



California Regional Water Quality Control Board San Diego Region



Linda S. Adams
Secretary for
Environmental Protection

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

Arnold Schwarzenegger
Governor

9174 Sky Park Court, Suite 100, San Diego, California 92123-4353
(858) 467-2952 • Fax (858) 571-6972
[http:// www.waterboards.ca.gov/sandiego](http://www.waterboards.ca.gov/sandiego)

October 5, 2010

In reply refer to:
755818: cloflen

Dan Ferons
Santa Margarita Water District
26111 Antonio Parkway
Rancho Santa Margarita, CA 92688

Dear Mr. Ferons:

Subject: Action on Request for Clean Water Act Section 401 Water Quality Certification for the **Plano Foremain Protection and Emergency Berm Restoration Project** Water Quality Certification No. **10C-069**

Enclosed find Clean Water Act Section 401 Water Quality Certification for discharge to Waters of the U.S. and acknowledgment of enrollment under State Water Resources Control Board Order No. 2003-017 DWQ for the **Plano Foremain Protection and Emergency Berm Restoration Project** (Project). A description of the project and project location can be found in the project information sheet, location map, and site maps, which are included as Attachments 1 through 5.

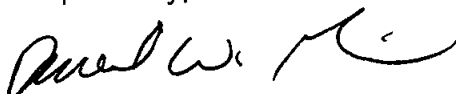
Any petition for reconsideration of this Certification must be filed with the State Water Resources Control Board within 30 days of certification action (23 CCR § 3867). If no petition is received, it will be assumed that you have accepted and will comply with all the conditions of this Certification.

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, 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.

California Environmental Protection Agency

In the subject line of any response, please include the requested **"In reply refer to:"** information located in the heading of this letter. For questions pertaining to the subject matter, please contact Chad Loflen at (858) 467-2727 or cloflen@waterboards.ca.gov.

Respectfully,



DAVID W. GIBSON
Executive Officer

Enclosures:

Clean Water Act Section 401 Water Quality Certification No. 10C-069 for the Plano Foremain and Emergency Berm Restoration Project, with 5 attachments

cc: Refer to Attachment 2 of Certification 10C-069 for Distribution List.

| Tech Staff Info & Use | |
|-----------------------|------------|
| File No. | 10C-069 |
| WDID | 9000002124 |
| Reg. Measure ID | 375377 |
| Place ID | 755818 |
| Party ID | 43348 |
| Person ID | 524069 |

**ATTACHMENT 2
E-MAIL DISTRIBUTION LIST**

Jason Lambert
U.S. Army Corps of Engineers, Regulatory Branch
jason.p.lambert@usace.army.mil

Russell Barabe
California Department of Fish and Game, San Diego
rbarabe@dfg.ca.gov

