

GRAYS HARBOR NAVIGATION IMPROVEMENT PROJECT

Public Meeting
Aberdeen, Washington

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27 February 2014



US Army Corps of Engineers
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Executive Summary

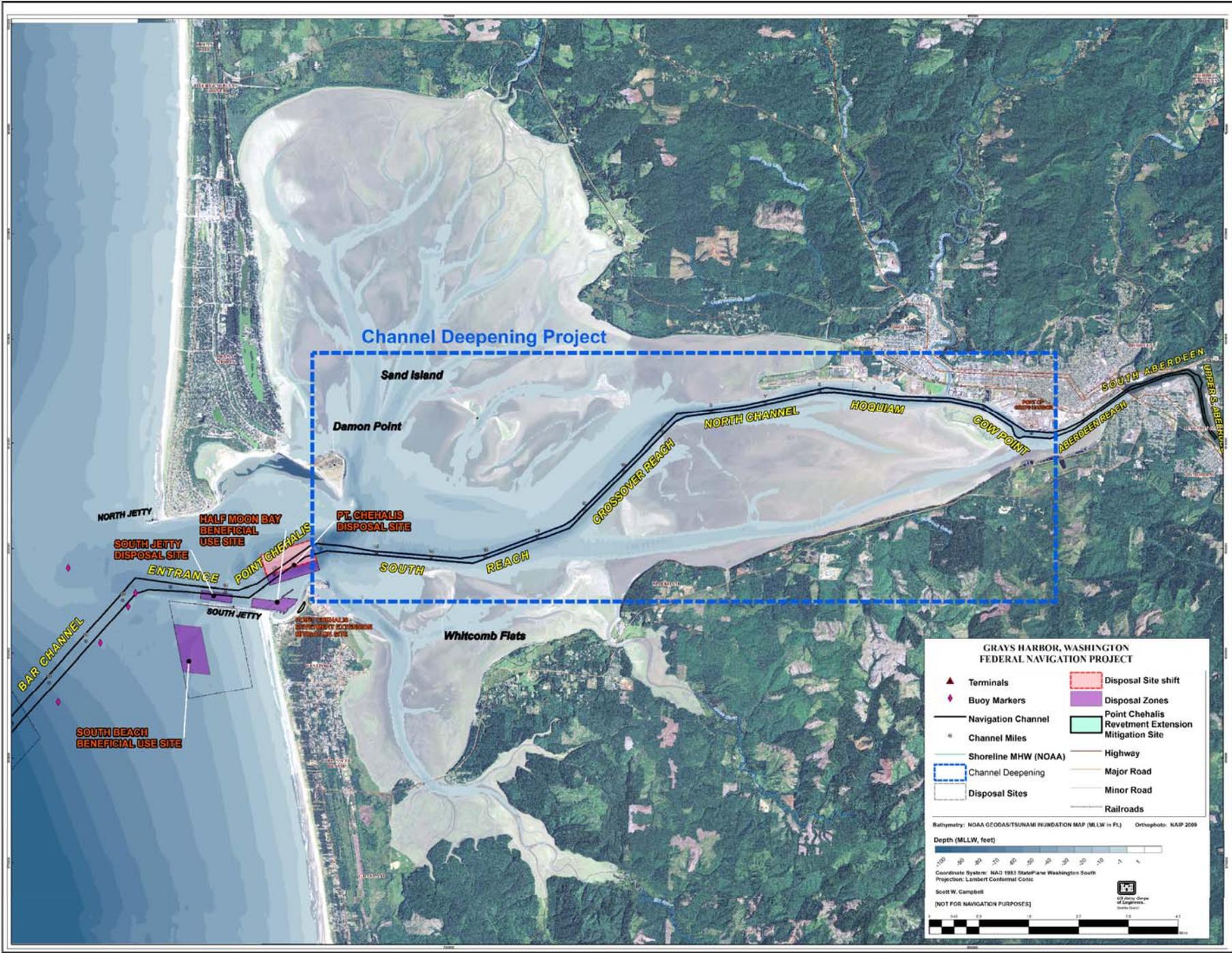
- The Corps proposes to deepen the navigation channel to Congressionally authorized -38 feet MLLW
- A deeper channel increases efficiency and reduces the cost of shipping - \$4.4 million annual benefit
- A Supplemental EIS has been prepared to update analysis in '82 EIS and '89 SEIS
- Economic justification is supported by the existing fleet and does not depend on new commodities



