

Seattle Public Utilities Lower Duwamish Superfund Cleanup

Seattle City Council
Parks, Public Utilities and Technology Committee

March 26, 2025



Lower Duwamish Waterway (LDW) Superfund Site



5 miles between Harbor Island and the Turning Basin

EPA-led cleanup of contaminants in river sediment

Why is the City a liable party?

SPU is liable due to:

- Contaminants in historic combined sewer overflows;
- Discharges from an early sewage treatment plant;
- Contaminants in stormwater.

SCL is liable due to:

- Ownership of sites where contaminants may have been released;
- Ownership of transformers distributed at multiple locations.

SPU and SCL split City costs 85% SPU and 15% SCL.

The LDW is a Superfund Site because contaminants in the sediments pose risks to people and the environment

Major Contaminants of Concern:

- Polychlorinated Biphenyls (PCBs)
- Arsenic
- Polycyclic aromatic hydrocarbon (PAHs)
- Dioxins/Furans

Fishing for the Safest Seafood from the Lower Duwamish River? Eat Salmon.

The main way people are exposed to chemicals in the river is through eating fish. Don't eat resident fish, shellfish, or crab that live year-round in the river. Salmon are the healthiest choice because they spend a short time in the river.



Chum		SAFE TO EAT 2-3 MEALS per week
Coho		
Pink		OR
Sockeye		
Chinook (King)		LIMIT 1 MEAL per week
OR		
Blackmouth	Resident Chinook caught during winter	CAUTION 2 MEALS per month

DO NOT EAT RESIDENT FISH, SHELLFISH, or CRAB

Especially WOMEN who are or may become PREGNANT, NURSING MOTHERS, and CHILDREN. They have chemicals that can harm the growth and brain development of babies and children.



For more information call 1-877-485-7316 www.doh.wa.gov/fish

Risks are to people who eat resident fish, crabs and clams.

Salmon are safe to eat (within Puget Sound limits).

