



**Commission Work Session
September 19, 2022
2:30 PM**

Percival Plaza – Olympics Room
626 Columbia Street NW, Suite 1B
Olympia, Washington 98501

The meeting agenda is available on the Port of Olympia website as of September 16, 2022.
<http://www.portolympia.com/commission>

*****PLEASE SILENCE YOUR CELL PHONES*****

The public may join the meeting from your computer, tablet or smartphone at:

<https://us02web.zoom.us/j/89352598595>

Or Telephone: 1 253 215 8782

Webinar ID: 893 5259 8595

Please note that the Zoom link changes for each meeting

NOTE: *No public comment or commission action will be taken at this Work Session.*

A. CALL TO ORDER

1. Budd Inlet Sediment Cleanup and Restoration

- Staff and Consultant Team Briefing - Lisa Parks, Executive Services Director
- Squaxin Island Tribe Perspective – Ray Peters, Executive Director and Jeff Dickison, Natural Resources Department
- Department of Ecology Perspective – Rebecca Lawson, Southwest Regional Toxics Program Section Manager

2. Upcoming Topics (10 Mins) – Sam Gibboney, Executive Director

3. Adjourn

Port of Olympia Mission

Create economic opportunities by connecting Thurston County to the world by air, land & sea.



COMMISSION MEETING

<u>BRIEFING DATE/TIME:</u>	September 19, 2022
<u>DEPARTMENT:</u>	Environmental
<u>STAFF CONTACT/TITLE:</u>	Lisa Parks Telephone: 360.528.8020 Email: Lisap@portolympia.com
<u>TOPIC:</u>	Budd Inlet Sediment Cleanup and Restoration
<u>PURPOSE:</u> <i>Check all that apply</i>	<input checked="" type="checkbox"/> Information only <input type="checkbox"/> Decision needed <input type="checkbox"/> Follow up from previous briefing
<u>BACKGROUND & OVERVIEW:</u>	
Staff will be briefing the Commission on this large, complex, multi-year project as attached. Following the briefing, staff will provide more detailed information related to each specific request for Commission action, as they are presented.	
<u>DOCUMENTS ATTACHED:</u>	
<ul style="list-style-type: none">▪ Power Point Presentation	

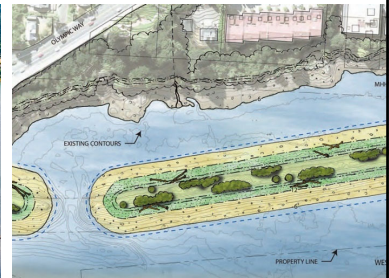
Budd Inlet Cleanup & Restoration

September 19, 2022

Lisa Parks
Executive Services Director

Goals

- **REMEDIATE** impacts of urbanization and development
- **PRESERVE** commercial viability of community's maritime facilities
- **ENHANCE** the community's access
- **IMPROVE** habitat and natural function of the Inlet



Why Restore Budd Inlet?

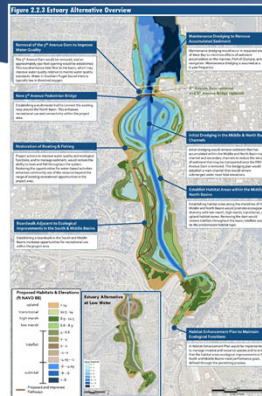
- Remove legacy contamination
- Preserve viability of the Port's maritime facilities
- Facilitate future USACE routine dredging
- Accommodate/Facilitate Deschutes River Estuary Restoration
- Increase public access
 - Implement sea level rise physical adaptation strategies
 - Habitat restoration



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Why Now?

- Compliance with Ecology Agreed Order
- Urgent need for operational dredging
- Prepare for increased sediment loading from Deschutes River Estuary Restoration
- Increased Federal & State funding for environmental restoration and infrastructure
- Opportunities for needed Port infrastructure improvements in conjunction with remediation
- Infrastructure permitting through remediation project
- Port is positioned to be the "Work Party" for the overall effort



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Vision2050

Top-Rated Community Review Actions

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From the Port's Strategic Plan 2025

Restoration

Provide leadership on collaborative efforts to achieve environmental cleanup, habitat restoration and maintenance dredging in Budd Inlet.

Issues/Outcomes

- Sea Level Rise Adaptation
- Remove Contamination
- Improve Water Quality
- Sediment Management
- Marina Dredge
- Habitat Enhancement
- Navigational Channel Maintenance
- Deschutes River Estuary
- Public Access
- Peninsula Infrastructure

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The Budd Inlet Team



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Today's Agenda

Staff Briefing

- History & Background
- Project Approach
- Technical Considerations
- Project Costs and Timing
- Project Funding
- Next Steps