Project Overview and Recommendation

- **Project Purpose:**
 - ▶ Reduce the cost of transportation.
 - ▶ Reduce shipping delays.
- **Need:** Deep-draft vessels calling at Grays Harbor have to be partially loaded or experience tidal delays due to insufficient channel depth.
- **Scope:** Study is a Limited Reevaluation - limited, narrow scope. Corps re-evaluated economic justification and environmental acceptability of two depths within what Congress authorized in 1986.
- Limited Reevaluation Report (LRR) documents economic analysis conducted for the reevaluation.
- Supplemental Environmental Impact Statement (SEIS) documents environmental analysis conducted for the reevaluation.





Channel Deepening Project

**GRAYS HARBOR, WASHINGTON
FEDERAL NAVIGATION PROJECT**

▲ Terminals	■ Disposal Site shift
◆ Buoy Markers	■ Disposal Zones
— Navigation Channel	■ Point Chehalis Revetment Extension Mitigation Site
⊙ Channel Miles	— Highway
— Shoreline MHW (NOAA)	— Major Road
— Channel Deepening	— Minor Road
□ Disposal Sites	— Railroads

Bathymetry: NOAA GEODAS/Tsunami inundation map (MLLW in Ft.) Orthophoto: NAIP 2009

Depth (MLLW, feet)

Coordinate System: NAD 1983 StatePlane Washington South
Projection: Lambert Conformal Conic

Scott W. Campbell
[NOT FOR NAVIGATION PURPOSES]

US Army Corps of Engineers
District Office

Navigation Improvement Background

- **1982 – Feasibility Report and Environmental Impact Statement (EIS)** completed for channel improvement below -30 feet MLLW
- **1986 - Congress authorized Navigation Improvement Project** from -46 feet MLLW (Outer Harbor) to -38 feet MLLW (Inner Harbor)
- **1989 - Corps completes General Design Memorandum:** found economic justification for and recommended deepening to full depth in Outer Harbor and to -36 feet MLLW in Inner Harbor
- **1989 – Corps Completes Supplemental Environmental Impact Statement (SEIS)**
- 1990-1991 - Phase I deepening completed
- **2009 - Reconnaissance 905(b) Analysis and Report:** Documented Federal interest in reevaluation of implementing the authorized depth of Inner Harbor to -38 feet MLLW
- **2012-2014 - Limited Reevaluation Report:** Documents analysis of current economic benefits and costs associated with depths of -37 and -38 feet MLLW
- **2012-2014 – Supplemental EIS (SEIS):** Documents the scope and purpose of the project, alternatives considered, and environmental impacts of those alternatives.



Economic Analysis

- *“The **role** of the U. S. Army Corps of Engineers with respect to navigation is to provide safe, reliable, and efficient waterborne transportation systems (channels, harbors, and waterways) for movement of commerce, national security needs, and recreation. The Corps accomplishes this mission through a combination of capital improvements and the operation and maintenance of existing projects.”*