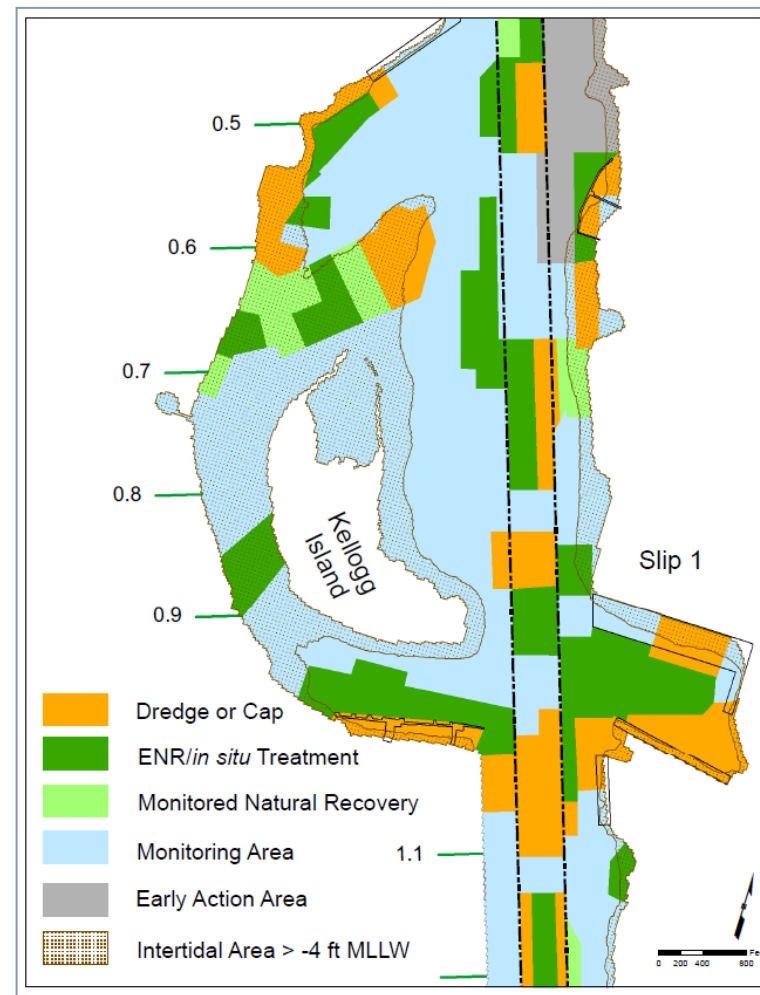
EPA's Selected Remedy

Involves 3 types of actions:

- Dredging
- Capping
- Monitoring

Dredging and capping will take approximately 10 years.

Monitoring will continue indefinitely.

