

---

# Review Plan

---

## Santa Ana River Re-dredging of the Salt Marsh, Newport Beach, California

*Prepared by:*

*U.S. Army Corps of Engineers  
Los Angeles District*

*15 February 2011*

## Shak, Arthur T SPL

---

**From:** Shak, Arthur T SPL  
**Sent:** Friday, June 03, 2011 2:36 PM  
**To:** Ryan, Joseph A SPL; Jung, Arthur Y SPL; Mesa, Chuck SPL  
**Cc:** Grandon, Jane F SPL  
**Subject:** FW: Maintenance Dredging Review Plans (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: FOUO

George says the Santa Ana River Marsh Review Plan was approved!!!!!!

-----Original Message-----

From: Domurat, George W SPD  
Sent: Friday, June 03, 2011 1:39 PM  
To: Shak, Arthur T SPL; Bigornia, Boniface SPD; Bowers, Paul W SPD  
Cc: Jung, Arthur Y SPL  
Subject: Re: Maintenance Dredging Review Plans (UNCLASSIFIED)

That one was also approved some time ago.....gd

-----

Message sent via my BlackBerry Wireless Device

----- Original Message -----

From: Shak, Arthur T SPL  
To: Bigornia, Boniface SPD; Bowers, Paul W SPD  
Cc: Jung, Arthur Y SPL; Domurat, George W SPD  
Sent: Fri Jun 03 13:17:18 2011  
Subject: FW: Maintenance Dredging Review Plans (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: FOUO

Paul/Boni,

We are satisfied that we have an approved RP for this year's O&M dredging P&S from GWD (see below).

The re-dredging of the SARM Salt Marsh RP was also submitted, but I don't recall seeing a SPD approval on this one yet.

Art Shak

-----Original Message-----

From: Grandon, Jane F SPL  
Sent: Thursday, May 19, 2011 1:57 PM  
To: Shak, Arthur T SPL; Clifford, Jodi L SPL; Ryan, Joseph A SPL; Chang, Mohammed N SPL  
Subject: FW: Maintenance Dredging Review Plans (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: FOUO

Good news from George, and good comments.

We mention the VE in the response to questions, so we will need to put the VE in the proper place in the body of the document.

-----Original Message-----

From: Domurat, George W SPD  
Sent: Thursday, May 19, 2011 1:51 PM  
To: Grandon, Jane F SPL  
Subject: RE: Maintenance Dredging Review Plans (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: FOUO

Jane, the Maintenance Dredging Plans that you submitted are hereby approved....for future similar Plans please consider the following comments....Thanks....gd

1. In Section 2, add a figure showing the harbor, dredging areas, and disposal areas.
2. In Section 2, include a rough cost estimate for the project.
3. In Section 6, include a rough cost of the review effort.
4. Include in the RP, a reference to the programmatic VE study. You can check with Mo Chang on this one...

-----Original Message-----

From: Grandon, Jane F SPL  
Sent: Friday, May 13, 2011 2:10 PM  
To: Domurat, George W SPD  
Subject: Maintenance Dredging Review Plans (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: FOUO

Hi George,  
Did you receive the four maintenance dredging Review Plans? We sent them to you 25 April, and email on 28 April 2011.  
Please let us know the status of their approval.  
Thank you.  
-Jane

Classification: UNCLASSIFIED  
Caveats: FOUO

Classification: UNCLASSIFIED  
Caveats: FOUO

Classification: UNCLASSIFIED  
Caveats: FOUO

Classification: UNCLASSIFIED  
Caveats: FOUO

15 February 2011

MEMORANDUM FOR Commander, South Pacific Division Attn: CESPDPDS, George Domurat

SUBJECT: Transmittal of Review Plan for Santa Ana River Re-dredging of the Salt Marsh, Newport Beach, California

