal disturbance to the current thalweg.

2. If the above measure proves unsuccessful or are not implementable, portions of the thalwag not adjacent to the Rotational or Un-maintained area shall be moved to be adjacent to the Rotational or Un-maintained Area, based on existing thalweg sinuousity, natural geomorphology, and be hydraulically acceptable (for the flow conveyance requirements of the flood control channel) and in accordance with the multi-agency AHMP. Any relocation of the thalweg would be coordinated with the City, Corps, NMFS, and other responsible agencies via field reconnaissance. Currently, the thalweg appears to be positioned within the Compensation/Preservation and Un-maintained Area.

c. Reach 3A to 1 *Interstate 5 (Station 42+00 to Station 181+00 Foussat Road Bridge)*

1. The thalweg, currently located within the Annually Maintained Area (Station to Station), will be left in a self-maintaining alignment dictated by natural fluvial geomorphic processes. The thalweg does not appear to require manipulation at this time. The position of the thalweg and its suitability as steelhead habitat will be monitored in accordance with the multi-agency adaptive habitat management plan. If adaptive management becomes necessary, techniques for in-stream habitat enhancement using criteria and standards set forth in the California Salmonid Streambed Habitat Restoration Manual (i.e., rootwads, tree boulder complexes, etc.) would be used to provide in-stream cover and shade.

6. Sediment management.

If it becomes necessary to perform sediment management, sediment management activities may directly impact in-stream habitat in the primary thalweg, the thalweg shall be diverted around the area. If necessary, the thalweg would be constructed through the impact area based upon extant thalweg sinuosity appropriate for the channel, natural geomorphology, and hydraulic acceptability in accordance with the multi-agency adaptive AHMP.

The Corps requests written concurrence or non-concurrence with our determination that the proposed project is not likely to adversely affect the endangered Southern California Steelhead DPS. After you have reviewed all of the material presented, we ask you to please contact our staff project ecologist, Mr. Thomas Keeney, at (213) 452-3875 or via electronic mail at Thomas.W.Keeney@usace.army.mil. All correspondence should be addressed to Ms. Ruth Bajza Villalobos, Chief, Planning Division, U.S. Army Corps of Engineers, Los Angeles District, Attn: Thomas W. Keeney, CESPL-PD-RQ, P.O. Box 532711, Los Angeles, California 90053-2325.

Sincerely,

Ruth Bajza Villalobos
Chief, Planning Division

Enclosures

ATTACHMENT 7

Memorandum from Department of the Army, Los Angeles District Corps of Engineers
Regarding Jurisdictional Impacts and Mitigation, dated February 5, 2008

DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, CORPS OF ENGINEERS
P.O BOX 532711
LOS ANGELES, CALIFORNIA 90053-2325

REPLY TO

2008 FEB 15 A 8:39

401 Cert - M Porter

07C-019

CESPL-RG-SD/CESPL-PD-RN

21 January 2002
(Revised Feb. 2008)

MEMORANDUM FOR THE RECORD

SUBJECT: Regulatory Jurisdictional Determination (JD) and Impacts/Mitigation Analysis of Waters of the United States/Wetlands within the San Luis Rey River (SLRR) Corps Federal Project Area and Impacts from the Corps Operations and Maintenance (O&M) Permit Activities as regulated under Section 404 of the Clean Water Act (CWA) and the SLRR Federal authorization (Public Law 89-298, Stat. 1073).

1. PURPOSE: To document the delineation of the existing waters of the United States (including jurisdictional wetlands) and the impacts/mitigation to these waters from the Corps Federal Project and the Corps SLRR O&M permit. The delineation was done in conjunction with the Hydro-geomorphic Functional Assessment (HGM) report prepared by EARSI, PCR, and Aspen Environmental, consultants for the Corps Planning Division in 2002 with final review by Dr. Mark Sudol in 2002. This document makes reference to the Corps Draft Environmental Statement as a part of the document. Overall, Regulatory supports the Corps position of a sufficiently wide maintained or mowed strip in the channel with a resulting higher flood capacity and sediment transport capability that may affect sediment removal and the massive functional loss of sediment removal activities but must maintain a high value riparian wetlands and low flow wetlands area throughout the project reach in conjunction with high value vireo/flycatcher habitat. Please note that this analysis was revised in February 2008 due to new alternatives formulated, changes in the 1987 wetlands delineation manual (2007 Arid Supplement), the proposed Mitigation Rule of 2007 and RGL 01-1, and changes in the definition of discharge in fill under Section 404 of the Clean Water Act (33 CFR 323.2).

2. a. SUMMARY: The Corps Regulatory Branch has prepared a delineation of existing waters of the United States (includes jurisdictional wetlands) within the Federal Project and the approximate impacts/mitigation of the Corps Federal Project O&M plan to the Federal Project area within the San Luis Rey River. This delineation is a landscape review of jurisdictional wetland/waters of the U.S. conditions and review of impacts and mitigation both proposed. Due to cost limitations and constraints on the project manager's time the delineation did not follow the routine or comprehensive determinations per the 1987 Corps of Engineers Wetlands Delineation Manual. Instead the Regulatory Branch Chief Mark Sudol and the Corps project manager Robert Smith utilized the HGM report transects and other hydrologic data (photos of floods, HEC-RAS, etc.) as the required data sheets to roughly delineate the approximate boundaries of the jurisdictional wetlands and waters of the United States. The Corps regulatory position regarding

this delineation is that the majority of the areas within the SLRR Federal Project area are legally classified as jurisdictional waters of the U.S. that function as either highly valuable jurisdictional wetlands areas or equally high value willow riparian vegetated waters of the U.S. or as high value riparian buffer areas to adjacent wetlands. Thereby the Corps boundaries of waters of the U.S. and the CDFG Streambed Alteration Agreement (SAA) are close to agreement in some areas insofar as jurisdictional boundaries.