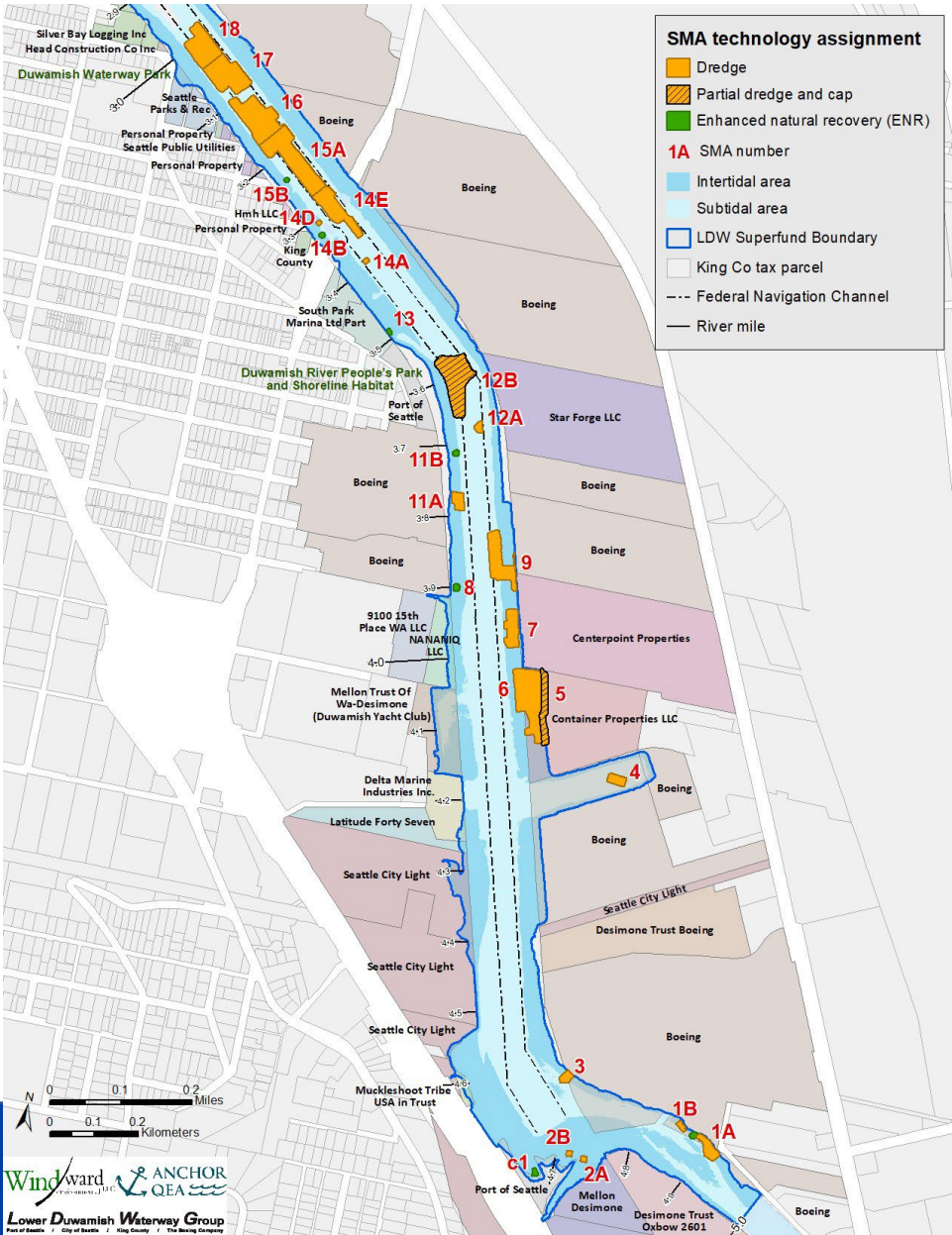


Cleanup Phases

- Remedial Design of the **Upper Reach** – Completed 2023
- Upper Reach** Construction 2024-2027
- Remedial Design of the **Middle Reach** – complete in 2027
- Remedial Design of the **Lower Reach** – begin 2025



Upper Reach Construction 2024-2028



The Culmination of a 25-year Process

Since 2000: The City has been working with EPA, the Washington Department of Ecology, King County, the Port of Seattle, and Boeing to investigate contamination, clean up hot spots, and identify how to remediate the Lower Duwamish Waterway.

Source Control has been happening for 20 years to identify sources of historical pollution and prevent recontamination.

The City is under an EPA-issued Unilateral Order that requires the City to implement the cleanup. In-water work began November 2024.

Purpose of Legislation

To allow SPU and SCL to continue implementing the lower Duwamish cleanup and, by signing the Consent Decree and Settlement Agreements, get benefits we don't have now:

- 1) protection from lawsuits and
- 2) the receipt of settlement funds.

The City will receive approximately \$88 million in settlement funds and EPA will waive \$10.5 million in oversight costs the City would otherwise pay. The City will also receive about \$5.5 million in reimbursement for past costs.

What is the City Council being asked to do?

The City Council is NOT being asked to “approve” the Consent Decree or the settlements, because the Charter gives that authority to the City Attorney.

The Council is being asked to authorize SPU and SCL to spend money in amounts and in years that extend beyond the budget cycle.

State law provides that: The legislature of a city may authorize, by enacting an ordinance, public utilities to make expenditures “not contemplated in the annual budget.” RCW 35.32A.070

Clean Up Costs and Cost Shares

Estimated Future Costs (over 30 Years)

EPA estimate: \$667 million (2023 Dollars)

SPU estimate: \$757 million (2024 Dollars)

Performing Party Cost Shares

Boeing: 53.6%

City: 31.5%

King County: 14.9%

Settlements:

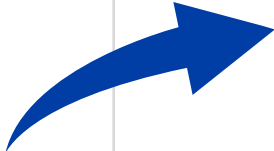
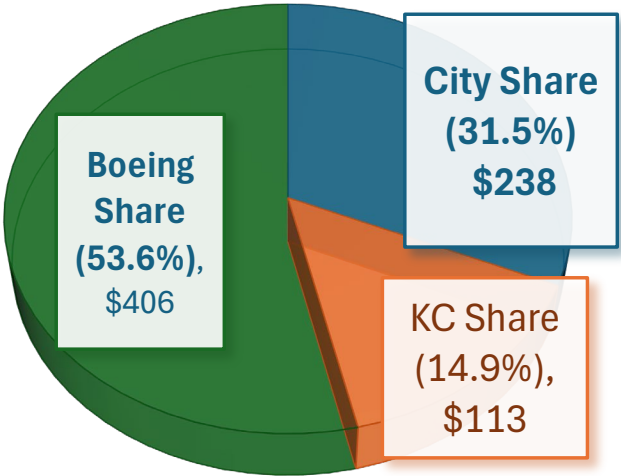
Federal agencies that are responsible for some of the contamination will pay \$140 M.

