
Santa Ana Regional Water Quality Control Board

July 30, 2012

Erin Jones
U.S. Army Corps of Engineers
P.O. Box 532711
Los Angeles, CA 90053

**CLEAN WATER ACT SECTION 401 WATER QUALITY STANDARDS
CERTIFICATION FOR THE SANTA ANA RIVER MARSH DREDGING PROJECT,
COUNTY OF ORANGE, CALIFORNIA (SARWQCB PROJECT NO. 302012-19)**

Dear Ms. Jones:

On May 7, 2012, we received an application for Clean Water Act Section 401 Water Quality Standards Certification ("Certification") from the U.S. Army Corps of Engineers (Corps) for the Santa Ana River Marsh Dredging Project. The Corps requested a reply by June 30, 2012, but later extended the deadline to July 31, 2012.

The purpose of the project is to remove accumulated sediment from tidal channels within the Santa Ana River Marsh. The Santa River Marsh is a 92-acre coastal salt marsh located adjacent to the mouth of the Santa Ana River, within the City of Newport Beach. The marsh was restored in 1992 as mitigation for impacts caused by the Corps' Santa Ana River Mainstem Project (a flood control project). The marsh's tidal channels have not been dredged since the site was first restored in 1992. Sediment accumulation over the past twenty years has reduced tidal flushing, leading to reduced water quality. Sedimentation also threatens habitat diversity by converting open water and intertidal habitat to marsh and upland habitat.

This letter responds to your request for certification that the proposed project, described in your application and summarized below, will comply with State water quality standards outlined in the Water Quality Control Plan for the Santa Ana River Basin (1995) (Basin Plan) and subsequent Basin Plan amendments:

Project Description: The project consists of the removal of approximately 77,000 cubic yards of accumulated sediment from the Santa Ana River Marsh using a hydraulic dredge and an excavator. Approximately 23,000 cubic yards of dredged sediment will be placed in the nearshore zone off Newport Beach. Another 30,000 cubic yards will be disposed of at the U. S. Environmental Protection Agency's (U.S. EPA) LA-3 Ocean Dredged Material Disposal Site. The remaining 24,000 cubic yards will be disposed of at

an upland landfill. The project will take place largely within the city of Newport Beach, California (33°37'53.82"N/ 117°57'11.40"W).

Dredged sediment destined for disposal at LA-3 will be pumped from the hydraulic dredge to a staging site in the ocean just outside the surf zone, where the sediment will be transferred to scows for transport to the LA-3 site. Dredged sediment for nearshore placement will be delivered by pipeline or by a combination of pipeline and scows.

Receiving water:

1. Santa Ana River Marsh
2. Pacific Ocean
 - (a) 4.6-acre disposal zone centered 800 feet offshore, located 3,000 feet southeast of Santa Ana River mouth south jetty
 - (b) LA-3 Ocean Dredged Material Disposal Site administered by U.S. EPA

Fill area: 16 acres of temporary impact to wetland habitat (10,200 linear feet)
4.6 acres of temporary impact to ocean

Dredge/Fill volume: 77,000 cubic yards (Dredge)

Federal permit: Not applicable for U.S. Army Corps projects

You have proposed to mitigate water quality impacts as described in your Certification application. The proposed mitigation is summarized below:

Onsite Water Quality Standards Mitigation Proposed:

- Corps will implement measures recommended by USFWS to mitigate impacts to the light-footed clapper rail and the California least tern
- Temporarily affected vegetation, habitat, & staging areas will be monitored to ensure complete recovery
- Standard water quality related best management practices (BMPs) will be employed during construction activities.

Offsite Water Quality Standards Mitigation Proposed:

- Benefits produced by the project (wetland restoration) will mitigate temporary impacts. Compensatory mitigation is not required.

Threatened or Endangered Species: Three federally-listed threatened or endangered species (California least tern, light-footed clapper rail, and snowy plover) occur in the vicinity of the project site. The Corps initiated informal consultation with the U.S. Fish and Wildlife Service (USFWS) to identify measures to address potential negative impacts to these species. The Corps subsequently received concurrence from the

USFWS that, with implementation of avoidance and minimization measures, the project is not likely to adversely affect these species.