The exact boundaries of the jurisdictional wetlands are very close to the boundaries of waters of the U.S. since the entire channel area has saturated soils for greater than 2 weeks and has numerous hydrologic and hydric soils indicators such as trash rack and obligate plant species throughout the project area. From Douglas Drive to the Pacific Ocean there is a high groundwater table that saturates the channel and thereby creates a line where jurisdictional wetland hydrology is assured. Regulatory did include the SLRR basins within the mitigation summary as well as certain bench areas within the levees that function as high value wetlands/waters/buffers. Regulatory has been involved with the O&M permit with the Corps Planning Division during the entire Federal project process and has been working with them, the agencies, and the City to develop an O&M alternative that would avoid and minimize impacts. Currently Regulatory is satisfied that the impacts of mowing are not adverse but that sediment removal activities could be a major functional loss to the wetlands and riparian areas of the SLRR. The Corps selected a mowed sediment removal alignment that avoided, to the extent practicable, occupied listed species habitat and high value wetlands to reduce sediment removal activities. The impacts of sediment removal could be extensively degrading to the wetlands base of the San Luis Rey River with major functional losses to wetlands. However, specific criteria or triggers for sediment removal have been developed and defined in the Hydraulic Report (Appendix C of the PADD/SEIS/EIR). The need for sediment management will be determined based on those areas where the average bed elevation, as determined over a 100-foot interval, exceeds the upper bed limit by more than 0.5 feet. Under these specifications, it is likely that sediment management would be required only relatively infrequently on average over the life of the project, and only along specific segments or reaches of the project length rather than along the entire length.

Overall the Corps has created, restored, and enhanced, since construction of the project in 1994, 520 acres of high value wetlands/waters/buffers within the SLRR project area that when combined with the additional 46 acres of offsite mitigation proposed per the CESA permit yields almost 566 acres of wetlands/waters/buffer mitigation areas. Given the proposed O&M impacts of 174 acres, there is a net gain of high value riparian wetland/waters/buffer areas. Therefore there is no net loss of wetlands/waters/buffers acreage or adverse loss of wetland functions but a net gain. Also the Corps has adopted a mowing strategy that will minimize impacts to: 1) listed species, 2) high value riparian and low growth wetlands, 3) sediment removal activities, and 4) potential for catastrophic flood damages and resultant catastrophic water quality impacts.

The total original project construction impacts, to include operation and maintenance, were 161 acres of waters/wetlands that existed at the time, which the Corps was required to mitigate per the USFWS 1987 Biological Opinion (BO). The original authorized O&M plan would have maintained an area of approximately 259 acres within the flow conveyance zone that would allow vegetation 0-5 years of age. However, the original authorized O&M plan was not implemented due to Endangered Species Act issues. Because the original authorized O&M plan was not implemented, vegetation that was managed by the Corps outside the flow conveyance zone matured and subsequently established in the 400-foot wide flow conveyance zone, which resulted in an additional temporal gain in riparian/wetland habitat above what existed prior to construction. To avoid and minimize impacts to the listed species and their habitat, the O&M plan was revised to accommodate additional riparian/wetland habitat within the flow conveyance zone. This modified O&M plan (Alternative 11), which occurs within a smaller overall footprint than the original O&M plan, would result in 174 acres of impacts to existing vegetation within the flow conveyance zone. These acres occur within areas that were previously addressed as project impacts.

b. METHODOLOGY: The Draft Environmental Impact Statement (DEIS) outlines vegetation types that are freshwater/alkali marsh, open water, sand bar, Giant Reed/Arundo, and willow riparian that all function both as jurisdictional wetlands and/or high value waters of the U.S. The DEIS and the Biological Assessment were used for this JD but did not provide a sound methodology for delineating and assessing impacts to waters of the U.S. The formulation of actual field data sheets would require more funds to comprehensively delineate a more precise boundary of the jurisdictional wetland areas and Regulatory has used a more aerial landscape approach to draw in rough boundaries of the jurisdictional wetlands areas based on the HGM report aerials and transects.

c. DELINEATION: The Corps has completed a final HGM analysis of the jurisdictional wetlands and the field work for the delineation was done simultaneously with the HGM field work by several regulators in conjunction with Dr. Mark Sudol (now HQ Regulatory chief), Aspen Environmental, Environmental & Regulatory Specialists, PCR consultants, and several graduate students from UCLA in December, 2000. The data was collected at 21 transects that were also used for the HGM analysis which were then correlated with Stations of the Corps Federal Project. The Corps utilized a CD ROM disk that compiled the HGM data along with the transect data. No data sheets were recorded as the HGM data sheets sufficed to document presence of hydric soils, hydrophytic vegetation, and hydrology indicators. The Corps has compiled the amount of jurisdictional waters for each ecological reach and has compiled subsections of each reach by Station.

The delineation that follows is a station by station analysis of each of the ecological reaches in the HGM report. The actual impacts analysis is based on the alternatives analysis in the DEIS. The channel project has a 400 ft width that was used as the delineation/impact area from College Blvd. to the Pacific Ocean and the area for the jurisdictional determination. Jurisdictional wetlands require three parameters to be met that include the presence of hydrophytic vegetation, hydric soils, and hydrology.

In regards to hydrophytic vegetation the dominant vegetation species include willows, mulefat, typha, cattails, tules, and various herbaceous plants and sedges that are all hydrophytic wetland vegetation. The majority of the areas within the Federal project are overgrown with these species. The Corps impacts analysis does subtract out areas such as sandbars devoid of hydrophytic vegetation, invasive plants, open water, and avoided freshwater marsh in the low flow. The hydric soils determination was based on a review of the soils present in the SLRR channel shown in the DEIS under Table 3-1 and the HGM transects which documented areas that had debris rack and obligate wetland plant species. Furthermore the Corps determined that the majority of the SLRR channel has been saturated for 2 weeks after several storm events and had some hydric soil indicaters like mottles and gleyed soils. The majority of the soils did show signs of saturation throughout the project area and were actually saturated from Douglas Rd. to Benet Rd. with groundwater near the surface and a small perennial low-flow open water channel.

The Corps also documented hydrology indicators such as debris rack, scour marks and other Ordinary High Water Mark/hydrology indicators from College Blvd. to the downstream end of the project area and these are shown in the backup data to the HGM report. Also the Corps had direct photographic evidence and aerials to substantiate the flows went from levee to levee under ordinary storm conditions. High groundwater and saturated soils at the surface below Douglas Drive to the downstream end of the project were documented on every site visit. Also firsthand witnessing of storm events has correlated with the hydrology indicators. Additionally, testimony from Corps construction inspectors and the City have supported the fact the SLRR channel system is a leveed channel system that completely saturates during most large storm seasons throughout the majority of the channel. Overall the Corps has determined that the majority of the SLRR channel is jurisdictional wetlands or waters of the U.S. but the table below does exclude certain areas where only waters of the U.S. were present without jurisdictional wetlands.

