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

November 17, 2008

In reply refer to: WPN:08C-056:cloflen

WDID	9 000001817
CIWQS:	
Place	724833
Reg. Measure	350800
Party	297330
Party	73367
Certified Mail:	
70081140000499718559	

Laura Coley Eisenberg
Rancho Mission Viejo
28811 Ortega Highway
San Juan Capistrano, CA 92675

Dear Laura Eisenberg:

SUBJECT: Action on Request for Clean Water Act Section 401 Water Quality Certification for the **Maintenance Activities for Horno Basin Detention Basin and Concrete Channel** Water Quality Certification No. **08C-056**

Enclosed find Clean Water Act Section 401 Water Quality Certification with for discharge to Waters of the U.S. for the Maintenance Activities for Horno Basin Detention Basin and Concrete Channel (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 6.

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 you have accepted and will comply with all the conditions of this Certification.

Failure to comply with all conditions of this Certification may subject you to enforcement actions by the California Regional Water Quality Control Board, San Diego Region (Regional Board), including administrative enforcement orders requiring you to cease and desist from violations, or to clean up waste and abate existing or threatened conditions of pollution or nuisance; administrative civil liability in amounts of up to $10,000 per day per violation; referral to the State Attorney General for injunctive relief; and, referral to the District Attorney for criminal prosecution.

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.

If you have any questions regarding this notification, please contact Chad Loflen directly at 858-467-2727 or by email via cloflen@waterboards.ca.gov.

Respectfully,

JOHN H. ROBERTUS
Executive Officer

Enclosure:

Clean Water Act Section 401 Water Quality Certification No. 08C-056 for Maintenance Activities for Horno Basin Detention Basin and Concrete Channel project, with 6 attachments

cc: Refer to Attachment 2 of Certification 08C-056 for Distribution List.

Linda S. Adams
Acting Secretary for Environmental Protection

California Regional Water Quality Control Board

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

PROJECT: **Maintenance Activities for Horno Basin Detention Basin and Concrete Channel, (Certification Number 08C-056), (WDID Number 9 000001817)**

In reply refer to: WP:08C-057: cloflen

APPLICANT: **Laura Coley Eisenberg**
Rancho Mission Viejo
28811 Ortega Highway
San Juan Capistrano, CA 92675

ACTION:

ACTION: ☐ Order for Low Impact Certification	☐ Order for Denial of Certification
☑ Order for Technically-conditioned Certification	☑ Waiver of Waste Discharge Requirements

PROJECT DESCRIPTION:

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, Rancho Mission Viejo must satisfy the following:

A. GENERAL CONDITIONS:

1. Rancho Mission Viejo must, at all times, fully comply with the engineering plans, specifications and technical reports submitted to the California Regional Water Quality Control Board, San Diego Region (Regional Board), to support this 401 Water Quality Certification (Certification) and all subsequent submittals required as part of this Certification and as described in Attachment 1. The conditions within this Certification must supersede conflicting provisions within such plans submitted prior to the Certification action. Any modifications thereto, would require notification to the Regional Board and reevaluation for individual Waste Discharge Requirements and/or Certification amendment.

2. During maintenance activities, Rancho Mission Viejo must maintain a copy of this Certification at the project site so as to be available at all times to site personnel and agencies.

3. Rancho Mission Viejo must permit the 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.

4. Rancho Mission Viejo must notify the Regional Board within 24 hours of any unauthorized discharge, including hazardous or toxic materials, 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 practice (BMPs) or other measures that will be implemented to prevent future discharges.

5. Rancho Mission Viejo 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 reach waters of the U.S. and/or State.

6. This Certification is not transferable to any person except after notice to the Executive Officer of the Regional Board. Rancho Mission Viejo must also notify the Regional Board of any change in ownership of the project area. Notification must include, but not be limited to, a statement that the property owner has provided the purchaser or transferee with a copy of the Section 401 Water Quality Certification and that the purchaser or transferee understands the permit requirements and must implement them. If the property is sold, the seller and purchaser must sign and date the notification. If the permit is transferred, the permit holder and transferee must sign and date the notification. The notification for transfer of mitigation responsibility shall include a signed statement from the new party demonstrating acceptance and understanding of the responsibility to meet the mitigation conditions and applicable requirements of the Certification. Notification must be provided within **10 days** of the sale and/or transfer of the property.

7. 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.

8. 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 bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

9. 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.

10. Rancho Mission Viejo and successor owners must submit annual progressive reports to the Regional Board on or before **August 1** of each year following the issuance of this Certification. Annual reports must contain a status update for the project including, but not limited to, dates of excavation of material from on-site waters, duration of excavation activities, estimated amount of

material excavated, dates of vegetation removal, and a report on the required annual training for pollution prevention measures, spill response, and BMP implementation and maintenance. Annual Reports must also include requirements pursuant to Condition D.1 of this Certification.

