PROJECT PURPOSE AND NEED AND PROJECT DESCRIPTION

GRAYS HARBOR NAVIGATION IMPROVEMENT PROJECT

Purpose and Need Statement

The Grays Harbor Navigation Improvement Project (Proposed Project) is located 50 miles west of Olympia on the central coast of Washington. The cities of Aberdeen, Hoquiam, Ocean Shores, and Westport surround Grays Harbor. Based on a General Design Memorandum dated February 1989, the deep draft channel was deepened to -36 feet mean lower low water (MLLW), two feet less than the fully-authorized depth of -38 feet MLLW. The Port of Grays Harbor has requested deepening the channel the additional two feet to better accommodate current vessel traffic for existing Port tenants and commodities.

The purpose of the Proposed Project is to improve the efficiency of deep-draft vessel navigation in Grays Harbor. The Proposed Project is needed to alleviate large vessel restrictions imposed by the insufficient channel depths. Ship transportation in the existing upstream channel is limited by depth. Current depths are inadequate to accommodate vessels with drafts exceeding -36 feet MLLW.

Project Description

The U.S. Army Corps of Engineers (Corps) is investigating the feasibility of deepening the federal navigation deep-draft channel in Grays Harbor from the currently maintained depth of -36 feet MLLW to the fully authorized depth of -38 feet MLLW. The deepening would occur from the South Reach upstream to Cow Point Reach where the Port of Grays Harbor Terminal 4 is located. The Grays Harbor Navigation Improvement Project (Proposed Project) would deepen approximately 14.5 miles of the 27.5-mile channel.

Currently, the Corps removes an average of 1.2 million cubic yards of sediment annually from the channel. The dredged material is disposed of at various approved disposal sites, including open-water disposal at the Point Chehalis, South Beach, South Jetty, and Southwest disposal sites, as well as beneficial use for beach nourishment at Half Moon Bay. Deepening the navigation channel to -38 feet MLLW is estimated to require the initial removal of approximately 1.8 million cubic yards, and would result in removing approximately ten percent more material during annual maintenance dredging. The Corps anticipates continuing to dispose of maintenance dredged material at the same disposal sites during and after implementation of the Proposed Project.

For additional information about the Proposed Project, visit the Corps' website at http://www.nws.usace.army.mil.

Questions can be directed to Josh Jackson, Grays Harbor General Investigation Project Manager, at (206) 764-6583 or Joshua.L.Jackson@ usace.army.mil.

NEPA PROCESS AND SCHEDULE
GRAYS HARBOR NAVIGATION IMPROVEMENT PROJECT

The U.S. Army Corps of Engineers (Corps) will evaluate dredging the Grays Harbor Navigation Channel to the previously authorized depth of -38 feet mean lower low water (MLLW) in a General Reevaluation Report and will comply with the National Environmental Policy Act (NEPA) by developing a Supplemental Environmental Impact Statement (SEIS) that will tier from the original 1982 EIS and the 1989 SEIS.

The Corps anticipates evaluating in the SEIS three dredging alternatives. Each alternative will be analyzed assuming with implementation of the Grays Harbor Long-Term Management Strategy (LTMS) and without implementation of the LTMS.

Alternative 1 (No Action): Continue annual maintenance dredging to -36 feet MLLW

- Continue Annual Dredging to -36 feet MLLW with LTMS
- Continue Annual Dredging to -36 feet MLLW without LTMS

Alternative 2: Deepen existing navigation channel within some or all reaches to a depth greater than -36 feet MLLW and less than or equal to -37 feet MLLW

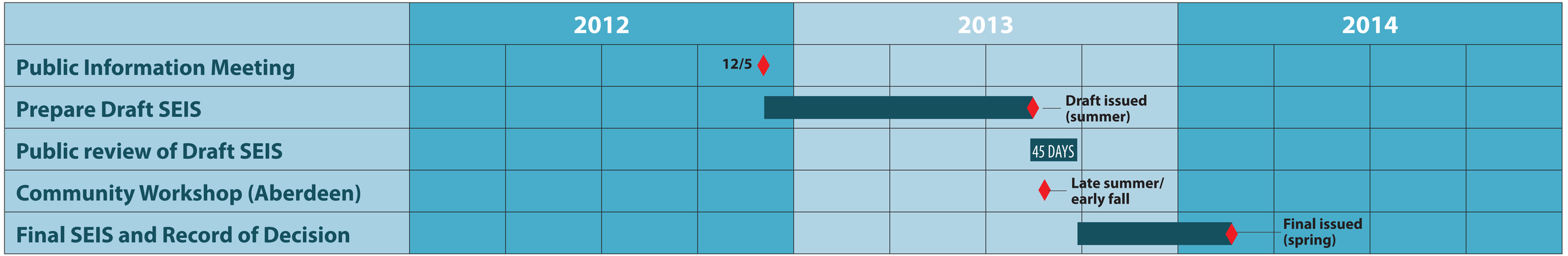
- Deepening and then Annual Maintenance Dredging to -37 feet MLLW with LTMS
- Deepening and then Annual Maintenance Dredging to -37 feet MLLW without LTMS