It should be recognized that the San Luis Rey River Federal project area is a highly dynamic and changing project area. The channel bed may be substantially incising in some areas and aggregating in other areas and the sedimentation rates may change as upstream changes and build-out occur which could reduce sedimentation and increase incision. Once the Corps establishes a low flow mowed maintained strip in the channel then the channel geomorphology, hydrology, soils, and vegetation may also change and the area where we found jurisdictional wetlands vegetation may change. Also if the City begins to recharge the adjacent SLRR basins then

the groundwater level may rise and the amount of gleyed and saturated soils will increase. The current hydric soils are young hydric soils with newly gleyed-soil areas below Douglas Drive to the Pacific Ocean. Regulatory will be monitoring the channel both during and after the final Corps sediment removal and mowing have been completed under the Corps Federal construction project and may adjust the jurisdictional wetlands boundaries if substantial changes occur. The 15 ft. access strip to be maintained on the channel side of each levee may be established as an O&M zone if the entire channel endures an extreme event that scours the entire channel from levee to levee. Overall Regulatory shall ensure that impacts to the functions of high value jurisdictional wetlands and riparian areas in the SLRR project area are avoided to the extent practicable with benign sediment removal activities. A reassessment of jurisdictional wetlands areas in conjunction with endangered species surveys may be an annual requirement or at least after large storm events have altered the channel. Regulatory shall incorporate needed monitoring and constraints on sediment removal activities with the agencies and the City in accordance with the adaptive habitat management plan to fully maximize the wildlife, flood control, groundwater recharge, and water quality wetland functions of the San Luis Rey River.

d. IMPACTS ANALYSIS: Regarding the impacts analysis to the wetlands areas the majority of the impacts are due to mowing that is a regulated as a discharge of fill under Section 404 of the Clean Water Act insofar as where mowing creates a discharge of wood chips. Thereby Regulatory did not classify mowing as an impact where a discharge of fill did not occur. Mowing of some areas like mulefat scrub and unvegetated sandbar did not raise the bottom elevation of the substrate and was not considered a discharge of fill. Mowing of riparian and Arundo areas would create a discharge of wood chips and would raise the substrate bottom and would constitute a discharge of fill. Sediment removal as an impact that would occur in maintained areas due to deposition and scour activities would require re-contouring, mechanized land-clearing, and stockpiling in jurisdictional areas that would be regulated under Section 404 of the Clean Water Act. These areas of potential sediment removal /recon touring/infilling activities is unknown but could range from the entire maintain or mowed area after an extreme storm event to just small activities after smaller storm events. The acreage of the maintained or mowed area is tabulated in the DEIS, however, under the criteria for sediment removal, it is likely that sediment management would be required only relatively infrequently on average over the life of the project, only along specific segments or reaches of the project length rather than along the entire length, and will be subject to future storm events. Regulatory has sought throughout the process to minimize the massive functional losses of sediment manipulation activities by the use of mowing; this is substantiated throughout the HGM analysis done in 2001 by Dr. Sudol. Preserving the root mass of wetlands plants by mowing instead of complete clearing will in the long run show great functional gains to the SLRR system.

Specific impacts of the proposed O&M project (174 acres) are totaled in Table 1 (by reach). Please note that the impacts to wetlands shown in the Section 404(b)(1) alternatives was

233 acres but subsequent to the Section 404(b)(1) alternatives analysis Regulatory has reduced the impacts even more due to the subtraction of the following impacts areas from the wetlands base: 1) open water, 2) freshwater marsh avoidance in the low flow channel, and 3) sandbar areas. Subtracting out these areas yields 202 acres of impacts to wetlands. Additionally the Corps has determined that the mowing of 28 acres of thinly dispersed mulefat scrub in sandbar areas does not constitute a discharge of wood chips and does not substantially raise the bottom elevation of the substrate and thereby does not constitute a discharge of fill per 33 CFR 323.2. Subtracting out the 28 acres of mowed thinly dispersed mulefat scrub from the wetland impacts leaves 174 acres of impacts to jurisdictional wetlands/waters/buffer areas. Also note that the potential adverse water quality impacts (eutrophication and structural impacts to plants) of mowing of the SLRR and the discharge of wood chips and mulch into the SLRR is mitigated by the City's agreement to remove woody debris near the bridges, outlet gates, near mouth of river, and on Oceanside beaches and the proposed restoration and preservation of riparian mitigation areas throughout the Federal Project.

3. MITIGATION ANALYSIS: Overall the Corps has created, restored, and enhanced, since construction of the project in 1994, over 520 acres of existing high value wetlands/waters/riparian buffers within the SLRR project area that when combined with the additional 46 acres of offsite mitigation proposed per the CESA permit yields almost 566 acres of wetlands/waters/buffer mitigation areas that are existing and proposed. Table 2 offers a breakdown of the mitigation. The Corps has created Compensation Areas per the 1987 USFWS BO that will meet the mitigation requirements of the California Department of Fish and Game Streambed Alteration Agreement and that also can be used to mitigate for future O&M impacts to wetlands/waters of the U.S. as follows: 1) Wetlands/waters/buffer mitigation areas created outside the 400 ft wide O&M area and Wetlands shown as being restored/preserved as Unmaintained areas within the 400 ft wide O&M area and, 2) Mitigation areas within adjacent ponds. Furthermore the CESA permit has required that the Corps/City provide another 46 acres of offsite mitigation that shall be wetlands/waters/buffer areas for listed species mitigation. Also the Corps wishes to acknowledge that 46 acres of rotational riparian wetland areas to be mowed every ten years should be acknowledged as a temporal gain in wetlands with temporal growth in between 10 year mowing cycles that shall be used to sustain listed species with variable maturity habitat.

Consequently, the Corps has mitigated both the impacts of O&M and construction with almost 566 acres of mitigation (does not include 46 acres of rotational temporal gains for mowed strips every 10 years). The new Mitigation Rule proposed in December 2007 and Regulatory Guidance Letter No. 01-1 allows for the Corps to use wetlands, riparian waters, and upland riparian buffer areas as mitigation for achieving functional gains in the aquatic ecosystem; the SLLR project makes use of all three of these mitigation components and therefore does not represent a net loss of wetlands, achieves a net gain of wetlands/waters of the U.S/buffer areas, and substantially restores and creates additional wetlands within the SLRR.

4. This jurisdictional determination and impacts analysis was prepared by Robert Revo Smith Jr., P.E., Regulatory Branch and was reviewed by Dr. Mark Sudol, the Regulatory Branch Chief at the time of the original JD. Also the revised analysis was reviewed by Planning Division in February 2008 for accuracy with the DEIS.