Regulatory Compliance: The Corps released a draft Environmental Assessment (DEA) for public review on April 18, 2012 pursuant to its obligations under the National Environmental Policy Act (NEPA). The DEA was finalized on July 19, 2012 and included a Finding of No Significant Impact. A Clean Water Act Section 404 permit is not required as the Corps is implementing this project itself.

The California Environmental Quality Act (CEQA) categorical exemption under 14 CCR § 15304(g) applies to maintenance dredging where the dredged material is deposited in an area authorized by all applicable state and federal regulatory agencies. The Southern California Dredged Material Management Team reviewed the project and approved disposal at LA-3 and in the nearshore zone for sediment from five of seven subareas within the marsh. Sediment in the remaining two subareas is for nearshore or LA-3 disposal will be disposed of at an upland landfill. The project, implemented with the conditions specified below, qualifies for exemption under 14 CCR § 15304(g).

Other Potentially Applicable Permits:

- Construction de-watering discharges, including temporary stream diversions necessary for project construction, are regulated under Regional Board Order No. R8-2009-0003, General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (De Minimus) Threat to Water Quality. This project includes the diversion of tidal flow around areas of the marsh being dredged in order to maintain tidal flow into Semeniuk Slough. Based on the information in the project application and the DEA, we do not expect that enrollment in this permit will be required. For more information, please review Order No. R8-2009-0003 at www.waterboards.ca.gov/santaana/
- Construction activities associated with this project may result in land disturbance equal to or greater than one acre. The Corps must substantially comply with the terms of the Statewide General Construction permit if land clearance for staging and sediment drying exceeds one acre. For more information please review Order No. 2009-0009-DWQ at http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml

This 401 Certification is contingent upon the execution of the following conditions:

- 1) **Use of Best Management Practices (BMPs):** The Corps shall utilize BMPs to minimize the controllable discharges of sediment and other wastes to waters of the state and of the United States. These BMPS shall include:

- a. Isolation of areas being dredged from adjacent waters, (such as Semeniuk Slough) using temporary diversion structures or gates and silt curtains if warranted
 - b. Isolation of Areas D and E from the remainder of the marsh during the dewatering and drying operation
 - c. Operational factors (e.g. equipment operating speed, coordination with favorable tides) to limit the turbidity plume associated with the components of the project that involve nearshore activity
 - d. Removal of floating material or material that will become floatable from dredged sediment
- 2) Receiving Water Limitations and Specifications: The Corps must comply with the following applicable narrative and/or numeric objectives:
- a. Bacteria, Santa Ana River Marsh (including Semeniuk Slough) – The Santa Ana River Marsh is listed in the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) as having the water contact recreation beneficial use (REC-1). The Corps shall ensure that its project does not cause an exceedance of the Basin Plan objectives specified in Table 1 for this beneficial use.

Table 1: Bacteria Receiving Water Limitations for the Santa Ana River Marsh and Semeniuk Slough

Parameter	30-day Logarithmic Mean (5 or more samples)	10% of samples in any 30-day period
Fecal coliform	< 200 per 100 ml	< 400 per 100 ml

- b. Bacteria, Nearshore Zone – For recreational standards purposes, the nearshore zone is defined in the California Ocean Plan as a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour whichever is further from shoreline. The Corps project includes a nearshore sediment disposal and a nearshore sediment dewatering operation (hopper overflow) that will take place within this zone. The Corps shall ensure that its activities do not cause an exceedance of the Ocean Plan standards summarized in Table 2.

Table 2: Bacteria Receiving Water Limitations for the Nearshore Zone

Parameter	30-day Geometric Mean (5 most recent samples)	Single Sample Maximum
Total coliform	< 1,000 per 100 ml	< 10,000 per 100 ml <1,000 per 100 ml when fecal coliform/total coliform ratio > 0.1
Fecal coliform	< 200 per 100 ml	< 400 per 100 ml
Enterococcus	< 35 per 100 ml	< 104 per 100 ml

- c. Physical Characteristics, Ocean Discharge –
 - i. Floating particulates and grease and oil shall not be visible
 - ii. The discharge of sediment and water shall not cause aesthetically undesirable discoloration of the ocean surface

- d. Chemical Characteristics – The Corps must comply with the receiving water limitations specified in Table 3. The turbidity and transmittance limitations are based on recent data collected in Lower Newport Bay. The Corps may substitute site-specific data relating these parameters to total suspended solids (TSS) if available. The Corps must obtain prior approval from the Regional Board for proposed changes to the limitations specified in Table 3.

