



Alan C. Lloyd Ph D
Secretary for
Environmental
Protection

California Regional Water Quality Control Board

San Diego Region

Internet Address: <http://www.swrcb.ca.gov/rwqcb9/>
9174 Sky Park Court, Suite 100, San Diego, California 92123
Phone (858) 467-2952 • FAX (858) 571-6972



Arnold Schwarzenegger
Governor

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

PROJECT: Agua Hedionda Channel Dredging Project (File No. 06C-007)

APPLICANT: Mr. Glenn Pruim, Public Works Director
City of Carlsbad
1635 Faraday Avenue
Carlsbad, CA 92008

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 checked="" type="checkbox"/> Waiver of Waste Discharge Requirements |

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 shall 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) shall be conditioned upon total payment of the full fee required under 23 CCR section 3833, unless otherwise stated in writing by the certifying agency.

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>.

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ADDITIONAL CONDITIONS:

In addition to the three standard conditions, the City of Carlsbad shall satisfy the following:

A. GENERAL CONDITIONS

1. The City of Carlsbad shall, at all times, fully comply with the engineering plans, specifications and technical reports submitted with this application for 401 Water Quality Certification and all subsequent submittals required as part of this certification.
2. The City of Carlsbad shall maintain a copy of this certification at the project site so as to be available at all times to site personnel and agencies.
3. Prior to the start of the project, the City of Carlsbad shall educate all personnel on the requirements in this certification, pollution prevention measures, spill response, and best management practices.
4. The City of Carlsbad shall permit the San Diego Regional Water Quality Control Board (SDRWQCB) 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.
5. The City of Carlsbad shall notify the SDRWQCB within 24 hours of any unauthorized discharge to waters of the U.S. and/or State; measures that were implemented to stop and contain the discharge; measures implemented to clean-up the discharge; the volume and type of materials discharged and recovered; and additional BMPs or other measures that will be implemented to prevent future discharges.
6. The City of Carlsbad shall, at all times, maintain appropriate types and sufficient quantities of materials onsite to contain any spill or inadvertent release of materials that may cause a condition of pollution or nuisance if the materials reached a waters of the U.S. and/or State.
7. The City of Carlsbad shall dispose of the dredge material at a contained upland location, or provide a plan, including text description and figures, indicating how containment of dredge materials will occur at all sites where dredge material may be stockpiled. The plan shall include a delineation of all waters of the US/State within the vicinity of the stockpiles. This plan will be provided to the SDRWQCB for review prior to initiating dredging activities.

8. Dredge material shall not be deposited in a location that may cause significant adverse effects to aquatic life, fish, or wildlife or may harm the beneficial uses of the receiving waters.
9. This Certification is not transferable to any person except after notice to the Executive Officer of the SDRWQCB. The applicant shall submit this notice in writing at least 30 days in advance of any proposed transfer. The notice must include a written agreement between the existing and new owner containing a specific date for the transfer of this Certification's responsibility and coverage between the current discharger and the new discharger. This agreement shall include an acknowledgement that the existing owner is liable for compliance and violations up to the transfer date and that the new owner is liable from the transfer date on.
10. In the event of any violation or threatened violation of the conditions of this certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under state law. For purposes of section 401(d) of the Clean Water Act, the applicability of any state law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this certification.
11. In response to a suspected violation of any condition of this certification, the SDRWQCB 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 shall be a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.
12. In response to any violation of the conditions of this certification, the SDRWQCB may add to or modify the conditions of this certification as appropriate to ensure compliance.
13. This certification authorizes sediment removal activities only. This certification does not authorize the construction of any structure within Agua Hedionda or Calavera Creek, nor does it authorize any widening, armoring or realignment of any waters of the US/State.

B. TURBIDITY MONITORING PROGRAM

1. To ensure that the emergency dredging project does not adversely affect the beneficial uses of Agua Hedionda Creek, the City of Carlsbad shall develop and implement a Turbidity Monitoring Plan to measure turbidity levels above and below the dredging project site. Turbidity monitoring shall continue until such a time that emergency dredging activities have been completed. The turbidity monitoring program shall be developed and submitted to the Regional Board for acceptance prior to initiation of dredging. Hourly turbidity levels shall not exceed the following limits:

Background Turbidity	Maximum Increase
0-50 NTU	20% over background turbidity level
50-100 NTU	10 NTU
Greater than 100 NTU	10% over background turbidity level

2. The City of Carlsbad shall immediately assess the results of each sampling event, and if the results of the downstream site exceed the maximum allowable increase in turbidity, the City of Carlsbad shall conduct an immediate assessment of erosion and sediment control best management practices being implemented on-site. The City of Carlsbad shall:
 - a. Repair or replace any BMP that has failed.
 - b. Maintain any BMP that is not functioning properly due to lack of maintenance.
 - c. Evaluate whether additional or alternative BMPs should be implemented to prevent further exceedences of turbidity levels.
 - d. Report to the Regional Board within 2 working days the actions taken to remedy the situation.