Squaxin Island Tribe

Washington State Department of Ecology


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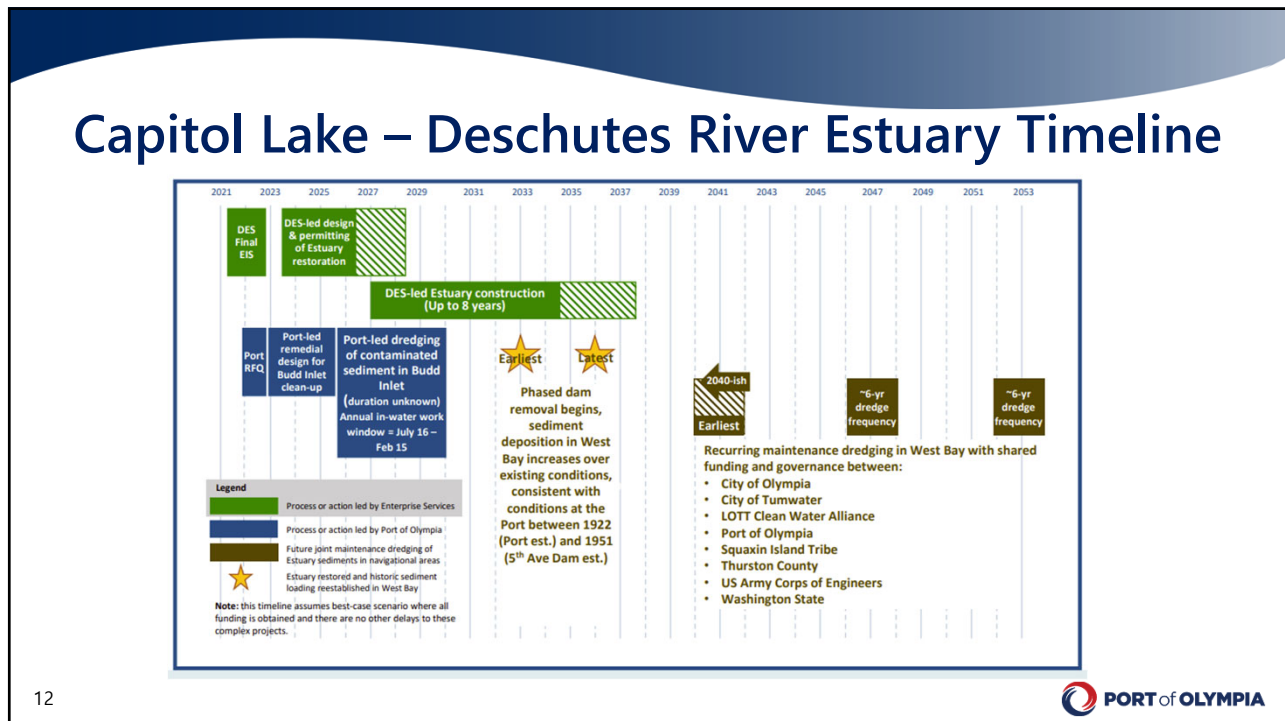
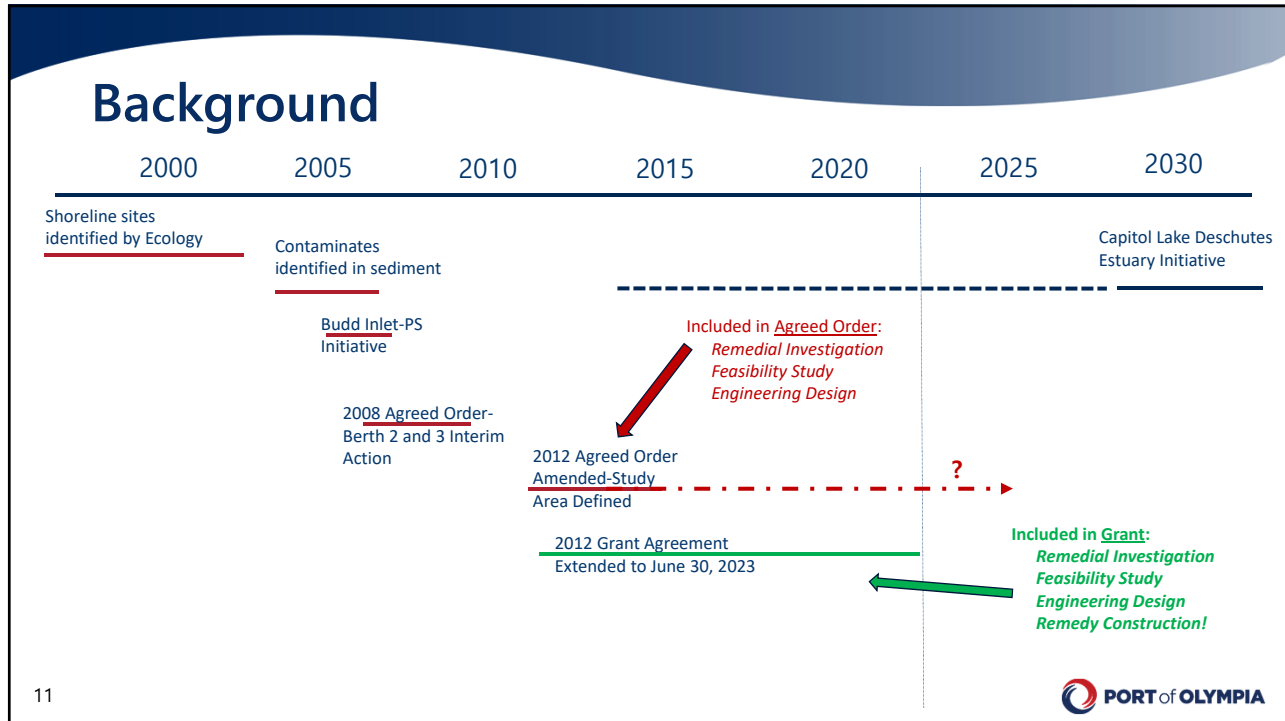


History

A collage of five historical black and white photographs. The top-left photo shows a coastal town with a long pier extending into the water. The top-middle photo is an aerial view of a large industrial facility with multiple buildings and a curved pier. The top-right photo shows a large industrial complex situated on a peninsula or island in a body of water. The bottom-left photo depicts a construction site with heavy machinery and materials. The bottom-right photo shows a large industrial yard with a tall water tower and various pieces of equipment.

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Project Approach



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The Port as “Work Party”

Manages and Coordinates:

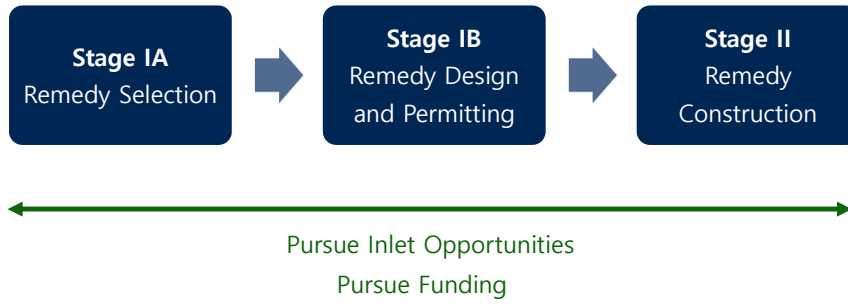
- Federal and state funding
- Complex work schedule
- Community and agency interface & communications
- Technical consulting contractors
- Construction bids & contracts
- Cash flow
- PLP contributions
- Port liability insurance recovery

Achieves:

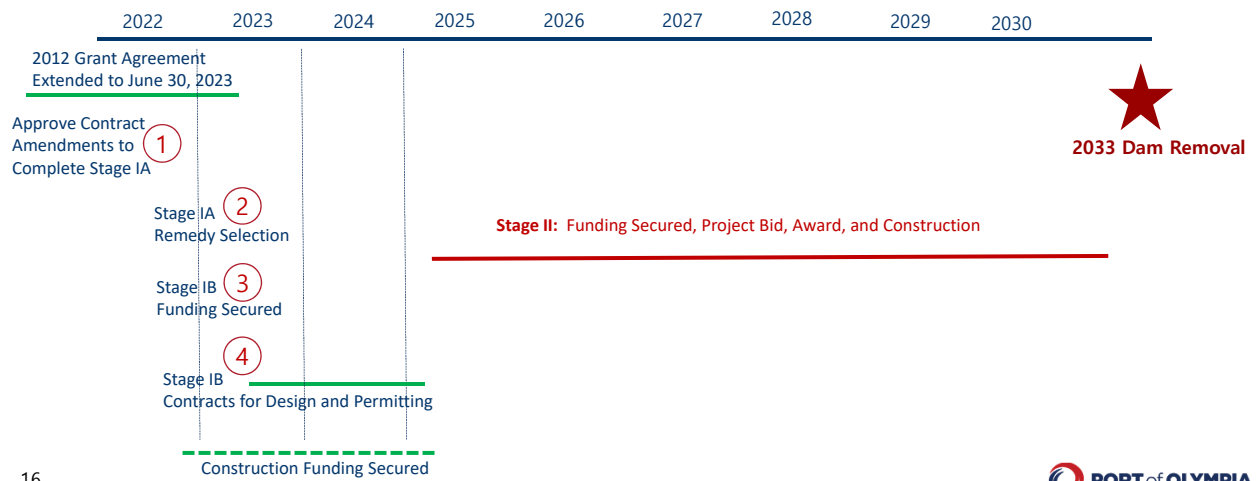
- Navigational dredge and long-term channel maintenance by USACE
- Removal of toxic contaminants
- Restoration of habitat and ecological function
- Maritime infrastructure improvements
- Sediment management from the Capitol Lake-Deschutes River Estuary decision
- Development of expanded community access
- Sustainable maritime economy

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Project Stages



Commission Milestones - Actions



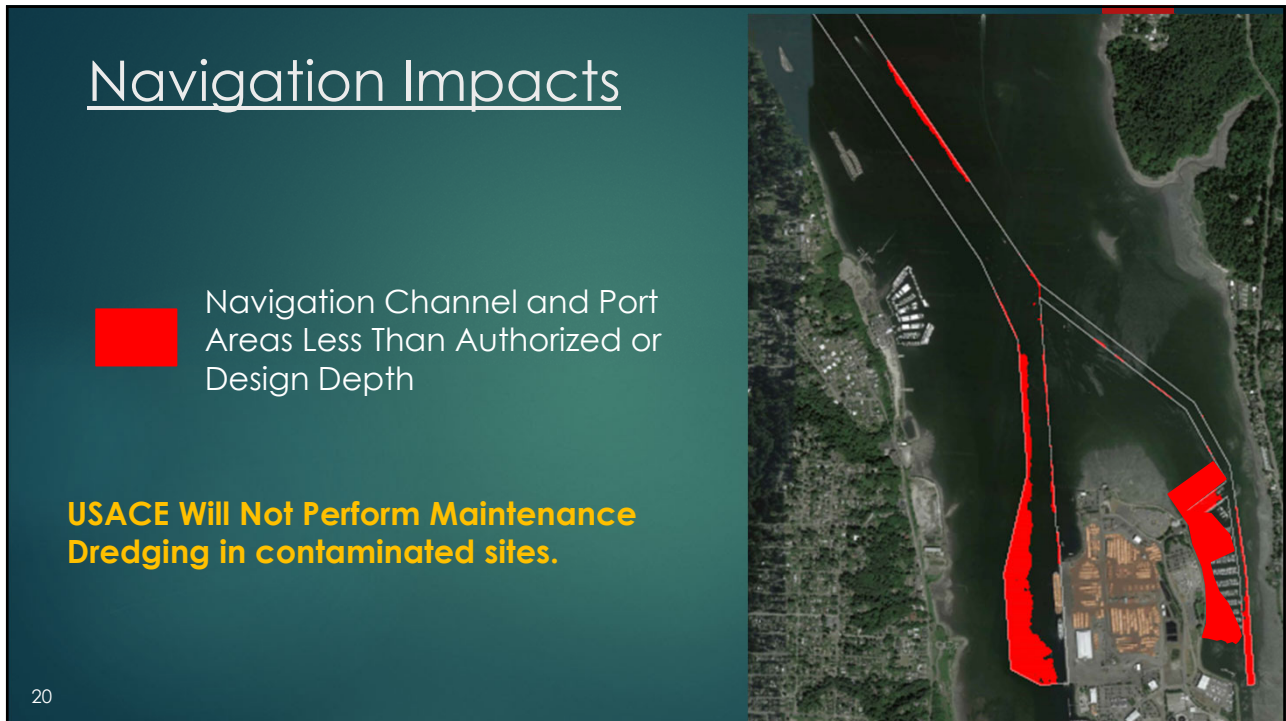
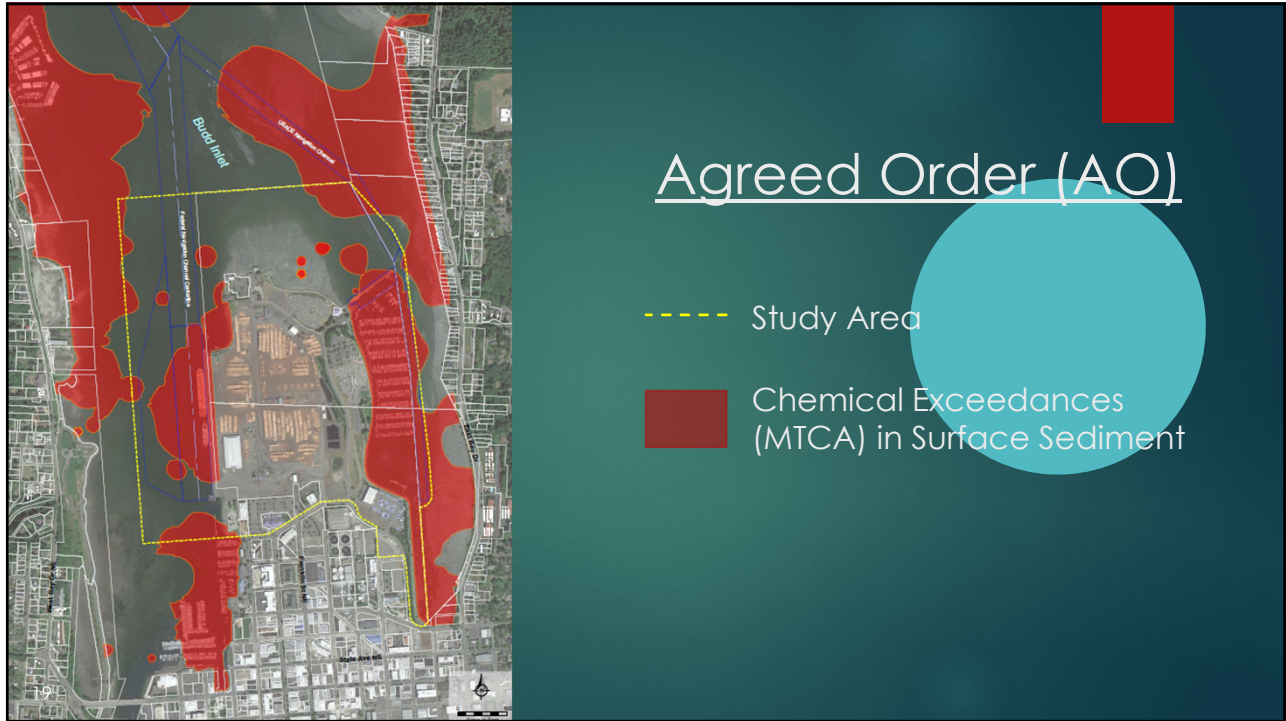
Technical Considerations