B. PROJECT CONDITIONS:

1. This Certification expires **5 years** from the date of issuance.

2. Prior to the start of the project, and annually thereafter, Rancho Mission Viejo must educate all personnel on the requirements in this Certification, pollution prevention measures, spill response, and BMP implementation and maintenance.

3. Rancho Mission Viejo must notify the Regional Board in writing at least **5 days** prior to the actual commencement of dredge, fill, and discharge activities.

4. Rancho Mission Viejo must comply with the requirements of State Water Resources Control Board Water Quality Order No. 99-08-DWQ, or subsequent reissuance, the NPDES General Permit for Storm Water Discharges Associated with Construction Activity.

5. The treatment, storage, and disposal of wastewater during the life of the project must be done in accordance with waste discharge requirements established by the Regional Board pursuant to CWC § 13260.

6. Discharges of concentrated flow during maintenance activities must not cause downstream erosion or damage to properties or stream habitat.

7. Water containing mud, silt, or other pollutants from equipment washing or other activities, must not be discharged to waters of the United States and/or the State or placed in locations that may be subjected to storm flows. Pollutants discharged to areas within a stream diversion area must be removed at the end of each work day or sooner if rain is predicted.

8. All surface waters, including ponded waters, must be diverted away from areas undergoing grading, construction, excavation, vegetation removal, and/or any other activity which may result in a discharge to the receiving water. Diversion activities must not result in the degradation of beneficial uses or exceedance of water quality objectives of the receiving waters. Any temporary dam or other artificial obstruction constructed must only be built from materials such as clean gravel which will cause little or no siltation. Normal flows must be restored to the affected stream immediately upon completion of work at that location.

9. If maintenance activities are conducted during periods of low flow within the concrete channel, proper BMPs must be implemented to prevent disturbance, introduction and/or entrainment of sediments within surface waters.

10. Substances hazardous to aquatic life including, but not limited to, petroleum products, raw cement/concrete, asphalt, and coating materials, must be prevented from contaminating the soil and/or entering waters of the United States and/or State. BMPs must be implemented to prevent such discharges during each project activity involving hazardous materials.

11. Sediment removal within the detention basin must occur outside of the rainy season (October 01- April 30).

12. Maintenance activities within the channel, outfall structure and rip rap pad must not occur during periods of high flow or during storm flows.

13. Removal of vegetation must occur by hand, mechanically, or using EPA approved herbicides deployed using applicable BMPs to prevent impacts to Beneficial Uses of waters of the State. Removal of vegetation must occur outside of the avian nesting season (March 15- August 31).

C. COMPENSATORY MITIGATION FOR LOSS OF WATERS OF THE U.S./STATE:

1. Mitigation for permanent discharges to the 0.125 acres of vegetated wetlands in the Horno Basin Outfall Structure must be achieved at a 1:1 ratio, by applying 0.125 acres of wetland credits within the Gobernadora Ecological Restoration Area (GERA). Impacts to the Horno Basin detention basin (6.1 acres), concrete channel (1090 linear feet), unvegetated outfall structure and downstream rip rap pad (0.215 acres) from sediment and minor vegetation removal shall be mitigated through the existing habitat values and functions provided by the 13.25 acres of un-credited already existing created/restored wetlands within GERA that are already providing temporal gain and habitat value.

2. Rancho Mission Viejo must restore all areas of temporary impacts and all other areas of temporary disturbance which could result in a discharge or a threatened discharge to waters of the United States/State. Restoration must include grading of disturbed areas to pre-project contours and revegetation with native species. Rancho Mission Viejo must implement all necessary BMPs to control erosion and runoff from areas associated with this project.

3. Prior to start of maintenance activities, Rancho Mission Viejo must provide the Regional Board with verification that 0.125 acres of wetland credits in the GERA Mitigation Bank have been purchased.

4. Within **90 days** of the issuance of this Certification, Rancho Mission Viejo must provide the Regional Board a draft preservation mechanism (e.g. deed restriction, conservation easement, etc.) that will protect all mitigation areas and their buffers in perpetuity. Within one year of the issuance of this Certification, Rancho Mission Viejo must submit proof of a completed preservation mechanism that will protect all mitigation areas and their buffers in perpetuity. **Sediment and/or vegetation removal maintenance activities must not be initiated until a completed preservation mechanism is received.** The conservation easement, deed restriction, or other legal limitation on the mitigation property must be adequate to demonstrate that the site will be maintained without future development or encroachment on the site which could otherwise reduce the functions and values of the site for the variety of beneficial uses of waters of the U.S. that it supports. The legal limitation must prohibit, without exception, all residential, commercial, industrial, institutional, and transportation development, and any other infrastructure development that would not maintain or enhance the wetland and streambed functions and values of the site. The preservation mechanism must clearly prohibit activities that would result in soil disturbance or vegetation removal, other than the removal of non-native vegetation. Other infrastructure development to be prohibited includes, but is not limited to, additional utility lines, maintenance roads, and areas of maintained landscaping for recreation.

