

# **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**

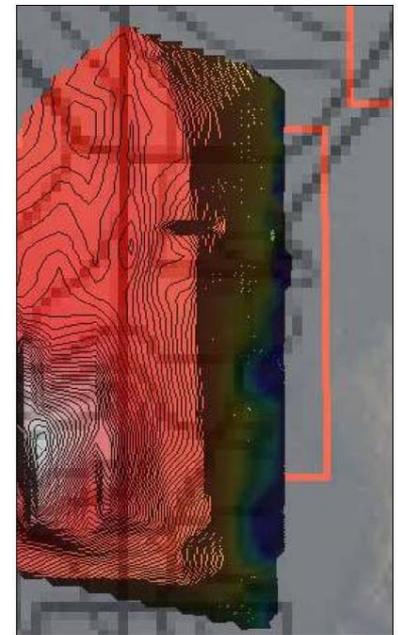
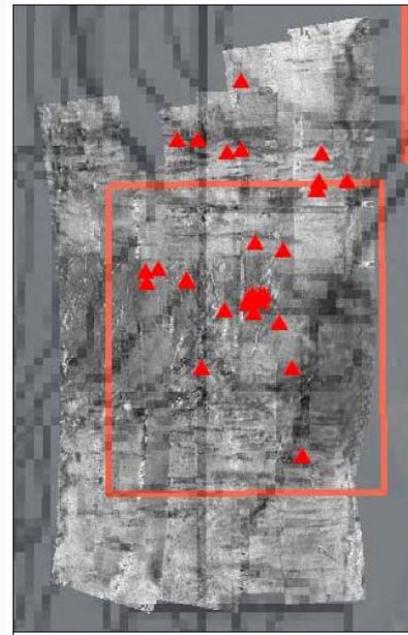


# Dredge Areas

- **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)

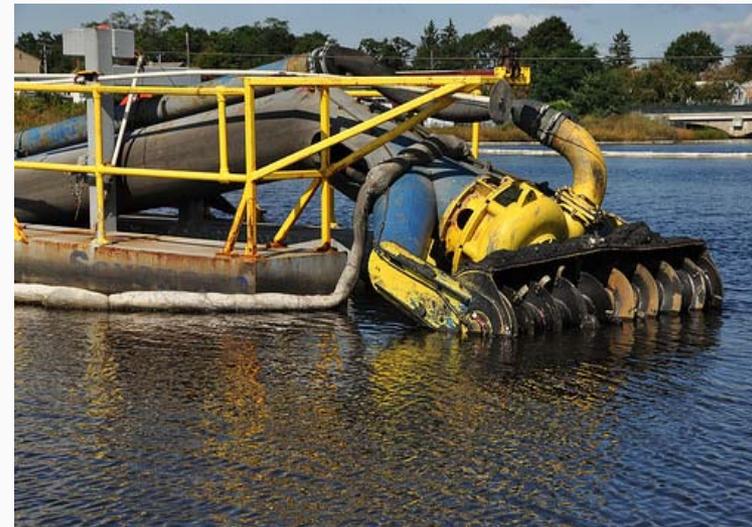




# Hydraulic Dredging

## 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](http://www.epa.gov/nbh)
- **Press Release:** July 2011
- **Office Hours:** July – September
- **Contact EPA Community Involvement Coordinator**
  - [Kelsey O'Neil](#)  
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Toll Free 1-888-372-7341 ext.8-1799

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# Questions ?

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