39 other parties that have small shares of liability will collectively pay \$141 M.

1 party (Lumen) will pay about \$1 M annually.

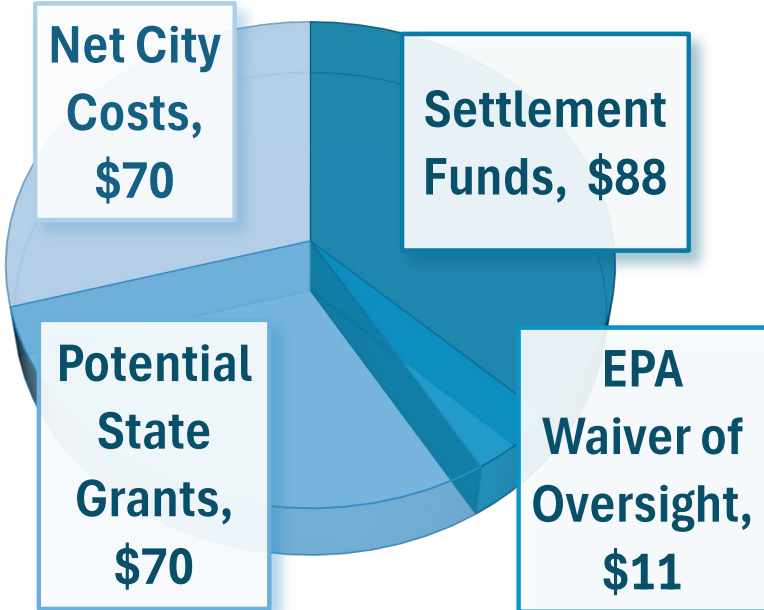
Breakdown of City Costs

LDW SUPERFUND SITE
ESTIMATED COST \$757M



FUNDING OF ESTIMATED CITY COSTS

(\$238M TOTAL)



Reimbursement for Past Costs = \$5.5M

Costs are incorporated in existing budget projections

SPU and SCL have included the estimated costs in their current forecasts and built the needed capacity into their existing rate structures. These are not general funds.

Monsanto Settlement funds (\$160 M) were due to Monsanto's PCB production. Funds will be used for cleanup, source control, stormwater treatment, and community engagement in the Lower Duwamish area.

Where we are in the process

- Boeing and the 40 settling parties signed the Consent Decree and Settlement Agreements.
- DOJ gave preliminary approval of the Consent Decree (under Biden administration.)
- Once the City and County Councils pass legislation, the City and County will sign.
- The Consent Decree goes back to DOJ for final approval.
- Once approved, the Consent Decree is filed with the Court in Seattle.
- The public may comment, and other parties may object to the Consent Decree.
- **When the Court approves the Consent Decree, it and the settlements take effect.**

Discussion



RESERVE



Lower Duwamish Cleanup Costs Summary

(Estimates based on 2024 Dollars)