1. Reference EC 1165-2-209, Civil Works Review Policy, 31 Jan 2010.
2. The enclosed Review Plan for Santa Ana River Re-dredging of the Salt Marsh, Newport Beach, California project has been prepared in accordance with EC 1165-2-209.
3. The Santa Ana River Salt Marsh is a feature of the Santa Ana River Project which was authorized by the Water Resources Development Act of 1986 (99<sup>th</sup> Congress 2<sup>nd</sup> session, P.L. 99-662). The 92-acre Salt Marsh Restoration project is located near the mouth of the Santa Ana River in Newport Beach, California. The marsh restoration was completed in 1991, and included grading and installation of tide gates to improve tidal flushing and create habitat for the light-footed clapper rail and Belding's Savannah sparrow. Since initial construction, about 60,000 cubic yards of sedimentation has infilled in the lower portion of the marsh, reducing the tidal prism and tidal circulation. The proposed re-dredging of the lower parcel of the marsh will restore marsh channels to original design depths and restore tidal circulation.
4. As described in the enclosed review plan, the Los Angeles District recommends that Agency Technical Review is not required for Plans and Specifications for Re-dredging of the Salt Marsh. The District Quality Control is the appropriate level of review for this low risk and non-controversial action. A Type II Independent External Peer Review (Safety Assurance Review) is not required for this project.
5. The Los Angeles District requests approval of this Review Plan as described in Appendix B of EC 1165-2-609.

  
for RICHARD J. LEIFIELD, P.E.  
Chief, Engineering Division

Attachment

# Santa Ana River Re-Dredging of the Salt Marsh Newport Beach, California

---

## Contents

1. INTRODUCTION.....	1
2. PROJECT DESCRIPTION.....	1
3. WORK PRODUCTS.....	3
4. SCOPE OF REVIEW.....	3
5. REVIEW TEAM.....	3
6. SCHEDULE/COSTS.....	4
7. DOCUMENTATION OF REVIEW.....	4
8. POINTS OF CONTACT.....	4
9. REVIEW PLAN APPROVAL.....	4
10. SUPPLEMENTAL INFORMATION TO SUPPORT RISK INFORMED DECISIONS ON APPROPRIATE REIVEIWS.....	5

## REVIEW PLAN

### *Re-Dredging of the Santa Ana River Salt Marsh Newport Beach, California*

#### **1. INTRODUCTION.**

a. Purpose. This Review Plan defines the scope and level of quality management activities for the Plans and Specifications and accompanying Design Documentation Report for the Re-dredging of the Santa Ana River Salt Marsh.

b. References.

- (1) ER 1110-2-1150, Engineering and Design for Civil Works Projects, 31 Aug 1999
- (2) ER 1110-1-12, Engineering and Design Quality Management, 21 Jul 2006
- (3) WRDA 2007 H. R. 1495 Public Law 110-114, 8 Nov 2007
- (4) EC 1165-2-209, Civil Works Review Policy, 31 Jan 2010
- (5) Army Regulation 15-1, Committee Management, 27 November 1992 (Federal Advisory Committee Act Requirements)
- (6) National Academy of Sciences, Background Information and Confidential Conflict Of Interest Disclosure, BI/COI FORM 3, May 2003

c. Review Requirements. This review plan was developed in accordance with EC 1165-2-209, which establishes the procedures for ensuring the quality and credibility of U.S. Army Corps of Engineers (USACE) decision and implementation documents through independent review. This Review Plan describes the scope of review for the current phase of work. All appropriate levels of review (DQC, ATR, IEPR and Policy and Legal Review) will be included in this Review Plan and any levels not included will require documentation in the Review Plan of the risk-informed decision not to undertake that level of review. The RP identifies the most important skill sets needed in the reviews and the objective of the review and the specific advice sought, thus setting the appropriate scale and scope of review for the individual project.

#### **2. PROJECT DESCRIPTION.**

a. Project Authority. The Santa Ana River Salt Marsh is a feature of the Santa Ana River Project which was authorized by Water Resources Development Act of 1986 (99th Congress 2nd Session, P.L. 99-662).

b. Location and Description. The 92-acre salt marsh restoration is located near the mouth of the Santa Ana River in Newport Beach, California. It is just upstream of Pacific Coast Highway and east of the Greenville-Banning Channel levee. The marsh restoration was completed in 1991, providing 8 acres of mitigation for project construction on the Lower Santa Ana River and creating new and improved habitat for wetland dependent species. The restoration included grading and installation of tide gates to improve tidal flushing and create habitat for the endangered light-footed clapper rail and Belding's

Savannah sparrow. Since initial construction and the present, about 60,000 cubic yards of sedimentation has occurred within the lower marsh. This sedimentation reduces the tidal prism and reduces tidal circulation. The proposed re-dredging of the lower parcel of the marsh restoration will remove the sedimentation and restore tidal circulation. Figure 1 shows the general arrangement of the Santa Ana River Marsh.