3. The City of Carlsbad shall retain all turbidity monitoring data, and report the results of the monitoring program to the SDRWQCB at the conclusion of dredging activities.

C. MITIGATION

1. Mitigation for permanent impacts to 0.8 acres of vegetated waters of the U.S. will be achieved at a 3:1 ratio, consisting of the creation of 1.6 acres of wetlands within the Carlsbad Hydrologic Unit, and the enhancement or restoration of 0.8 acres of wetlands within the Carlsbad Hydrologic Unit.

2. Mitigation for temporary impacts to 4.2 acres, will be achieved at a 1:1 ratio, by the enhancement of 4.2 acres of waters of the U.S./State within the Carlsbad Hydrologic Unit.

3. Within 120 days of the issuance of this certification, the City of Carlsbad shall develop and submit a Final Wetlands Mitigation and Monitoring Plan for SDRWQCB approval, that shall be consistent with Conditions C.1 and C.2 above, and shall achieve the following performance standards:
 - a. Created wetlands that are installed to compensate for impacts to jurisdictional wetland areas must possess the three criteria (wetland hydrology, hydrophytic vegetation, and hydric soils) necessary to be delineated as a Corps jurisdictional area;
 - b. All mitigation sites shall be maintained 95 percent free of exotic/nonnative plant species;
 - c. All mitigation sites must be self-sustaining; and

- d. All mitigation sites must exhibit evidence of natural recruitment of native wetland and/or riparian species.
4. Implementation of mitigation shall provide the following functional gains:
 - a. Habitat function - Creation of structurally and spatially diverse habitat surrounding riparian areas will provide nesting and foraging grounds for birds, amphibians, and other wildlife.
 - b. Biogeochemical/water quality functions - Expansion of wetland areas shall increase areas for natural water quality functions, such as microbial action that removes toxins, nitrogen, and other nutrients from runoff.
 - c. Hydrologic functions - Expansion of wetland areas will allow greater flood flow attenuation, energy dissipation, and storage during storm events.
 5. The Final Wetlands Mitigation and Monitoring Plan shall include function-based success criteria. Criteria may be based on *Function-Based Performance Standards for Evaluating the Success of Riparian and Depressional/Emergent Marsh Mitigation Sites* (Prepared by PCR Services Corporation for the U.S. Army Corps of Engineers, Los Angeles District; 1999), or equivalent functional analysis. Functional analysis shall include, but not be limited to: structural diversity, coverage, and spatial density of habitat; percent of exotic and invasive vegetation present; hydrologic regime of the riparian zone; hydrologic support; saturation duration; micro and macro topographic complexity; and vegetation roughness and organic carbon. Ultimate success of the mitigation areas will be determined by the attainment of the target scores.
 6. The Final Wetlands Mitigation and Monitoring Plan shall include construction plans and specifications that include, but are not limited to, the following:
 - a. Proposed channel designs and earthwork for all mitigation areas, including appropriate cross sections and plan views;
 - b. A detailed planting plan, including species lists, plant sizes and numbers, and planting designs;
 - c. Detailed implementations schedule, including but not limited to, dates for initiation and completion of mitigation installation at different on-site and off-site mitigation areas, recordation of conservation easements; initiation of monitoring period; reporting dates, etc.;
 - d. An irrigation plan;
 - e. Signage and barrier designs adequate to prevent intrusion into mitigation areas and creek buffer zones;
 - f. Specific details regarding hydrologic and biogeochemical monitoring, including function-based performance standards, sample locations, periodicity, and qualitative and quantitative indicators; and
 - g. All other information, as appropriate.
 7. No Later than 90 days after SDRWQCB acceptance of the Final Mitigation Plan, the City of Carlsbad shall provide a draft preservation mechanism (e.g. deed restriction,

conservation easement, etc.) that will protect all mitigation areas and their buffers in perpetuity. The conservation easement or other legal limitation on the mitigation property shall be adequate to demonstrate that the site will be maintained without future development or encroachment on the site or 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 conservation easement or other appropriate legal limitation shall prohibit, without exception, all residential, commercial, industrial, institutional, and transportation development, and any other infrastructure development that would not maintain or enhance the wetland functions and values of the site. Other infrastructure development to be prohibited includes, but is not limited to, additional utility lines, paved maintenance roads, and areas of maintained landscaping for recreation. The City of Carlsbad shall submit proof of a completed preservation mechanism within one year of the submittal of the draft preservation mechanism