Technical Considerations

- ▶ MTCR Remediation (AO)
- ▶ Navigation
- ▶ Dredge Material Management
- ▶ Water Quality, Source Control & Remedy Protection
- ▶ Benthic Quality
- ▶ Capitol Lake
- ▶ Habitat
- ▶ Public Access





Benthic Quality



The "dead end"?

Budd Inlet, located at the terminal end of Puget Sound, tends to have fewer benthic species than elsewhere in Puget Sound. Furthermore, Budd Inlet is the only location in Puget Sound where our routine sediment monitoring program has found **azoxic** conditions (containing no living macrobenthic organisms) during past surveys. These conditions are found in **anoxic** sediments.

Anoxic sediments are generally fine-grained, black in color, and have very strong odors. These types of sediments are associated with degraded ecosystems and are characterized by low dissolved oxygen, increased organic matter and nutrients, accumulation of sulfides and chemical contaminants, as well as poor water circulation. All of these conditions have been documented in Budd Inlet.



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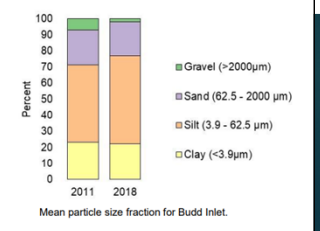
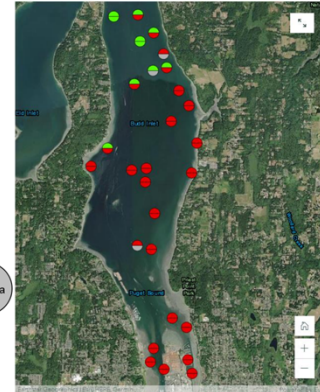
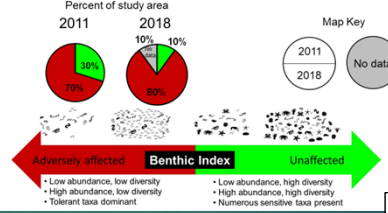
Benthic Community

Learn more about the benthos

Benthic community condition is declining in Budd Inlet

- The area with *adversely affected* benthic communities increased between 2011 and 2018, extending the locations with *adversely affected* benthos farther north toward the entrance of the inlet.
- Five stations with *unaffected* benthos in 2011 had *adversely affected* benthos in 2018.
- None of the stations improved from *adversely affected* to *unaffected* between the two surveys.

Benthic Index results for both 2011 and 2018 are shown in the map.

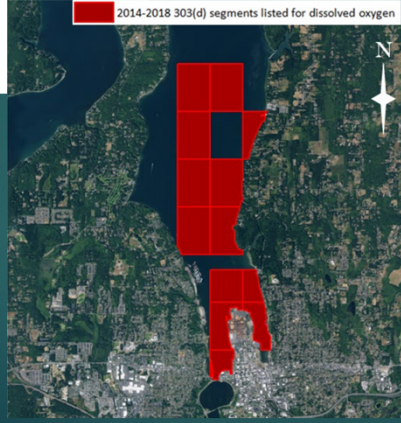


Water Quality

Budd Inlet Total Maximum Daily Load for Dissolved Oxygen

Water Quality Improvement Report and Implementation Plan

DEPARTMENT OF ECOLOGY
June 2022
Publication 22-10-012



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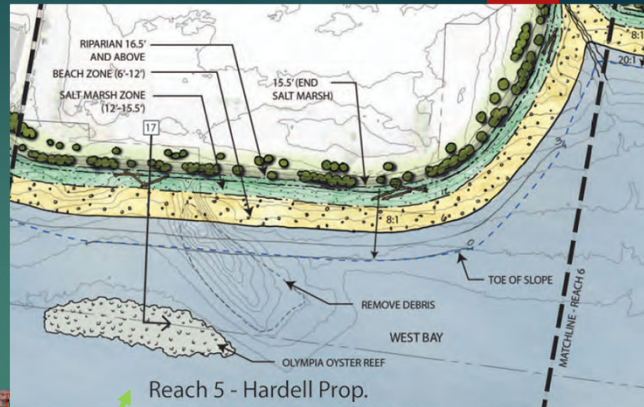
Habitat

City of Olympia
West Bay Environmental Restoration Assessment
Final Report

Prepared by:
Coast & Harbor Engineering, a Division of Hatch Mott MacDonald

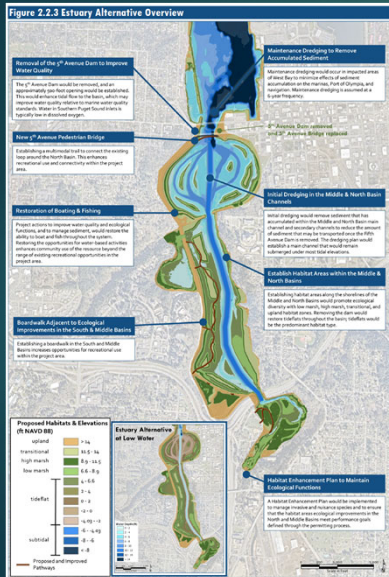
In Association with:
JA Brennan Associates
GeoEngineers
David Consulting Group
Environmental Science Associates
February 26, 2016