2/29/2008

Table 1 - Jurisdictional Determination of Waters of the U.S./Jurisdictional wetlands for the Federal San Luis Rey O&M Permit with an Analysis of Impacts due to Sediment Removal Activities (shown as an acreage range per station by station reach)

Station	Waters of the US (acres)	Wetlands (acres)	Impacts to Waters of US Alt. 2 (acres)	Impacts to Waters of US Alt. 10 (acres)	Impacts to Waters of US Alt. 11 (acres)
College					
374+00	13	11.8	1-11.8	1-8.85	1-8.85
361+00	11.9	11.9	1-11.9	1-8.93	1-8.93
351+20	9	9	1-9	1-6.75	1-6.75
332+50	17.2	17.2	1-17.2	1-12.9	1-12.9
324+50	7.35	7.35	1-7.35	1-5.52	1-5.52
301+00	21.58	20.58	1-20.58	1-15.43	1-15.43
Douglas	6.12	6.12	1-6.12	1-4.59	1-4.59
284+50	8.57	8.57	1-8.57	1-6.42	1-6.42
274+80	8.9	8.9	1-8.9	1-6.68	1-6.68
266+50	7.62	7.62	1-7.62	1-5.71	1-5.71
254+80	10.74	10.74	1-10.74	1-8.05	1-8.05
247+60	6.61	6.61	1-6.61	1-4.96	1-4.96
236+80	9.91	9.91	1-9.91	1-7.43	1-7.43
223+80	14.92	13.29	1-13.29	1-9.96	1-9.96
200+00	36.42	22.26	1-22.26	1-16.7	1-16.7
189+80	18.74	16	1-16	1-12	1-12
Fousatt	14.6	14.6	1-14.6	1-10.95	1-10.95
177+80	3.8	3.8	1-3.8	1-2.85	1-2.85
165+20	14.47	14.47	1-14.47	1-10.85	1-10.85
154+00	12.8	10.96	1-10.96	1-8.22	1-8.22
148+60	6.2	6.2	1-6.2	1-4.65	1-4.65
Benet	13.78	13.78	1-13.78	1-10.33	1-10.33
112+00	26.4	26.4	1-26.4	1-19.8	1-19.8
98+00	21.44	21.44	1-21.44	1-16.08	1-16.08
Totals	317.07	265	1-265acres (waters of US)	1- 174acres (waters of US)	1-174 acres (waters of US)

Table 2 – Regulatory Mitigation Analysis of the SLRR (Acres)

Mitigation Type/Description	Wetlands/Riparian Buffer Areas	Waters of the US (Waters)
Original Riparian Areas within 400 ft O&M area (temporal gain since 1994 to 2008)	225	8
Proposed Unmaintained Area within 400 ft. wide O&M area and Mitigation Areas adj to 400 ft. wide O&M area	185	
Detention Ponds	110	
Offsite Mitigation Area for CESA permit	46	
Totals	566	8
GrandTotal Wetlands/Waters/Buffers	574	

ATTACHMENT 8

Stream Photo Documentation Procedure

Standard Operating Procedure (SOP) 4.2.1.4

Stream Photo Documentation Procedure

(CARCD 2001, Written by TAC Visual Assessments work group)

Introduction:

Photographs provide a qualitative, and potentially semi-quantitative, record of conditions in a watershed or on a water body. Photographs can be used to document general conditions on a reach of a stream during a stream walk, pollution events or other impacts, assess resource conditions over time, or can be used to document temporal progress for restoration efforts or other projects designed to benefit water quality. Photographic technology is available to anyone and it does not require a large degree of training or expensive equipment. Photos can be used in reports, presentations, or uploaded onto a computer website or GIS program. This approach is useful in providing a visual portrait of water resources to those who may never have the opportunity to actually visit a monitoring site.

Equipment:

Use the same camera to the extent possible for each photo throughout the duration of the project. Either 35 mm color or digital color cameras are recommended, accompanied by a telephoto lens. If you must change cameras during the program, replace the original camera with a similar one comparable in terms of media (digital vs. 35 mm) and other focal length characteristics. A complete equipment list is suggested as follows:

Required:

- Camera and backup camera
- Folder with copies of previous photos (do not carry original photos in the field)
- Topographic and/or road map
- Aerial photos if available
- Compass
- Timepiece
- Extra film or digital disk capacity (whichever is applicable)
- Extra batteries for camera (if applicable)
- Photo-log data sheets or, alternatively, a bound notebook dedicated to the project
- Yellow photo sign form and black marker, or, alternatively, a small black board and chalk

Optional:

- GPS unit
- Stadia rod (for scale on landscape shots)
- Ruler (for scale on close up views of streams and vegetation)
- Steel fence posts for dedicating fixed photo points in the absence of available fixed landmarks

- Poisonous plants (e.g.: poison oak)
- Dangerous insects and animals (e.g.: bees, rattlesnakes, range animals such as cattle, etc.)
- Harmful or hazardous trash (e.g.: broken glass, hypodermic needles, human feces)

We recommend that the volunteer coordinator or leader discuss the potential hazards with all volunteers prior to any fieldwork.

General Instructions:

From the inception of any photo documentation project until it is completed, always take each photo from the same position (photo point), and at the same bearing and vertical angle at that photo point. Photo point positions should be thoroughly documented, including photographs taken of the photo point. Refer to copies of previous photos when arriving at the photo point. Try to maintain a level (horizontal) camera view unless the terrain is sloped. (If the photo can not be horizontal due to the slope, then record the angle for that photo.) When photo points are first being selected, consider the type of project (meadow or stream restoration, vegetation management for fire control, ambient or event monitoring as part of a stream walk, etc.) and refer to the guidance listed on *Suggestions for Photo Points by Type of Project.*

When taking photographs, try to include landscape features that are unlikely to change over several years (buildings, other structures, and landscape features such as peaks, rock outcrops, large trees, etc.) so that repeat photos will be easy to position. Lighting is, of course, a key ingredient so give consideration to the angle of light, cloud cover, background, shadows, and contrasts. Close view photographs taken from the north (i.e., facing south) will minimize shadows. Medium and long view photos are best shot with the sun at the photographer's back. Some artistic expression is encouraged as some photos may be used on websites and in slide shows (early morning and late evening shots may be useful for this purpose). Seasonal changes can be used to advantage as foliage, stream flow, cloud cover, and site access fluctuate. It is often important to include a ruler, stadia rod, person, farm animal, or automobile in photos to convey the scale of the image. Of particular concern is the angle from which the photo is taken. Oftentimes an overhead or elevated shot from a bridge, cliff, peak, tree, etc. will be instrumental in conveying the full dimensions of the project. Of most importance overall, however, is being aware of the goal(s) of the project and capturing images that clearly demonstrate progress towards achieving those goal(s). Again, reference to *Suggestions for Photo Points by Type of Project* may be helpful.

If possible, try to include a black board or yellow photo sign in the view, marked at a minimum with the location, subject, time and date of the photograph. A blank photo sign form is included in this document.

