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

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Presentation Overview

- Site and Project History
- Partnership Strategy
- Cost Sharing Allocations
- Construction Overview
- Project Benefits
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 QEA 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 on 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 had accumulated ~200,000 meters of O&M material
- USACE has authority to deepen Federal Channel by ~1.5 meters
- None of the berths had been dredged in decades resulting in modified operations
- Contaminated sediments existed throughout Harbor
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
- Chemicals of Concern included PAHs, PCBs, DDT, TBT
- Mostly fine sands, silts and clays - low organic carbon
Regional Management Alternatives

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

- Provided on-site solution
- Not tied to other development or funding
- Environmentally protective
- Opportunity for beach nourishment
- Allowed for Harbor deepening to advance
- Restored 100% use of Naval/OHD wharves
- Provided total solution for all 3 projects
- Shared resources = cost effective
Funding Strategy

• Challenges
  – Raising funds (total project ~ $14 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
  • 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 had 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
Port Hueneme Construction Overview

Naval Base Ventura County

Target CAD Site (700’ x 700’)

Oxnard Harbor District
Construction Sequencing

Step 1: Excavate Pit
Construction Sequencing

Step 1: Excavate Pit

Beach Fill
CAD Excavation (Dec 15 to Jan 23)
Step 2: Place Contaminated Sediment in Pit

Construction Sequencing
Contaminated Sediment Dredging
(Feb 4 to May 4)
Contaminated Sediment Dredging (Feb 4 to May 4)

Average Barge Load = 900 cubic meters
Construction Sequencing

Step 3: Place Cap Material
CAD Site Capping (May 5 to June 13)
CAD Site Armor Rock (June 13 – July 15)
Project Schedule

- Conceptual design for project completed in April 2007
- Design and permitting completed in August 2008
- Construction initiated in December 2008
- Completed in July 2009
Construction Volumes

- CAD cell construction
  - 540,000 cubic meters
- Contaminated sediment placement
  - 190,000 cubic meters
- CAD cell capping
  - 110,000 cubic meters
- Rock armor
  - 34,000 tons
Project Benefits

- Recreational = Restored Hueneme Beach
- Operations = Restored full navigation use to Harbor
- Future Growth = Provides clear path for Harbor deepening
- Financial = More than $30 million in benefits achieved for less than $14 million in costs
Biggest Accomplishment – A Model for a Teaming Approach
Questions?