8. The City of Carlsbad shall submit a report (including topography maps and planting locations) to the SDRWQCB within 90 days of completion of mitigation site preparation and planting, describing as-built status of the mitigation project. If the site grading and planting are not completed within six weeks of each other, separate reports will be submitted describing those specific as-built conditions.
9. The construction of proposed mitigation shall be completed within the same calendar year as impacts occur, or at least no later than 9 months following the close of the calendar year in which impacts first occur (e.g., if impacts occur in June 2006, construction of mitigation for all impacts must be completed no later than September 2007).
10. Mitigation areas shall 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 shall not occupy more than 5 percent of the onsite or offsite mitigation areas.
11. 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 City of Carlsbad be responsible for repair and replanting of the damaged area(s).
12. Mitigation monitoring reports shall be submitted annually until mitigation has been deemed successful. Monitoring reports shall be submitted no later than 30 days following the end of the monitoring period. Monitoring reports shall include, but not be limited to, the following:
 - a. Names, qualifications, and affiliations of the persons contributing to the report;
 - b. Tables presenting the raw data collected in the field as well as analyses of the physical and biological data;
 - c. Qualitative and quantitative comparisons of current mitigation conditions with pre-construction conditions and previous mitigation monitoring results;
 - d. Photodocumentation from established reference points;

- e. Survey report documenting boundaries of mitigation area; and
 - f. Other items specified in the draft and final Wetland and Riparian Mitigation and Monitoring Plan.
13. For the purpose of determining enhancement mitigation credit for the removal of exotic/invasive plant species, only the actual area occupied by exotic/invasive plant species shall be quantified to comply with mitigation requirements.
 14. For purposes of this certification, creation is defined as the creation of vegetated or unvegetated waters of the U.S. where they have never been documented or known to occur (e.g., conversion of nonnative grassland to freshwater marsh). Restoration is defined as the creation of waters of the U.S. where they previously occurred (e.g., removal of fill material to restore a drainage). Enhancement is defined as modifying existing waters of the U.S. to enhance functions and values (e.g., removal of exotic plant species from jurisdictional areas and replacing with native species).

D. BENTHIC MACROINVERTEBRATE COMMUNITY ANALYSIS

1. The City of Carlsbad shall develop and implement a five-year Bioassessment Monitoring program to evaluate changes in the benthic macroinvertebrate community in Agua Hedionda Creek resulting from impacts of the dredging project and future planned flood control projects.
2. Bioassessment monitoring and assessment using benthic macroinvertebrates shall be performed using the Targeted Riffle Composite (TRC) method consistent with the latest sampling and analysis methods in the Surface Water Ambient Monitoring Program Quality Assurance Management Plan (SWAMP QAMP). ¹At a minimum, bioassessment monitoring shall be performed at four sites (assessment stations) in Agua Hedionda Creek (as flow permits) in May/June and October of each year. One assessment site shall be located upstream of the dredging activity, one assessment site shall be located within the dredged reach of Agua Hedionda Creek, and one assessment site shall be located in a reach of Agua Hedionda Creek downstream of the dredging activity. A control station upstream of the project shall be located and sampled concurrently with the assessment stations. Each assessment site and the control site sampled shall also be evaluated using the core quantitative physical habitat assessment measures consistent with the latest version of the SWAMP QAMP in addition to any additional measures required by the SDRWQCB consistent with the SWAMP QAMP.

¹ The SWAMP QAMP is being updated to include these procedures. Current copies of the QAMP may be found at <http://www.waterboards.ca.gov/swamp/qamp.html>

3. Results of the bioassessment monitoring for benthic macroinvertebrates shall be reported using the Southern California Index of Biotic Integrity as described in Ode et al (2005)² and shall include an evaluation of the assessment and control sites sampled in comparison to at least one true reference site (least disturbed conditions) as sampled semi-annually in the San Diego Region by the San Diego Co-Permittees per the most recent version of the San Diego County Municipal Separate Storm Sewer System (MS4) NPDES permit Receiving Waters Monitoring and Reporting Program.
4. The five-year Bioassessment Monitoring Program will begin concurrently with the habitat mitigation program pursuant to Section C. of this certification. The bioassessment data and analysis shall be submitted as part of the required habitat mitigation monitoring reports pursuant to Condition C.12 of this certification.
5. The SDRWQCB Executive Officer may make revisions to the Bioassessment monitoring program at any time during the five year monitoring term, and may include changes in sampling or assessment methods, a reduction or increase in the number of locations monitored, or the frequency of monitoring required

E. 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 applications, reports, or information submitted to the Regional Board shall 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."