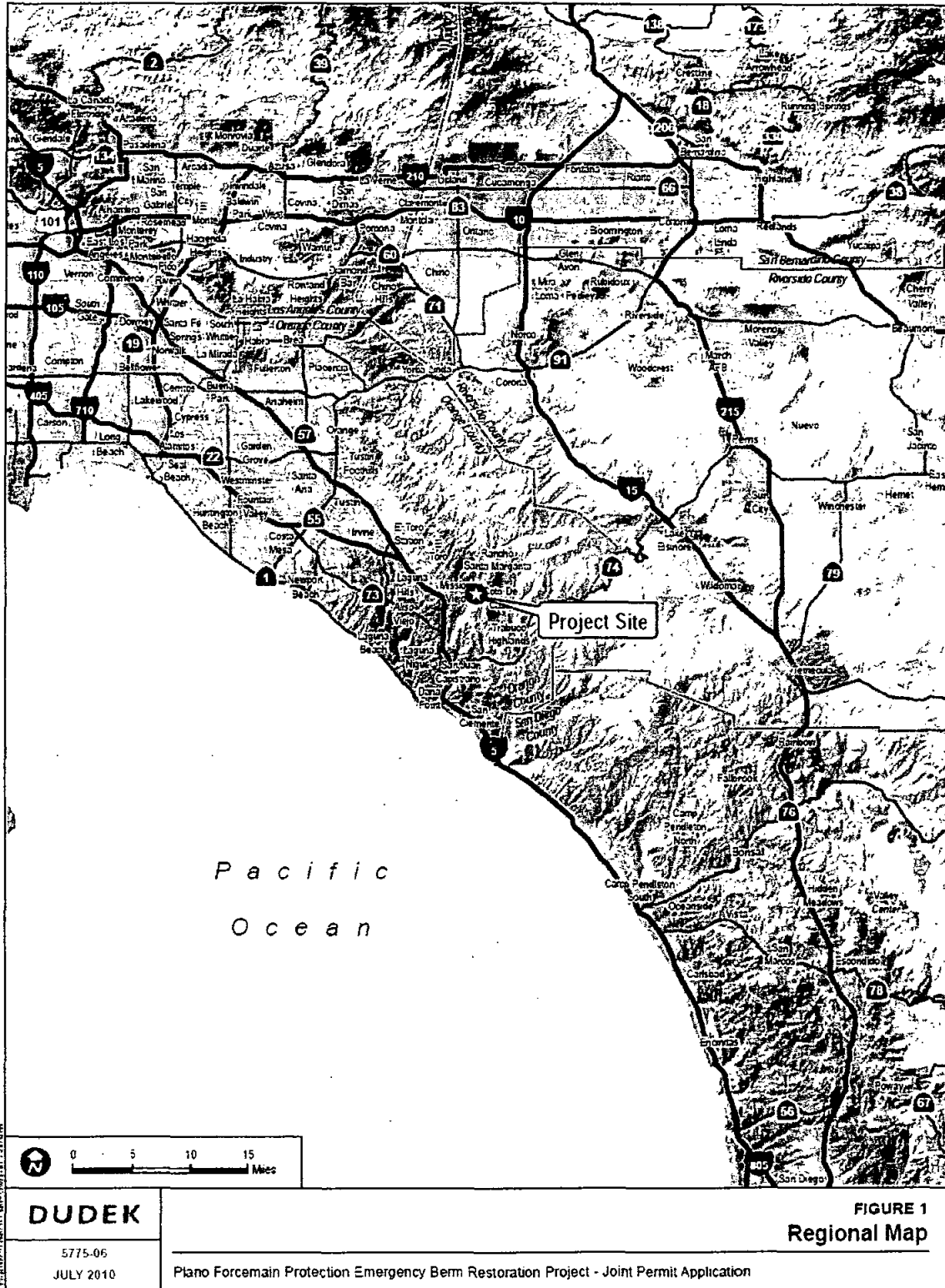
USEPA, Region 9
R9-WTR8-Mailbox@epa.gov

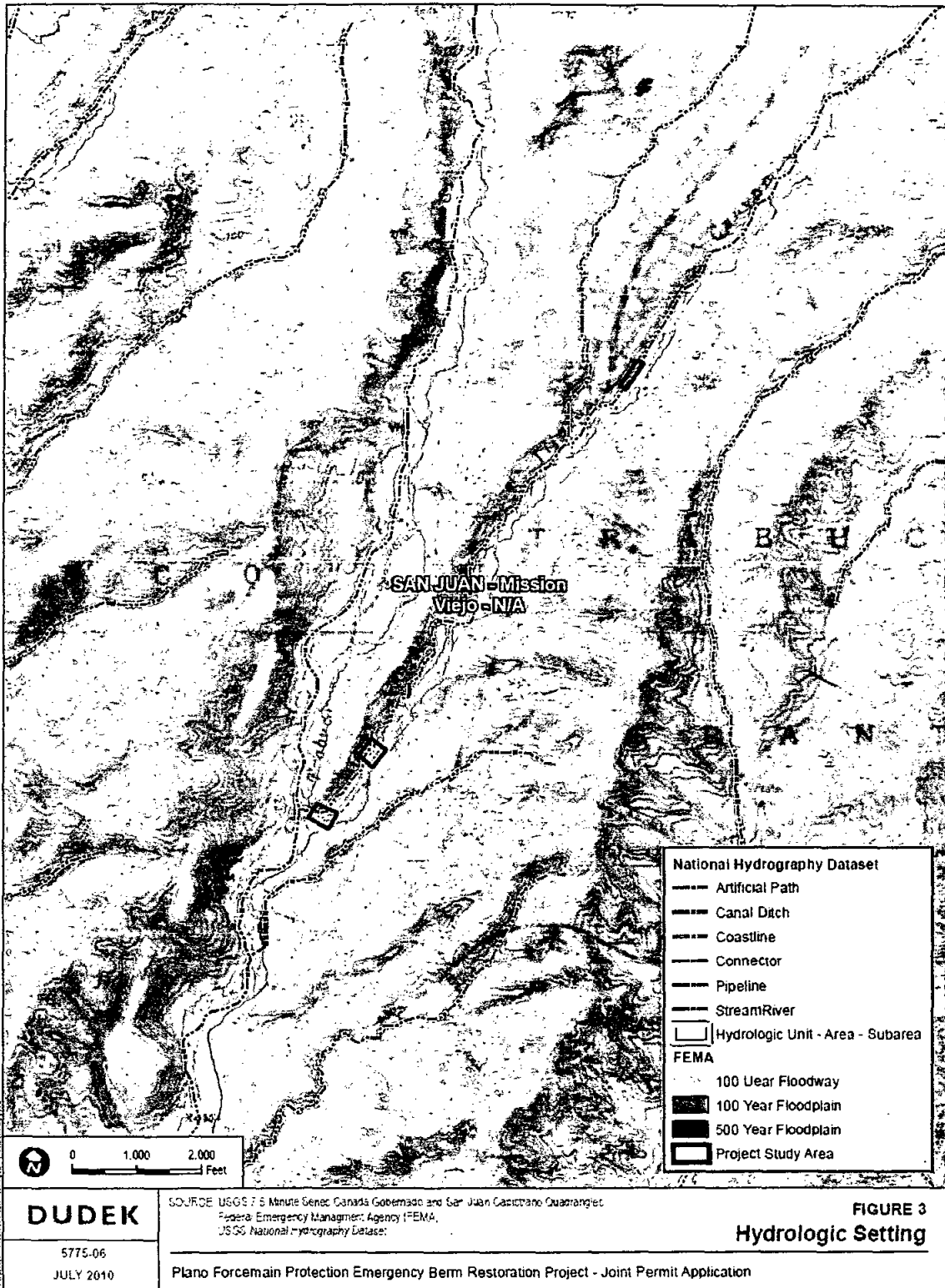
State Water Resources Control Board, Division of Water Quality
401 Water Quality Certification and Wetlands Unit
Stateboard401@waterboards.ca.gov

Vipul Joshi
Dudek
vjoshi@dudek.com

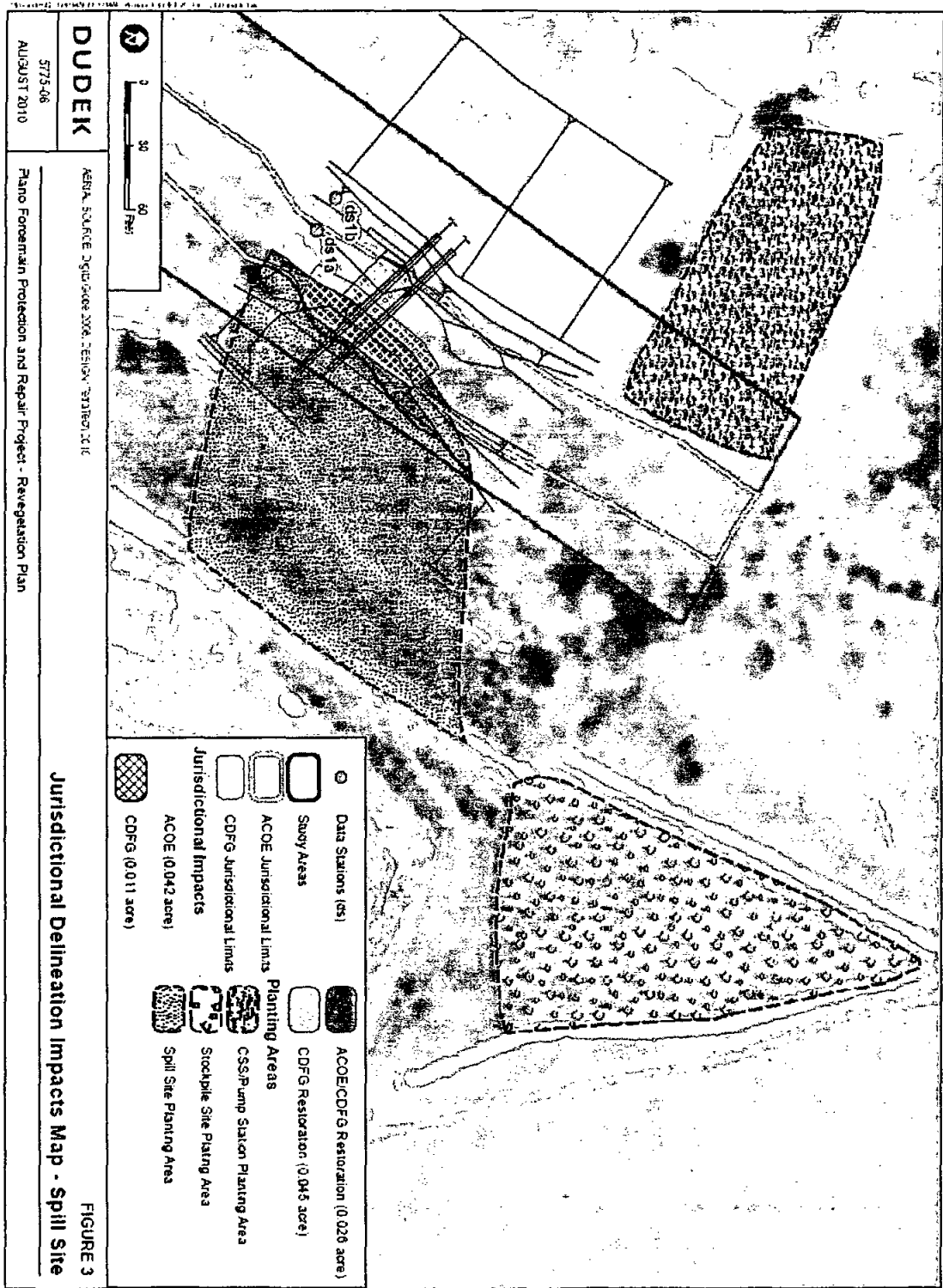
Chris Means
California Regional Water Quality Control Board – San Diego Region
cmeans@waterboards.ca.gov