2. Select an existing structure or landmark (mailbox, telephone pole, benchmark, large rock, etc.), identify its latitude and longitude, and choose (and record for future use) the permanent position of the photographer relative to that landmark. Alternatively, choose the procedure described in *Monitoring California's Annual Rangeland Vegetation* (UC/DANR Leaflet 21486, Dec. 1990). This procedure involves placing a permanently marked steel fence post to establish the position of the photographer.

3. For restoration, fuel reduction, and BMP projects, photograph the photo-points and carry copies of those photographs on subsequent field visits.

Determining the Compass Bearing:

1. Select and record the permanent magnetic bearing of the photo center view. You can also record the true compass bearing (corrected for declination) but do not substitute this for the magnetic bearing. Include a prominent landmark in a set position within the view. If possible, have an assistant stand at a fixed distance from both the photographer and the center of the view, holding a stadia rod if available, within the view of the camera; preferably position the stadia rod on one established, consistent side of the view for each photo (right or left side).
2. Alternatively, use the procedure described in *Monitoring California's Annual Rangeland Vegetation* (UC/DANR Leaflet 21486, Dec. 1990). This procedure involves placing a permanently marked steel fence post to establish the position of the focal point (photo center).
3. When performing ambient or event photo monitoring, and when a compass is not available, then refer to a map and record the approximate bearing as north, south, east or west.

Suggestions for Photo Points by Type of Project:

Ambient or Event Monitoring, Including Photography Associated with Narrative Visual Assessments:

1. When first beginning an ambient monitoring program take representative long and/or medium view photos of stream reaches and segments of shoreline being monitored. Show the positions of these photos on a map, preferably on the stream/shore walk form. Subjects to be photographed include a representative view of the stream or shore condition at the beginning and ending positions of the segment being monitored, storm drain outfalls, confluence of tributaries, structures (e.g., bridges, dams, pipelines, etc.).

2. If possible, take a close view photograph of the substrate (streambed), algae, or submerged aquatic vegetation.

3. Time series: Photographs of these subjects at the same photo points should be repeated annually during the same season or month if possible.

Vegetation Management for Fire Prevention ("fuel reduction"):

1. Aerial view (satellite or airplane photography) if available.

2. In the absence of an aerial view, a landscape, long view showing all or representative sections of the project (bluff, bridge, etc.)

3. Long view (wide angle if possible) showing the project area or areas. Preferably these long views should be from an elevated vantage point.

4. Medium view photos showing examples of vegetation changes, and plantings if included in the project. It is recommended that a person (preferably holding a stadia rod) be included in the view for scale

5. To the extent possible include medium and long view photos that include adjacent stream channels.

Stream Sediment Load or Erosion Monitoring:

1. Long views from bridge or other elevated position.

2. Medium views of bars and banks, with a person (preferably holding a stadia rod) in view for scale.

3. Close views of streambed with ruler or other common object in the view for scale.

4. Time series: Photograph during the dry season (low flow) once per year or after a significant flood event when streambed is visible. The flood events may be episodic in the south and seasonal in the north.

5. Optional: Use a tape set perpendicular across the stream channel at fixed points and include this tape in your photos described in 1 and 2 above. For specific procedures refer to Harrelson, Cheryl C., C.L. Rawlins, and John P. Potyondy, *Stream Channel Reference Sites: An Illustrated Guide to Field Techniques*, United States Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station, General Technical Report RM-245.

PHOTO SIGN FORM: Print this form on yellow paper. Complete the following information for each photograph. Include in the photographic view so that it will be legible in the finished photo.

Location:

Subject Description:

Date:

Time:

DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT CORPS OF ENGINEERS
P.O. BOX 532711
LOS ANGELES, CALIFORNIA 90053-2325

REPLY TO
ATTENTION OF

February 7, 2013

Office of the Chief
Planning Division

Mr. David W. Gibson
Executive Officer
California Regional Water Quality Control Board
San Diego Region
Attention: Mr. Alan Monji
9174 Sky Park Court, Suite 100
San Diego, California 92123

Dear Mr. Gibson:

The U.S. Army Corps of Engineers, Los Angeles District (Corps) and City of Oceanside (City) request a five-year extension to the Section 401 Water Quality Certification (WQC, No. 07C-019) and the enrollment under Order No. 2003-017-DWQ for the San Luis Rey River Flood Risk Management, Oceanside, San Diego County, California. The current WQC will be expiring this month on February 15, 2013.

The Corps and City requested Section 401 WQC for vegetation and sediment management of the San Luis Rey River Flood Risk Management Project by letter and application dated February 13, 2007. Your office issued to the Corps and City an Order for Technically-Conditioned Certification and enrollment in the State Water Resources Board Order No. 2003-0017-DWQ (Non-Isolated Waters) on February 15, 2008.

Since your office's issuance of the certification, the Corps and City have continued coordination with the resource agencies on meeting the project's commitments as identified in the permits, authorizations and approvals for this project including the Section 401 WQC, U.S. Fish and Wildlife Service (USFWS) Biological Opinion (1-6-87-F-17R2), as amended, California Department of Fish and Wildlife (CDFW) California Endangered Species Act (CESA) Permit (2081-2007-029-05) and Streambed Alteration Agreement (SAA, 1600-2007-0173-R5), Coastal Consistency Determination (CD-043-07), and the Post Authorization Decision Document/Supplemental Environmental Impact Statement/Environmental Impact Report (PADD/SEIS/EIR, July 2007).

The Corps has completed the initial mowing efforts (vegetation management) of Phases 1 and 2 in 2008 and 2012, respectively. The City has since taken over responsibility to operate and maintain the Phase 1 vegetation management area. The Corps will be updating the project Operation, Maintenance, Repair, Replacement, Rehabilitation (OMRRR) Manual to include the Phase 2 vegetation management area and provide it to the City for long term operation and maintenance. The Corps has prepared and is currently implementing the Water Quality Monitoring Plan (WQMP) for the project as conditioned in the WQC (Condition C, Water Quality Monitoring). A copy of the WQMP as well as copies of the progress and annual reports documenting the monitoring and survey results was transmitted to Mr. Alan Monji of your staff on January 29, 2013.

In addition to meeting the water quality monitoring requirements of the 401 WQC, the Corps is continuing active and passive restoration activities to meet the habitat mitigation requirements of the 401 WQC (Conditions F2, F3, F6, and F7) and other project permits and agreements. One of the primary efforts since 2005 has been giant reed (*Arundo donax*) eradication through herbicide treatments and biomass reduction, in accordance with the 401 WQC, PADD/SEIS/EIR, and other project permits and agreements. To date, the Corps and City have successfully eradicated approximately 95 percent of invasive exotic weeds within the project area. Site preparations for active restoration, including cutting down and reducing any dead weed biomass, began in Fall 2012 in preparation for planting of the previously weed-infested areas with native plants.