-Engineering Regulation 1105-2-100

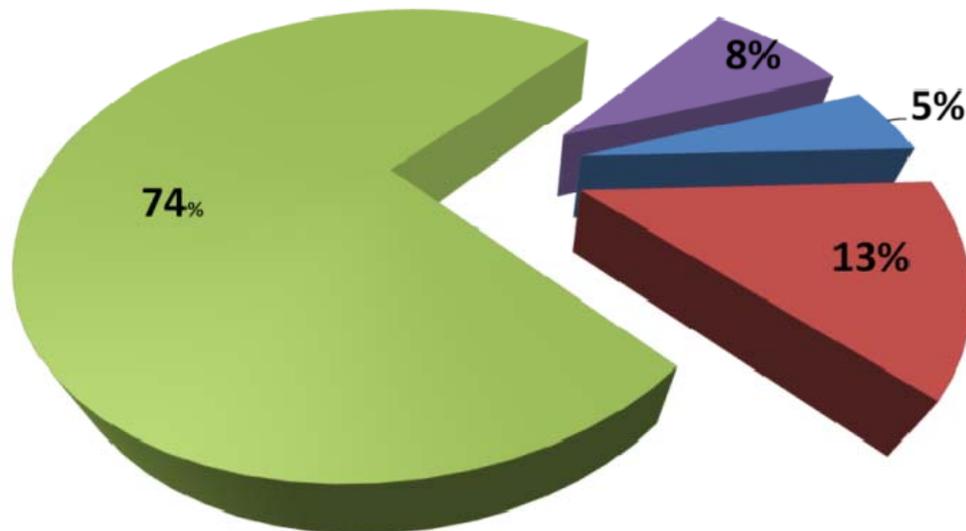


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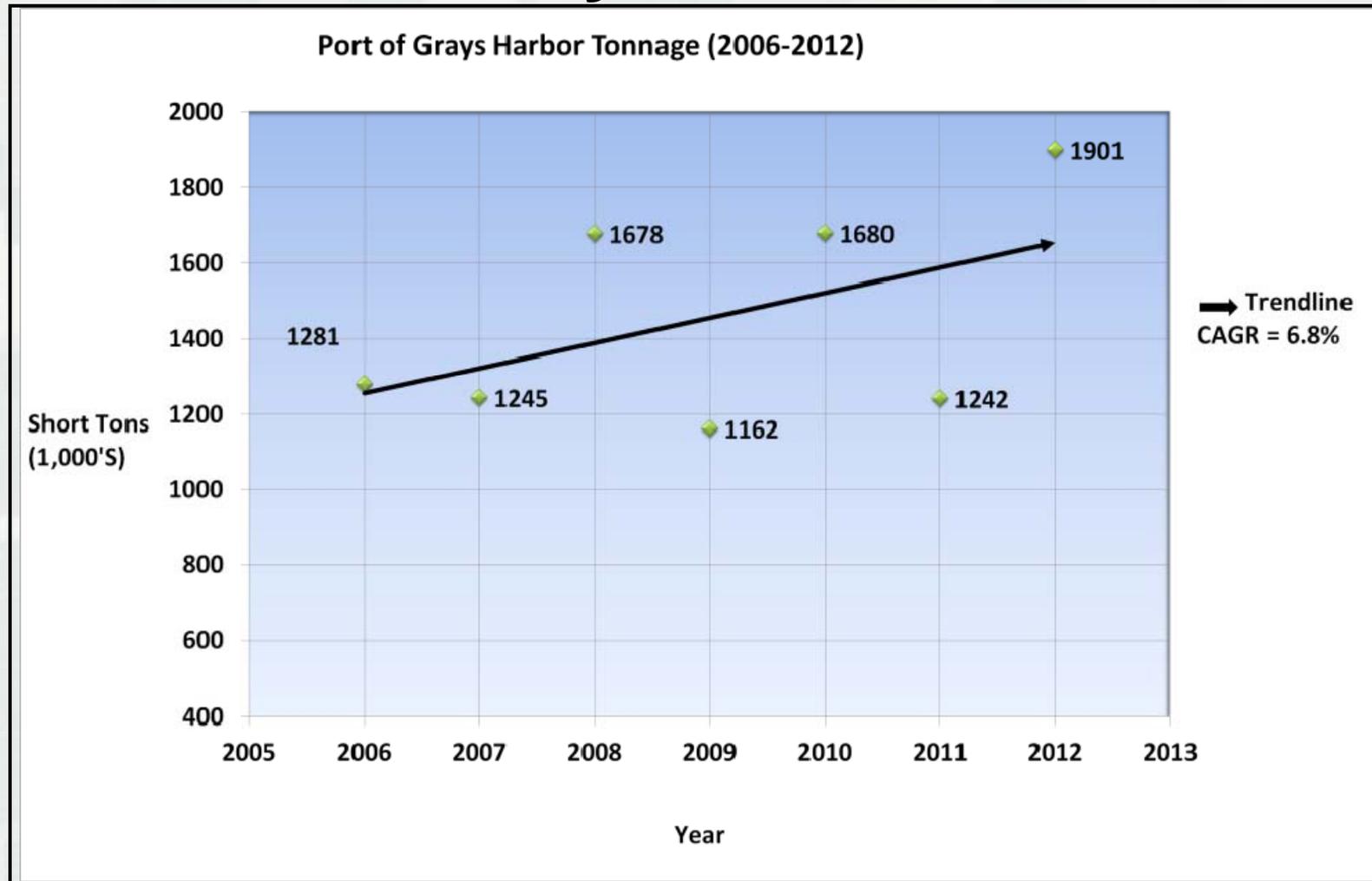
Commodities

