

LOWER HARBOR CAD CELL TECHNICAL WORKING GROUP MEETING

April 25th, 2012: Discussion of
Potential Air Impacts

Follow up on Last Meeting

Information to be posted to EPA website soon:

- ▣ State Enhanced Remedy (SER) Turbidity Data
- ▣ SER Navigational Protocols
- ▣ Volumes, Depths, Location Data of Sediment to be Dredged
- ▣ Monitoring data from Narragansett EPA Lab and data correlating toxicity testing to turbidity levels.

Current Status of Lower Harbor CAD Cell Design

- ▣ Lower Harbor CAD Cell under design under Cooperative Agreement with the New Bedford Harbor Development Commission.
- ▣ Anticipate CAD cell draft design in May.
- ▣ Contract to construct the Lower Harbor CAD cell will be put out to bid this summer.

Quick Overview






New Bedford Harbor Website:

<http://www.epa.gov/nbh>



Aerovox

PCB gradient is north to south

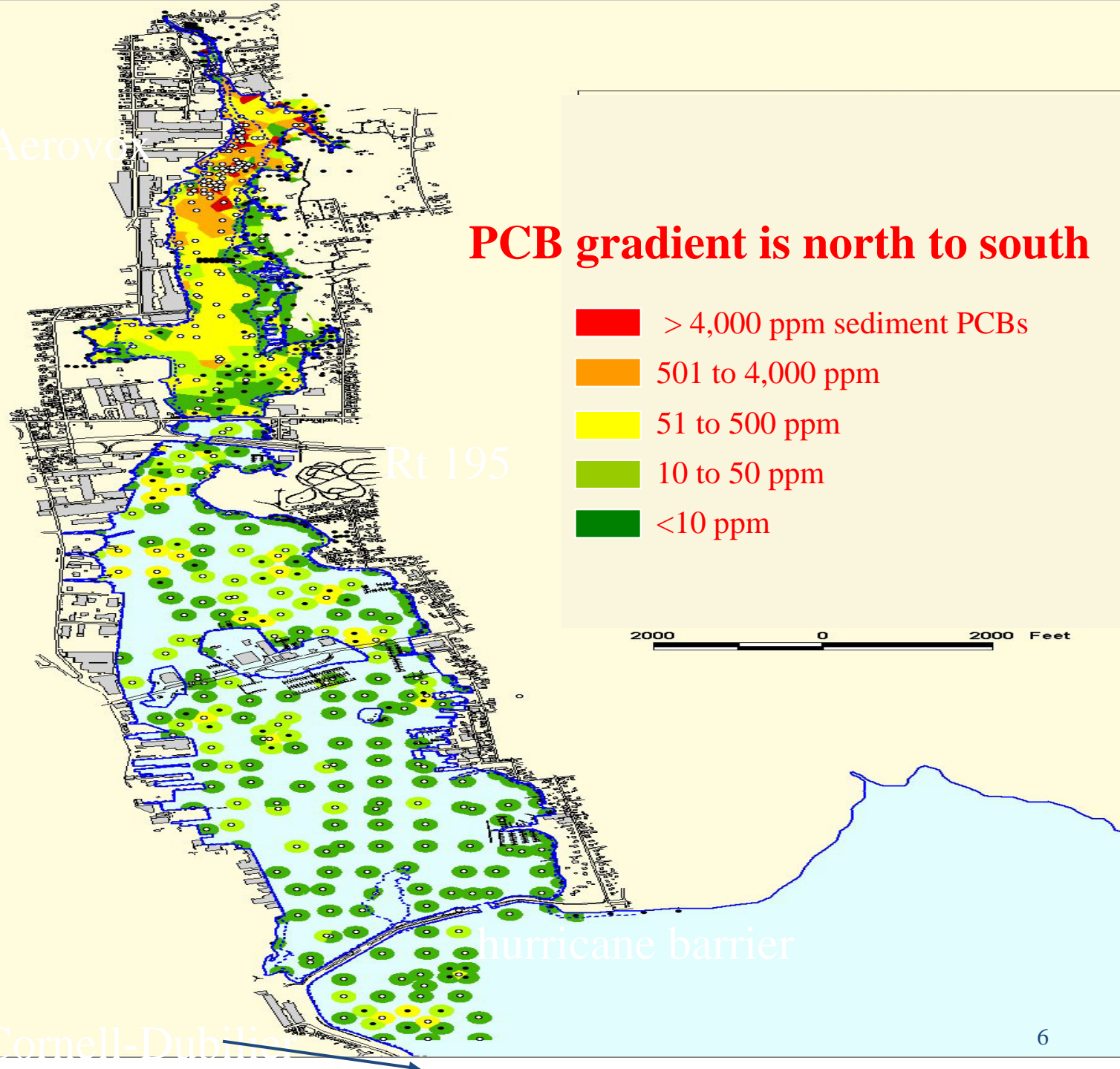
-  > 4,000 ppm sediment PCBs
-  501 to 4,000 ppm
-  51 to 500 ppm
-  10 to 50 ppm
-  <10 ppm

Rt 195

2000 0 2000 Feet

hurricane barrier

Cornell-Dubilier



NOTE: red, orange and green denote sediment areas with (or formally with) PCB levels requiring cleanup.