5. The construction of proposed mitigation must be concurrent with project maintenance activities and completed no later than **9 months** following the initial discharge of dredge or fill material into on-site waters. Delays in implementing mitigation must be compensated for by an increased mitigation implementation of **10 percent of the cumulative compensatory mitigation** for each month of delay.

6. Regional Board acceptance of the final mitigation plan applies only to the site and plan that mitigates for the Maintenance Activities for Horno Basin Detention Basin and Concrete Channel and must not be construed as approval of the mitigation site or plan for use by other current or future projects that are planning to use the GERA site for mitigation.

7. 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, Rancho Mission Viejo is responsible for repair and replanting of the damaged area(s).

8. Responsible Party Updates: Rancho Mission Viejo must provide the name and contact information of any third party accepting responsibility for implementing the mitigation requirements of this Certification. The notification must be submitted to the Regional Board within 30 days of the transfer of responsibility. The notification must include a signed statement from the new

party demonstrating acceptance and understanding of the responsibility to meet the mitigation conditions and applicable requirements of the Certification.

9. For purposes of this Certification, establishment is defined as the creation of vegetated or unvegetated waters of the U.S./State where the resource has never previously existed (e.g. conversion of nonnative grassland to a freshwater marsh). Restoration is divided into two activities, re-establishment and rehabilitation. Re-establishment is defined as the return of natural/historic functions to a site where vegetated or unvegetated waters of the U.S./State previously existed (e.g., removal of fill material to restore a drainage). Rehabilitation is defined as the improvement of the general suite of functions of degraded vegetated or unvegetated waters of the U.S./State (e.g., removal of a heavy infestation or monoculture of exotic plant species from jurisdictional areas and replacing with native species). Enhancement is defined as the improvement to one or two functions of existing vegetated or unvegetated waters of the U.S./State (e.g., removal of small patches of exotic plant species from an area containing predominantly natural plant species). Preservation is defined as the acquisition and legal protection from future impacts in perpetuity of existing vegetated or unvegetated waters of the U.S./State (e.g., conservation easement).

D. STREAM PHOTO DOCUMENTATION PROCEDURE:

1. Rancho Mission Viejo, and its successors, must conduct photo documentation of the project site, including all areas of permanent impact, on an annual basis prior to and after maintenance activities, and mitigation areas, including all areas of permanent and temporary impact, prior to initial maintenance activities and within **60 days** of expiration of this Certification. Photo documentation must be conducted in accordance with the State Water Resources Control Board Standard Operating Procedure 4.2.1.4: Stream Photo Documentation Procedure, included as Attachment Number 6. In addition, photo documentation must include Geographic Positioning System (GPS) coordinates for each of the photo points referenced. Rancho Mission Viejo must submit this information in a photo documentation report to the Regional Board to be included within each Annual Report. The report must include a compact disc that contains digital files of all the photos (jpeg file type or similar).

E. GEOGRAPHIC INFORMATION SYSTEM REPORTING:

1. Rancho Mission Viejo must submit Geographic Information System (GIS) shape files of the impact and mitigation areas within **30 days** of initial maintenance activities and the mitigation area within **30 days** of initial maintenance activities. 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.

F. REPORTING:

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

2. All reports and information submitted to the Regional Board must be submitted in both hardcopy and electronic format. The preferred electronic format for each report submission is one file in PDF format that is also Optical Character Recognition (OCR) capable.

3. All applications, reports, or information submitted to the Regional Board must be signed and certified 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.

4. A duly authorized representative of a person designated in Items 4.a. through 4.c. above may sign documents if:

    a. The authorization is made in writing by a person described in Items 4.a. through 4.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.

5. All applications, reports, or information submitted to the Regional Board must be signed and 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."

6. Rancho Mission Viejo must submit reports required under this Certification, or other information required by the Regional Board, to:

   Executive Officer
   California Regional Water Quality Control Board
   San Diego Region
   Attn: 401 Certification; Project No. 08C-056
   9174 Sky Park Court, Suite 100
   San Diego, California 92123

6. 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 Date(s)
Annual Report	A.10	On or before August 1st annually
Notification of Initial Maintenance Activities	B.3	at least 5 days prior to the actual commencement of dredge, fill, and discharge activities
Stream Photo Documentation	D.1	To be included within the Annual Report
GIS Requirements	E.1	Within 30 days of initial maintenance activities

PUBLIC NOTIFICATION OF PROJECT APPLICATION:

On August 19, 2008 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:

Chad Loflen
California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123
858-467-2727
cloflen@waterboards.ca.gov

WATER QUALITY CERTIFICATION:

I hereby certify that the proposed discharge from the <Project Name> (Project No. 08C-056) will comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. This discharge is also regulated under State Water Board Order No. 2003-0017-DWQ, "Statewide General Waste Discharge Requirements for Dredged or Fill Discharges that have Received State Water Quality Certification (General WDRs)," which requires compliance with all conditions of this Water Quality Certification. Please note that enrollment under Order No. 2003-017 DWQ is conditional and, should new information come to our attention that indicates a water quality problem, the Regional Board may issue 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
Executive Officer
Regional Water Quality Control Board

11/14/2008
Date

Attachments:

1. Project Information
2. Distribution List
3. Location Map
4. Site Map
5. Mitigation Map
6. Stream Photodocumentation Procedure

ATTACHMENT 1
PROJECT INFORMATION

Applicant:	Laura Coley Eisenberg Rancho Mission Viejo 28811 Ortega Highway San Juan Capistrano, CA 92675 Phone: 949-240-3363 Fax: 949-248-1763 leisenberg@ranchomv.com
Applicant Representatives:	Tony Bomkamp Glenn Lukos Associates 29 Orchard Lake Forest, CA 92630-8300 Phone: 949-837-0404 ext. 41 Fax: 949-837-5834 tbomkamp@wetlandpermitting.com
Project Name:	Maintenance Activities for Horno Basin Detention Basin and Concrete Channel
Project Location:	The project would be located within the Ladera Community, near the interchange of Ortega Highway and Antonio Parkway in Orange County. The site in within the San Juan Creek Watershed in Horno Creek, a tributary to San Juan Creek. Latitude/Longitude: 33°31' 50.38" N - 117°38' 47.39"W
Type of Project:	Maintenance Activities for the Horno Basin Detention Basin, Concrete Channel and Dissipation Structure.
Project Description	The proposed project is maintenance of the Horno Basin detention basin, concrete channel and dissipation structure, which includes sediment removal and minor vegetation removal. The continuing maintenance is required to maintain the flood capacity of the channel, dissipation structure and sediment basin. Maintenance activities to remove sediment and vegetation to maintain flood capacity would result in permanent impacts to 0.125 acres of the 0.34 acre dissipation structure in Horno Creek. Impacts from sediment removal and minor vegetation removal will occur in the concrete section of Horno Creek (1090 linear feet), and the sediment basin (6.1 acres). Removal of vegetation must occur outside of the avian nesting season (March 15- August 31), and sediment removal activities in the sediment basin will not occur during the rainy season (October 01 to April 30). Maintenance activities will not take place within Horno Creek during periods of high flow or storm flows.

Federal Agency/Permit:	U.S. Army Corps of Engineers §404, NWP 31
Other Required Regulatory Approvals:	California Department of Fish and Game Streambed Alteration Agreement
California Environmental Quality Act (CEQA) Compliance:	The County of Orange Issued a Notice of Determination on August 07, 1998
Receiving Water:	Ortega HSA 901.28
Affected Waters of the United States:	Permanent: Wetland: 0.125 acres Maintenance Impacts: Unvegetated Streambed: 1090 linear feet Sediment Basin: 6.1 acres Unvegetated Dissipation Outfall Structure: 0.215 acres
Dredge Volume:	n/a
Related Projects Implemented/to be Implemented by the Applicant(s):	Past: The Ladera Ranch Project (finished in 2003) Future: Rancho Mission Viejo Ranch Plan Planning Area 1 (2.65 acres), 401 Certification/WDR R9-2006-0104
Compensatory Mitigation:	Mitigation for permanent discharges to the 0.125 acres of vegetated wetlands in the Horno Basin Outfall Structure will be achieved by applying 0.125 acres of wetland credits within the Gobernadora Ecological Restoration Area (GERA). Impacts to the Horno Basin detention basin, concrete channel, unvegetated outfall structure and downstream rip rap pad shall be mitigated through the existing habitat values and functions provided by the 13.25 acres of un-credited already existing created/restored wetlands within GERA that are already providing temporal gain and habitat value. Areas of temporary impact will be restored to pre-project conditions.