Includes Stormwater (Source Control) and Recreation Components



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Capitol Lake



Maintenance Dredging Design	Managed Lake Alternative	Estuary Alternative	Hybrid Alternative: West Bay
Dredging Location	North Basin	West Bay (impacted areas only)	Same as Estuary Alternative
Estimated Dredging Frequency	~20 years	~6 years (frequency confirmed through monitoring)	~5 years (frequency confirmed through monitoring)
Approximate Recurring Dredge Quantity (cubic yards (cubic meters))	~470,000 (360,000) (first event) >470,000 (360,000) ² (thereafter)	~700,000 (540,000) ²	~985,000 (750,000) ³
Disposal Options for Dredged Sediments	Upland disposal	In-water disposal is assumed; upland disposal is an option	In-water disposal is assumed; upland disposal is an option

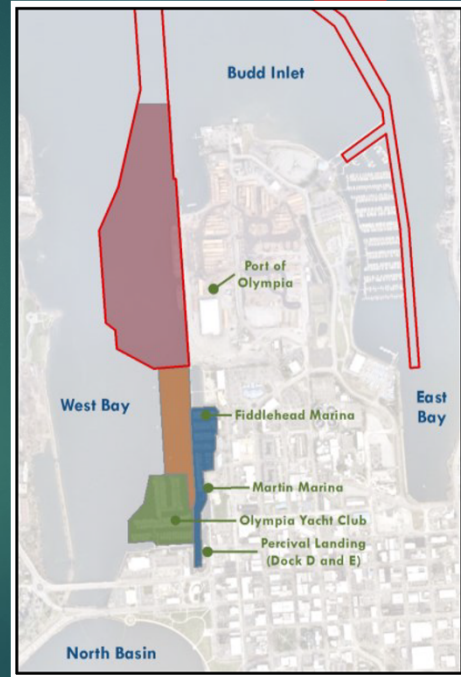
~115,000 CY/Year Sediment into West Bay

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Capitol Lake - Impact Future Maintenance Dredging in Budd Inlet

Table 2.3.2 Expected Maintenance Dredging Schedule & Locations under the Estuary Alternative

Year Following Construction	Location
6	Olympia Yacht Club
12	Olympia Yacht Club, private marinas, Port of Olympia, and Federal Navigation Channel
18	Olympia Yacht Club
24	Olympia Yacht Club, private marinas, Port of Olympia, Federal Navigation Channel, and other access areas along the eastern shoreline
30	Olympia Yacht Club



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~700,000 CY every 6 Years

The Port of Olympia invites you to participate in our first Public Outreach Opportunity

WATERFRONT DESTINATION DEVELOPMENT PLAN

A continuation of the Port 2050 Vision Plan

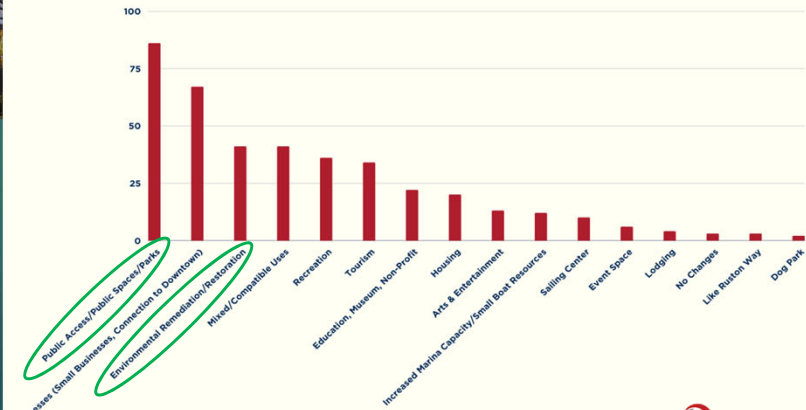
Wednesday

- Small Boat Resources
- Extend Walking Trail
- Incorporate public access, parks, greenspace, plazas
- Community/sailing / event center
- Consider Environmental Remediation/Stewardship

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Public Access

How Should the Area Look in 30 Years



Sediment Clean-Up

Leave Contamination in Place

- ▶ Capping
 - ▶ Place Several Feet of Material to Isolate Contaminated Material
 - ▶ Armor or Habitat Layer
 - ▶ Amended Caps
 - ▶ Activated Carbon etc.
- ▶ ENR – Enhanced Natural Recovery
 - ▶ Place ~6" Layer Clean Material & Allow Natural deposition
- ▶ MNR – Monitored Natural Recovery
 - ▶ Allow Cleaner material to Naturally Deposit

Removal

- ▶ Dredging or Excavation

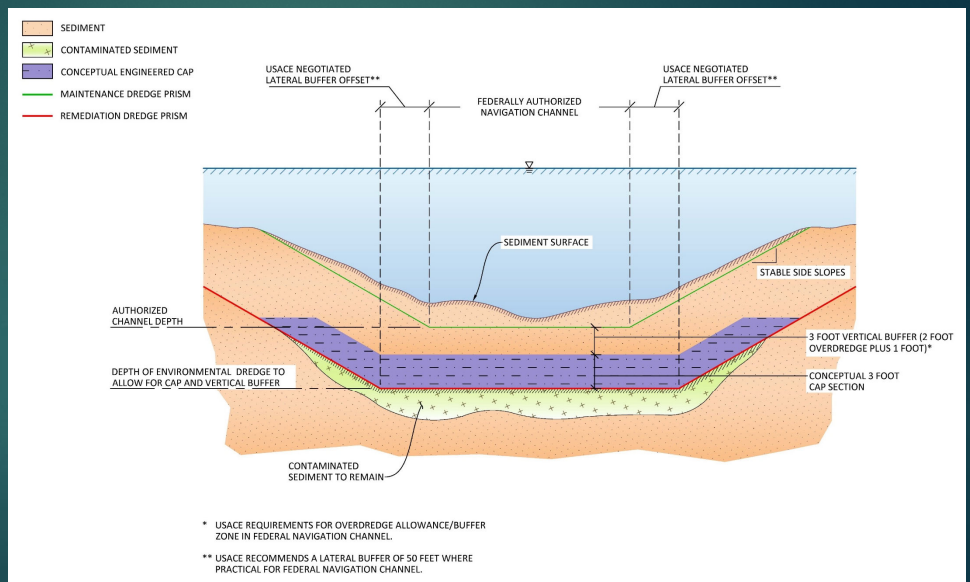
Combined or Hybrid Remedies



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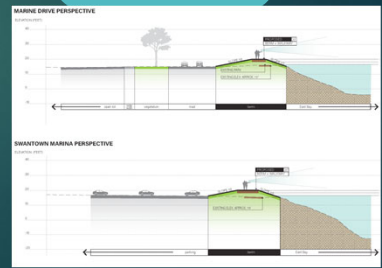
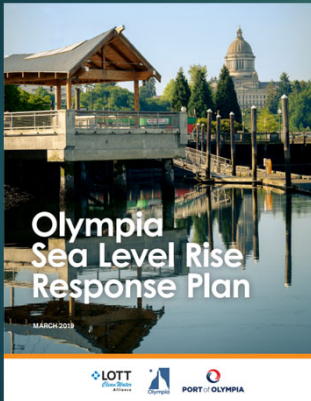
MTCA and Federal Channel