North of Wood Street cleanup (2002-03)

Aerovox

RED areas: continue with current remedy

New Bedford

ORANGE areas: place in Superfund CAD cell

The Superfund CAD cell would be located between the Rt. 195 and Rt. 6 bridges

Three navigational CAD cells have been built to date

Rt 195

Rt. 6

Fairhaven

New Bedford Harbor

hurricane barrier

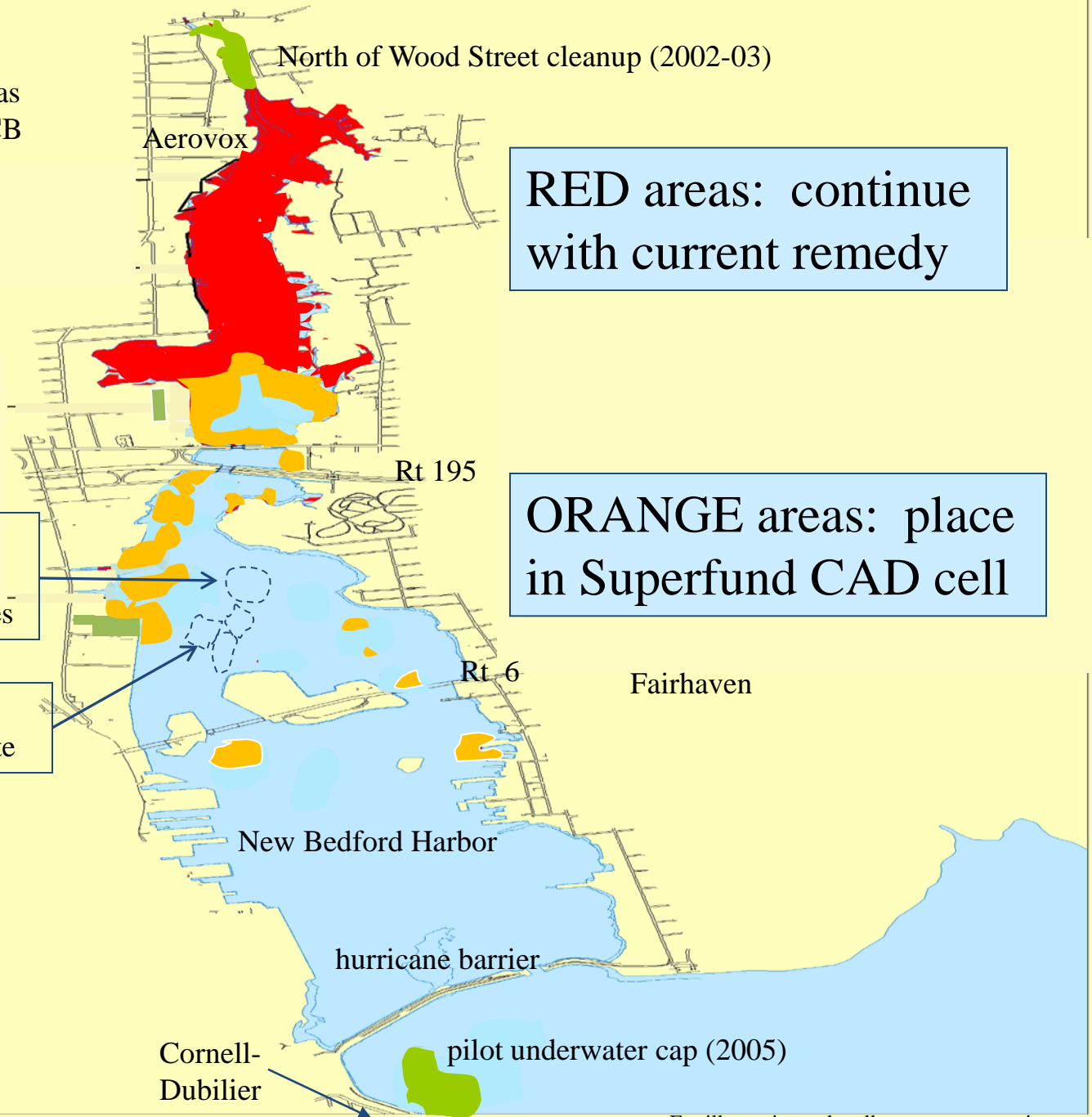
pilot underwater cap (2005)

Cornell-Dubilier

N

app. one mile

For illustration only, all areas are approximate



Lower Harbor CAD Cell Project

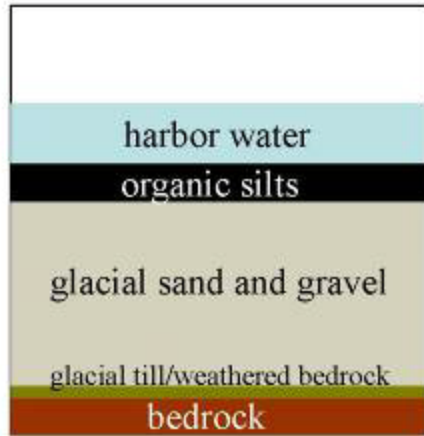
- ▣ Dredge 300,000 cubic yards of PCB contaminated sediment (mostly) from Lower Harbor;
- ▣ Contaminated at levels between 50 ppm and 190 ppm;
- ▣ Disposal in Confined Aquatic Disposal Cell (CAD) in Lower Harbor, allowed to consolidate.
- ▣ Three foot thick sand cap to cover consolidated material.

ESD: Lower Harbor CAD Cell Can be Safely Implemented

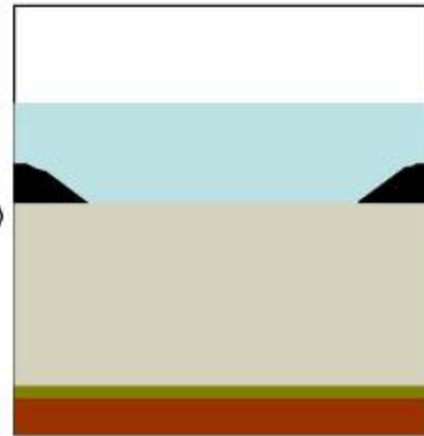
- ▣ Can be safely implemented (four separate site-specific lines of evidence demonstrate this:
 - Lower Harbor's ecological quality significantly improved since navigational CAD cells implemented
 - State-of-the-science real-time water quality monitoring water quality performed showing protective results
 - Air and water quality modeling supports safe and effective implementation
 - 2005 underwater pilot cap outside the hurricane barrier continues to be protective

Bases of Changes Contained in LHCC ESD

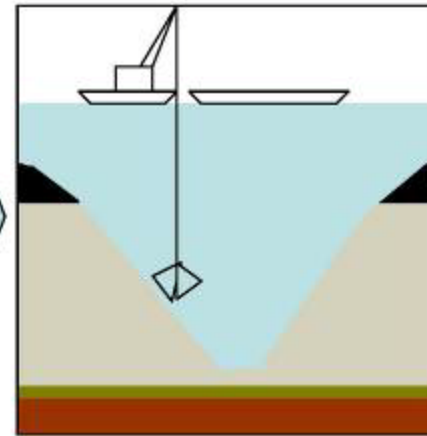
- ▣ Evaluation of Short and Long Term Impacts was supportive of the change
- ▣ Siting, construction, and O&M can be performed protectively.
- ▣ Disposal in LHCC reduces time and cost to complete the harbor cleanup
- ▣ Collaboration with navigational dredging may increase cost-effectiveness.
- ▣ Potential for beneficial reuse of clean fill from LHCC construction.



1. Harbor bottom as is

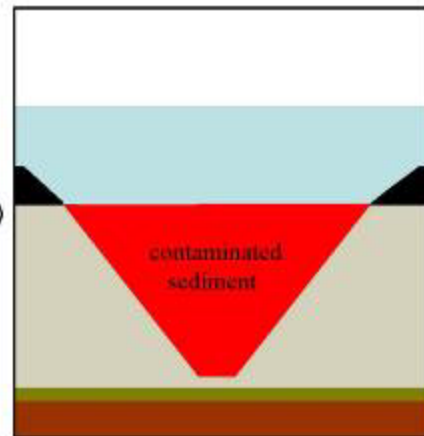


2. Excavation of silts

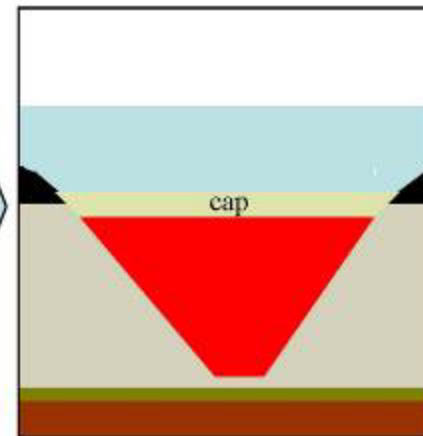


3. Excavation of sand and gravel

What's a
CAD cell?
(confined aquatic
disposal)

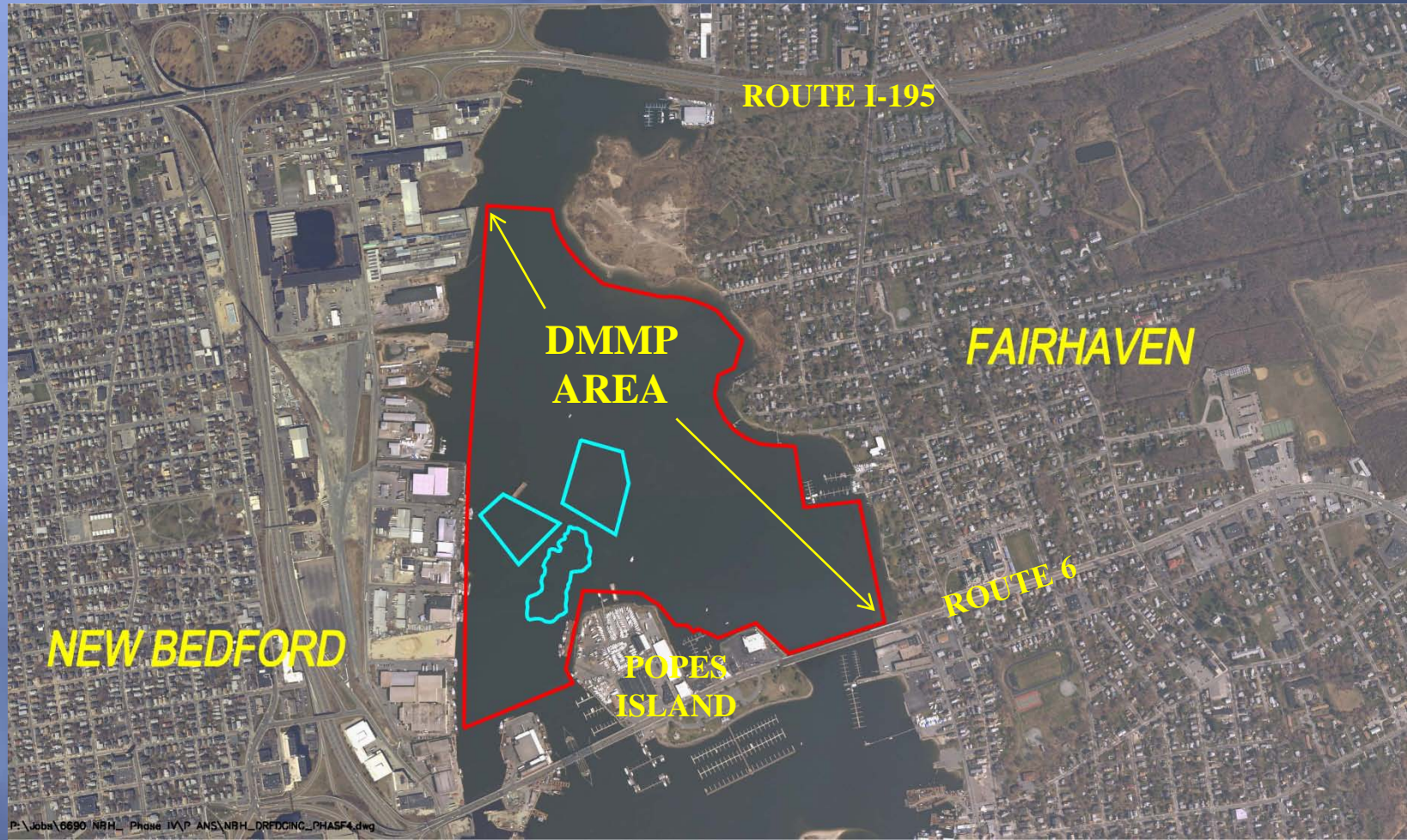


4. Placement of dredged
sediments into the CAD cell



5. Placement of clean cap
(after consolidation)

Dredged Material Management Plan Area



Air Aspects of ESD

- ▣ Air monitoring will be performed during dredging of contaminated material:
 - During construction of LHCC, air monitoring will be performed during dredging of and placement of top of CAD material
 - Not performed during dredging of clean material for CAD cell.
- ▣ Dredged materials will not be allowed to dry out prior to placement to avoid generation of airborne dust.
- ▣ Significant air quality impacts are not expected due to results of air modeling.
- ▣ Results of air monitoring to be posted on EPA website.

Speakers

- ▣ Steve Fox, Jacobs: Air Monitoring
- ▣ Dave Lederer, US EPA: Air Modeling
- ▣ Margaret McDonough, US EPA: Risk Assessment