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

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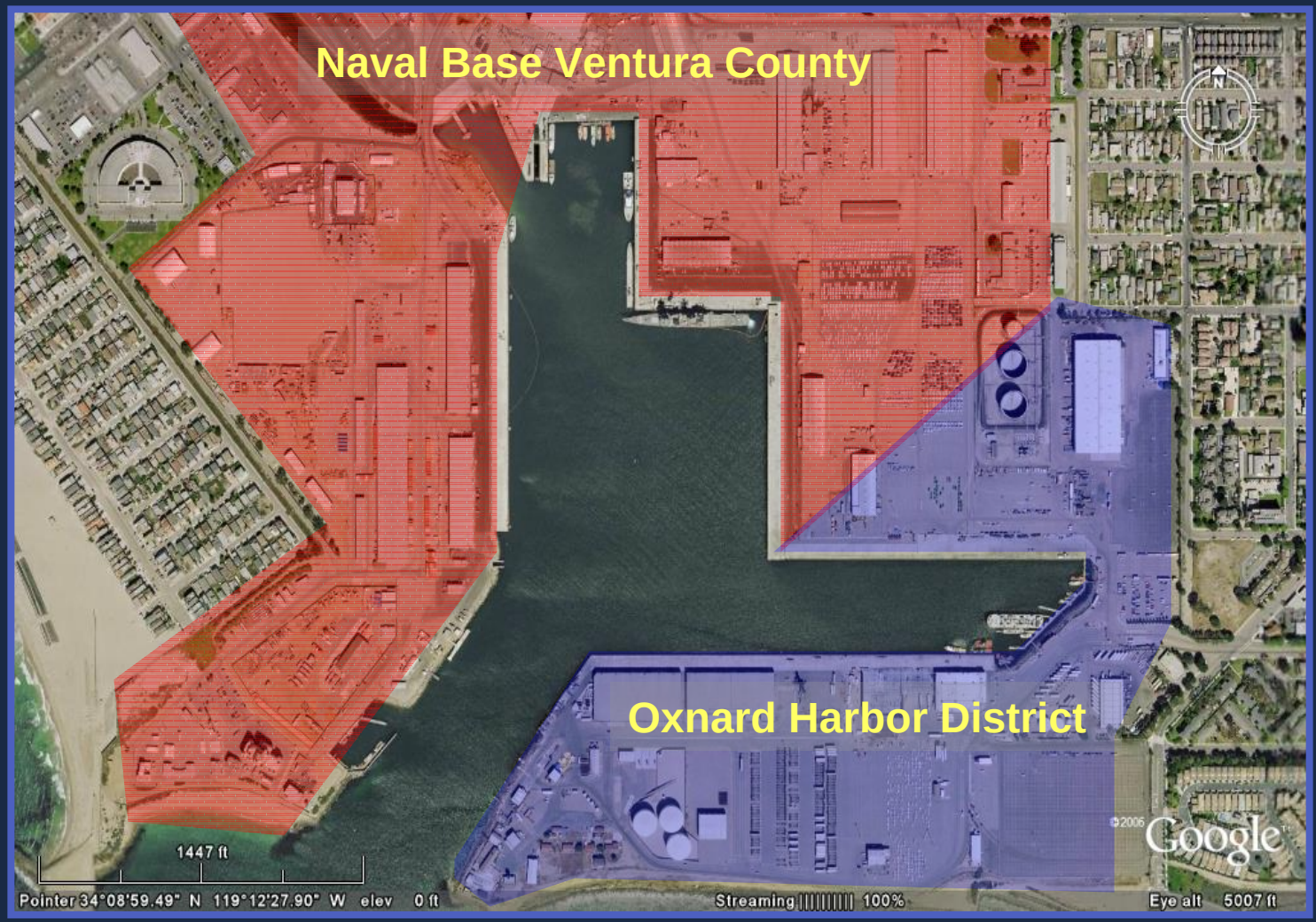
Port Hueneme History