² Ode, P., A. Rehn, J. May (2005). A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams Environmental Management Vol. 35, No. 1, pp. 1-13

3. The City of Carlsbad shall 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; File No 06C-007
9174 Sky Park Court, Suite 100
San Diego, California 92123

PUBLIC NOTIFICATION OF PROJECT APPLICATION:

On February 9, 2006, receipt of the project application was posted on the SDRWQCB web site to serve as appropriate notification to the public.

REGIONAL WATER QUALITY CONTROL BOARD CONTACT PERSON:

Christopher Means
California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123
(858) 637-5581
cmeans@waterboards.ca.gov

WATER QUALITY CERTIFICATION:

I hereby certify that the proposed discharge from the Agua Hedionda Channel Dredging Project (File No. 06C-007) 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 California Regional Water Quality Control Board, San Diego Region, Waiver of Waste Discharge Requirements (Waiver Policy) No. 17. Please note that this waiver is conditional and, should new information come to our attention that indicates a water quality problem, the SDRWQCB 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

3/2/2006
Date

- Attachments:
1. Project Information
 2. Distribution List
 3. Location Map
 4. Rancho Carlsbad Flood Control Project diagram

**ATTACHMENT 1
PROJECT INFORMATION**

Applicant: Mr. Glen Pruum, Public Works Director
City Of Carlsbad
1635 Faraday Avenue
Carlsbad, CA 92008

Applicant Representatives: N/A

Project Name: Agua Hedionda Channel Dredging Project

Project Location: The proposed dredging project would occur Along 3000 feet of Agua Hedionda Creek (see attachment 3)

Type of Project: Creek dredging for flood control purposes

Project Description: The dredge work will include the removal of 30,000 to 40,000 cubic yards of accumulated sediment in Agua Hedionda Creek and Calavera Creek, located within and adjacent to the Rancho Carlsbad Mobile Home park. Material will be removed by backhoe or excavator, and no grading of access roads will be necessary.

Federal Agency/Permit: Army Corps of Engineers Emergency Individual Permit

Other Required Regulatory Approvals: California Department of Fish & Game Streambed Alteration Agreement
California Coastal Commission Jurisdictional Determination

California Environmental Quality Act (CEQA) Compliance: On February 6, 2006 the City of Carlsbad approved a Notice of Exemption from CEQA for an emergency project

Receiving Waters: Agua Hedionda Creek & Calavera Creek

Impacted Waters of the United States: The project will result in permanent impacts to 0.8 acres of wetlands in Agua Hedionda Creek, and temporary impacts to 4.2 acres of jurisdictional streambed.

Dredge Volume: 30,000 – 40,000 cubic yards of sediment

Related Projects Implemented/to be Implemented by the Applicant(s): See attachment 4 (Rancho Carlsbad Flood Control Program of Projects)

Compensatory Mitigation: Mitigation for permanent impacts to 0.8 acres of vegetated waters of the

U.S. will be achieved at a 3:1 ratio; consisting of the creation of 1.6 acres of wetlands within the Carlsbad Hydrologic Unit, and the enhancement or restoration of 0.8 acres of wetlands within the Carlsbad Hydrologic Unit.

Mitigation for temporary impacts to 4.2 acres will be achieved at a 1:1 ratio, by the enhancement of 4.2 acres of waters of the U.S./State within the Carlsbad Hydrologic Unit.

Within 120 days of the issuance of this certification, the City of Carlsbad shall develop and submit a Final Wetlands Mitigation and Monitoring Plan for SDRWQCB approval, which shall be consistent with certification conditions.

**Best Management
Practices:**

The City of Carlsbad shall dispose of the dredge material at a contained upland location, or prior to initiation of dredging activities, provide a plan, including text description and figures, indicating how containment of dredge materials will occur at all sites where dredge material may be stockpiled.

The City will monitor hourly for turbidity during dredging activities, and if turbidity limits are exceeded will re-evaluate the effectiveness of BMPs in place.

Public Notice:

On February 9, 2006, receipt of the project application was posted on the SDRWQCB web site to serve as appropriate notification to the public.

Fees:

Total Due: \$11,250.00
Total Paid (check No.141046, 2178): \$11,250.00

**ATTACHMENT 2
DISTRIBUTION LIST**

Ms. Kari Coler
U.S. Army Corps of Engineers
Regulatory Branch
16885 W. Bernardo Dr., Suite 300 A
San Diego, CA 92127

Mr. Mark Durham
U.S. Army Corps of Engineers
Regulatory Branch
P.O. Box 532711
Los Angeles, CA 90053-2325

State Water Resources Control Board
Division of Water Quality

Agua Hedionda and Calavera Creek Dredging and Improvement Project