Table 3: Physical/Chemical Numeric Receiving Water Limitations

Parameter	Santa Ana River Marsh and Sementuk Slough	Ocean-Nearshore Zone
Turbidity	45 NTU	45 NTU
Transmittance	15%	15%
TSS	50 mg/L	50 mg/L
pH	7 < pH < 8.6; < 0.2 unit change from ambient	< 0.2 unit change from naturally occurring pH
Dissolved Oxygen	> 5 mg/L	> 5 mg/L
Total Recoverable Petroleum Hydrocarbons (TRPH)	0.1 mg/L	0.1 mg/L

- 3) **Monitoring:** The Corps must implement a monitoring program to ensure compliance with the receiving water limitations specified above in Conditions 2a through 2d. Minimum requirements of the monitoring plan are listed in Table 4. The Corps may satisfy some of the monitoring requirements in Table 4 by coordinating its monitoring with the Orange County Health Care Agency (OCHCA) and the Orange County Sanitation District (OCSD).
 - a. General Monitoring Provisions:
 - 1. All sampling, sample preservation, and analytical procedures shall be in accordance with the current approved edition of “*Standard Methods for the Examination of Water and Wastewater*” (American Public Health Association) and/or 40 CFR Part 136 approved methods unless otherwise specified by the Executive Officer of the Regional Board.
 - 2. In accordance with the provision of Water Code section 13176, chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the California Department of Public Health or at laboratories approved by the Regional Board's Executive Officer.

3. The Corps shall have and implement an acceptable written quality assurance (QA) plan for laboratory analyses. Duplicate chemical analyses must be conducted on a minimum of ten percent (10%) of the samples, or at least one sample per month, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples.
4. All monitoring instruments and devices used by the Corps to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. In the event that continuous monitoring equipment is out of service for greater than a 24-hour period, the Corps shall obtain a representative grab sample each day the equipment is out of service. The Corps shall correct the cause(s) of failure of the continuous monitoring equipment as soon as practicable. In its monitoring report, the Corps shall specify the period(s) during which the equipment was out of service and if the problem has not been corrected, shall identify the steps which the Corps is taking or proposes to take to bring the equipment back into service and the schedule for these actions.
5. Monitoring and reporting shall be in accordance with the following:
 - i. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - ii. Monitoring and reporting shall be done more frequently as necessary to maintain compliance with this certification and or as specified in this certification.
 - iii. Whenever the Corps monitors any pollutant more frequently than is required by this certification, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharge monitoring report specified by the Executive Officer.
 - iv. Daily samples shall be collected on each day of the week.
 - v. Weekly samples shall be collected on any representative day of each week.
 - vi. Monthly samples shall be collected on any representative day of each month.
- b. Nutrient monitoring shall consist of Nitrate/Nitrite-Nitrogen, Total Kjeldahl Nitrogen (TKN), and Total Phosphorus. Bacteria monitoring shall include total coliform, fecal coliform, and enterococcus.
- c. Samples shall be collected down-current of the project activity being monitored. The Corps should obtain current directions in the nearshore zone from the OCSD and the Southern California Coastal Ocean Observing System: <http://www.sccoos.org/projects/ocsd-diversion/>.