- 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



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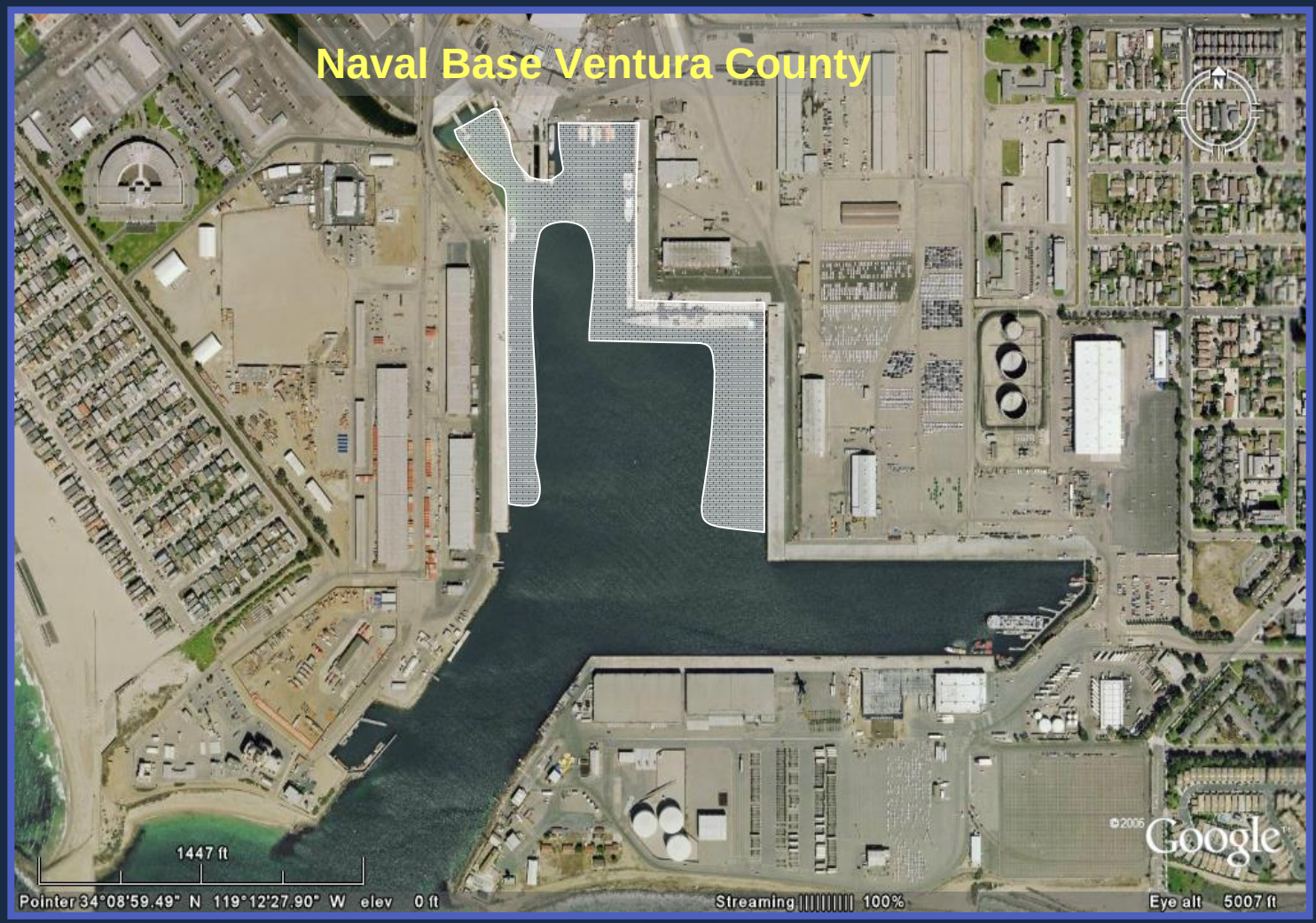
Challenges for Port Hueneme