Alternative 3: Deepen existing navigation channel within some or all reaches to a depth greater than -37 feet MLLW and less than or equal to -38 feet MLLW

- Deepening and then Annual Maintenance Dredging to -38 feet MLLW with LTMS
- Deepening and then Annual Maintenance Dredging to -38 feet MLLW without LTMS

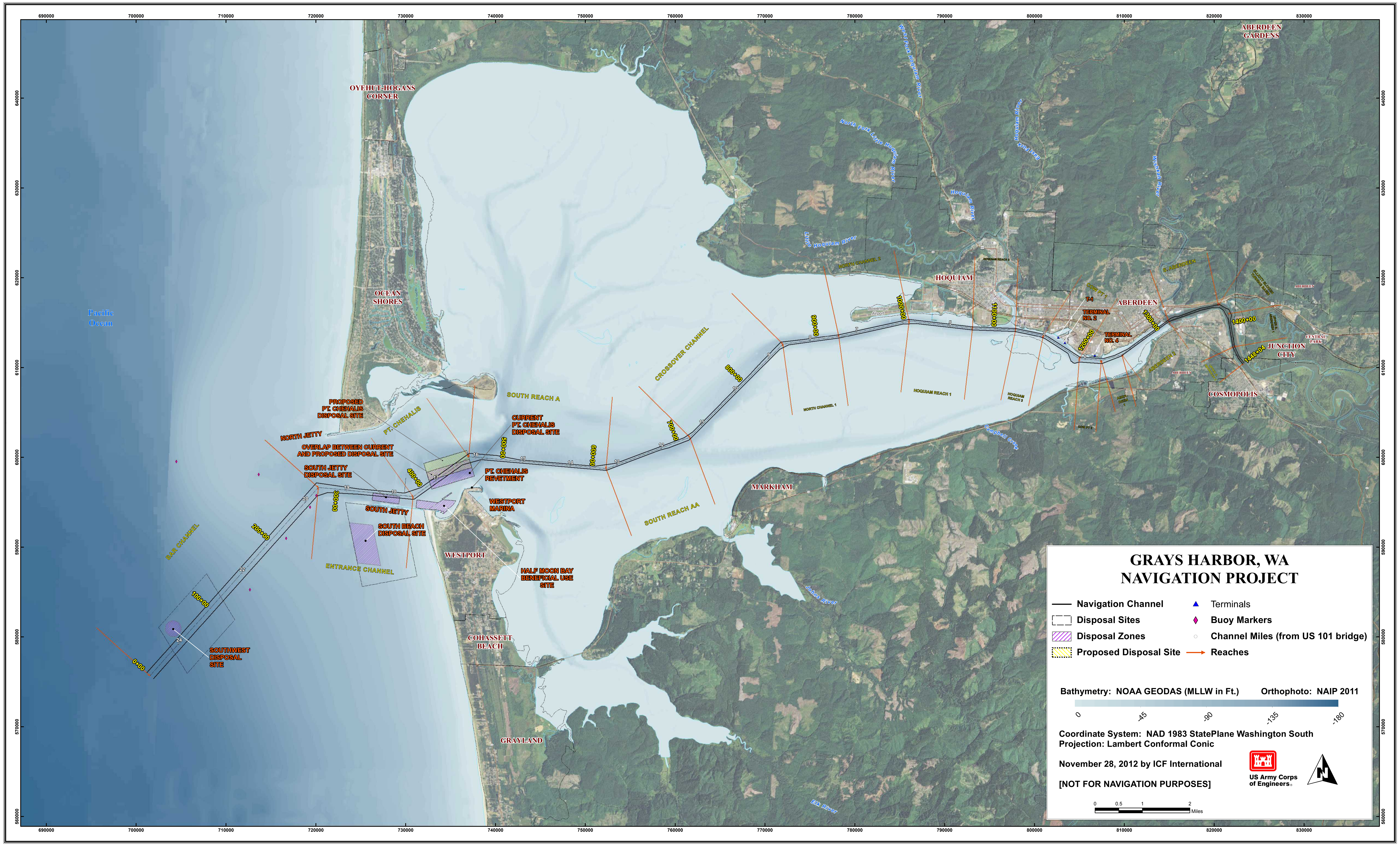
Long-Term Management Strategy: The purpose of the operations and maintenance LTMS study is to assess if a breach of the landmass adjacent to the south jetty may occur, evaluate the threat of adverse impacts on the Proposed Project resulting from a breach, and, if action is warranted, assess and recommend the most appropriate LTMS of authorized Proposed Project features. Pending consideration of comments on the draft Environmental Assessment, the preferred alternative includes initial placement of dredged sand between Half Moon Bay and South Beach to reduce risk of breaching and periodic placement of sand thereafter.