Table 4: Minimum Monitoring Program

Project Component	Locations	Monitored Analytes	Frequency
Hydraulic Dredging (Areas A, B, C, F, G) and Sediment Excavation (Areas D and E)	SAR Marsh: two locations 300 feet from dredge (generally upcurrent and downcurrent)	Turbidity	Daily during first week, weekly thereafter
		Transmittance	
		Dissolved Oxygen	
		pH	
	Semeniuk Slough: One location within 300 feet of boundary with SAR Marsh	Turbidity	Daily during first week, weekly thereafter
		Transmittance	
		Dissolved Oxygen	
		pH	Weekly
		TSS	
		TRPH	
Nearshore Hopper Sediment Dewatering	<u>Bacteria</u> : Four locations in the surfzone spaced 500 feet apart along the beach, centered at the location of the hopper <u>Other Parameters</u> : Mid-column, 100 and 300 feet from discharge site	Turbidity	Daily during first week, weekly thereafter
		Transmittance	
		Dissolved Oxygen	
		pH	
Nearshore Placement	<u>Bacteria</u> : Four locations in the surfzone spaced 500 feet apart along the beach, centered at the midpoint of the rectangular placement zone <u>Other Parameters</u> : Mid-column, 100 and 300 feet from discharge site	TSS	Weekly
		TRPH	
		Nutrients	
		Bacteria	
In-situ Sediment Dewatering and Excavation (*if included in project)	Residual surface sediment (Areas D and E)	pH	Once after dredging. Quarterly thereafter for one year
		TRPH	
		Metals	
		Benthic community Bioassessment	Once prior to dredging and quarterly thereafter until benthic community has recovered

4) Reporting:

- a. All analytical data shall be reported with method detection limit¹ (MDLs) and with identification of either reporting level or limits of quantitation (LOQs). To the maximum extent practicable, all MDLs shall be sufficiently low enough to compare analytical results for water and sediment samples to the values listed above under Condition #2: "Receiving Water Limitations and Specifications."
- b. Laboratory data must quantify each constituent down to the approved reporting levels for specific constituents. Any internal quality control data associated with the sample must be reported when requested by the Executive Officer. The Regional Board will reject the quantified laboratory data if quality control data are unavailable or unacceptable.
- c. Monitoring data shall be submitted in a format acceptable by the Regional Board. Specific reporting format may include preprinted forms and/or electronic media. The results of all monitoring required by this certification shall be reported to the Regional Board, and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this certification.
- d. The Corps shall tabulate the monitoring data to clearly illustrate compliance and/or noncompliance with the requirements of the certification.
- e. For every item of monitoring data where the requirements are not met, the monitoring report shall include a statement discussing the reasons for noncompliance, the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and an estimate of the date when the Corps will be in compliance. The Corps shall notify the Regional Board by letter when compliance with the time schedule has been achieved.
- f. The Corps shall assure that records of all monitoring information are maintained and accessible for a period of at least five years from the date of the sample, report, or application. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or by the request of the Regional Board at any time.
- g. All reports and/or information submitted to the Regional Board shall be signed by a responsible officer or duly authorized representative of the Corps and shall be submitted under penalty of perjury.

¹ The standardized test procedure to be used to determine the method detection limit (MDL) is given at Appendix B, "Definition and Procedure for the Determination of the Method Detection Limit" of 40 CFR 136.

- h. The Corps shall submit monthly reports via e-mail to the assigned Regional Board staff identified in this certification by the 7th day of each month. The monthly reports shall include a copy of the laboratory reports for samples collected during the previous month, as well as a brief description of project activities conducted during the previous month. Monthly reports are not required for recovery monitoring conducted after completion of dredging and disposal activities (Table 4, Areas D and E).
 - i. A final water quality monitoring report summarizing the project data and correcting any errors and/or omissions in the monthly reports shall be submitted to the Regional Board no later than six months after completion of the dredging and disposal activities.
 - j. A final report summarizing the post-dredging recovery monitoring, if required (Table 4, Areas D and E), shall be submitted to the Regional Board no later than six months after completion of the recovery monitoring.
- 5) Caulerpa: The Corps must conduct at least one visual survey for the invasive algae *Caulerpa taxifolia* at low tide prior to initiating dredging. If *Caulerpa taxifolia* is discovered, the Corps must cease dredging and notify Regional Board staff, the California Department of Fish and Game (CDFG) (William Paznokas: 858-467-4218, wpaznokas@dfg.ca.gov) and/or the National Marine Fisheries Service (NMFS) (Eric Chavez: 562-980-4064, Eric.Chavez@noaa.gov) within 24-hours of discovery. The Corps may resume dredging after implementing management measures specified by the CDFG and/or NMFS.
- 6) Eelgrass: Although the DEA indicated that eelgrass is currently not present in the marsh, eelgrass may have recolonized areas within the marsh subsequent to the Corps' last monitoring activities in 1999-2000. The Corps must conduct at least one visual survey for eelgrass at low tide prior to initiating dredging. If eelgrass is discovered within the planned dredge footprint, the impact must be mitigated according to the latest version of the Southern California Eelgrass Mitigation Policy.
- 7) Threatened or Endangered Species: The Corps must implement measures identified by the USFWS for avoidance of adverse effects to the light-footed clapper rail and the California least tern.
- 8) Construction Wastes: Substances resulting from project-related activities that could be harmful to aquatic life, including, but not limited to, petroleum lubricants and fuels, cured and uncured cements, epoxies, paints and other protective coating materials, portland cement concrete or asphalt concrete, and washings and cuttings thereof, shall not be discharged to soils or waters of the state. All waste concrete shall be removed.