- 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



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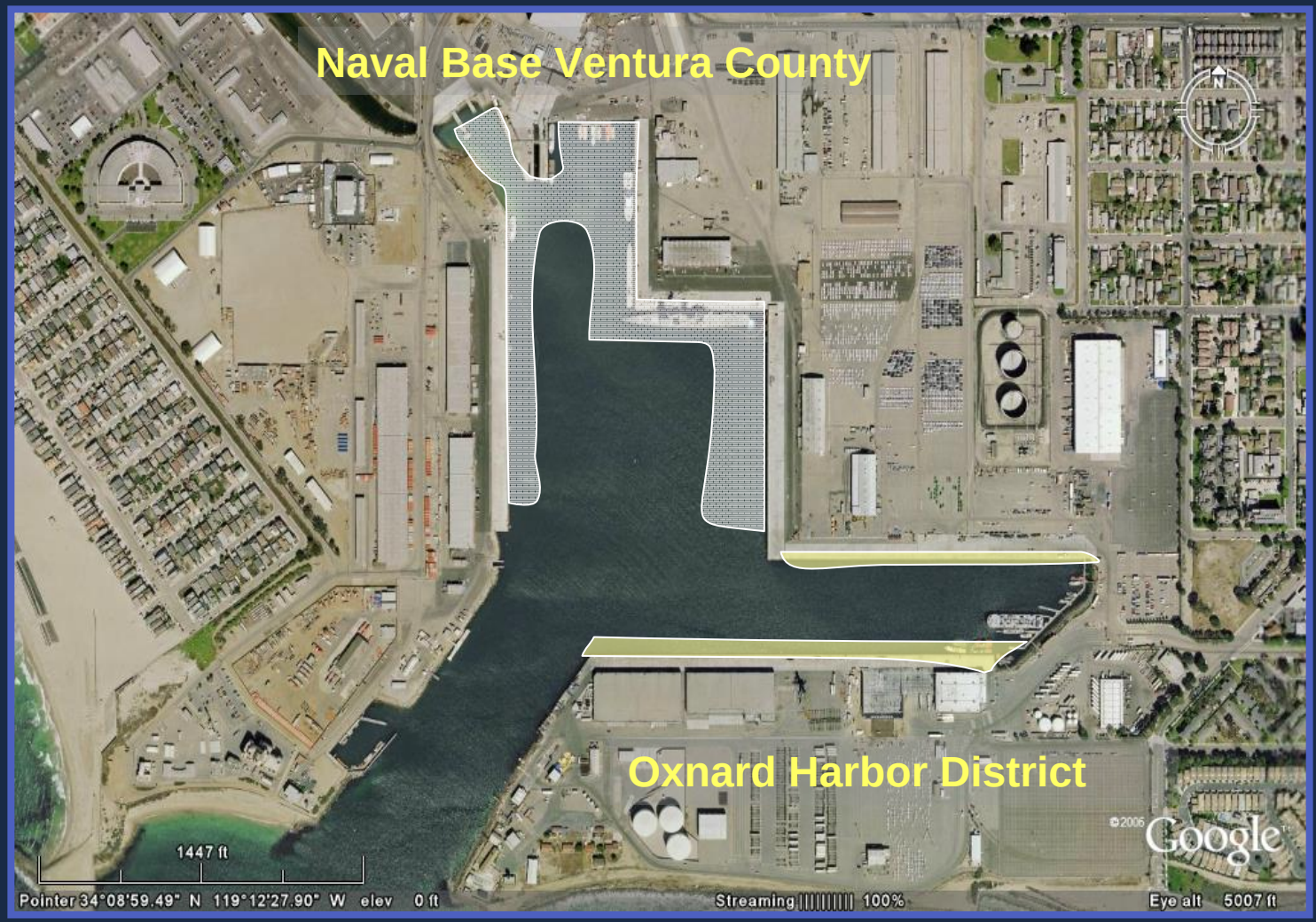
Port Hueneme Sediment Issues