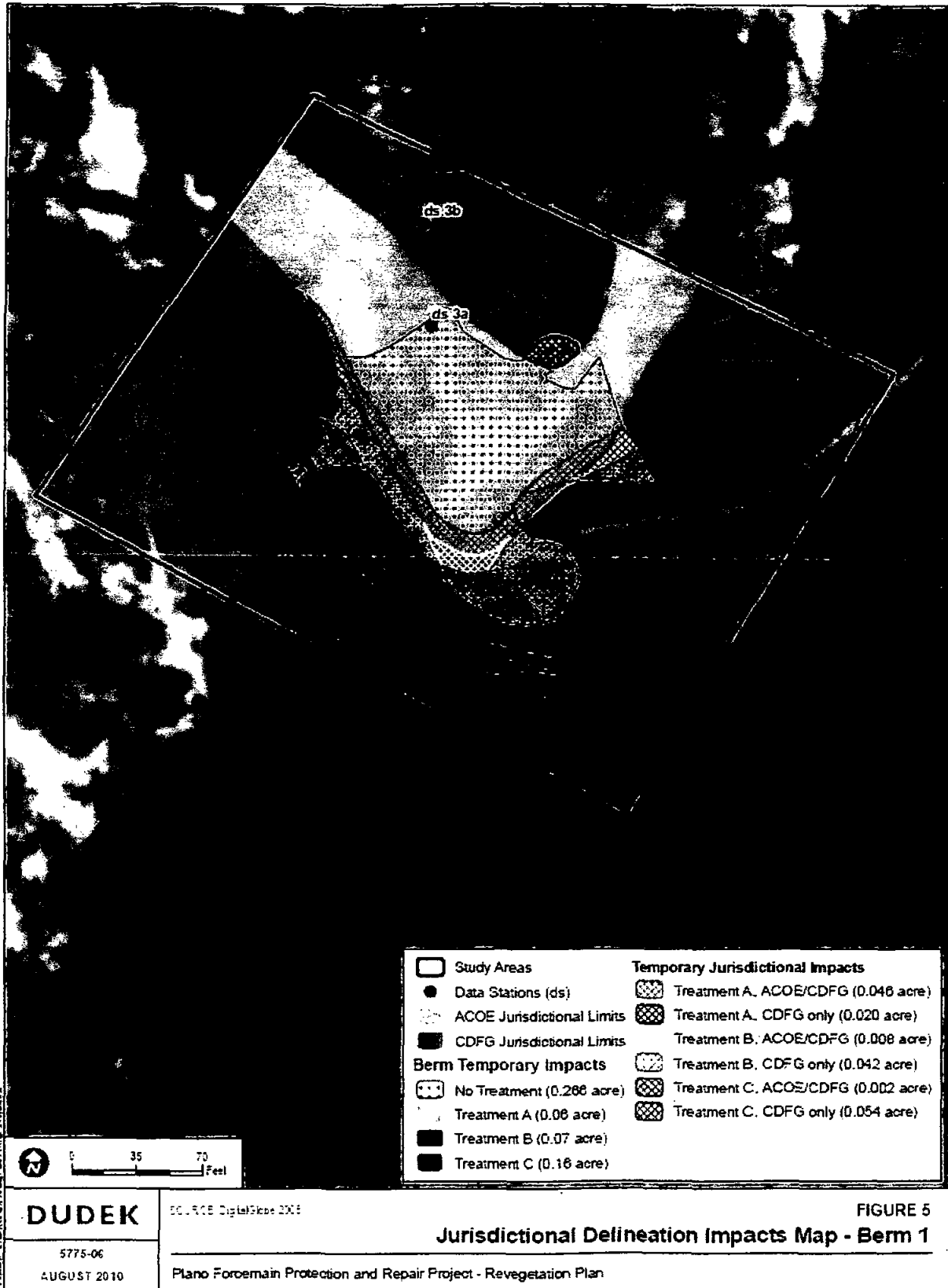
ATTACHMENT 3 PROJECT LOCATION

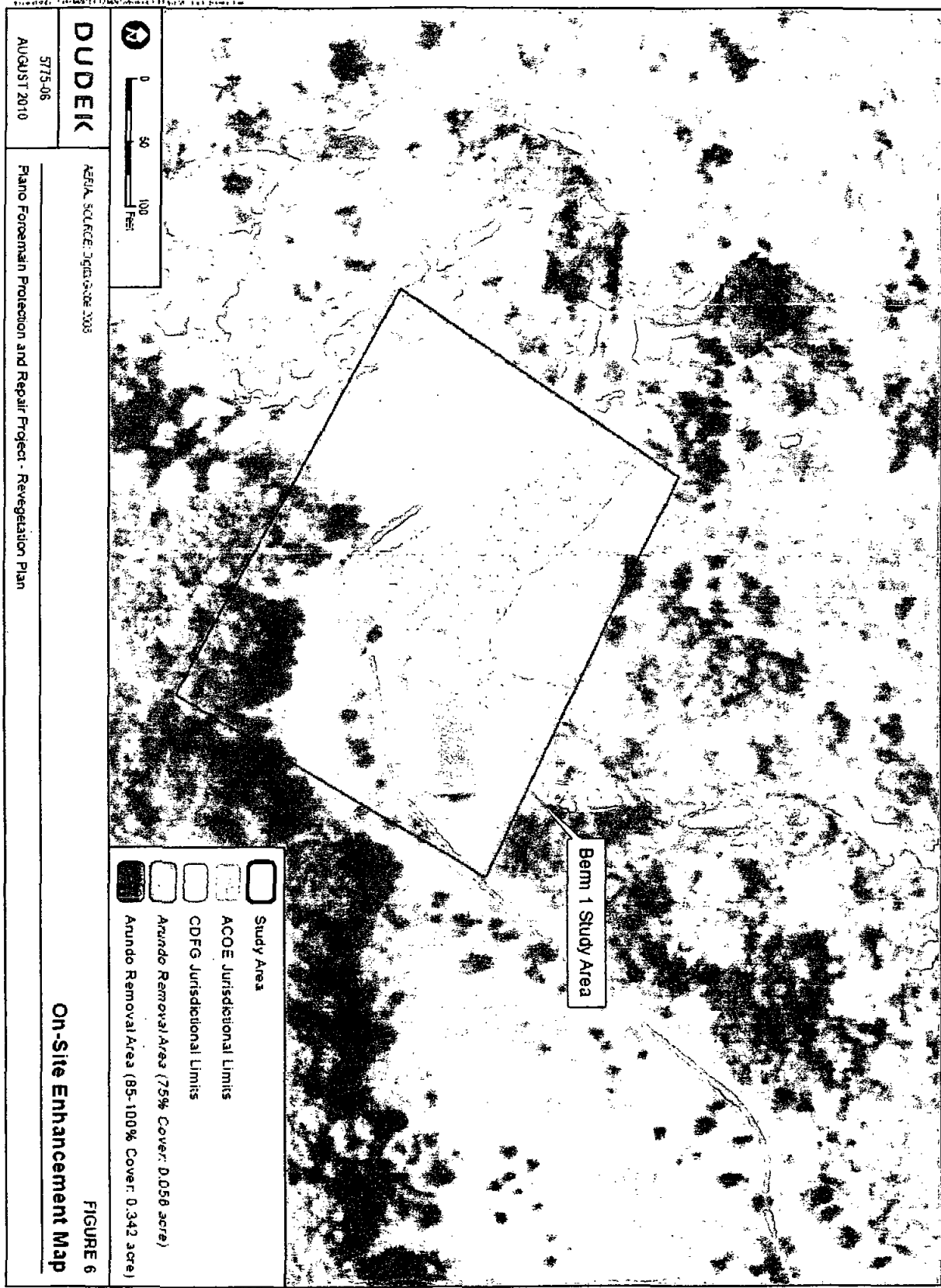




ATTACHMENT 4
SITE AND MITIGATION MAPS









California Regional Water Quality Control Board San Diego Region



Linda S. Adams
Secretary for
Environmental Protection

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

Arnold Schwarzenegger
Governor

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

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: Plano Forcemain Protection and
Emergency Berm Restoration Project,
Certification Number (10C-069)
WDID: 9 000002124

APPLICANT: Dan Ferons
Santa Margarita Water District
26111 Antonio Parkway
Rancho Santa Margarita, CA 92688

| |
|---|
| CIWQS Reg. Meas. ID: 375377 Place ID: 755818 Party ID: 43348 |
|---|

ACTION:

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

PROJECT DESCRIPTION:

The project will install protective rock materials between and downstream of two adjacent pipeline crossings within Tijeras Creek, as well as restore a downstream site that was bermed due to a sewage spill into Tijeras Creek. The berm restoration will also involve upstream bio-engineering bank stabilization. The placement of protective rock fill at the pipeline location will result in 0.039 acres (75 linear feet) of permanent impacts. The restoration of the berm and upstream channel bio-engineering stabilization will result in .046 acres of permanent impacts (buried boulders), and 0.24 acres (195 linear feet) of temporary impacts. Tijeras Creek currently suffers from severe hydromodification, and on-going active bank erosion has exposed the pipeline, which has created a check point within the Creek, further exacerbating downstream erosion.