2012- Port of Grays Harbor Total Commodity by Percent

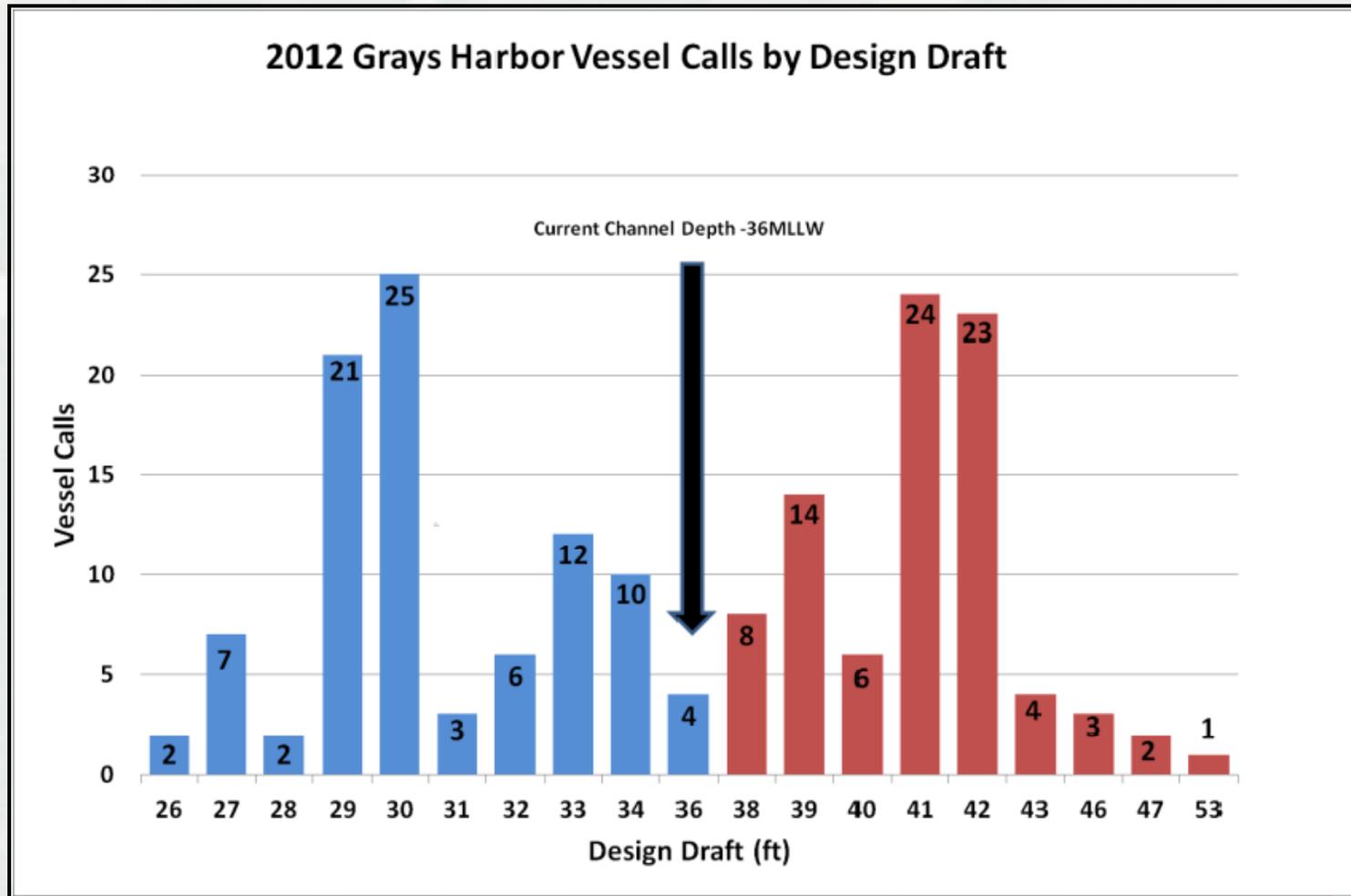
- Chemicals
- Food & Farm Products
- Forest Products, Wood and Chips
- Manufactured Equipment