As discussed with Mr. Monji of your staff in a field meeting on January 31, 2013 and at the project annual resource agency meeting on February 6, 2013, the Corps' contractor is currently scheduled to begin plant installation within the active restoration areas next week (week of February 11, 2013) to take advantage of the current winter/spring season for plant installation. Plant installation was originally scheduled to begin in January 2013, but after assessment of the propagated plants and weather, the lead restoration ecologist recommended the start date be pushed back into February for higher success in plant establishment and survival. It is imperative that the planting activities are completed this winter/spring season with the goal of restoring endangered least Bell's vireo (*Vireo bellii pusillus*) habitat within the project area to minimize and offset impacts resulting from the Phase 1 and 2 vegetation management activities. Enclosed is a description of the restoration activities being implemented within the restoration areas. The Corps plans to continue with the active restoration activities as planned and described in the enclosure. All project minimization measures and 401 WQC conditions pertaining to avoiding and minimizing impacts to water quality are and will continue to be implemented during all restoration activities.

The Corps is requesting a five-year extension of the project 401 WQC. The Corps plans to continue with the on-going restoration activities as described above and detailed in the enclosure in order to meet the habitat mitigation requirements of the 401 WQC, USFWS BO, CDFW CESA Permit, CDFW SAA, and CCD. No other work is anticipated until the fall except for the regular species population monitoring and cowbird trapping program that occurs during the breeding season and the spring water quality sampling. If you have any questions or concerns regarding the proposed project or this request, please contact Ms. Tiffany Bostwick, Corps' Project Environmental Coordinator, at (213) 452-3845.

Thank you for your attention to this document.

Sincerely,

for Josephine R. Axt, Ph.D.
Chief, Planning Division

Enclosure

San Luis Rey River Flood Risk Management Project
Active Restoration Project Description
February 5, 2013

Introduction

The Corps is currently implementing both active and passive restoration activities within the lower San Luis Rey River from approximately College Boulevard to Interstate 5. All activities are being conducted in accordance with the Draft Restoration Program for the San Luis Rey River Flood Control Channel dated October 4, 2012. A December 28, 2007 version of this plan was first submitted to the USACE, USFWS, and CDFG. Joint comments from USFWS and CDFG were received in October 2008 and incorporated into the plan and these changes were presented during annual stakeholder meetings in January 2011 and 2012. A revised draft plan was completed in October 2012, which included incorporation of the offsite Rincon parcel mitigation site. However, due to more changes in the project, this draft plan is currently being revised to include remedial restoration activities on the Whelan parcel. Once the conceptual plans for Whelan have been agreed to, the plan will be finalized and resubmitted to all agencies.

On the ground activities have been underway for several years. To date, these activities have primarily been eradication of all invasive exotic weeds within the boundaries of the project. As recent as 2008, invasive exotic weeds encompassed well over 100 acres within the project boundary

Due to the nature of the weeds being treated, primarily giant reed (*Arundo donax*), salt cedar (*Tamarisk* spp.), eucalyptus (*Eucalyptus* spp.), pepper tree (*Schinus* spp.), and pampas grass (*Cortaderia* sp.), complete eradication of these species has taken several years to achieve. As of January 2013, approximately 95% of the invasive exotic weeds have been successfully eradicated. The next phase of the project includes both active and passive restoration practices: active restoration will consist of continued weed control, container planting, and plant maintenance; while passive restoration includes only weed control. Active restoration will be implemented within areas that once contained large and contiguous (>0.5 acre) stands of invasive exotic weeds. Other areas where weed patch size was smaller, passive restoration will be implemented. These areas are highlighted in the attached figures labeled Act_Pass1-3. In total, at least 58 acres are being actively restored while at least 42 acres are being passively restored, not including the Whelan and offsite Rincon parcels.

Planting of the active restoration areas is scheduled to begin in February 2013. Seeds and cuttings from onsite plant materials were collected in 2012 and container plants have been propagated at RECON's native plant nursery. The plant species being propagated for active restoration are of similar composition and density as can be found in the onsite southern willow scrub habitat containing the highest LBV nest success. These target habitat types being planted in active restoration areas include Freemont's cottonwood forest, black willow woodland, and mule fat shrubland (see planting palettes in the three tables below). Planting will occur on the benches and flood plains located above the river thalwags that meander through the project site. The planting layout will be determined in the field by the project restoration biologist and will take into consideration each species hydrologic requirements and onsite micro-topography.

The planting palettes are generally as follows:

FREMONT'S COTTONWOOD FOREST CONTAINER PLANT PALETTE

Growth Form	Scientific Name	Common Name	Container Size	Number Per Acre (maximum)	Spacing (feet on center)
Tree	*Platanus racemosa*	western sycamore	1 gallon	20	20
	Populus fremontii	cottonwood	1-gal/cuttings	50	20
	Salix goodingii	black willow	1-gal/cuttings	40	12
	Salix laevigata	red willow	1-gal/cuttings	40	12
	Salix lasiolepsis	arroyo willow	1-gal/cuttings	50	12
Shrub	*Artemisia palmerii*	Palmer's sagewort	1 gallon	100	6
	Baccharis salicifolia	mule fat	1 gallon	150	6
	Salix exigua	narrow-leaved willow	1-gal/cuttings	150	10
	Rubus ursinus	California blackberry	1 gallon	200	4
	Vitis girdiana	desert wild grape	1 gallon	200	4
Herb, Vine, Forb	*Ambrosia psilostachya*	western ragweed	1 gallon	150	6
	Artemisia douglasiana	Douglas mugwort	1 gallon	150	4
	Iva hayesiana	San Diego marsh elder	1 gallon	150	4
	Urtica dioica	stinging nettle	rose pot	300	3

BLACK WILLOW WOODLAND CONTAINER PLANT PALETTE

Growth Form	Scientific Name	Common Name	Container Size	Number Per Acre (maximum)	Spacing (feet on center)
Tree	*Platanus racemosa*	western sycamore	1 gallon	20	20
	Populus fremontii	cottonwood	1-gal/cuttings	50	20