Best Management Practices (BMPs):	Equipment shall be cleaned and repaired (other than emergency repairs) at least 500 feet from waters of the United States. All contaminated water, sludge, spill residue or hazardous compounds from said activities shall be disposed of at a lawfully authorized and designated site. Rancho Mission Viejo shall implement appropriate BMPs to prevent the introduction of pollutants and downstream transport of sediment if sediment removal activities occur during periods of low flow within the concrete channel. If flows are present in the concrete channel, proper tracking control BMPs must be implemented for vehicles crossing the concrete channel. Substances hazardous to aquatic life including, but not limited to, petroleum products, raw cement/concrete, asphalt, and coating materials, must be prevented from contaminating the soil and/or entering waters of the United States and/or State. BMPs must be implemented to prevent such discharges during each project activity involving hazardous materials Equipment and vehicles must be staged outside of the concrete channel, detention basin and dissipation outfall structure. All maintenance vehicles and equipment will be maintained in proper working order (i.e. free from leaks). Sediments may be temporarily stored within the detention basin during maintenance periods. Rancho Mission Viejo shall implement appropriate erosion control BMPs for any temporarily stored sediment.
Public Notice:	On August 19, 2008 receipt of the project application was posted on the San Diego Regional Water Quality Control Board (Regional Board) web site to serve as appropriate notification to the public.
Fees:	Total Due: $16,109.00 Total Paid: $16,109 (check No. 30845 & 31108) Remaining Due: $0

ATTACHMENT 2
DISTRIBUTION LIST

cc (via e-mail only):

Tony Bomkamp
Glenn Lukos Associates
29 Orchard
Lake Forest, CA 92630-8300
tbomkamp@wetlandpermitting.com

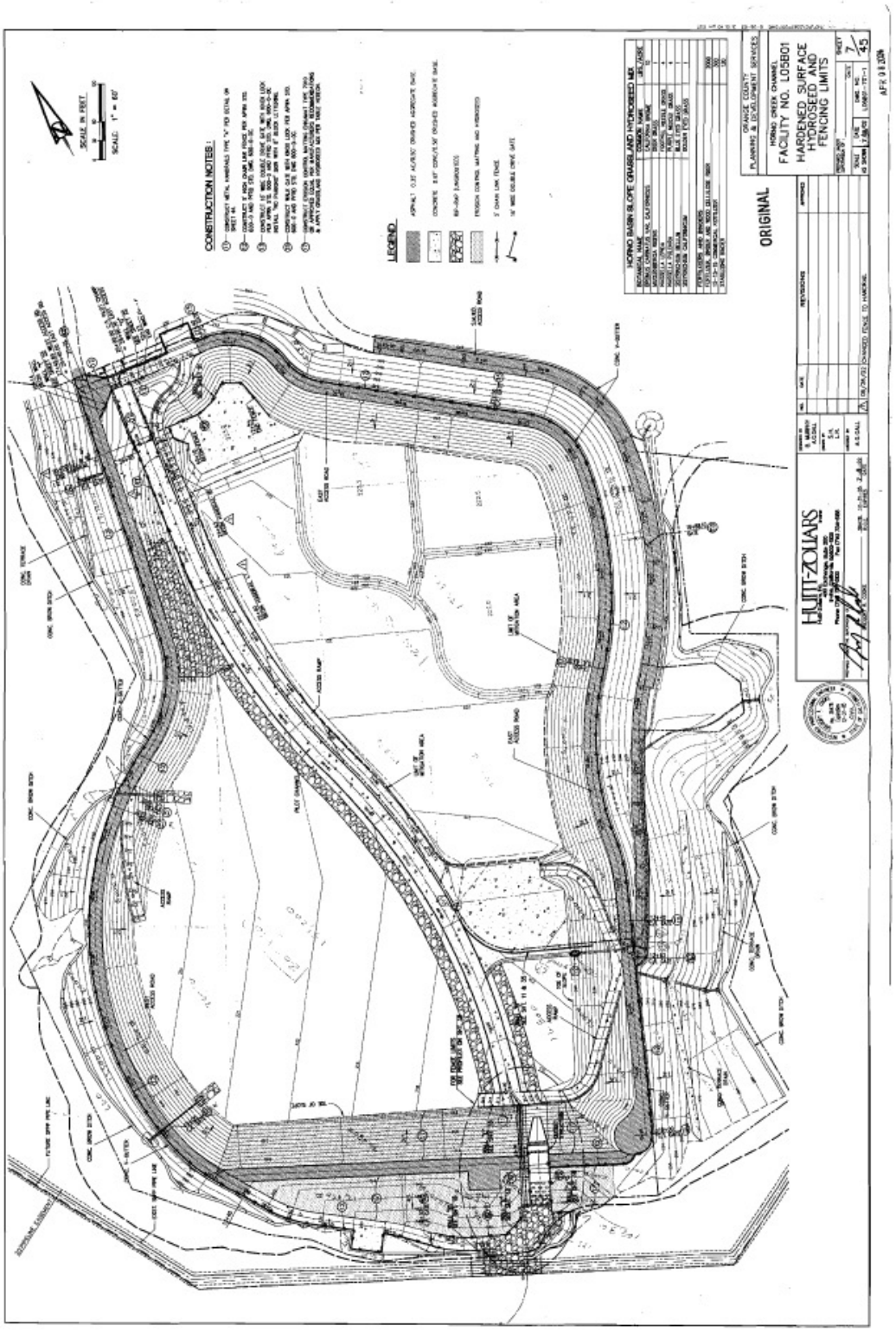
Jae Chung
U.S. Army Corps of Engineers, Regulatory Branch
Los Angeles Office
P.O. Box 532711
Los Angeles, CA 90053-2325
Yong.J.Chung@usace.army.mil