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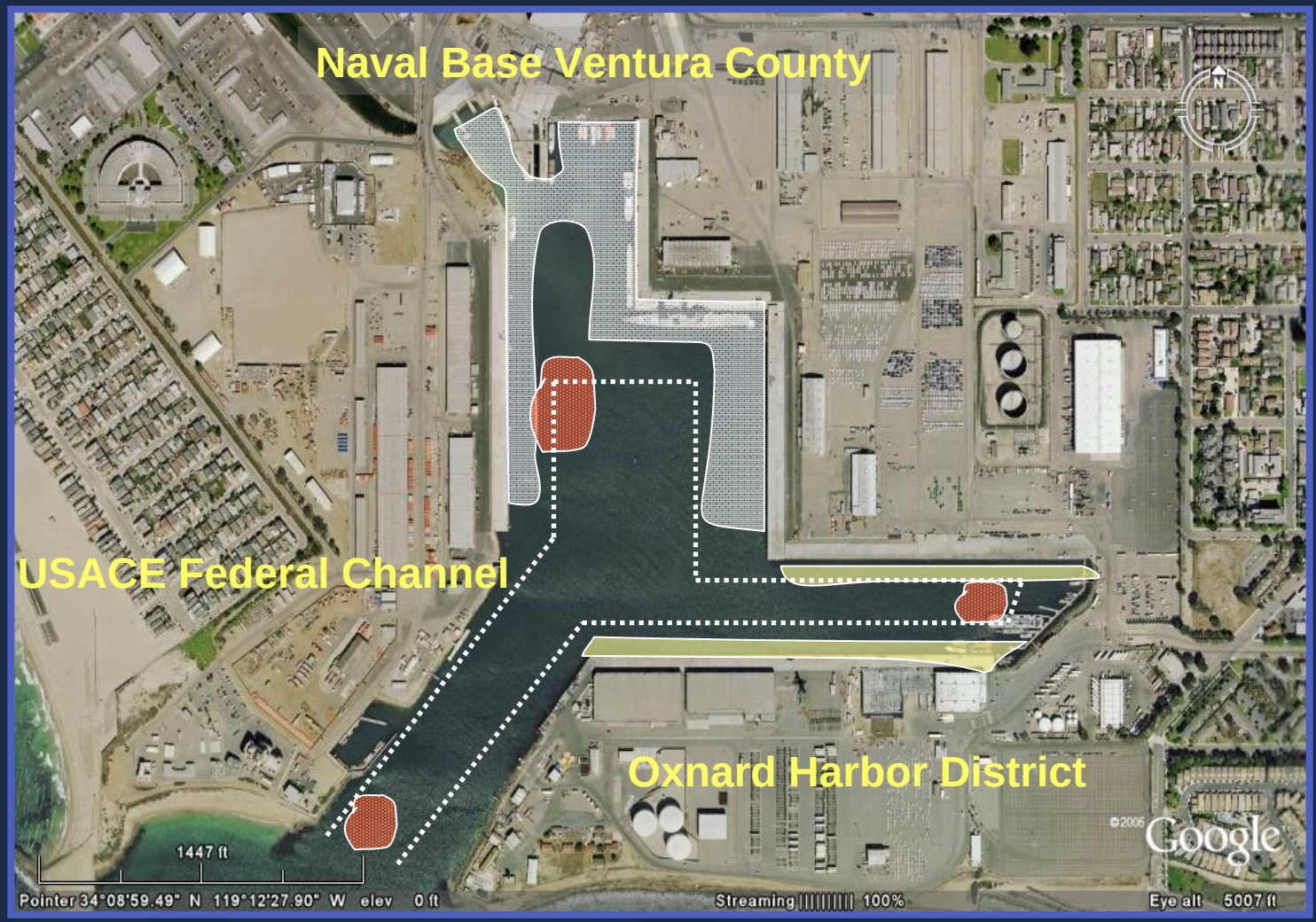
Port Hueneme Sediment Issues