	Salix goodingii	black willow	1-gal/cuttings	40	12
	Salix laevigata	red willow	1-gal/cuttings	40	12
	Salix lasiolepsis	arroyo willow	1-gal/cuttings	50	12
	Artemisia palmerii	Palmer's sagewort	1 gallon	100	6
Shrub	*Baccharis salicifolia*	mule fat	1 gallon	150	6
	Salix exigua	narrow-leaved willow	1-gal/cuttings	150	10
	Rubus ursinus	California blackberry	1 gallon	200	4
	Vitis girdiana	desert wild grape	1 gallon	200	4
	Ambrosia psilostachya	western ragweed	1 gallon	150	6
Herb, Vine, Forb	*Artemisia douglasiana*	Douglas mugwort	1 gallon	150	4
	Iva hayesiana	San Diego marsh elder	1 gallon	150	4
	Urtica dioica	stinging nettle	rose pot	300	3

MULE FAT SHRUBLAND CONTAINER PLANT PALETTE

Growth Form	Scientific Name	Common Name	Container Size	Number Per Acre (maximum)	Spacing (feet on center)
	Salix exigua	narrow-leaved willow	1-gal/cutting	121	15
Tree	*Sambucus nigra* ssp. c*aerulea*	blue elderberry	1-gallon	40	20
	Baccharis salicifolia	mule fat	1-gal/cutting	809	6
	Ericameria ericoides	mock heather	1-gallon	40	20
Shrub	*Lupinus chamissonis*	dune lupine	1-gallon	486	10

Following planting, a maintenance period will be implemented which includes continued weeding and watering of the planted container stock until they become established. Qualitative and quantitative monitoring will also be performed and annual reports will be prepared. Success criteria for native and

non-native cover, native density, and native diversity have been established and are based on performance relative to adjacent reference sites.

Site Preparation

Site preparation will include cutting down any weed biomass that may still be left standing following weed treatments. Biomass reduction may be accomplished through one or more means including the use of the large mower masticator, walk behind brush mower, or line trimmer. In addition, any resprouting weeds will be treated prior to planting.

Plant Delivery

Once the active restoration sites have been prepared, a flatbed delivery truck will deliver the container plants to various locations along the levee where workers will unload the plants and carry them down to a staging area or directly to the planting locations. In areas where there are access ramps down into the channel, the delivery truck may back down the ramp for easier offloading. Since plant deliveries often deliver more plants than can be planted in one day, unloaded plants may be staged on a higher terrace near the levee for a period of 1-3 days. To facilitate planting, a small flatbed ATV (similar to a golf cart) may be used to shuttle plants from the staging area to the planting locations within the flood control channel. Under no circumstance will the ATVs or delivery truck cross any low flow channel or areas of water. In areas where a low flow channel must be crossed, hand crews will pass plants by hand over the channel.

This restoration/planting work will require various deliveries of plants (about 1,300 plants per delivery, 1-2 deliveries per week), which will require vehicle access to the levee, into the channel. Thus, there may be periods (a few hours on delivery days) where the maintenance road/bike path will be completely blocked due to the plant delivery; at other times there may be partial blockage of the road/path due to restoration crew trucks/equipment.

Planting

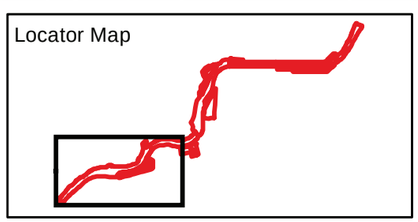
The planting layout will be determined in the field by the restoration biologist. In general, plant species that prefer more hydric conditions will be planted in areas lower in elevation and closer to the river thalwag and plant species that prefer drier conditions will be planted on higher terraces and away from the thalwag. For planting, there will be no modifications to the existing topography and therefore, no grading is necessary. Planting practices will follow typical planting techniques and include excavating a hole approximately twice the size of the container plant, placing the plant into the hole and backfilling with native soil. The backfill will be tamped into place and any remaining backfill material will be spread out in the vicinity of the planted container plant.

Schedule

Planting of the active restoration areas is scheduled to begin in February 2013. The total duration of this active restoration work is estimated to take 6-8 weeks.

Image Source: 2009 Aerials Express (flown Jan 2009)