California Environmental Protection Agency

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at <http://www.swrcb.ca.gov>.

Recycled Paper



CHON\NF\01

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 Santa Margarita Water District must satisfy the following:

A. GENERAL CONDITIONS:

1. The Santa Margarita Water District 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 (San Diego Water 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 San Diego Water Board and reevaluation for individual Waste Discharge Requirements and/or Certification amendment.
2. During construction, the Santa Margarita Water District 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. The Santa Margarita Water District must permit the San Diego Water 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. The Santa Margarita Water District must notify the San Diego Water 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. The Santa Margarita Water District 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 in its entirety or in part to any person except after notice to the Executive Officer of the San Diego Water Board in accordance with the following terms.
 - a. **Transfer of Property Ownership:** The Santa Margarita Water District must notify the San Diego Water Board of any change in ownership of the project area. Notification of change in ownership must include, but not be limited to, a statement that the Santa Margarita Water District has provided the purchaser with a copy of the Section 401 Water Quality Certification and that the purchaser understands and accepts the certification requirements and the obligation to implement them or be subject to liability for failure to do so; the seller and purchaser must sign and date the notification and provide such notification to the Executive officer of the San Diego Water Board within **10 days** of the transfer of ownership.

 - b. **Transfer of Mitigation Responsibility:** Any notification of transfer of responsibilities to satisfy the mitigation requirements set forth in Section D shall include a signed statement from an authorized representative of the new party (transferee) demonstrating acceptance and understanding of the responsibility to comply with and fully satisfy the mitigation conditions and agreement that failure to comply with the mitigation conditions and

associated requirements may subject the transferee to enforcement by the San Diego Water Board under Water Code section 13385, subdivision (a). Notification of transfer of responsibilities meeting the above conditions must be provided to the San Diego Water Board within **10 days** of the transfer date.

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 San Diego Water 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 San Diego Water 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 San Diego Water Board may add to or modify the conditions of this Certification as appropriate to ensure compliance.
10. The Santa Margarita Water District and successor owners must submit annual progress reports to the San Diego Water Board prior to **August 1** of each year following the issuance of this Certification until the project has reached completion.

B. PROJECT CONDITIONS:

1. Prior to the start of the project, and annually thereafter, the Santa Margarita Water District must educate all personnel on the requirements in this Certification, pollution prevention measures, spill response, and BMP implementation and maintenance.
2. The Santa Margarita Water District must comply with the requirements of State Water Resources Control Board Water Quality Order No. 2003-0017-DWQ, Statewide General Waste Discharge Requirements for discharges of dredged or fill material that have received State Water Quality Certification. These General Waste Discharge Requirement are accessible at:
http://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/general

orders/go_wdr401regulated_projects.pdf.

3. The Santa Margarita Water District must notify the San Diego Water Board in writing at least **5 days** prior to the actual commencement of dredge, fill, and discharge activities.
4. The Santa Margarita Water District must comply with the requirements of State Water Resources Control Board Water Quality Order No. 2009-09-DWQ, and any subsequent re-issuance as applicable, 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 San Diego Water Board pursuant to CWC § 13260.
6. Discharges of concentrated flow during construction or after completion 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. 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.
10. All areas that will be left in a rough graded state must be revegetated with native species no later than one week after completion of grading. The revegetation palette must not contain any plants listed on the California Invasive Plant Council Invasive Plant Inventory, which can be found online at <http://www.cal-ipc.org/ip/inventory/weedlist.php>.

11. 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 0.039 acres (75 linear feet) of un-vegetated waters of the United States associated with the pipeline protection, as well as permanent (0.046 acres) and temporary discharges (0.24 acres, 195 linear feet) to un-vegetated waters of the United States from the berm restoration (see Attachment 4) must be achieved as described in Attachment 1 and the Conceptual Revegetation Plan for the Santa Margarita Water District Plano Forcemain Repair and Protection Project, prepared by Dudek and dated September 2010. Mitigation must be achieved on-site and downstream as follows:
 - a. Through the restoration of 0.06 acres of vegetated waters of the United States at the berm site via bio-engineering and stream stabilization of an existing portion of the berm site.
 - b. Through restoration of all impacts associated with the berm placement (0.24 acres).
 - c. Through the restoration of grade at the pipeline crossing, including re-creation of a pool downstream of the pipeline protection area.
 - d. Through the enhancement of 0.398 acres of streambed/riparian habitat (waters of the United States) downstream of the berm restoration site.
2. The Santa Margarita Water District must submit a Final Habitat Mitigation and Monitoring Plan **prior to commencement of** Project construction.
3. The Santa Margarita Water District 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. The Santa Margarita Water District must implement all necessary BMPs to control erosion and runoff from areas associated with this project.
4. The Santa Margarita Water District must notify the San Diego Water Board in writing at least **5 days** prior to the actual commencement of mitigation installation, and completion of mitigation installation.

5. The Santa Margarita Water District must salvage leaf litter, coarse woody debris, and upper soil horizons from impacted jurisdictional water sites that are relatively free of invasive exotic species for use in on-site mitigation areas.
6. The Santa Margarita Water District must also salvage large cuttings from appropriate tree species if they exist at the impact site and use them as pole plantings at the mitigation site.
7. The Santa Margarita Water District must submit an as-built report (including topography maps and planting locations) to the San Diego Water Board within the **first Mitigation and Monitoring Report (see Condition C.13)** following completion of mitigation site preparation and planting, describing the as-built status of the mitigation project.
8. The Santa Margarita Water District is responsible for maintaining grade control rock installed at the pipeline crossing. Rock utilized for grade control must be adequately interlocked and keyed into the stream banks to prevent downstream washout. The Santa Margarita Water District must repair, remove and mitigate for any failed grade control, including downstream rock washouts. The grade control must be designed to:
 - a. Allow for fish and wildlife passage during storm events.
 - b. Not impede storm flows.
 - c. Not exacerbate downstream erosion.
9. The construction of proposed mitigation must be concurrent with project grading 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.
10. Throughout the mitigation monitoring program 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.
11. San Diego Water Board acceptance of the mitigation plan applies only to the site and plan that mitigates for the Plano Forcemain Protection and Emergency Berm Restoration Project 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 Project site for mitigation.