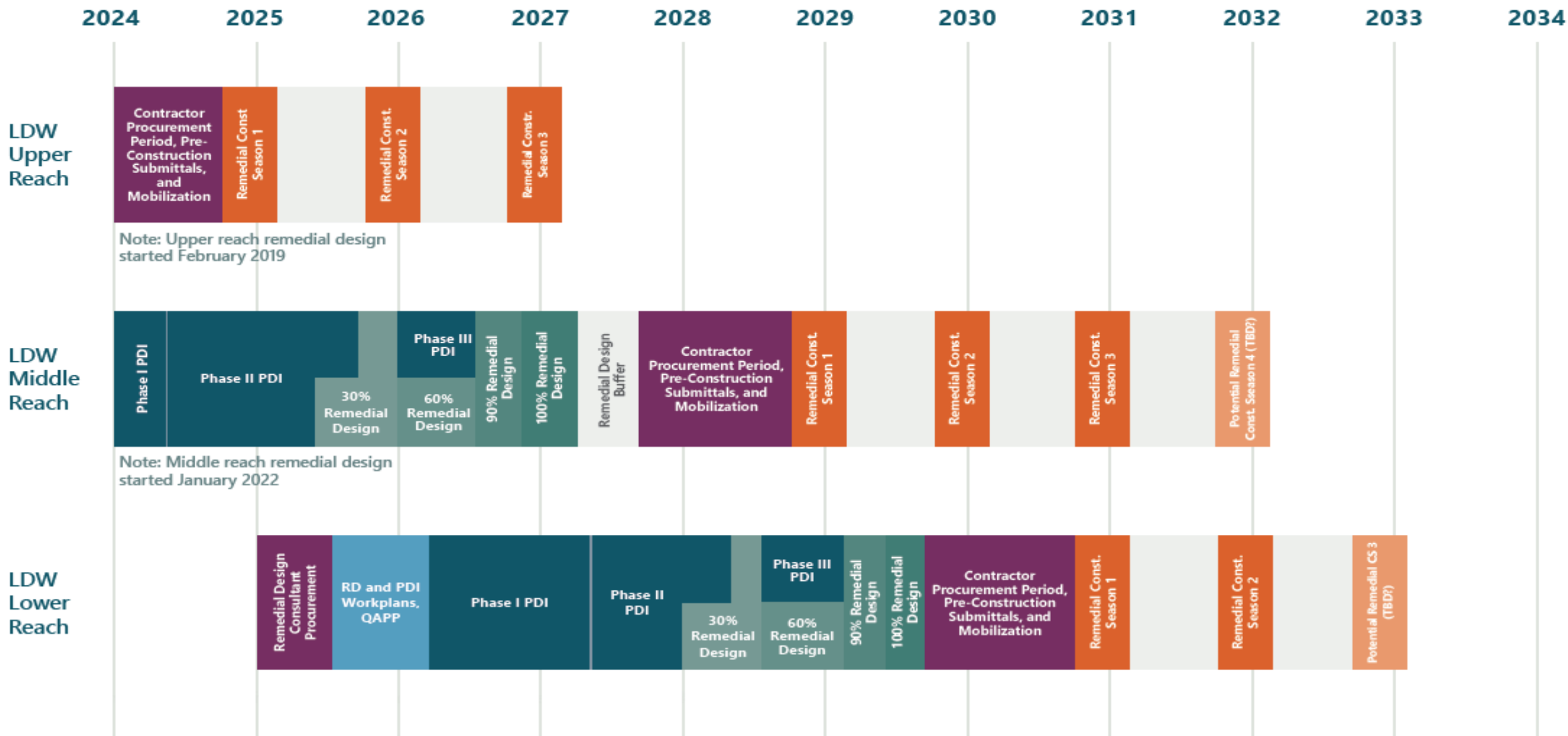
Total Cleanup Costs for LDW (SPU Estimate) – 30 YEARS	\$757 M
City Share (31.5% of \$757 M)	\$238 M
City Portion of Settlement Funds for Future Costs	\$(88 M)
EPA Waiver of Future oversight costs	\$(10.5 M)
Net City Costs	\$139.5
Potential State Grant Match (up to 50%)	\$(69.75 M)
Potential Net City Costs	\$69.75 M

Reimbursement for Past Costs

\$ 5.5 M

LDW Upper, Middle and Lower Reaches Remedial Design and Remedial Action Conceptual Timelines

VERSION 1 (LOWER REACH REFLECTS UAO SCHEDULE)