Port of Grays Harbor Growth



The Need For Deepening



National Economic Development Benefits & Costs

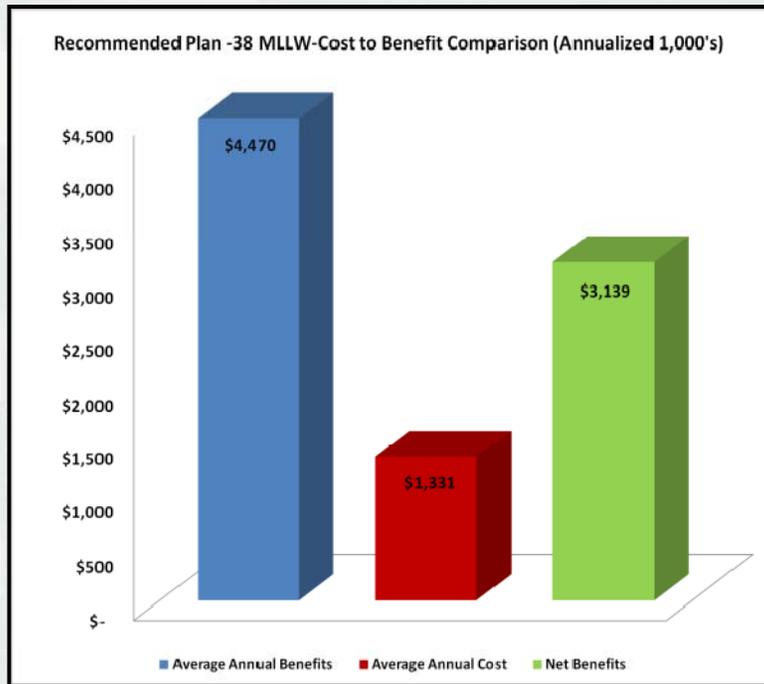
- Cost Reduction Benefit
 - ▶ Reductions in costs incurred from trip delays (tidal delays)
 - ▶ Increased loads in existing ships (less light loading)
 - Increased safety (non-monetary)
-

- Construction and associated costs
 - Dredging and disposal
 - Real estate
- Operation and maintenance costs

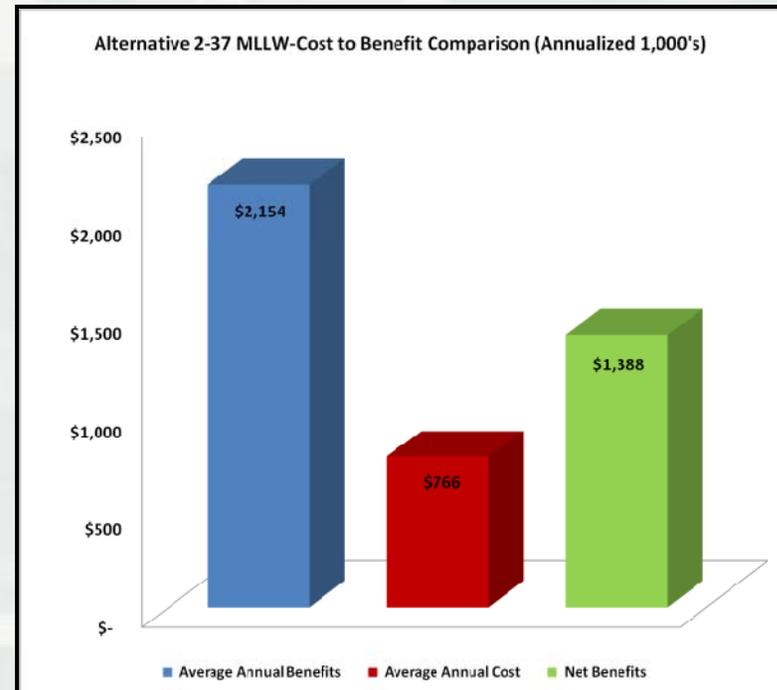


Alternative Plan Selection

Economic benefit of a navigation project is the reduction in the value of resources required to transport commodities.