12. 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 Santa Margarita Water District is responsible for repair and replanting of the damaged area(s).
13. Mitigation monitoring reports must be submitted annually until mitigation has been deemed successful. Annual monitoring reports must be submitted prior to **December 1** of each year. 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, including at a minimum;
 - c. Topographic complexity characteristics at each mitigation site;
 - d. Upstream and downstream habitat and hydrologic connectivity;
 - e. Source of hydrology;
 - f. Width of native vegetation buffer around the entire mitigation site;
 - g. Qualitative and quantitative comparisons of current mitigation conditions with *pre-construction conditions and previous mitigation monitoring results*;
 - h. Photodocumentation from established reference points;
 - i. A Survey report documenting boundaries of mitigation area; and
 - j. Other items specified in the final mitigation and monitoring plan.
14. 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.
15. 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. The Santa Margarita Water District, and its successors, must conduct photo documentation of the project site, including all areas of permanent and temporary impact, prior to and after project construction, and mitigation areas, including all areas of permanent and temporary impact, prior to and after project construction. 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 (5). In addition, photo documentation must include Geographic Positioning System (GPS) coordinates for each of the photo points referenced. The Santa Margarita Water District must submit this information in a photo documentation report to the San Diego Water Board with the **Mitigation and Monitoring reports (see Condition C.13)**. 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. The Santa Margarita Water District must submit Geographic Information System (GIS) shape files of the impact and mitigation areas within the **first Mitigation and Monitoring Report (see Condition C.13)** following 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.

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 San Diego Water Board for failure to furnish requested information pursuant to CWC section 13268.
2. All reports and information submitted to the San Diego Water 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. The Santa Margarita Water District must submit an as-built report to the San Diego Water Board within the **Final Project Annual Report (see Condition A.10)** following completion of the project. The report should include as-built drawings no bigger than 11" x 17", and include photos of the completed project.

4. All applications, reports, or information submitted to the San Diego Water 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.
5. 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 San Diego Water Board Executive Officer.
6. All applications, reports, or information submitted to the San Diego Water 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."
7. The Santa Margarita Water District must submit reports required under this Certification, or other information required by the San Diego Water Board, to:

Executive Officer
California Regional Water Quality Control Board
San Diego Region
Attn: 401 Certification; Project No. 10C-069
9174 Sky Park Court, Suite 100
San Diego, California 92123

8. Required Reports: The following list summarizes the reports required per the conditions of this Certification to be submitted to the San Diego Water Board.

| Report Topic | Certification Condition | Due Date(s) |
|--------------------------------------|-------------------------|--|
| Unauthorized Discharge | A.4 | Within 24 Hours |
| Certification Transfer | A.6 | Within 10 Days of Transfer |
| Annual Progress Reports | A.10 | August 01 Annually |
| Commencement of Fill | B.3 | 5 Days Prior |
| Final Mitigation and Monitoring Plan | C.2 | Prior to Construction |
| Mitigation Commencement | C.4 | 5 days Prior |
| Mitigation As-Builts | C.7 | First Mitigation and Monitoring Report |
| Mitigation Annual Reports | C.13 | December 01 Annually |
| Stream Photo Documentation | D.1 | Mitigation and Monitoring Reports |
| GIS Reporting | E.1 | First Mitigation and Monitoring Report |
| Project As-Builts | F.3 | Final Project Annual Report |

CEQA FINDINGS:

1. The Santa Margarita Water District is the lead agency under the California Environmental Quality Act (Public Resources Code section 21000, et seq., (CEQA)), and filed a Notice of Exemption on September 17, 2010 under CEQA Guidelines Title 14, California Code of Regulations, 15333 (14 CCR § 15333). The Santa Margarita Water District determined the project is less than 5 acres and will not have a significant effect on the environment.
2. The San Diego Water Board has reviewed the lead agency's Notice of Exemption, and also finds that the project as proposed will not have a significant effect on the environment with conditioned mitigation measures and therefore determines that issuance of this Certification is consistent with the Notice of Exemption.

PUBLIC NOTIFICATION OF PROJECT APPLICATION:

On August 09, 2010, receipt of the project application was posted on the San Diego Water Board web site to serve as appropriate notification to the public. No public comments were received on the project.


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 Plano Forcemain Protection and Emergency Berm Restoration Project (Project No. 10C-069) will comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. This discharge is also regulated under State Water Board Order No. 2003-0017-DWQ, "Statewide General Waste Discharge Requirements for Dredged or Fill Discharges that have Received State Water Quality Certification (General WDRs)," which requires compliance with all conditions of this Water Quality Certification. Please note that enrollment under Order No. 2003-017 DWQ is conditional and, should new information come to our attention that indicates a water quality problem, the San Diego Water Board may issue 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 San Diego Water Board's Water Quality Control Plan (Basin Plan).



DAVID W. GIBSON
Executive Officer
Regional Water Quality Control Board

10-5-2010

Date

- Attachments:
1. Project Information
 2. Distribution List
 3. Location Map
 4. Site and Mitigation Maps
 5. Stream Photodocumentation Procedure

**ATTACHMENT 1
PROJECT INFORMATION**

Applicant: Santa Margarita Water District
Attention: Dan Ferons
26111 Antonio Parkway
Rancho Santa Margarita, CA 92688
Telephone: 949-459-6590
Facsimile:
Email: danf@smwd.com

**Applicant
Representatives:** Dudek
Attention: Vipul Joshi
605 Third Street
Encinitas, CA 92024
Telephone: 760-479-4284
Facsimile: 760-632-8710
Email: vjoshi@dudek.com

Project Name: Plano Forcemain Protection and Emergency Berm
Restoration Project

Project Location: Latitude: 33° 36' 39.4" N Longitude: 117° 36' 55.8 W

Type of Project: Infrastructure protection and emergency activity restoration

Need for Project: The project is needed to protect an existing sewage pipeline that traverses Tijeras Creek. The pipeline was installed in 1990 at a depth of 10 feet below the active streambed at the time. Post-development hydromodification has exacerbated active bed and bank erosion, which has exposed the pipeline and surrounding bedrock. The exposed pipeline is acting as a grade control structure and check point, with a 3-4 foot elevation drop immediately downstream of the pipeline. Thus, the pipeline is being undermined by storm flows within the creek and sufficient grade needs restored to reduce further head-cutting and protect the pipeline integrity. The project is also needed to remove an emergency berm that was constructed to contain an upstream sewage spill into Tijeras Creek and restore the streambed and riparian habitat at the berm location.

Project Description: The project will install protective rock materials between and downstream of two adjacent pipeline crossings within Tijeras Creek, as well as restore a downstream site that was bermed due to a sewage spill into Tijeras Creek. The berm restoration

will also involve upstream bio-engineering bank stabilization. The placement of protective rock fill at the pipeline location will result in 0.039 acres (75 linear feet) of permanent impacts. The restoration of the berm and upstream channel bio-engineering stabilization will result in 0.046 acres of permanent impacts (buried boulders), and 0.24 acres (195 linear feet) of temporary impacts. Tijeras Creek currently suffers from severe hydromodification, and on-going active bank erosion has exposed the pipeline, which has created a check point within the Creek, further exacerbating downstream erosion.

| | |
|---|--|
| Federal Agency/Permit: | U.S. Army Corps of Engineers §404, NWP 12, 38 ACOE Staff: Jason Lambert |
| Other Required Regulatory Approvals: | California Department of Fish and Game 1602 Streambed Alteration Agreement, CDFG Staff: Russell Barabe |
| California Environmental Quality Act (CEQA) Compliance: | Notice of Exemption: 09/17/2010 Lead Agency: Santa Margarita Water District |
| Receiving Water: | Tijeras Creek, San Juan HU, Mission Viejo HA, Middle Trabuco HAS (901.23) |
| Affected Waters of the United States: | Temporary: Streambed: 0.24 acres (195 linear feet) Permanent: Streambed: 0.039 acres (75 linear feet). Permanent impacts associated with the bio-engineering at the berm site (0.046 acres of buried boulders) is considered self mitigating. |
| Dredge Volume: | n/a |
| Related Projects Implemented/to be Implemented by the Applicant(s): | Investigative Order No. 2010-0078 was issued to the applicant as a result of a sewage spill in Tijeras at the pipeline location. |
| Compensatory Mitigation: | <u>On-site:</u> Restoration: 0.06 acres of vegetated waters of the United States via bio-engineering at the emergency berm site. |

Enhancement: 0.398 acres of enhancement downstream of the berm site.