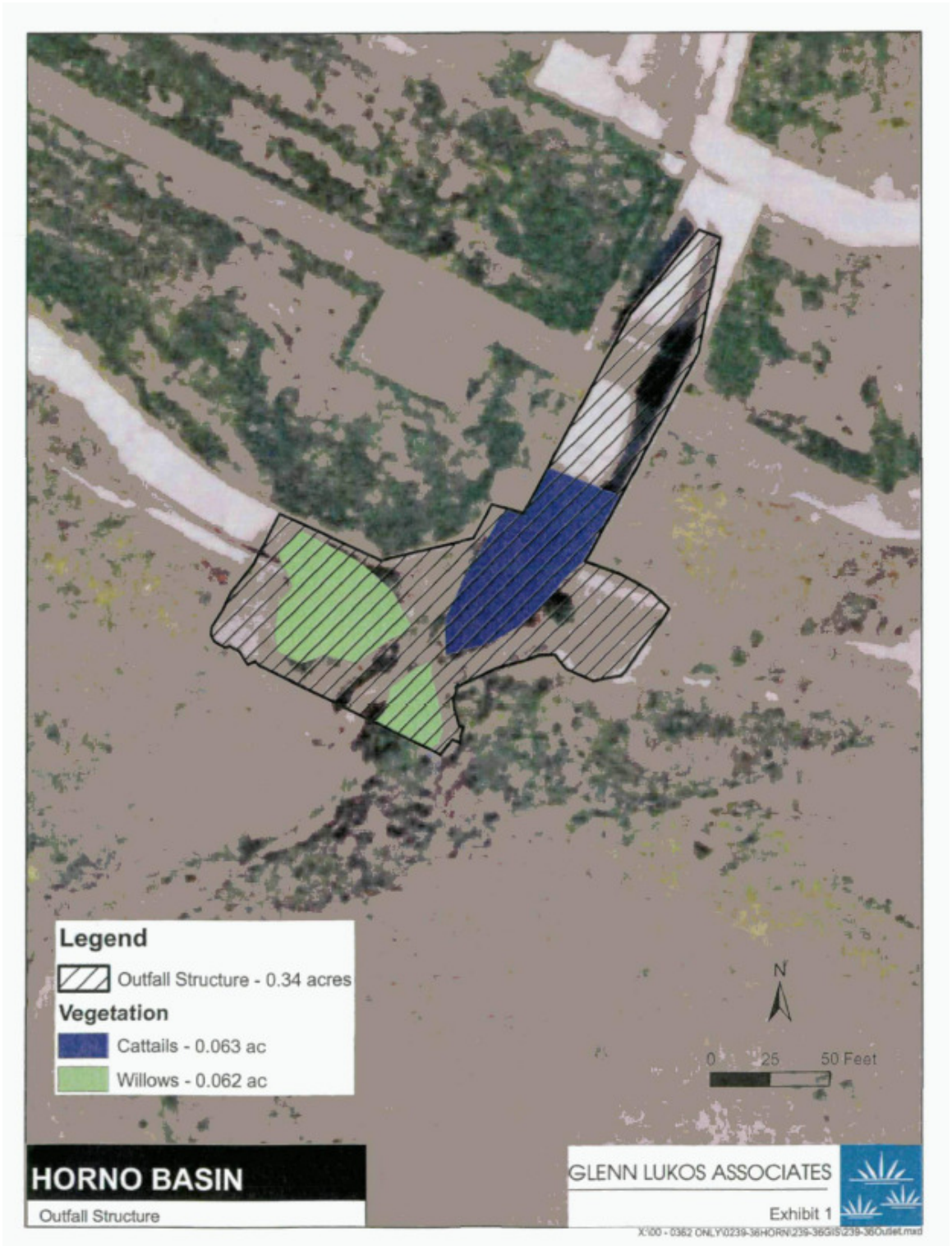
Tamara Spear
California Department of Fish and Game
South Coast Region
Habitat Conservation Planning – South
4949 Viewridge Avenue
San Diego, CA 92123
tspear@dfg.ca.gov

State Water Resources Control Board, Division of Water Quality
401 Water Quality Certification and Wetlands Unit
Attn: Bill Orme
P.O. Box 100
Sacramento, CA 95812-0100
borme@waterboards.ca.gov