Z-Layer
USACE

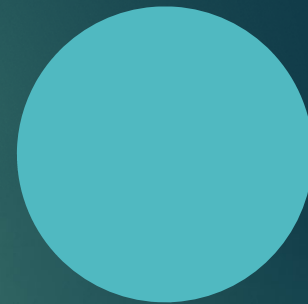


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Sea Level Rise



Dredging....



& Disposal
(Placement, Beneficial Re-Use)

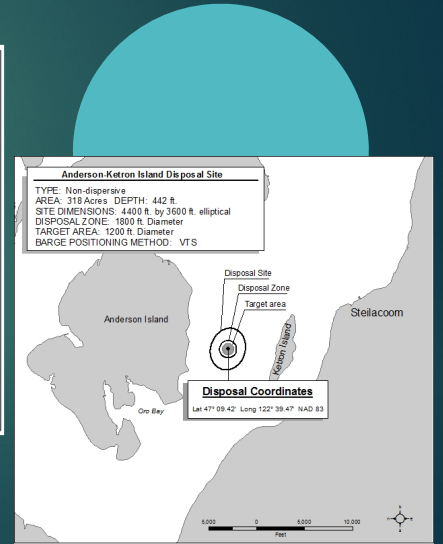
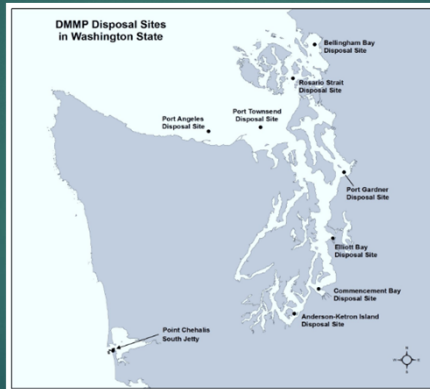
Dredge Material Management DMMP & Open Water Disposal

**Dredged Material Evaluation and Disposal Procedures
USER MANUAL**
July 2021

Photo courtesy of Fyfa Evans, Port of Everett

Dredged Material Management Program
U.S. Army Corps of Engineers, Seattle District
Environmental Protection Agency, Region 10
Washington State Department of Natural Resources
Washington State Department of Ecology

Prepared by
Dredged Material Management Office, U.S. Army Corps of Engineers, Seattle District



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Dioxin Furans

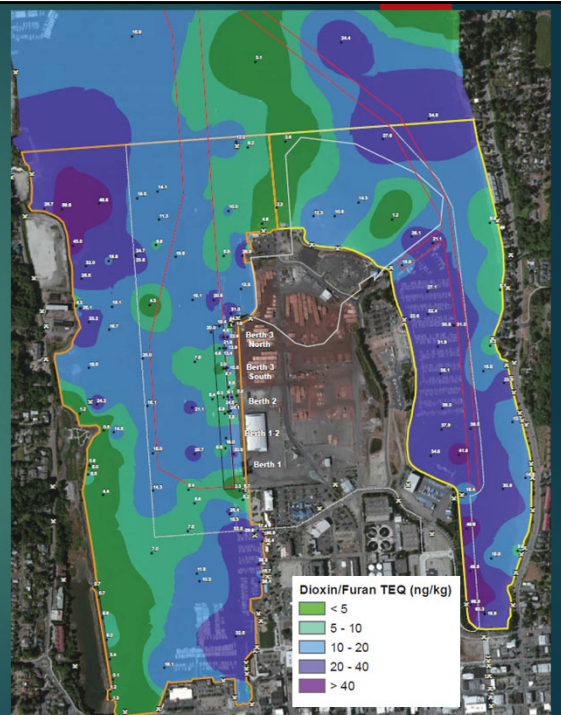
Budd Inlet

- ▶ Range from 0.65 to 98.9 ng/kg-TEQ (pptr)
- ▶ Average 19.5 pptr

Study Area

- ▶ Average = 19 pptr
- ▶ East Bay = 36 pptr
- ▶ West Bay = 14 pptr
- ▶ Intertidal = 41 pptr

Disposal Site Management
Objective of 4 pptr TEQ



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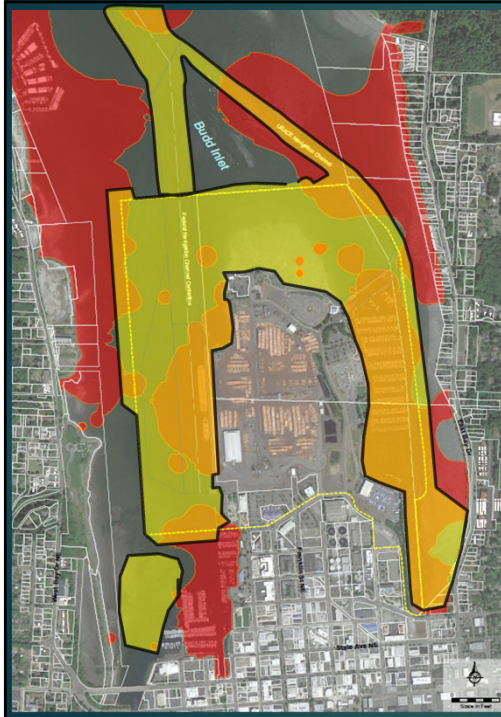
DREDGE
MATERIAL
MANAGEMENT