Restoration of temporary impacts associated with the berm construction to pre-project condition.

Mitigation Location: On-site.

On-site mitigation will occur at the pipeline crossing, emergency berm site and immediately downstream of the emergency berm site.

Best Management Practices (BMPs):

Construction
In accordance with State Water Resources Control Board Water Quality Order No. 2009-09-DWQ, and any subsequent re-issuance as applicable.

Post Construction
No new, replaced, or exiting impervious surfaces are associated with the project.

Public Notice: On August 09, 2010 receipt of the project application was posted on the San Diego Water Board web site to serve as appropriate notification to the public. No comments were received for this project.

Inspection: n/a

Fees: Total Due: \$2,368.00
Total Paid: \$2,368.00 (check No. 321908 and No. 322196)

CIWQS: Regulatory Measure ID: 375377
Place ID: 755818
Party ID: 43348

ATTACHMENT 5 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:

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

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:

Please mail attachment to:

Joyce Schulte
2546 Palo Vista Road
Fallbrook, CA 92028

Conditional Waiver No. 4 – Discharges from Agricultural and Nursery Operations

Conditional Waiver No. 4 is for discharges from agricultural and nursery operations, which contain pollutants that can percolate to groundwater or runoff to surface waters. Discharges from agricultural and nursery operations include discharges resulting from growing operations, irrigation return flows, and storm water runoff which can transport pollutants from agricultural and nursery operations to surface waters and groundwater.

The following types of discharge not regulated or authorized under WDRs may be eligible for Conditional Waiver No. 4:

- Discharges of plant crop residues to land
- Discharges of storm water runoff
- Discharge/application of amendments or mulches to soil (
- Discharges of agricultural irrigation return water
- Discharges of nursery irrigation return water

Discharges from lands used for agricultural or nursery operations can be significant sources of sediment, dissolved solids, nutrients, pesticides, hydrocarbons, pathogens (i.e., bacteria, viruses, protozoa), and other pollutants which can adversely affect the quality of waters of the state if growing operations, irrigation return flows, and storm water runoff are not properly managed. Discharge from these types of operations can all originate from one land owner/operator, and have similar discharge sources, environmental settings, and/or waiver conditions. Therefore, these types of discharge were grouped together into one discharge classification. Agricultural and nursery operations that comply with the waiver conditions are not expected to pose a threat to the quality of waters of the state.

Agricultural and nursery operations can utilize composted materials and/or plant crop residues as soil amendments or mulches, as well as compost green wastes on site to be used later as a mulch or soil amendment. Agricultural and nursery irrigation return flows can produce surface runoff that may transport pollutants from soil (e.g., sediment, hydrocarbons, dissolved solids, pesticides) and soil amendments or mulches (e.g., nutrients, organics, pesticides, pathogens) to surface waters and can also leach pollutants into underlying groundwater.

Storm water and surface runoff that is allowed to come in contact with these wastes can leach pollutants to underlying groundwater, or transport pollutants to surface waters. Storm water runoff from agricultural activities and return flows from irrigated agriculture are exempt from federal NPDES regulations.¹ However, storm water runoff from agricultural activities and return flows from irrigated agriculture are subject to regulations in the state Water Code and may be regulated with WDRs, unless a waiver is issued. Agricultural and nursery operations that properly manage their growing operations, irrigation return flows, and storm water runoff are not expected to pose a threat to the

¹ Code of Federal Regulations Title 40 sections 122.3(e) and (f)

quality of waters of the state. Therefore, waiver conditions must require proper management and other measures to minimize or eliminate discharges of pollutants from agricultural and nursery operations to waters of the state.

Current San Diego Water Board resources would not be sufficient to issue general or individual WDRs and to enroll and regulate each agricultural or nursery operation in the Region. Additionally, the costs associated with annual fees and monitoring requirements for WDRs can require significant resources from agricultural and nursery operations, which would likely be a significant expense for smaller growing facilities. However, collective discharges from these smaller facilities can potentially have a significant impact on the quality of the waters in the Region. This, in turn, can increase the efforts required by cities and counties to comply with NPDES storm water requirements and/or TMDL compliance.

For discharges of irrigation return flows and storm water runoff from agricultural or nursery operations, the existing conditional waivers require implementation of MMs/BMPs, but no enrollment, monitoring, or reporting requirements. The San Diego Water Board has assumed that agricultural and nursery operations are complying with the existing waiver conditions. However, the existing waiver conditions for agricultural and nursery operations do not include any requirements that would compel the owner or operator of an agricultural or nursery operation to comply with waiver conditions. Also, because there are no requirements to compel compliance with waiver conditions, many of the agricultural and nursery operations are very likely unaware of their responsibilities under the existing conditional waivers, or the consequences of their actions on water quality and the environment. Educating these operators of their responsibilities is necessary to ensure that their practices do not adversely affect water quality.

The Central Coast, Central Valley, and Los Angeles Regional Water Boards have implemented waiver programs to control NPS runoff from irrigated lands (including agricultural and nursery operations) with conditions that require enrollment, implementation of MMs/BMPs, monitoring, reporting, and preparation of water quality management plans. The irrigated lands waiver programs from these other Regional Water Boards provide the option of enrolling as an individual discharger, or joining a group or coalition to share the cost of a monitoring and reporting program. Joining a monitoring group is a much more cost effective and affordable option, because the cost of monitoring and reporting is shared among the group members. Monitoring groups also require fewer resources and less oversight than individual dischargers for the other Regional Water Boards. Therefore, the irrigated lands waiver programs from other Regional Water Boards also include incentives to join a monitoring group in the form of reduced monitoring and/or reporting requirements for early enrollment, and discounted annual fees for group members.

The San Diego Water Board is also proposing to implement a waiver program that includes enrollment, monitoring, and reporting. In the other regions most of the agricultural and nursery operations are on large 100-acre and greater size parcels that can be easily located, have easily identified owners and/or operators, and operate on a

full-time and/or year-round schedule. Thus, the Regional Water Boards from these other regions can easily identify and contact owners and/or operators that are not enrolled in their irrigated lands conditional waiver programs. Identifying larger operations such as these in the San Diego Region and enrolling them in a similar waiver program should not be very difficult.

However, many of the growers in the San Diego Region are very small (10 acres or less) operations. There are thousands of these small growing operations in the San Diego Region. The small operations have owners and/or operators that do not occupy the parcels or are present only part of the year, and/or operate on a seasonal, part-time, or sporadic schedule. Contacting and convincing them to join a monitoring group or enrolling them as individual dischargers may be difficult and will likely require significant time and resources. Available data suggest that the collective discharges from these smaller facilities may be impacting the quality of the waters in the Region, and therefore need to be identified and brought into compliance with the waiver conditions.

The owners/operators of agricultural or nursery operations will be given an opportunity to form and/or join a monitoring group. Owners/operators of agricultural and nursery operations that form and/or join a monitoring group and file a Notice of Intent with the San Diego Water Board will be allowed to divide the cost of a monitoring and reporting program among the group members. A monitoring group that has good spatial coverage will likely require fewer sampling locations on a per operation basis than if an individual operations were to conduct a monitoring and reporting program on its own.