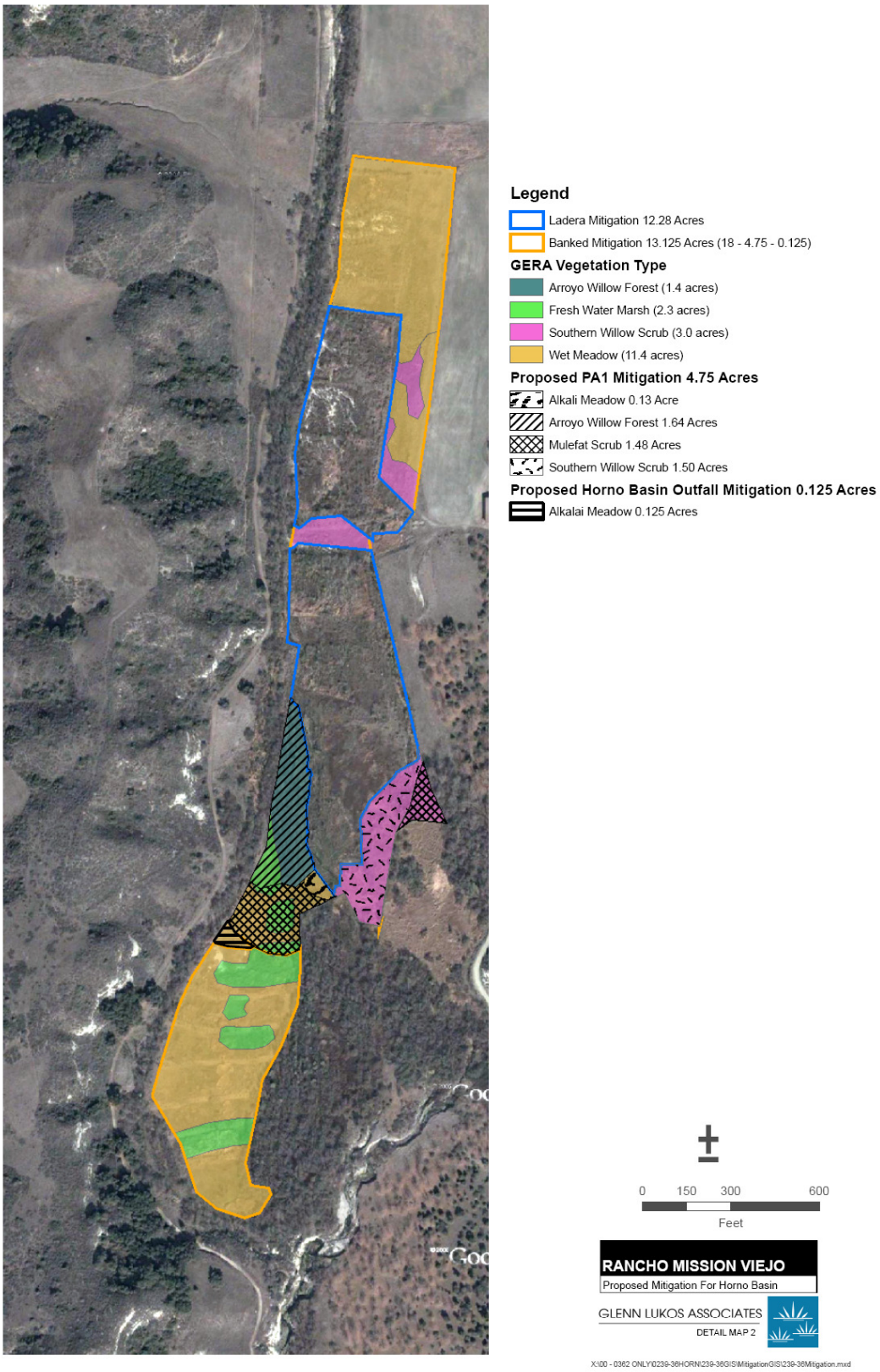
ATTACHMENT 3
PROJECT LOCATION

ATTACHMENT 4
SITE MAP




Legend
Outfall Structure - 0.34 acres
Vegetation
Cattails - 0.063 ac
Willows - 0.062 ac
N
0
25
50 Feet
HORNO BASIN
Outfall Structure
GLENN LUKOS ASSOCIATES
Exhibit 1

ATTACHMENT 5
MITIGATION MAP



ATTACHMENT 6
STREAM PHOTO DOCUMENTATION PROCEDURES

Standard Operating Procedure (SOP)

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 characteristics. A complete equipment list is suggested as follows:

<u>Required:</u>
- 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

<u>Optional:</u>

- 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

How to Access Aerial Photographs:

Aerial Photos can be obtained from the following federal agencies:

USGS Earth Science Information Center
507 National Center
12201 Sunrise Valley Drive
Reston, VA 22092
800-USA-MAPS

USDA Consolidated Farm Service Agencies
Aerial Photography Field Office
222 West 2300 South
P.O. Box 30010
Salt Lake City, UT 84103-0010
801-524-5856

Cartographic and Architectural Branch
National Archives and Records Administration
8601 Adelphi Road
College park, MD 20740-6001
301-713-7040

Roles and Duties of Team:

The team should be comprised of a minimum of two people, and preferably three people for restoration or other water quality improvement projects, as follows:
1. Primary Photographer
2. Subject, target for centering the photo and providing scale
3. Person responsible for determining geographic position and holding the photo sign forms or blackboard.