Landfill
Disposal



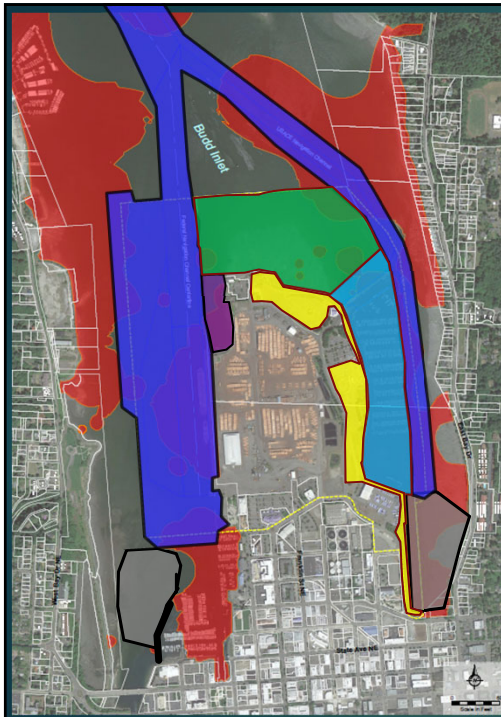
Dredge Material
Management

On-Site Upland
Landfill
Beneficial Re-Use



Port Priority Areas

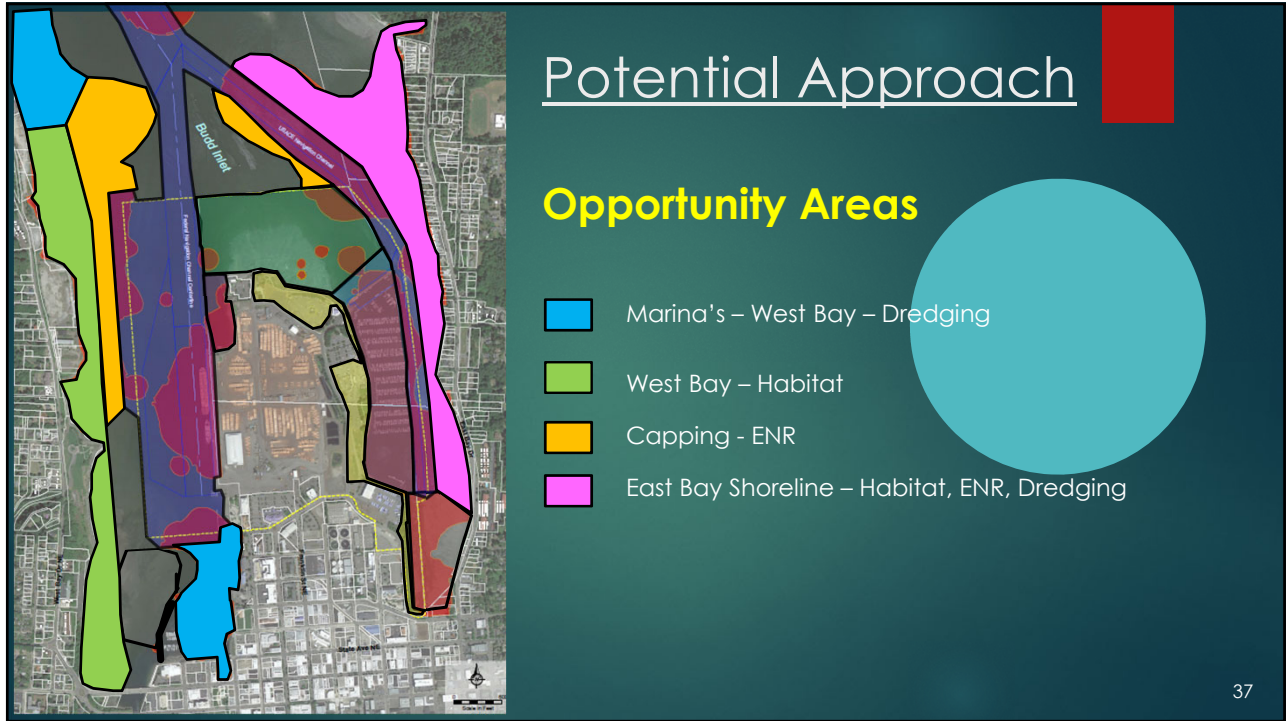
- Study Area and Navigation (including Source Control)
- Chemical Exceedances in Sediment

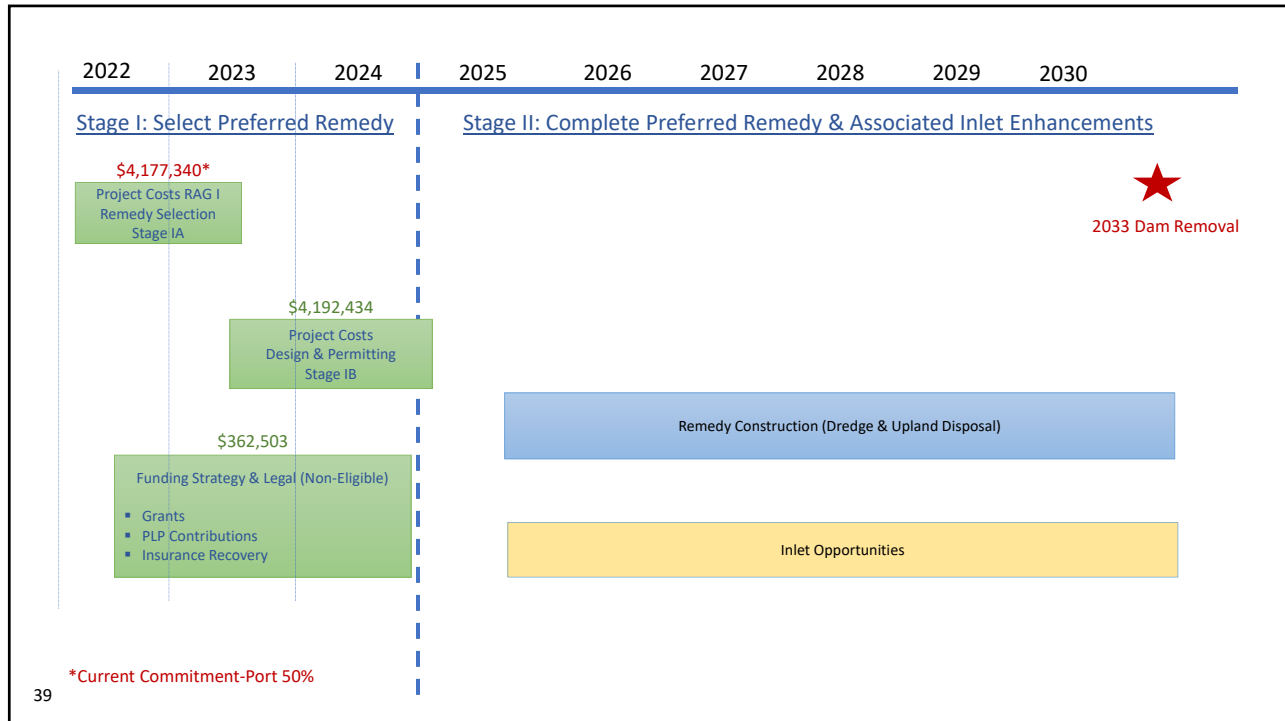


Potential Approach

Port Priority Areas

- Navigation Channel - Dredging
- North End/Cascade Pole - Habitat w/Capping
- Swantown Marina & Boatworks - Dredging
- East Bay South - Habitat & Source Control - Dredging, Sediment Basin
West Bay South - Source Control - Dredging, Sediment Basin, Jetty
- Sea Level Rise - Materials Management
- Former Log Pond - CDF