Owners/operators of agricultural and nursery operations that choose not to be a member of a monitoring group/coalition will also be required to file a Notice of Intent and perform monitoring. Responsibility for implementing the requirements of the monitoring program would be the sole responsibility of each individual operation that has not joined a monitoring group, which would likely be a significant expense for an individual operation. Enrolling as part of a monitoring group would reduce the enrollment, monitoring, and reporting requirements, as well as divide the financial responsibility among the members in the monitoring group. For these reasons, enrollment in a monitoring group is in the best interest of all agricultural and nursery operators, and is encouraged by the San Diego Water Board. Owners/operators of agricultural or nursery operations that do not comply with the conditional waivers may be issued individual WDRs and/or have other enforcement actions taken against them, which will likely require their participation in a monitoring group, as well as additional fees and/or fines.

Reaching out and informing all the agricultural and nursery operations about the conditional waiver in the Region would exceed the resources currently available to the San Diego Water Board. Additionally, contact from a regulatory agency is often met with an ambivalent or negative response by agricultural and/or nursery owners/operators. Therefore, assistance from non-regulatory agencies and organizations is required to reach out and educate these owner/operators about the conditional waiver and steps needed to comply with the waiver conditions.

The San Diego Water Board has already contacted the San Diego County Farm Bureau (Farm Bureau), UCCE, NRCS, and regional resource conservation districts (RCDs) about reaching out to owners/operators of agricultural and nursery operations. These organizations, and others, can help the San Diego Water Board educate the owners/operators of agricultural and nursery operations about the conditional waiver and waiver conditions, and prepare them for the enrollment, monitoring and reporting requirements of this conditional waiver. These organizations can also provide guidance to agricultural and nursery operators to help them form and/or join monitoring groups.

In addition to the outreach efforts from the Farm Bureau, UCCE, NRCS, and regional RCDs, the municipalities (i.e., cities and counties), government agencies, and San Diego Water Board can encourage agricultural and nursery operators to implement MMs/BMPs and join a monitoring group. When municipalities, government agencies, and/or the San Diego Water Board perform a compliance inspection, as authorized by state, county or local ordinances, or in response to a complaint or a reported violation of waiver conditions, during the inspection they can inform owner/operator of the agricultural and nursery operation of their responsibilities to be included in the conditional waiver program. Agricultural and nursery operators can be issued Notices of Violation, or other enforcement actions for not implementing waiver-required MMs/BMPs and can be encouraged to form and/or join a monitoring group.

Agricultural or nursery operators that violate waiver conditions by not implementing MMs/BMPs and that allow the degradation of water quality should be notified of their responsibilities and required to comply with waiver conditions. Agricultural or nursery operations that repeatedly violate waiver conditions should be required to file a RoWD and be regulated with WDRs. Enforcement actions could also be taken against facilities that fail to comply with waiver conditions.

Therefore, waiver conditions should be developed to encourage the education of agricultural and nursery operators, and encourage agricultural and nursery operators to form and/or join monitoring groups. The waiver conditions should also provide explicit requirements that the owners/operators of agricultural and nursery operations are expected to meet in order to be eligible for this conditional waiver. However, if the owner/operator of an agricultural or nursery operation violates any waiver conditions, the San Diego Water Board has the option to terminate the conditional waiver for the operation and begin regulating the agricultural or nursery operation with individual WDRs and/or take other enforcement actions.

In order to be eligible for Conditional Waiver No. 4, discharges must comply with certain conditions to be protective of water quality. The waiver conditions applicable to discharges from agricultural and nursery operations include the following:

- 4.I.A. General Facility Design and Management Waiver Conditions
- 4.I.B. General Enrollment and Education Waiver Conditions

- 4.I.C. General Waiver Conditions for Application of Compost as a Fertilizer, Amendment, or Mulch to Soil
- 4.I.D. General Waiver Conditions for Application of Products Used in Agricultural and Nursery Operations
- 4.I.E. General Inspection and Reporting Requirements
- 4.II.A. Specific Waiver Conditions for Agricultural Operations
- 4.II.B. Specific Waiver Conditions for Nursery Operations

Discharges from agricultural and nursery operations that comply with the general and specific waiver conditions in Conditional Waiver No. 4 are not expected to pose a threat to the quality of waters of the state.

4.I.A. General Facility Design and Management Waiver Conditions

1. Agricultural and nursery operations must comply with any local, state, and federal ordinances and regulations and obtain any required approvals, permits, certifications, and/or licenses.
2. Agricultural and nursery operations must implement management measures (MMs) and/or best management practices (BMPs) to minimize or eliminate the discharge of pollutants that may adversely impact the quality or beneficial uses of waters of the state. Recommended MMs/BMPs are available in the State Water Board's Nonpoint Source (NPS) Program Plan and/or available from University of California Cooperative Extension (UCCE), Natural Resources Conservation Service (NRCS), and/or regional resource conservation districts (RCDs).

4.I.B. General Enrollment and Education Waiver Conditions

1. Agricultural and nursery operators must perform a self assessment to identify the pollutants present on the site and assess the potential for runoff and/or infiltration to adversely affect the quality or beneficial uses of the waters of the state. Annual self assessments must be available on site for inspection. If an agricultural or nursery operator does not have proof available during an inspection, the operator must submit proof to the inspecting agency and the San Diego Water Board within 45 days from the date of inspection. Self assessment questionnaires are available from the UCCE.
2. Agricultural and nursery operators must complete at least 2 hours of water quality management related training annually. Training may include formal classroom training or meetings with a training component. Proof of training must be available on site for inspection. Agricultural and nursery operators who do not have proof available during an inspection must submit proof to the inspecting agency and the San Diego Water Board within 45 days from the date of inspection.
3. Agricultural and nursery operators must be in regular contact with the local Farm Bureau, UCCE, NRCS, and/or regional RCDs so they can be informed of the latest MMs/BMPs and developments with water quality issues. Proof of contact (e.g., newsletter addressed to facility, NRCS conservation plan, UCCE self assessment) must be available on site for inspection. Agricultural

and nursery operators who do not have proof available during an inspection must submit proof to the inspecting agency and the San Diego Water Board within 45 days from the date of inspection.

4. Agricultural and nursery operations must implement MMs/BMPs to minimize or eliminate the discharge of pollutants that may adversely impact the quality or beneficial uses of waters of the state. Recommended MMs/BMPs are available in the State Water Board's NPS Program Plan and/or available from UCCE, NRCS, and/or regional RCDs.
5. Agricultural and nursery operators shall maintain records pertaining to the water quality management efforts for the operation. The records shall include the following information:
 - a) Site map showing locations of MMs/BMPs and nearby surface water bodies and/or water wells
 - b) List of hazardous materials kept on the property
 - c) Location and amount of waste materials (e.g., green wastes, trash) generated and composted and/or reused on site, or disposed of off site
 - d) Pesticide use reports and records
 - e) Fertilizer, soil amendment, and mulch use records
 - f) Irrigation management records (i.e., water use, irrigation system, irrigation schedule, etc.)
 - g) Equipment maintenance records
 - h) List of MMs/BMPs implemented to minimize and/or eliminate runoff to surface waters and/or infiltration to groundwater
 - i) Owner, operator, and employee education and training records
 - j) Inspection reports
 - k) Self assessments
 - l) Contacts with Farm Bureau, UCCE, NRCS, regional RCDs, and/or other organizations
 - m) Copies of any permits, licenses, and certifications required for the operation
 - n) Water quality monitoring data (if any)

Recommended water quality record keeping documentation is available from the UCCE. Water quality management records must be available on site for inspection.

6. **No later than December 31, 2010**, agricultural and nursery operations must form or join a monitoring group. The function of the monitoring group is to perform water quality monitoring and report the results to the San Diego Water Board. Monitoring groups will be allowed to divide the costs associated with the water quality monitoring and reporting requirements in 4.I.F among its members. Individual operations not in a monitoring group will be solely responsible for the costs associated with the water quality monitoring and reporting requirements in 4.I.F.
7. **No later than January 1, 2011**, owners/operators of agricultural and nursery operations must file a Notice of Intent, as either an individual operation or as part of a monitoring group, with the San Diego Water Board.