NED ANALYSIS -38 MLLW (1,000's)	
Average Annual Benefits	\$ 4,470
Average Annual Cost	\$ 1,331
Net Benefits	\$ 3,139
Benefit to Cost	3.36



NED ANALYSIS -37 MLL(1,000's)	
Average Annual Benefits	\$ 2,154
Average Annual Cost	\$ 766
Net Benefits	\$ 1,388
Benefit to Cost	2.81



Environmental Analysis

- Supplemental Environmental Impact Statement (SEIS) supplements the 1982 EIS and 1989 SEIS documents and focuses on the environmental impacts of the selected alternatives.
- The proposed project deepens six reaches, within the authorized footprint, using the same work window currently used for maintenance dredging.



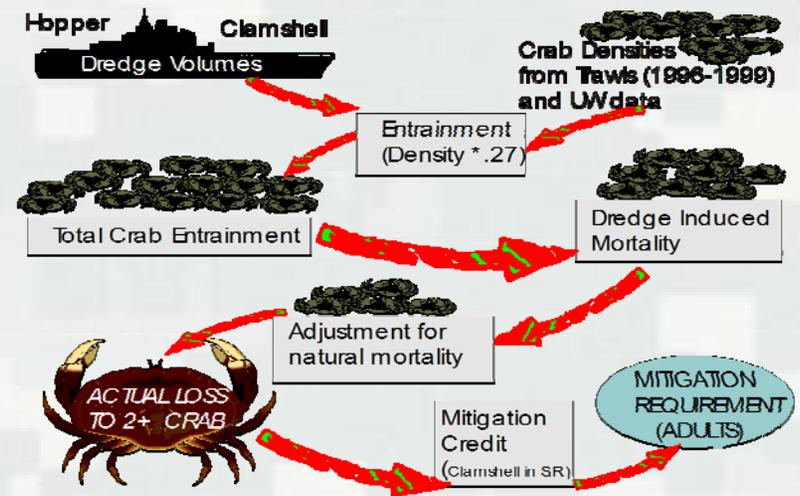
Environmental Analysis

- The SEIS analysis focused on:
 - ▶ Endangered and Other Sensitive Species
 - ▶ Historic and Cultural Resources
 - ▶ Air and Water Quality
 - ▶ Geomorphic Processes
 - ▶ Socioeconomics
 - ▶ Land Use and Recreation



Dungeness Crab

- Of special concern is impacts to Dungeness Crab populations.
- The UW Dredge Impact Model (DIM) was utilized to assess impacts from deepening to crab.
- Impacts to overall population calculated as minimal (<1%).
- Does not alter O&M mitigation agreement



Comments

Due
March
24th

SEATTLE DISTRICT

US Army Corps of Engineers

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Emergency erosion protection provided for coastal tribes

Corps flood fighters placed 310 tons of riprap at a jetty tie-in with the Quileute Tribe to protect their village and marina. A team also provided riprap and oversaw protective berm construction preserving a hydrant, water system and reservoir for the Hoh Tribe, who provided equipment and operators. The Corps worked in...

News Release

Chittenden Locks

Regulatory Branch Permit Information

Most Requested

- Hiram M. Chittenden Locks in Ballard
- Lake and River Level Information
- Civil works Projects and Studies
- Contracting
- Dredged Material Management
- Employment
- Environmental Documents
- Freedom of Information Act Requests
- Grays Harbor Navigation**
- Regulatory Permitting

Open Public

Regulatory Public N
Environmental Doc

Latest

Officials seek publ
Report, Environmental Impact Statement

2/21/2014

Officials from the U.S. Army Corps of Engineers, Skokomish Indian Tribe and Mason County are seeking

FACEBOOK TWITTER

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- Documents are available at:
<http://www.nws.usace.army.mil/>
- Comments can be emailed to:
graysharborcomments@usace.army.mil



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