Lower Santa Ana River Marsh

Figure 1. Plan View of Santa Ana River Marsh

### 3. WORK PRODUCTS.

Plans and Specifications and a Design Documentation Report will be developed for the Marsh Re-dredging. Supporting products include a Sampling and Analysis Plan (SAP), coordinated with the Resource Agencies, for clearing dredge material and dredge material placement site(s), a geotechnical field investigation, and an Environmental Assessment (EA). The SAP, geotechnical investigation and EA is external to the scope of this RP.

### 4. SCOPE OF REVIEW.

Agency Technical Review (ATR) is undertaken to "ensure the quality and credibility of the government's scientific information" in accordance with ER 1110-1-12. The Scope of the review for maintenance dredging of the Santa Ana River Marsh is to ensure constructability, compliance with environmental commitments, and adherence to the original plan of marsh restoration. District Quality Control (DQC) activities will review the draft and final P&S along with the accompanying DDR, and a BCOE review.

The re-dredging of the marsh will not affect the tide gates or levee, and have no effect on the hydraulics of the Santa Ana River or its flood protection performance. Based on the de minimus risk to life safety and property loss, an ATR is not required. Likewise, a SAR or IEPR is not warranted.

### 5. REVIEW TEAM.

District Quality Control Activities. This is the list of the reviewers who will perform the DQC activities. DQC will be managed by the Los Angeles District, Engineering Division in accordance with South Pacific Division and SPL Quality Management Plans.

Name	Title	Discipline	Organization
TBD	Construction Representative	Construction	So Cal Area Office
Jeffrey Devine	Geotechnical Engineer	Geotechnical	Soils Design
Tiffany Bostwick	Biologist	Environmental	Environmental Resources
Linh Do	Civil Engineer	Civil Engineering	Design Section A
Robert Castle	Hydraulic Engineer	Hydraulics	Hydraulic Design
Eileen Takata	Project Manager	Project Management	Project Management
Jane F. Grandon	Coastal Engineer	Coastal Engineering	Coastal Engineering Section
Ron Spencer	Surveyor	Surveys	Surveying Section

## 6. SCHEDULE/COSTS.

The RP schedule is shown below. No extraordinary costs for reviews are anticipated.

Draft P&S and DDR Completed	22-Apr-2011
DQC Review of Draft Completed	06-May-2011
Final P&S Package Completed	03-Jun-2011
Complete QA Back Check Review	15-Jun-2011
QC/QA Certification by SPL	21-Jun-2011
BCOE Certification Complete	21-Jun-2011
Approve Plans and Specifications	21-Jun-2011
Advertise Construction Contract	23-Jun-2011
Open Bids	26-Jul-2011
Construction Contract Award	25-Aug-2011

## 7. DOCUMENTATION OF REVIEW.

The District Quality Control activities for Re-dredging the Santa Ana River Marsh will be completed by the Los Angeles District. The Agency Technical Review external to the MSC is waived due to the minimal risk involved with the dredging activities. The Document Review and Checking System (DrChecks) will document the review process, including recording of comments, responses and back-checking. A copy of the DrChecks comments and their responses for this project will be maintained on file at Los Angeles District.

In addition, a Quality Control Certification and BCOE will be prepared once the process is completed and issues resolved. Indication of this concurrence will be documented by the signing of a quality assurance certification statement by the Los Angeles District Chief, Engineering Division.

## 8. POINTS OF CONTACT.

Questions about this Review Plan may be directed to the Los Angeles District Project Delivery Team, Lead Engineer, Joseph A. Ryan, 213-452-3679. The Chief, Engineering Division is Richard J. Leifield, 213-452-3629.

## 9. REVIEW PLAN APPROVAL.

The Los Angeles District requests that the South Pacific Division endorse the above recommendations and approve this Review Plan as described in Appendix B of EC 1165-2-609.

