

# **Marina del Rey (MdR) Harbor Dredging Update County of Los Angeles**

## **Location and Description**

Marina del Rey Harbor (MDR) is located approximately 15 miles southwest of downtown Los Angeles and is the largest man-made harbor in the United States with approximately 4,700 boat slips. Marina del Rey is home to the U.S. Coast Guard Cutter (USCGC) Halibut, Lifeguard Baywatch, County Fire and Sheriff vessels that perform vital offshore law enforcement, search and rescue and emergency response operations. Rescue craft in Marina del Rey aided in search and rescue operations after an Alaska Airlines flight crashed in the ocean off of Point Mugu earlier in the decade. The federal project maintenance consists of jetties, entrance channel, main channel, and breakwater.

The Marina del Rey north entrance, south entrance and main channel area should be dredged in Fiscal Year (FY) 2011 to address the current and future critical blockage and harmful impacts to navigation. This dredging will also remove contaminated sediment (unsuitable for beach placement) from the south entrance and will be placed in a contaminated disposal facility (CDF) at the Port of Long Beach Middle Harbor (POLBMH) project site. Though partial dredging occurred in the south entrance in FY 2009, this whole area has not been fully dredged since FY 2000. Also, although the north entrance was dredged in 2007, both the entrance and the sand trap are filling back in. Four major benefits of this project are (1) the opportunity to safely dispose of contaminated sediment in a CSF at the (POLBMH) project site, (2) maintaining a navigable harbor to allow the U.S. Coast Guard and local law enforcement to maintain public safety and rescue operations in regional waters, especially adjacent to LAX, (3) providing a source of clean sand to nourish local beaches, and (4) greatly reduce the volume of contaminated material requiring the high cost disposal option provided by an upland landfill.

## **The Problem: Contaminated Sediments in MDR**

Over the past several years, the federally authorized channels have experienced significant shoaling which has impacted all boat traffic. At present, there is approximately 900,000 cubic yards (CY) of clean and contaminated material to be dredged at the Harbor (Figure 1). The South Entrance and adjacent channel areas have an estimated 320,000 CY of contaminated sediment, and the North Entrance and adjacent channels have an estimated 570,000 CY of clean sediment. The U.S. Corps of Engineers (Corps) is designing a dredging project for FY10/FY11 to remove this sediment (Figures 1 and 2).

**Marina Del Rey Harbor  
Available Quantities - Cubic Yards  
November 2009 Survey**

	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7 North	Area 7 South	Area 8 North	Area 8 South	Area 9 North	Area 9 South	TOTAL
Design Depth	-30 ft	-20ft	-20ft	-20ft	-20ft	-30 ft	-20ft	-20ft	-20ft	-20ft	-20ft	-20ft	QTY
Footprint Area (sq yards)	30,116	29,342	22,566	26,951	33,074	29,920	32,888	25,994	32,582	26,504	32,428	26,368	348,733
<b>No Overdepth</b>													
Nov 2009 Condition Survey (cubic yards)	131,000	30,620	33,550	25,145	23,380	227,500	42,635	45,800	34,750	32,115	20,850	16,970	<b>664,315</b>
													no overdepth
<b>With 2 ft Overdepth</b>													
Nov 2009 Condition Survey (cubic yards)	146,700	45,420	45,750	39,005	39,460	243,500	60,610	59,890	52,420	46,555	37,740	31,110	<b>848,160</b>
													<b>TOTAL</b>
													cubic yards

Note: In the past, Areas 1, 2, 3, and 7 have been identified as contaminated areas.

Figure 1



Figure 2

The Ballona Creek flood control channel is a primary source of contamination for these areas (i.e., from waste and runoff that flow down the channel). The Corps is currently developing a regional Ecosystem study for the Ballona Creek watershed. The partners in this collaborative effort include; the County of Los Angeles, the Cities of Los Angeles, Culver City, Beverly Hills, State and Federal Resource and Regulatory Agencies, and the Ballona Creek Conservancy. The Study partners are developing a list of projects and programs that will implement sustainable ecosystem projects which include a concerted effort for the reduction contaminated sediments. The culmination of these regional efforts will significantly reduce future federal obligations for the removal of

contaminated sediments that accumulate in the federal navigation channel in Marina Del Rey.

### **Urgent Need for Dredging with Beneficial Reuse and an Innovative Solution**

The contaminated areas must be dredged in FY10/FY11 to take advantage of a one-time opportunity to place contaminated sediments in a CDF at the POLBMH project site and to avoid critical blockage and harmful impacts to navigation. The site is anticipated to begin receiving materials from third parties in November 2010 and will likely remain open until mid 2012 or until third-party capacity, approximately 3 million CY, is reached. Based on the historical results of sediment testing at MDR, the Harbor is a prime candidate for fill material at the POLB CDF. It has been approximately ten years since the south entrance has been thoroughly dredged. The available materials adjacent to the Harbor in Ballona Creek could sweep into the south entrance with one severe storm and close that entrance to all vessels at any time. Such a closure would harm the ability of the USCGC Halibut to respond rapidly to homeland security, offshore law enforcement, search and rescue, and emergency response operations. Likewise, local Fire Department, Lifeguard Baywatch and Sheriff's vessels would be impeded from rapidly assisting in their own public safety responsibilities along with coastline rescue operations for aircraft using, for example, the adjacent Los Angeles International Airport. In addition, closure would result in serious impacts on the daily use of MDR by the thousands of recreational and business crafts, as well as the economy via area businesses and the tourism industry.

The Corps is proposing to use CDF constructed within the POLB for two important reasons: (1) to enable an economical and beneficial reuse of the recovered contaminated sand; and (2) to greatly reduce the volume of contaminated material requiring the high cost disposal option provided by an upland landfill.

### **Project Schedule**

- |                           |          |
|---------------------------|----------|
| • Begin Sediment Sampling | Feb 2010 |
| • Draft Sampling Results  | Mar 2010 |
| • Final Sampling Results  | Apr 2010 |
| • Draft Plans and Specs   | May 2010 |
| • Draft EA/FONSI          | May 2010 |
| • Final Plans and Specs   | Jul 2010 |
| • Final EA/FONSI          | Jul 2010 |
| • Start Construction      | Oct 2010 |
| • Complete Construction   | Sep 2011 |

### **Costs and Expectations**

The current FY10 appropriation (\$1.4 million) provided adequate funds to develop Plans and Specifications and Environmental Assessment (EA) and Finding of No Significant Impact (FONSI).

The Department of Beaches and Harbors and the Corps are developing three alternatives for this project:

1. Dredge all available materials in Areas 1 through 9 (approx. 900,000 CY) with placement of clean materials on Dockweiler State Beach or Redondo Beach and contaminated materials to POLB CDF at a cost of approximately \$14 million.
2. Dredge available materials in Areas 1 through 6 (approx. 600,000 CY), the North and South Entrances, with placement of clean materials on Dockweiler or Redondo Beach and contaminated materials to POLB CDF at a cost of approximately \$10 million.
3. Dredge available materials in Areas 1 through 3 and 7 South (320,000 CY), the South Entrance, with placement of contaminated materials to POLB CDF at a cost of approximately \$8 million.

Costs are based on previous contracts performed at MDR. These costs are highly speculative. Actual costs will be determined by results of Invitation for Bid and low bidder.