TACOMA HARBOR, WA
DEEP DRAFT NAVIGATION
FEASIBILITY STUDY

TENTATIVELY SELECTED PLAN
PUBLIC INFORMATION MEETING

Donald Kramer, Chief, Planning Section
Kristine Ceragioli, Project Manager

January 15, 2020
AGENDA

Open House
• Sign up to make a comment

Presentation
• Introductions
• Background
• Alternatives Considered
• Tentatively Selected Plan
• Path Forward

Formal Comments
• Ground Rules
• Tonight: verbal or written
• Future: mail or email
CORPS STUDY PROCESS

**Scoping**
- Data gathering
- Request public input on study area issues for consideration

**Alternative Evaluation & Analysis**
- Evaluate alternatives
- Recommend a plan
- Draft report / National Environmental Policy Act (NEPA) document
- Opportunity for public review & comment

**Feasibility Analysis of Selected Plan**
- Finalize report and release for public review

**Final Report**
- Send final report to Congress for approval and funding

Current Stage
STUDY AUTHORITY AND SPONSOR

Authority: Section 209, Rivers and Harbors Act of 1962, Public Law 87-874

Non-Federal Sponsor: Port of Tacoma
TACOMA HARBOR STUDY AREA

COMMENCEMENT BAY
OPEN WATER DISPOSAL SITE

SALTCHUK DISPOSAL SITE

COMMENCEMENT BAY

Legend
- Sitcum Waterway
- Blair Waterway
- Saltchuk Disposal Site
- Open Water Disposal Site
PROBLEMS & OBJECTIVES

Problems:
– The authorized depth for the Blair Waterway is -51 feet MLLW and the existing depth of the non-federal Sitcum Waterway is -51 feet MLLW. Container ships currently experience tidal restrictions, causing lost transportation efficiencies and lost cost efficiencies at Tacoma Harbor.

– Ships at Tacoma do not realize economies of scale afforded by the larger container ships projected to call in the future. Tide restrictions, light loading, or other operational inefficiencies will be more impactful for the future fleet.

Objectives:
– Achieve transportation cost savings through increased economic efficiencies at the Blair and Sitcum waterways of Tacoma Harbor over the 50-year period of analysis.

– To the extent practicable, consider ancillary environmental benefits over the 50-year period of analysis within the study area of the project.
ECONOMIC DESIGN VESSEL

- Post-Panamax: 136'
- 10K TEU Ships: 150'
- 18K TEU Ships: 193'

14,000 TEU ship draft: 51'
18,000 TEU ship draft: 52.5'
Alternative 1: No-Action Alternative

Alternative 2: Blair Waterway Deepening up to -58 feet MLLW

Alternative 2a: Blair Waterway Deepening through Husky Terminal up to -58 feet MLLW

Alternative 2b: Blair Waterway Deepening to -57 feet MLLW (National Economic Development (NED) Plan)
ALT 1: NO-ACTION ALTERNATIVE

Length: 2.75 miles

Depth: -51 feet MLLW

Width: Varies through channel

Continue standard operations at Port with no improvements to Federal navigation channel

Assumes minimal maintenance dredging (none since 2001)
ALT 2: BLAIR WATERWAY DEEPENING UP TO -58 FT

Length: 2.75 miles

Depth: -52 feet to -58 feet MLLW

Width: Varies through channel based on ship simulation

Assume 2:1 side slope throughout
ALT 2A: BLAIR WATERWAY DEEPENING THROUGH HUSKY TERMINAL

Length: 4,750 feet

Depth: -52 feet to -58 feet MLLW

Width: Varies from entrance through Husky Terminal based on ship simulation
ALT 2B: BLAIR WATERWAY DEEPENING TO -57 FT (NED)

Length: 2.75 miles

Depth: -52 feet to -57 feet MLLW

Width: Varies through channel based on ship simulation

Assume 2:1 side slope throughout, except four areas

NED: National Economic Development Plan
TENTATIVELY SELECTED PLAN (TSP)

National Economic Development (NED) Plan: -57 feet MLLW throughout Blair Waterway

Base plan: Open-water placement at Commencement Bay

Beneficial use: Placement at Saltchuk site based on preliminary results, pending model approval and further analysis

No Locally Preferred Plan identified at this time

The TSP is the Agency Preferred Alternative, which is the alternative that the Corps has concluded would fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical, and other factors.
TACOMA HARBOR OPEN WATER DISPOSAL

- Commencement Bay Open Water Disposal Site
- Saltchuk Disposal Site

Legend:
- Sitcum Waterway
- Blair Waterway
- Saltchuk Disposal Site
- Open Water Disposal Site

Commencement Bay
DREDGED MATERIAL AND DISPOSAL PLAN

Suitability

• Conducted feasibility-level sediment sampling and partial Dredged Material Management Program (DMMP) testing (Feb-June 2019)

• The majority of the sediment that would be dredged is clean native material, especially below -54 ft. MLLW

• Confirmed material acceptable for open-water disposal or beneficial use

• Full DMMP suitability determination will be done in Pre-construction, Engineering, and Design (PED) phase

Assumptions

Material suitable for open-water disposal

• Clam shell bucket
• Placement of material in DMMP open-water disposal site via bottom dump barge

Material suitable for Saltchuk site

• Clam shell bucket for most material
• Placement of material via bottom dump barge
• Some placement may be assisted by an excavator

Material unsuitable for open-water disposal

• Environmental bucket
• Upland landfill in Pierce County
## SALTCHUK BENEFICIAL USE SCENARIOS AND COST EFFECTIVENESS ANALYSIS

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Description</th>
<th>Incremental Project First Cost over Base Plan ($1000)</th>
<th>Cost (AAEQ Cost in $1000)</th>
<th>Benefit (Net AAHU Gain)</th>
<th>Average Cost ($1000/AAHUs)</th>
<th>Cost Effective? / Best Buy?</th>
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<td>A</td>
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<td>3.6</td>
<td>$25</td>
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<td>Benches 1, 2 and 3</td>
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<td>All benches and islands</td>
<td>$10,631</td>
<td>$410</td>
<td>14.5</td>
<td>$28</td>
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CE/ICA = cost effectiveness and incremental cost analysis  
AAEQ = average annual equivalent  
AAHUs = average annual habitat units, also referred to as benefits or outputs
ENVIRONMENTAL EFFECTS (NED AND TSP)

No significant adverse effects to ESA-listed species

No significant impacts to commercially important species or protected marine mammals

No loss of wetlands

No compensatory mitigation is proposed
## SCHEDULE

<table>
<thead>
<tr>
<th>Activities/Milestones:</th>
<th>Date</th>
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<tbody>
<tr>
<td>Feasibility Cost Sharing Agreement Signing</td>
<td>21-Aug-2018</td>
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<td>Alternatives Milestone</td>
<td>15-Nov-2018</td>
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<td>Tentatively Selected Plan Milestone</td>
<td>21-Oct-2019</td>
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<td>Public Meeting</td>
<td>15-Jan-2020</td>
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<td>Agency Decision Milestone</td>
<td>21-Apr-2020</td>
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<td>Final Feasibility Report</td>
<td>23-Dec-2020</td>
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<td>Public Availability of Final Feasibility Report</td>
<td>May-2021</td>
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<tr>
<td>Northwestern Division Transmit to USACE HQ</td>
<td>Jun-2021</td>
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<tr>
<td>Chief’s Report</td>
<td>NLT 21-Aug-2021</td>
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BE INVOLVED IN THE PROCESS

Be Involved

Provide comments to the Corps of Engineers
• In person tonight
• Email
• Mail

Contact Information

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ATTN: CENWS-PMP
P.O. Box 3755
Seattle, WA 98124
FORMAL COMMENT PERIOD

Please sign-in to submit a verbal comment

Verbal comments are limited to 3 minutes per person

Verbal comments will be recorded for the formal record and printed in the final report

Written comments are also welcome
• Comment cards are in the back of the room

Answers or responses will not be provided during the comment period

Responses will appear in the final report
CONTACT US

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