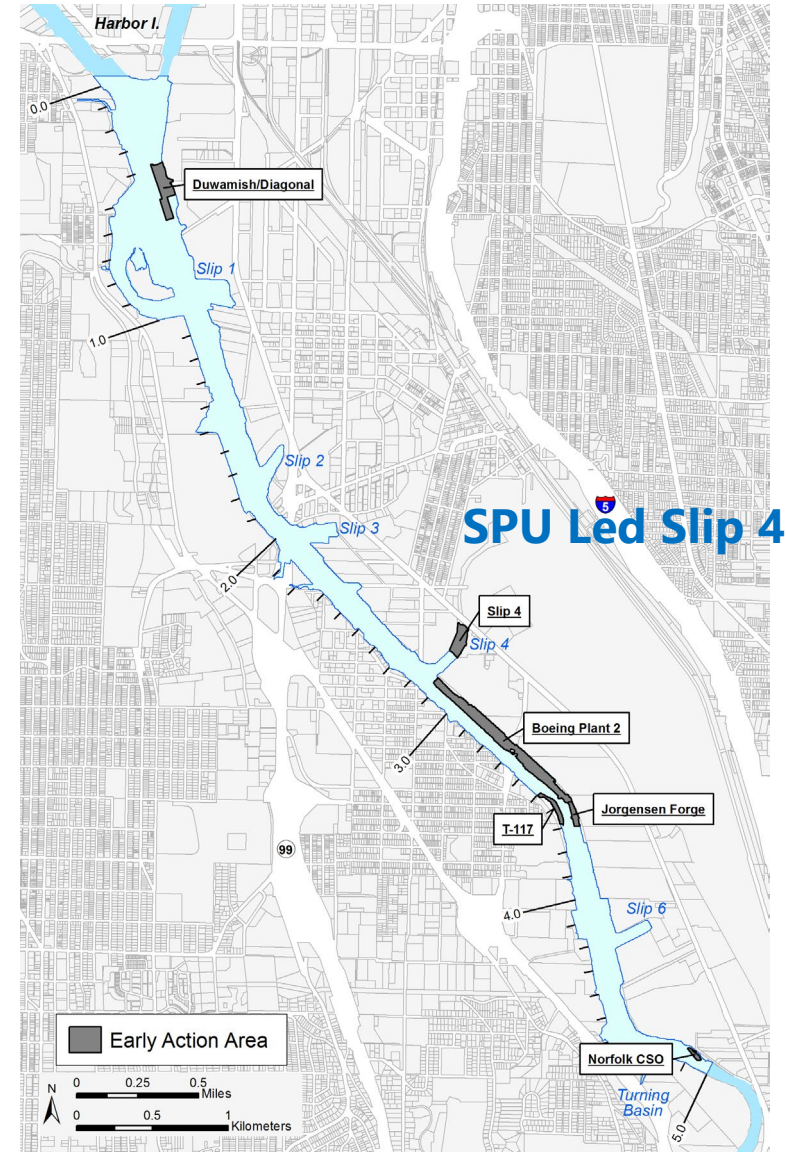
Note: This 3-reach schedule is a working schedule that assumes targeted dates for key milestones. Actual dates are dependent on many considerations. The middle reach schedule has significant uncertainty due to the complex nature of the middle reach remedial design.

Summary of Completed Early Actions

TOTAL of 6 early actions for PCBs and other COCs

- > \$150 million (25%)
- >30 acres (of 440 acres) (7%)

EAA	Completed	Size	Cost
Norfolk CSO	1999	0.6 acres	\$2.3 million
Duwamish/Diagonal	2005	6.7 acres	\$10.1 million
Slip 4	2012	3.8 acres	\$8.1 million
Boeing Plant 2	2015	17.5 acres	\$100+ million
Jorgensen Forge	2015	1.4 acres	\$7 million
Terminal 117	2015	1.7 acres	\$26 million



Sediment Program Cleanup Sites



Purpose of Legislation

This legislation will allow SPU and SCL to continue participating in the Lower Duwamish Waterway Superfund cleanup, through:

- Expending funds toward the cleanup, beyond the current budget cycle
- Accepting funds from other parties according to settlements
- Accepting State Remedial Action Grants
- Spending funds for cleanup of related upland sites including T108, South Park Marina, and North Boeing Field
- Sharing costs of the related sites with other parties