- 9) Construction Equipment: Motorized equipment shall not be maintained or parked within or near any stream crossing, channel or lake margin in such a manner that petroleum products or other pollutants from the equipment may enter these areas under any flow conditions. Vehicles shall not be driven or equipment operated in waters of the state on-site, except as necessary to complete the proposed project. No equipment (other than machinery directly related to the dredging operation and associated monitoring) shall be operated in areas of flowing water.
- 10) The Corps shall ensure that all facilities (outlet structures, grade control structures, and eroded soil-cement access ramps etc.) will be restored to their original design and grade, and that vegetation within the project area will be maintained in perpetuity.
- 11) This Water Quality Certification is subject to the acquisition of all local, regional, state, and federal permits and approvals as required by law. Failure to meet any conditions contained herein or any the conditions contained in any other permit or approval issued by the State of California or any subdivision thereof may result in the revocation of this Certification and civil or criminal liability.
- 12) A copy of this Certification and any subsequent amendments must be maintained on site for the duration of.
- 13) Applicant shall ensure that all fees associated with this project shall be paid to each respective agency prior to conducting any on-site construction activities.

Under California Water Code, Section 1058, and Pursuant to 23 CCR §3860, the following shall be included as conditions of all water quality certification actions:

- (a) Every certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Section §13330 of the Water Code and Article 6 (commencing with Section 3867) of this Chapter.
- (b) Certification is not intended and shall not be construed to apply to any activity involving a hydroelectric facility and requiring a FERC license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to Subsection §3855(b) of this Chapter and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
- (c) Certification is conditioned upon total payment of any fee required under this Chapter and owed by the applicant.

July 30, 2012

If the above stated conditions are changed, any of the criteria or conditions as previously described are not met, or new information becomes available that indicates a water quality problem, the Regional Board may require the applicant to submit a report of waste discharge and obtain Waste Discharge Requirements.

In the event of any violation or threatened violation of the conditions of this certification, the holder of any permit or license subject to this certification 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. Violations of the conditions of this certification may subject the applicant to civil liability pursuant to Water Code section 13350 and/or 13385.

This letter constitutes a Water Quality Standards Certification issued pursuant to Clean Water Act Section 401. I hereby issue an order certifying that any discharge from the referenced project will comply with the applicable provisions of Sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act, and with other applicable requirements of State law.

This discharge is also regulated under State Water Resources Control Board Order No. 2003-0017-DWQ (Order No. 2003-0017-DWQ), "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received Water Quality Certification" which requires compliance with all conditions of this Water Quality Standards Certification. Order No. 2003-0017-DWQ is available at:
www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo_2003-0017.pdf

If you have any questions, please contact Doug Shibberu at (951) 782-7959, or Mark Adelson at (951) 782-3234.

Sincerely,



Kurt V. Berchtold
Executive Officer
Santa Ana Regional Water Quality Control Board

cc (via electronic mail):

U.S. Army Corps of Engineers – Biologist, Planning Division – Erin Jones
U.S. Army Corps of Engineers, Los Angeles Office – Josephine Axt
State Water Resources Control Board, OCC - David Rice
U.S. Fish and Wildlife Service – Christine Medak

Erin Jones, U.S. Army Corps of Engineers - 12 -
Santa Ana River Marsh 401 Certification

July 30, 2012

U.S. Fish and Wildlife Service – Jon Avery
California Department of Fish and Game – Loni Adams
State Water Resources Control Board, DWQ-Water Quality Certification Unit - Bill
Orme

w:\mbrown\401\certifications\302012-19_santa_ana_river_marsh_dredge_acoe_30july12.docx