8. A Notice of Intent submitted by a monitoring group on behalf of its members must contain the following information:
 - a) Identify the representative(s) authorized to sign reports submitted on behalf of the group.
 - b) An electronic list of landowners and/or operators participating in the monitoring group including: (a) assessor parcel number(s), (b) parcel size, (c) parcel owner or operator name, (d) types of crops grown on each parcel, (e) number of irrigated acres, and (f) parcel owner or operator mailing address.
 - c) A detailed map of the area included within the monitoring group, preferably in GIS format, identifying individual parcels and/or districts that are participating in the monitoring group.
 - d) A detailed description of irrigation, storm water runoff, nutrient, pesticide, erosion control, composting, and other site-specific MMs/BMPs that have been implemented by each participant in the monitoring group, which must be provided as a written description, on a map, and/or using pictures.

Monitoring group members are not eligible for this waiver until a complete Notice of Intent is filed. The monitoring group must inform the San Diego Water Board when any member ceases to participate in the monitoring group within 30 days of the cessation of participation. Any member who ceases to participate in a monitoring group must file a Notice of Intent as an individual agricultural or nursery operation, in accordance with waiver condition 4.I.B.9, within 30 days of ceasing to participate in the monitoring group.

9. A Notice of Intent filed by an individual agricultural or nursery operation must contain the following information:
 - a) Information about the agricultural or nursery operation including: (a) assessor parcel number(s), (b) parcel size, (c) parcel owner and operator name(s), (d) types of crops grown on each parcel, (e) number of irrigated acres, and (f) parcel owner and operator mailing address(es).
 - b) A detailed map of the operation, preferably in GIS format, with locations of operation boundaries, nearby surface waters and water wells.
 - c) A detailed description of irrigation, storm water runoff, nutrient, pesticide, erosion control, composting, and other site-specific MMs/BMPs that have been implemented by the operation, which must be provided as a written description, on a map, and/or using pictures.

An individual agricultural or nursery operation is not eligible for this waiver until a complete Notice of Intent is filed.

4.I.C. General Waiver Conditions for Application of Compost as a Fertilizer, Amendment, or Mulch to Soil

1. Prevent the direct or indirect discharge of amendments or mulches to any surface waters of the state (including ephemeral streams and vernal pools).
2. Plant crop residues may be utilized as soil amendment or mulch.
3. Amendments or mulches applied to soil cannot include any of the following additives, unless sufficient information is provided to demonstrate that the waste does not pose a potential threat to water quality: (a) municipal solid

wastes; (b) sludges, including sewage sludge, water treatment sludge, and industrial sludge; (c) septage; (d) liquid wastes; (e) oil and grease; and (f) hazardous, designated, and any other wastes determined by the San Diego Water Board to pose a potential threat to water quality.

4. The amount of soil amendment or mulch materials that can be applied to soil must be reasonable for the crop or plant, soil, climate, special local situations, management system, and type of soil amendment or mulch. Application rates must take into account storm events during the rainy season (October-May). Application rates must not allow soil amendment or mulch materials to be transported off the property in storm water runoff during the rainy season. Resources are available from the NRCS, UCCE, and other organizations. A copy of the calculations and/or estimate of the application rate must be available on site for inspection.
5. Apply amendment or mulch materials to soil at site-specific rates appropriate to the season (i.e., dry vs. rainy).
6. Implement MMs/BMPs in areas with soil amendment or mulch materials to minimize or eliminate runoff and leachate to surface waters and groundwater.

4.1.D. General Waiver Conditions for Application of Products Used in Agricultural and Nursery Operations

1. Prevent the direct or indirect discharge of products used in agricultural or nursery operations to any surface waters of the state (including ephemeral streams and vernal pools).
2. The application of any products used in agricultural or nursery operations that contain pollutants that may be transported in surface runoff to surface waters or may infiltrate to groundwater must be applied in accordance with manufacturer instructions and guidelines, and must not have an adverse effect on the quality of any waters of the state.
3. Excessive amounts of any products used in agricultural or nursery operations spilled to land must be contained and properly disposed.
4. Any products used in agricultural or nursery operations applied to land must not adversely impact the quality or beneficial uses of groundwater in any water wells.

4.1.E. General Inspection and Reporting Waiver Conditions

1. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
2. Owners/operators must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.
3. **By March 31, 2011**, each monitoring group and each individual operation not participating in a monitoring group must contact the San Diego Water Board to begin developing a Monitoring and Reporting Program Plan (MRPP) and a Quality Assurance Project Plan (QAPP).
4. **By January 1, 2012**, each monitoring group and each individual operation not in a monitoring group must submit one MRPP/QAPP to the San Diego Water

Board. The MRPP/QAPP must include the monitoring locations, frequency of monitoring, constituents of concern to be monitored, documentation of monitoring protocols, and sufficient information about the agricultural and/or nursery operations to demonstrate that the proposed MRPP/QAPP will adequately document water quality and pollutant loadings, and demonstrate compliance with waiver conditions.

5. **By December 31, 2012**, each monitoring group and each individual operation not participating in a monitoring group must submit one Monitoring Program Report (MRP) to the San Diego Water Board consistent with the MRPP/QAPP.

4.II.A. Specific Waiver Conditions for Agricultural Operations

1. Minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of any waters of the state.
2. Agricultural operators cannot alter surface waters of the state on or off the property, unless the proposed alteration has received a Clean Water Act section 401 Water Quality Certification, individual WDRs, or individual waiver from the San Diego Water Board.

4.II.B. Specific Waiver Conditions for Nursery Operations

1. Prevent the direct or indirect discharge of nursery irrigation return water to any surface waters of the United States.
2. Nursery operations must minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of any waters of the state.
3. Nursery operators cannot alter surface waters of the state on or off the property, unless the proposed alteration has received a Clean Water Act section 401 Water Quality Certification, individual WDRs, or individual waiver from the San Diego Water Board.

The following list of references provides additional information that is available regarding appropriate MMs/BMPs for minimizing pollutants in runoff and other discharges from agricultural and nursery operations.

1. Industrial Storm Water Program, State Water Resources Control Board <http://www.swrcb.ca.gov/stormwtr/industrial.html>
2. Construction Storm Water Permit, State Water Resources Control Board http://www.swrcb.ca.gov/stormwtr/gen_const.html
3. Agricultural Management Measures, State Water Resources Control Board <http://www.swrcb.ca.gov/nps/docs/guidance/agricmms.pdf>
4. California Nonpoint Source Encyclopedia, State Water Resource Control Board <http://www.swrcb.ca.gov/nps/docs/encyclopedia/agriculture.pdf>
5. Developing a Management Plan for Irrigation Runoff, Dept. of Horticultural Sciences, Texas A&M University <http://aggie-horticulture.tamu.edu/greenhouse/nursery/environ/wmplan1.html>

6. Management Options for Nonpoint Source Pollution for Greenhouse and Container Crops, UC Cooperative Extension, San Diego
<http://commserv.ucdavis.edu/CESanDiego/Stormwater/index.htm>
7. BMPs Nurseries And Greenhouses, County of Orange
http://www.ocwatershed.com/StormWater/documents_bmp_existing_development.asp#ind
8. Electronic Field Office Technical Guide (eFOTG), Natural Resources Conservation Service <http://www.nrcs.usda.gov/technical/efotg/>
9. Grower Resources (including self assessment questionnaires and water quality record keeping notebook), San Diego County University of California Cooperative Extension http://cesandiego.ucdavis.edu/Clean%5FWater/Grower_Resources.htm