One of these people is also responsible for taking field notes to describe and record photos and photo points.

Safety Concerns:

Persons involved in photo monitoring should **ALWAYS** put safety first. For safety reasons, always have at least two 2 volunteers for the survey. Make sure that the

area(s) you are surveying either are accessible to the public or that you have obtained permission from the landowner prior to the survey.

Some safety concerns that may be encountered during the survey include, but are not limited to:

- Inclement weather
- Flood conditions, fast flowing water, or very cold water
- 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.

Recording Information:

Use a systematic method of recording information about each project, photo point, and photo. The following information should be entered on the photo-log forms (blank form included in this document) or in a dedicated notebook:

- Project or group name, and contract number (if applicable, e.g., for funded restoration projects)
- General location (stream, beach, city, etc.), and short narrative description of project's habitat type, goals, etc.
- Photographer and other team members
- Photo number
- Date
- Time (for each photograph)
- Photo point information, including:
    - Name or other unique identifier (abbreviated name and/or ID number)
    - Narrative description of location including proximity to and direction from notable landscape features like roads, fence lines, creeks, rock outcrops, large trees, buildings, previous photo points, etc. – sufficient for future photographers who have never visited the project to locate the photo point
    - Latitude, longitude, and altitude from map or GPS unit
- Magnetic compass bearing from the photo point to the subject
- Specific information about the subject of the photo
- Optional additional information: a true compass bearing (corrected for declination) from photo point to subject, time of sunrise and sunset (check newspaper or almanac), and cloud cover.

For ambient monitoring, the stream and shore walk form should be attached or referenced in the photo-log.

When monitoring the implementation of restoration, fuel reduction, or Best Management Practices (BMP) projects, include or attach to the photo-log a narrative description of observable progress in achieving the goals of the project. Provide supplementary information along with the photo, such as noticeable changes in habitat, wildlife, and water quality and quantity.

Archive all photos, along with the associated photo-log information, in a protected environment.

The Photo Point: Establishing Position of Photographer:

1. Have available a variety of methods for establishing position: maps, aerial photos, GPS, permanent markers and landmarks, etc. If the primary method fails (e.g., a GPS or lost marker post) then have an alternate method (map, aerial photo, copy of an original photograph of the photo-point, etc).

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.

4. Event monitoring refers to any unusual or sporadic conditions encountered during a stream or shore walk, such as trash dumps, turbidity events, oil spills, etc. Photograph and record information on your photo-log and on your Stream and Shore Walk Visual Assessment form. Report pollution events to the Regional Board. Report trash dumps to local authorities.

All Restoration and Fuel Reduction Projects – Time Series:

Take photos immediately before and after construction, planting, or vegetation removal. Long term monitoring should allow for at least annual photography for a minimum of three years after the project, and thereafter at 5 years and ten years.

Meadow Restoration:

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

2. In the absence of an aerial view, a landscape, long view showing an overlapping sequence of photos illustrating a long reach of stream and meadow (satellite photos, or hill close by, fly-over, etc.)

3. Long view up or down the longitudinal dimension of the creek showing riparian vegetation growth bounded on each side by grasses, sedges, or whatever that is lower in height

4. Long view of conversion of sage and other upland species back to meadow vegetation

5. Long view and medium view of streambed changes (straightened back to meandering, sediment back to gravel, etc.)

6. Medium and close views of structures, plantings, etc. intended to induce these changes

Stream Restoration/stabilization:

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 up or down the stream (from stream level) showing changes in the stream bank, vegetation, etc.

4. Long view and medium view of streambed changes (thalweg, gravel, meanders, etc.)

5. Medium and close views of structures, plantings, etc. intended to induce these changes.

6. Optional: Use a tape set perpendicular across the stream channel at fixed points and include this tape in your photos described in 3 and 4 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.

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- LOG FORM

Project:
Location:
Date:
Photographer:
Team members:

Photo #	Time	Photo Point ID	Photo Pt. Description & Location	Bearing to Subject	Subject Description

General Notes or Comments (weather, cloud cover, time of sunrise and sunset, other pertinent information):

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: