Whatcom Waterway Multiphase Remediation Project: Summary of Phase 1 Activities and Phase 2 Planning

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Presentation Summary

• Site Background and History

• Phase 1 Summary
  – Remediation and Construction Overview
  – Construction Challenges
  – Results

• Phase 2 Planning
  – Remediation Overview
  – Land Use Planning

• Next Steps
Site Background and History

Aerated Stabilization Basin (ASB)
Bellingham Shipping Terminal (BST)
Central Waterfront
Log Pond
Former GP Pulp & Tissue Mill (GP West)
GP Dock
Whatcom Waterway
Phase 1 Remediation/Construction Overview
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• Dredging for off-site disposal = 111,500 cy
  – Material barged to offload facility near Seattle, WA
• Engineered cap material placement = 12.9 acres
  – Sand, filter, and armor materials in engineered cap
• Residuals management cover material = 5.4 acres
  – Thin sand layer to mix with dredge residuals
• Shoreline remediation wall = 720 lineal feet
• Water quality monitoring
  – Silt curtains not required during dredging
  – Achieved turbidity requirements throughout construction
Phase 1 Construction Challenges

• Permitting
  – Pre-construction
  – Dredge material offload facility

• Shoreline/upland construction
  – Remediation wall
  – Shoreline debris

• Dredging and capping
  – Sequencing

• Waterway operations
  – Tenant coordination/schedule
Phase 1 Construction Results

• Pre-Construction
  – Unstable shoreline conditions
  – Failing structures
  – Source control concerns

• Post-Construction
  – Stabilized shoreline
  – New infrastructure
  – Source control addressed
Phase 1 Construction Results (cont.)

• Pre-Construction
  – Vertical bulkhead
  – Clarifier structure and foundation
  – Shoreline debris

• Post-Construction
  – Softened shoreline
  – Clarifier removed
  – Access and upland development potential
Phase 1 Construction Results (cont.)

- Pre-Construction
  - Significant shoreline debris
  - Shoreline erosion
  - Derelict creosote piles/structure

- Post-Construction
  - Stabilized shoreline
  - Piles/structure removed
  - Additional cap material placed
Phase 1 Construction Results (cont.)

• Full contamination removal from Bellingham Shipping Terminal (BST)
  • Post-dredge sampling did not require contingency re-dredging

• Engineered sediment caps proving effective

• Shoreline improvements supporting local land uses

• Ongoing decrease in mercury concentrations in crab tissue
Phase 1 Construction Results (cont.)
Phase 2 Remediation Overview

Federal Navigation Channel

BST Under-Pier Remediation

ASB Shoulder

Aerated Stabilization Basin

Inner Waterway
Phase 2 Remediation Overview (cont.)

• Material Volumes by Area (approximate)
  • Dredging
    • Aerated Stabilization Bank (ASB) = 310,000 cy
    • Federal Navigation Channel = 166,000 cy
    • BST Under-Pier Area = 9,400 cy
    • ASB Shoulder = 21,600 cy
  • Capping
    • Inner Waterway Sediment Cap = 76,000 cy
  • Dredge Residuals Management
    • Federal Navigation Channel = 25,000 – 35,000 cy
Phase 2 Land Use Planning

• Whatcom Waterway
  • Mixed industrial and recreational
  • Vessel maintenance and public access
  • Maintain operational elevation -18 feet mean lower low water within waterway
Phase 2 Land Use Planning

- BST
  - Deeper draft vessel bulk loading/unloading
  - Federal Navigation Channel considerations and maintenance
Phase 2 Land Use Planning (cont.)

- ASB
  - Previous consideration for marina development
  - Port considering other options

![Diagram of ASB and Central Waterfront]

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Next Steps

- Port of Bellingham to finalize future land use planning decisions
- Washington Department of Ecology coordination for Consent Decree Amendments (as necessary)
- Concept planning
- Pre-Remedial Design Investigation
- Remedial Design/Permitting/Construction
- Schedule
  - Begin agency coordination process in 2019
  - Design/permitting/construction TBD
Questions?
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