An Example of a Unique Partnership for Contaminated Sediment Management – The Port Hueneme Experience

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Presentation Overview

• Project Background and Design Overview
• Partnership Strategy
• Cost Sharing Allocations
• Lessons Learned
Project Team

- USACE, Los Angeles District
  - Construction Operations
  - Project Management
  - Regulatory
  - Planning
  - Engineering
  - Legal
Project Team Cont.

- U.S. Navy
  - Naval Base Ventura County
  - Southwest Division
    - Legal
    - Planning
- Oxnard Harbor District
- Anchor Environmental LLC
  - Everest International Consultants, Inc
  - iLanco Environmental
Port Hueneme History

- Oxnard Harbor District (OHD) formed in 1937 with 322 acres
- Harbor constructed and operations began in 1940
- Constructed harbor = not state lands
- U.S. Navy acquired harbor by paying off bonds in May, 1942
- Navy agrees to lease 16 acres to OHD in 1947 – commercial operations begin again
Current Uses

• Oxnard Harbor District (Port of Hueneme)
  – Produce import/export
  – RO/RO automobile imports

• U.S. Navy (Naval Base Ventura County)
  – Construction Battalion Center
  – Naval Surface Warfare Center
  – Pacific Missile Test Range
Port Hueneme – Joint Use

Naval Base Ventura County

Oxnard Harbor District
Challenges for Port Hueneme

• Federal Channel has accumulated ~200,000 meters of O&M material
• USACE has authority to deepen Federal Channel by ~1.5 meters
• None of the berths have been dredged in decades resulting in modified operations
• Contaminated sediments exist throughout Harbor
Port Hueneme Sediment Issues
Port Hueneme Sediment Issues

Naval Base Ventura County

Oxnard Harbor District
Port Hueneme Sediment Issues

Naval Base Ventura County

USACE Federal Channel

Oxnard Harbor District
Sediment Contamination

- Total ~250,000 cubic meters
- Approximately 60% from berths/40% from Federal Channel
- COCs include PAHs, PCBs, DDT, TBT
- Mostly fine sands, silts and clays – low organic carbon
Management Alternatives

• Landfill Disposal
• On-site near shore Confined Disposal Facility (CDF)
• Port fill site at POLA or POLB
• Contained Aquatic Disposal (CAD)
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Rationale for CAD Selection

- Provides on-site solution
- Not tied to other development or funding
- Environmentally protective
- Opportunities for beach nourishment
- Allows for Harbor deepening to advance
- Restores 100% use of Naval/OHD wharves
- Provides **total** solution for all 3 projects
- Shared resources = cost effective
Port Hueneme CAD Solution

Naval Base Ventura County

Target CAD Site (700’ x 700’)

Oxnard Harbor District
Expected Construction Sequencing

Step 1: Excavate Pit
Expected Construction Sequencing

Step 1: Excavate Pit

Beach Fill
Step 2: Place Contaminated Sediment in Pit
Expected Construction Sequencing

Step 3: Place Cap Material
Proposed CAD Cross-Section

-35’ MLLW
-42’ MLLW
-52’ MLLW
-83’ MLLW

Existing Mudline
Future Mudline
Cap Layer
Contaminated Layer
Funding Strategy

• Challenges
  – Raising funds (total project ~ $15 million)
  – Coordinating schedules
  – Contractor negotiations and scheduling

• Opportunities
  – All participants had some funds allocated for reduced individual projects
  – Staff committed from the top down
  – Significant project momentum
Cost Sharing Approach

• Break project into segments (e.g., CAD excavation, Navy wharves, cap armor placement, etc)
• Estimate costs associated with each segment
• Assign segments to participants based on either ownership or limitations in authority
Cost Sharing Approach Cont.

- Fine tune cost segments to accommodate secondary cost sharing strategies and funding schedules
  - Can include financial balancing to make project more equitable among all partners
  - Recognize previous agreements
  - Account for contaminated sediment ownership allocation
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Contracting Approach

- USACE has existing contract with Manson Construction for O&M dredging in Port Hueneme and Channel Islands Harbor
- Modification issued for additional work
- OHD/USACE Cost Sharing Agreement
- USACE/Navy Cost Sharing Agreement already in place for dredging
Contracting Approach Cont.

- OHD/Navy Agreement for CAD construction and long-term monitoring/liability
- All funds transferred to USACE for contracting and management
Project Schedule

• Conceptual design for project completed in April 2007
• Design and permitting completed in August 2008
• Construction will begin in December 2008
• Estimated completion is June 2009
Lessons Learned

- Obtaining senior management approval early on is key
- “Pre-negotiate” the permit conditions during the design phase of the project
- Develop an accurate construction cost estimate early in the process
- Involve the lawyers sooner rather than later in the process
Questions?