Locator Map



RECON

M:\JOBS3\4852\common_gis\figSAA-2A.mxd 04/06/10

Study Area Reaches

Mapped Arrundo Areas

Active Revegetation

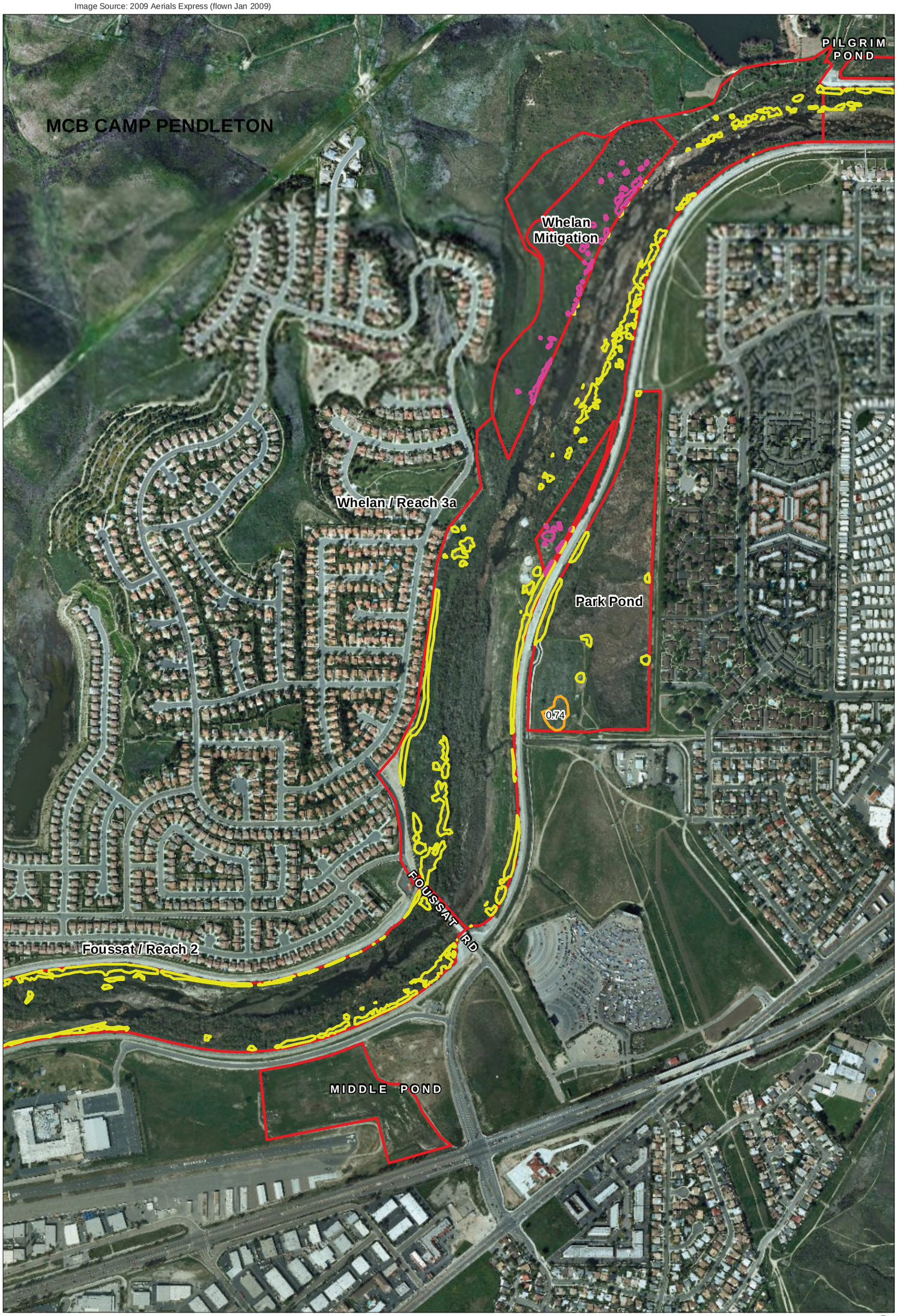
Passive Revegetation

Previous Mitigation

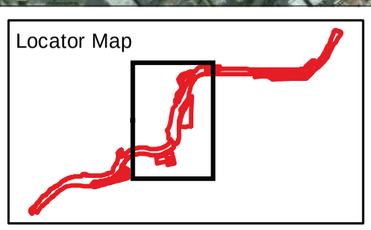
0 Feet 700

FIGURE A

Image Source: 2009 Aerials Express (flown Jan 2009)



Locator Map



Study Area Reaches

Mapped Arrundo Areas

Active Revegetation

Passive Revegetation

Previous Mitigation

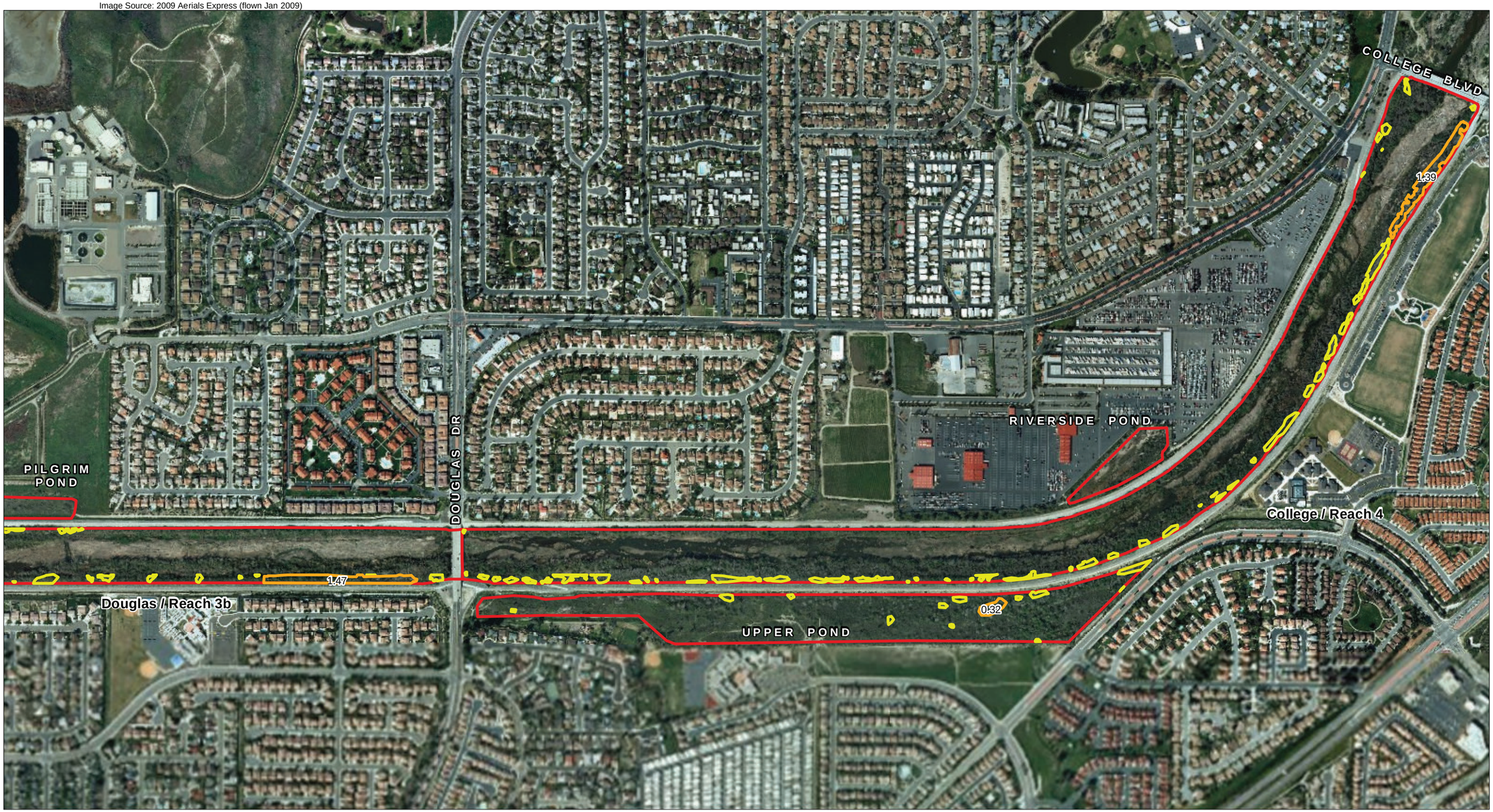
0 Feet 700

FIGURE B

RECON

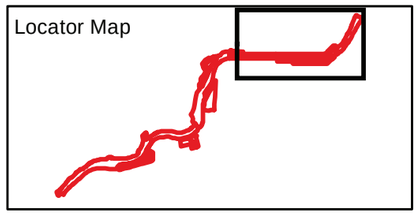
M:\JOBS3\5878\common_gis\figArundoB.mxd 10/18/2010

Image Source: 2009 Aerials Express (flown Jan 2009)



0 Feet 700

Locator Map



Study Area Reaches

Mapped Arrundo Areas

Active Revegetation

Passive Revegetation

FIGURE C

RECON

M:\JOBS3\5878\common_gis\figArundoC.mxd 10/18/2010