## 10. SUPPLEMENTAL INFORMATION TO SUPPORT RISK INFORMED DECISIONS ON APPROPRIATE REIVEIWS

Paragraph 15 of EC 1165-2-209 Risk Informed Decisions on Appropriate Reviews is duplicated below, with the PDT's evaluation of questions to consider in arriving at the recommendation to not conduct an ATR for the Re-dredging of the Santa Ana River Marsh.

a. Appropriate Reviews. All work products must undergo DQC. Beyond DQC, however, there is some level of judgment involved in determining whether ATR and/or IEPR levels of review are appropriate for any work product. Therefore, the RP for all work products shall include documentation of risk-informed decisions on those levels of review. Additional details on the various levels of review are provided below.

b. ATR. All decision and implementation documents are required to undergo ATR, regardless of the originating organization (Planning, Engineering, Construction, or Operations). In deciding whether to undertake ATR for other work products, answering a series of questions will aid the PDT to help identify work products as decision or implementation documents, even if they are not identified as such. Also, this process provides a basis for making a recommendation whether undertaking ATR is appropriate for products that are not either a decision or implementation document. A "yes" answer does not necessarily indicate ATR is required, rather it indicates an area where reasoned thought and judgment should be applied and documented in the recommendation. The following questions, and any appropriate additional questions, shall be explicitly considered:

(1) Does it include any design (structural, mechanical, hydraulic, etc)?

*There are no new structural, mechanical, hydraulic or geotechnical designs for this maintenance dredging activity. The original marsh design analysis was a subject of Design Memorandum No. 1 of the Phase II GDM on the Santa Ana River Mainstem, including Santiago Creek (August 1988).*

(2) Does it evaluate alternatives?

*No, other than the "no-action" and "re-dredge to original design grades".*

(3) Does it include a recommendation?

*No, the plans and specifications do not contain recommendations.*

(4) Does it have a formal cost estimate?

*There will be a feature budget estimate, and a fair and reasonable Government construction cost estimate to evaluate bids upon. But no formal cost estimate for an authorization decision.*

(5) Does it have or will it require a NEPA document?

*Dredging and the placement of dredge material in nearshore waters for a beneficial re-use will require an Environmental Assessment and Finding of No Significant Impact. It is anticipated that all adverse impacts can be mitigated to insignificance through construction timing and environmental controls.*

(6) Does it impact a structure or feature of a structure whose performance involves potential life safety risks?

*No - dredging of the marsh will not affect any structural features the Santa Ana River Mainstem Project, and hence will have no impact to potential life safety risks due to flooding. Appropriate controls to separate the public from work areas will be implemented to minimize accident risks to the public during construction. The original project was a mitigation requirement and it is not linked to the physical flood risk management feature of the Santa Ana River Mainstem Project.*

(7) What are the consequences of non-performance?

*The COE would be out of compliance with mitigation commitments of providing an ecosystem restoration. Sedimentation in open water areas of the marsh will continue, and the distribution of wetland habitats will change along with the effectiveness of the moat surrounding the California least tern island in deterring feral animals from preying during the nesting season.*

(8) Does it support a significant investment of public monies?

*No - This project represents 0.1 % of the Santa Ana River Mainstem Project budget. Santa Ana River Mainstem Project total budget is \$2.4 billion. The budget estimate for re-dredging of the Lower Santa Ana River Marsh is \$2.4 million.*

(9) Does it support a budget request?

*No.*

(10) Does it change the operation of the project?

*No.*

(11) Does it involve ground disturbances?

*Yes, dredging is proposed in the lower marsh over an area of about 5xx Acres. This area is currently sub and intertidal marsh.*

(12) Does it affect any special features, such as cultural resources, historic properties, survey markers, etc, that should be protected or avoided?

*No.*

(13) Does it involve activities that trigger regulatory permitting such as Section 404 or stormwater/NPDES related actions?

*Yes, State Water Quality Certification is required from the Santa Ana Regional Board for the dredge discharge in the nearshore and the dredging in the marsh. In addition, the California Coastal Commission should concur with the CZMA Consistency Determination for dredging of the marsh.*

(14) Does it involve activities that could potentially generate hazardous wastes and/or disposal of materials such as lead based paints or asbestos?

*No.*

(15) Does it reference use of or reliance on manufacturers' engineers and specifications for items such as prefabricated buildings, playground equipment, etc?

*No.*

(16) Does it reference reliance on local authorities for inspection/certification of utility systems like wastewater, stormwater, electrical, etc?

*No.*

(17) Is there or is there expected to be any controversy surrounding the Federal action associated with the work product?

*No.*