Project Schedule



GRAYS HARBOR NAVIGATION PROJECT FEATURES

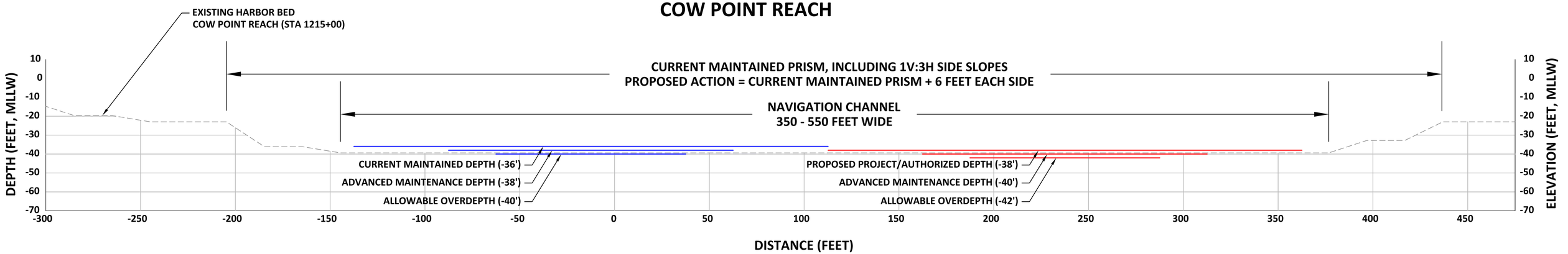
GRAYS HARBOR NAVIGATION IMPROVEMENT PROJECT



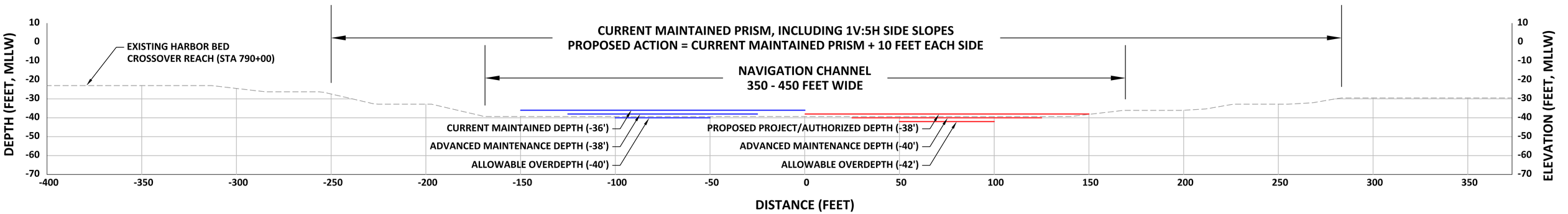
REPRESENTATIVE CROSS SECTIONS OF NAVIGATION CHANNEL

GRAYS HARBOR NAVIGATION IMPROVEMENT PROJECT

COW POINT REACH



CROSSOVER REACH



CURRENT MAINTENANCE DREDGING DEPTHS

PROPOSED PROJECT DREDGING DEPTHS

PHOTOS OF DREDGING AND DISPOSAL SITE PLACEMENT

GRAYS HARBOR NAVIGATION IMPROVEMENT PROJECT

Clamshell dredge (bucket capacity 35 cubic yards) onto bottom dump barge (4,000 cubic yard capacity) at Cow Point near Port of Grays Harbor Terminal #4 (February 2009). Bottom dump barge used for direct placement at open water disposal sites. Standard barge is used for upland stockpile/ rehandling.

The Corps hopper dredge 'Yaquina' has its own bottom dump capability. A hopper dredge with pump ashore can be used for direct upland placement for beneficial use/ rehandling.

Aerial view of hopper dredge drag arm.

Direct beach pump ashore from a hopper dredge via a floating pipeline (over North Jetty of Columbia River onto Benson Beach, 2008). Note sand berms to contain material.

5-YEAR GROWTH AT PORT OF GRAYS HARBOR

GRAYS HARBOR NAVIGATION IMPROVEMENT PROJECT

- Growth at the Port of Grays Harbor since 2007 includes over $200 million in private investments
- U.S. Army Corps of Engineers will consider existing ship traffic and cargo orders in its economic analysis related to the deepening of the navigation channel
- Examples of benefits associated with deepening the Grays Harbor navigation channel include:
  - Reduction in ship waiting time – A deeper channel would reduce the amount of fuel used and crew time spent waiting for the correct tide to enter or exit Grays Harbor
  - Efficiencies in loading – A deeper channel would allow ships to sail fully loaded, increasing their efficiency