Priority Funding Sources

Known Sources	Focus of Grant	Maximum \$	Match	Eligibility	Timing	Value	Overall
Washington State Department of Ecology Remedial Action Grant (RAG)	Design and remediation of environmental investigation and clean up for contaminated sites.	No limit	10-50%				
Washington State Department of Ecology Standard Integrated Planning Grant	Funding of strategy, implementation, environmental evaluation, and planning for contaminated properties that the grantee owns or does not own.	\$200-300k	0%				
USDOT Maritime Administration (MARAD) Port Infrastructure Development program (PIDP)	Improve infrastructure of ports that enhance efficiency-safety-reliability. Flexible.	\$57mm	20%				
Potentially Liable Parties	Attributable to all remediation costs.	No Limit	0%				
Historic Liability Insurance	Attributable to all remediation costs.	Policy Limits Remediation -No Limit Investigation	0%				

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Habitat Funding Sources

Likely Sources	Focus of Grant	Maximum \$	Match	Eligibility	Timing	Value	Overall
Washington State Recreation and Conservation Office (RCO) Land and Water Conservation Fund	Funds valuable habitat land acquisition and parks	\$960k	50%				
Washington State Recreation and Conservation Office (RCO) Wildlife and Recreation Program	Acquisition of recreation and habitat lands	\$1mm	25%				
Washington State Recreation and Conservation Office (RCO) Aquatic Lands Enhancement Account	Acquisition and improvement of aquatic lands for public purposes	\$1mm	25%				
Washington State Recreation and Conservation Office (RCO) Coast Restoration and Resiliency	Ecological restoration projects	\$2mm	0%				
National Coastal Resilience Fund	Beneficial use of dredge material	\$5mm					
Other Municipal Governments (MOU)	Habitat and recreation	Negotiated	NA				
Capitol Lake-State of Washington	Impacts of Estuary approach	Negotiated	NA				

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Remediation Funding Sources

Likely Sources	Focus of Grant	Maximum \$	Match	Eligibility	Timing	Value	Overall
Washington State Department of Ecology - Independent Remedial Action Grant (IRAG)	Design and remediation of environmental investigation and clean up for contaminated sites under the voluntary cleanup program.	\$300-450k	10-50%				
USEPA Brownfield Assessment Grants	Site assessment of contaminated properties.	\$500k	0%				
USEPA Cleanup Grants	Clean up of contaminated sites	\$650k	20%				
USEPA Revolving Loan Fund (Grants)	Provides funding to capitalize loans that are used to clean up brownfield sites						
USEPA Multipurpose (State and Tribes)	Very flexible-focus on environmental applications	\$25k	0%				
USEPA –State and Tribal Assistance Grants (STAG)	Environmental applications	?	?				
USEPA –State and Tribal Assistance Grants (STAG)	Brownfields	?	?				

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Infrastructure Funding Sources

Potential Sources	Focus of Grant	Maximum \$	Match	Eligibility	Timing	Likely	Overall
USDOT National Infrastructure Investments - Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Formerly TIGER and BUILD	Invest in port projects that achieve national objectives	\$25mm	20%				
EDA Economic Adjustment Grants- American Rescue Plan Act	Infrastructure that promotes growth and resiliency.	\$5mm	20%				
Department of Homeland Security- FEMA Port Security Grant Program	Strengthen national preparedness through protecting navigation concerns.	?	?				
Washington State Department of Commerce CERB Grant (2)	Funding of public improvements in support of business development	\$3mm (Loan)	20%				

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Project Milestones

Action	When	For
Stage IA		
RAG I Contracts	Fall 2022	Stage IA
Amend RAG I Scope	Fall 2022	Stage IA Focus
Select the Remedy	Spring 2023	Completes Stage IA
Stage IB		
Consider Stage IB Funding	Spring 2023	For Stage IB
Extend Contracts	June 2023	For Stage IB
Final Design & Permitting	Fall 2024	Complete Stage IB
Stage II		
Consider Stage II Funding	Fall 2024	For Stage II
Construction	2025-2030	Complete Stage II

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Pursue Inlet Opportunities
Pursue Funding

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2022 Next Steps: Current Commission Request

1. **Approve FY 2022-2023 Contract Amendments to complete Stage IA (Sept/Oct)**
 - DOF Data evaluation and remedy selection \$3,060,000
 - Lund Faucett- Communications Strategy and Implementation \$135,000
 - Gemini Environmental-Project Coordination \$95,000
 - Cascadia Consulting- Grants and Regulatory Strategy \$68,000
 - Cascadia Law Group-Legal Strategy and Guidance \$42,000 *(Not Grant Eligible)*
2. **Amend Ecology Remedial Action Grant Scope** *(Change scope to not include actual remedy construction)*
3. **Additional Contract Amendments to complete Stage IA (Jan 2023)**
 - Leeward Strategies *(Not Grant Eligible)*
 - Crossroads Strategies *(Not Grant Eligible)*
 - Beckett Group *(Not Grant Eligible)*

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Squaxin Island Tribe



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Department of Ecology



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Conclusion

REMEDIATE impacts of urbanization and development

PRESERVE commercial viability of community's maritime facilities

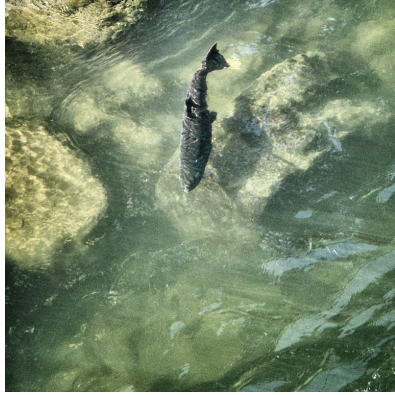


IMPROVE habitat and natural function of the Inlet

ENHANCE the community's access to the Inlet

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