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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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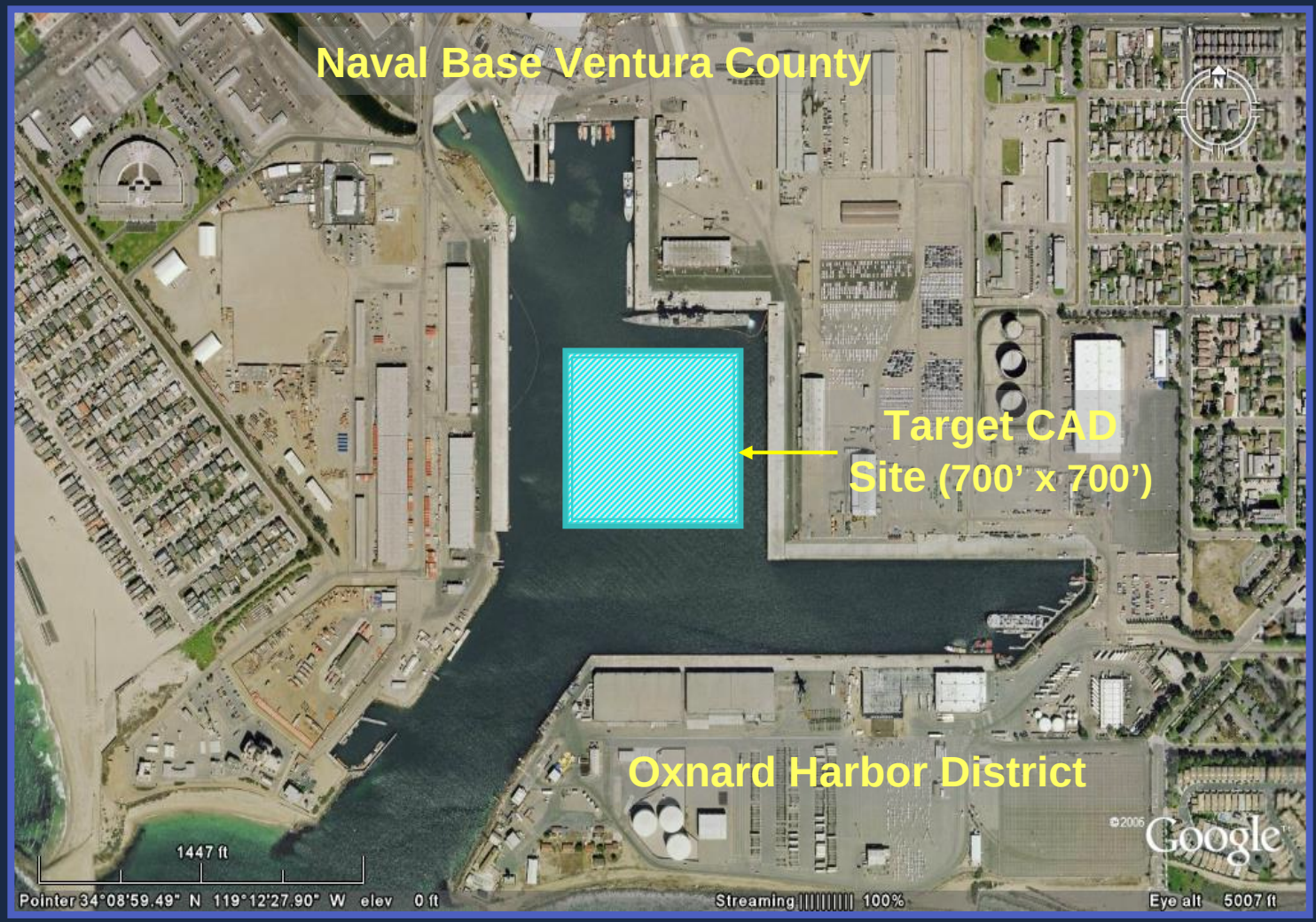
Rationale for CAD Selection

- 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



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Expected Construction Sequencing

