



2011 Dredging New Bedford Harbor Superfund Site

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Dredge Season 2011

- **Overview**
- **Dredge Areas**
 - Preparation
- **Dredge Plan**
 - Pre-Dredge Activities
 - Hydraulic Dredging
 - Mechanical Dredging
- **Environmental Monitoring**



Overview

- **225,000 cubic yards (cy) dredged out of 900,000 cy**
- **2011 Annual Funding of \$15 million**
- **Minimum of 45 days**
- **Schedule**
 - Mobilization, May to early-June 2011
 - Dredging, late-June to September/ October
 - Demobilization, October/ November
- **Operations 6 days/week, 12 hour days**

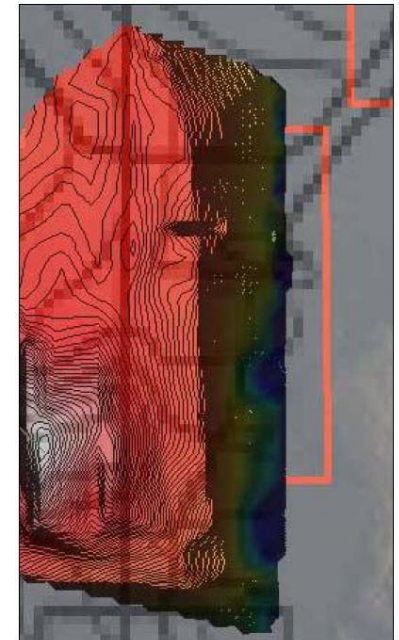
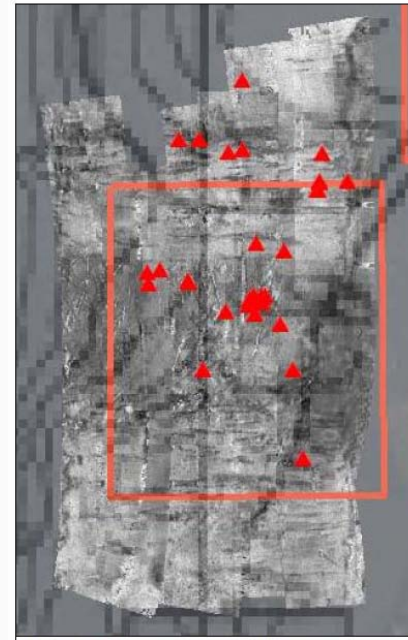


Dredge Areas

- **Seven (7) Dredge Areas**
 - 4 target areas: G, N, K, and L
 - 1 future use area: Q
 - 2 contingency area: P & O
- **Dredge PCB-contaminated sediment >10ppm**
- **Approx. 25,000 cubic yards (cy) expected to be dredged in 2011**

Dredge Area - Preparation

- **Marine Archaeological Survey**
 - April - June 2011
 - Objective
 - identify any areas that would interfere with dredging
 - avoid damage to any significant finds





Dredge Area - Preparation (*cont'd*)

- **Marine Archaeological Survey (*cont'd*)**
 - Next Steps
 - Determine nature of the findings
 - Consult with the Archaeological Stakeholders
 - Massachusetts Historical Commission (MHC) and
 - Bureau of Underwater Archeological Resources (BUAR),
 - local tribes and other interested parties
 - Progress Update at Next Public Meeting



Dredge Plan

- **Pre-Dredge**
 - May - June
- **Hydraulic Dredging in Areas G, K, L, N, O, & P**
 - 3 hydraulic “Mudcat” dredges
 - Set-up in Dredge Area G, K and L
 - Once areas completed, will move to adjacent areas:
G →N, K→O and L→P
- **Mechanical Dredging in Area Q**
 - Working with the to make the Harbor accessible
 - Harbor Development Commission (HDC) to build Pier in Fall of 2011

Pre-Dredge Activities

- **Mobilization**
 - Pipe-line Relocation
 - Booster Pump Set-up
- **Installation of Sheeting**
 - Guide dredge equipment
- **Debris Removal**
 - Barge Mounted Excavator
 - Removed Material Stored in Debris Disposal Area (DDA)





Hydraulic Dredging

1. Dredge with One (1) Mudcat at a time

- Tidal changes will determine which dredge area
 - Minimum water depth of 3 feet (ft)
- Removal to 1- 6 ft depth (avg. 2ft)
 - Based on sediment sampling
- Sediment & water pumped into floating pipeline



Hydraulic Dredging (*cont'd*)

2. Desanding

- Coarse sand, shell, and debris separated from finer sediments
- Material tested for PCBs to determine if Toxic Substances Control Act (TSCA) waste
- Trucked to Waste Disposal facility



Hydraulic Dredging (*cont'd*)

3. Dewatering

- Large presses squeeze excess water out of finer sediments
 - Finer sediments have highest PCB content, therefore disposed as TSCA
- Water treated, tested and discharged to Harbor





Hydraulic Dredging (cont'd)

- **Transport to Licensed PCB landfill in Michigan**
 - Material to be trucked due to Railroad Bridge repairs
 - Sediments loaded into lined truck & covered
 - 3 Trucks, 4 Trips per day from July to Sept.
 - Truck transport to Worcester Transfer Facility then by Rail





Mechanical Dredging

- **Conditions in Area Q requiring mechanical dredging**
 - Small quantity: approximately 750 cubic yards
 - Shallow area
 - Near shoreline

Mechanical Dredging (*cont'd*)

- **Expectations**
 - Shore-based excavator loaded truck
 - Barge-mounted excavator loaded to scow
 - Final Disposal in PCB Landfill
 - Air Monitoring at Sawyer St.





Monitoring Activities

- **Type of Monitoring**

- Air
- Sediment
- Water Quality
- Fish Migration
- Seafood Monitoring (by State)

- **Frequency**

- Generally before, during and after dredging

- **Locations**

- Same as last year for water, sediment & fish monitoring
- Additional locations for air monitoring



More Information

- **Website:** www.epa.gov/nbh
- **Press Release:** July 2011
- **Office Hours:** July – September
- **Contact EPA Community Involvement Coordinator**
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A large, faint watermark of the U.S. Environmental Protection Agency logo is centered in the background. The logo features a stylized flower with a smiling face, surrounded by the text "UNITED STATES ENVIRONMENTAL PROTECTION AGENCY".

Questions ?

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REPOSITORY TARGET SHEET

US EPA New England
Superfund Document Management System /
RCRA Document Management System
Native Files Target Sheet

SDMS Document ID #: 480750

Site Name: New Bedford

Phase Activity: 13.5

File Type(s) Attached (examples: Excel file or .jpg):

_.pptx

Document Type this Target Sheet Represents:

- Map Photograph Graph/Chart
 Video Compact Disc Other (Specify below)

Description or Comments:

Dredging update presentation

**To view the attached files, open the "Attachment Panel"
by clicking on the paper clip -  - at the bottom left of this window.**

**** Please note to view attachments the software corresponding with
the specified file type is necessary. ****

For any additional assistance please contact the EPA New England Office of
Site Remediation and Restoration Records and Information Center-
Telephone (617) 918 1440