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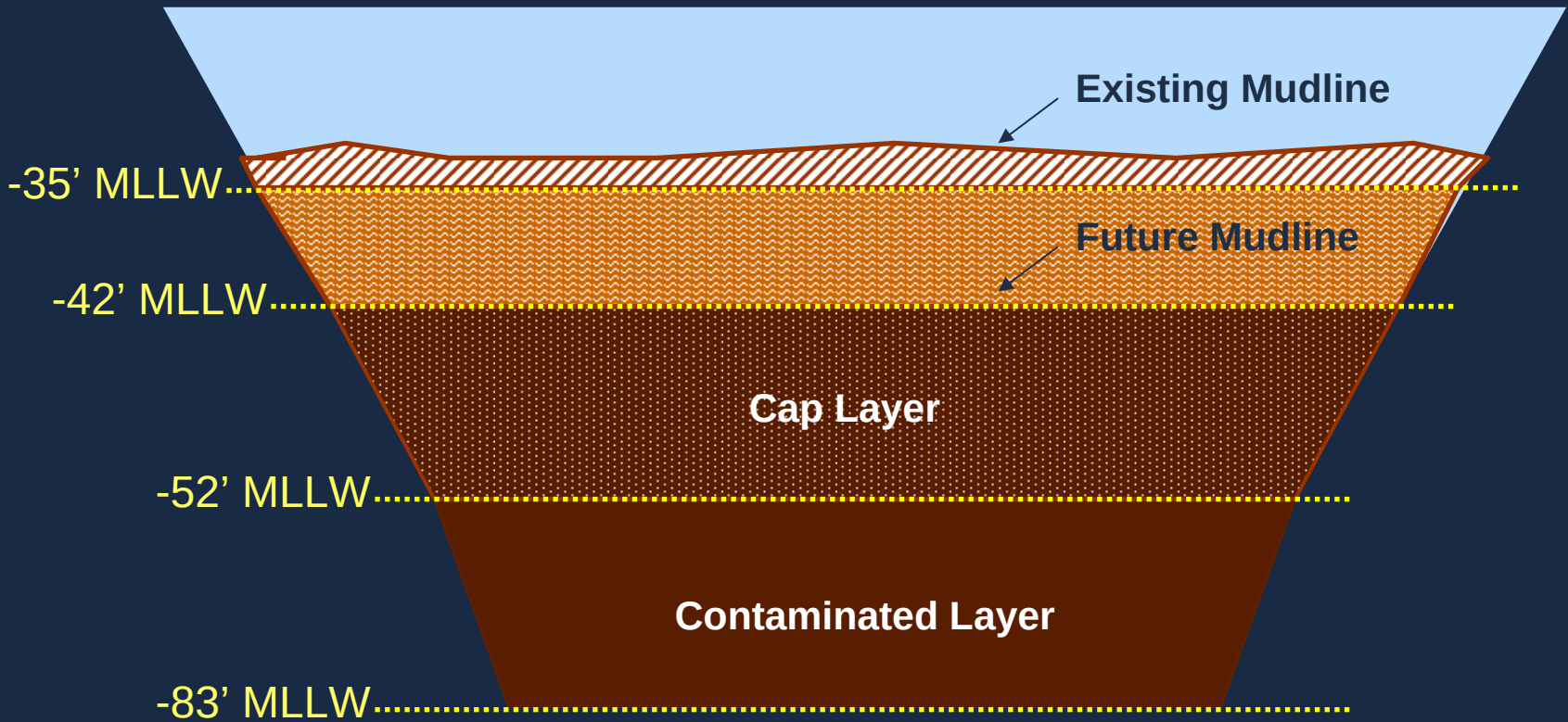
Proposed CAD Cross-Section



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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

Project Feature	Responsibility		
	USACE	U.S.Navy	OHD
Project Development			
- CEQA/NEPA Permitting		X	X
- Engineering Design		X	X
Contracting			
- Contract Management	X		
Construction			
- Equipment Mobilization	X		
- CAD Cell Excavation		X	X
- Dredging Navy Wharves		X	
- Dredging OHD Wharves			X
- Dredging "Hotspots" within O&M Channel	X		
- Capping	X		
- Placing Rock Armor		X	X
- Water Quality Monitoring	X	X	X
- Sediment Confirmational Sampling	X	X	X
- Construction Management	X	X	X
Post-Construction Activities			
- Long-Term Monitoring		X	X

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?

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