



Port of Seattle Regular Commission Meeting

September 22, 2026



COMMISSION REGULAR MEETING AGENDA

September 22, 2026

To be held virtually via MS Teams and in person at the Seattle-Tacoma International Airport – Conference Center, International Room, located at 17801 International Blvd, Seattle WA, Mezzanine Level. You may view the full meeting live at meetings.portseattle.org. To listen live, call in at +1 (206) 800-4046 or (833) 209-2690 and Conference ID 857 197 483#

ORDER OF BUSINESS

10:30 a.m.

1. CALL TO ORDER

2. **EXECUTIVE SESSION** – *if necessary, pursuant to RCW 42.30.110 (executive sessions are not open to the public)*

► 12:00 p.m. – PUBLIC SESSION

Reconvene or Call to Order and Pledge of Allegiance

3. **APPROVAL OF THE AGENDA** (*at this time, commissioners may reorder, add, or remove items from the agenda*)

4. SPECIAL ORDERS OF THE DAY

4a. Presentation of Lifesaving Award. **(no enclosure)**

5. EXECUTIVE DIRECTOR'S REPORT

6. COMMITTEE REPORTS

7. **PUBLIC COMMENT** – *procedures available online at <https://www.portseattle.org/page/public-comment-port-commission-meetings>*

During the regular order of business, those wishing to provide public comment (in accordance with the Commission's bylaws) on Commission agenda items or on topics related to the conduct of Port business will have the opportunity to:

1) Deliver public comment via email: All written comments received by email to commission-public-records@portseattle.org will be distributed to commissioners and attached to the approved minutes. Written comments are accepted three business days prior to the meeting and before 9.a.m. on the day of the meeting. Late written comments received after the meeting, but no later than the day following the meeting, will be included as part of the meeting record. All written comments must identify the purpose of the writing is for public comment at a Commission meeting.

2) Deliver public comment via phone or Microsoft Teams conference: To take advantage of this option, please email commission-public-records@portseattle.org with your name and agenda item or topic related to the conduct of Port business you wish to speak to by 9:00 a.m. PT on Wednesday, September 22, 2026. **(Please be advised that public comment is limited to agenda items and topics related to the conduct of Port business only.)** You will then be provided with instructions and a link to join the Teams meeting.

3) Deliver public comment in person by signing up to speak on your arrival to the physical meeting location: To take advantage of this option, please arrive at least 15 minutes prior to the start of any regular meeting to sign up on the public comment sheet available at the entrance to the meeting room to speak on agenda items and topics related to the conduct of Port business.

For additional information, please contact commission-public-records@portseattle.org.

8. CONSENT AGENDA (*consent agenda items are adopted by one motion without discussion*)

8a. Approval of the Regular Meeting Minutes of September 9, 2026. **(no enclosure)**

8b. Approval of the Claims and Obligations for the Period of August, 2026, through August 31, 2026, Including Accounts Payable Check Nos. 965034 through 965557 in the Amount of \$17,257,204.41; Accounts Payable ACH Nos. 087442 through 088308 in the Amount of \$66,126,505.31; Accounts Payable Wire Transfers Nos. 069732 through 069756 in the Amount of \$17,553,458.27; Payroll Check Nos. 230802 through 230911 in the Amount of \$110,964.15; and Payroll ACH Nos. 1333720 through 1338967 in the Amount of \$19,830,461.42, for Total Payments of \$120,878,593.56. **(memo enclosed)**

8b.1 Approval of the Claims and Obligations for the Period of July 1, 2026, through July 31, 2026, Including Accounts Payable Check Nos. 964498 through 965033 in the Amount of \$12,525,339.67; Accounts Payable ACH Nos. 086482 through 087441 in the Amount of \$87,712,227.98; Accounts Payable Wire Transfers Nos. 069713 through 069731 in the Amount of \$20,340,614.23; Payroll Check Nos. 230632 through 230801 in the Amount of \$194,828.12; and Payroll ACH Nos. 1325898 through 1333719 in the Amount of \$30,428,509.89, for Total Payments of \$151,201,519.89. **(memo enclosed)**

8c. Authorization for the Executive Director to Sign and Execute an Administrative Settlement Agreement and Order on Consent with the Environmental Protection Agency Requiring Removal Design and Removal Action at Terminal 25 South (T-25S). **(memo, agreement, and presentation enclosed)**

9. UNFINISHED BUSINESS

9a. Authorization for the Executive Director to Execute a Contract for Security Services to Support Employee Parking Operations at the North Employee Parking Lot and Three New Leased Parking Lots Known as Lots A, C, and M for a Total Estimated Cost of \$6,200,000.00 Over Five Years, and Request for \$700,000 to Fund and Maintain Existing Security Coverage for the Duration of the Request for Proposal Process and Through the Contract's Final Extension (October 2027), for a Total Authorization Requested of \$6,900,000. (*Postponed from September 9, 2026*) **(memo and presentation enclosed)**

10. NEW BUSINESS

- 10a. Authorization for the Executive Director or his Designee to Execute a Lease and Concession Agreement for a Non-Aeronautical Financial Institution (Credit Card) Lounge on A Concourse with AD Partnership, LLC, Operating a Chase Sapphire Lounge. **(memo and presentation enclosed)**

11. PRESENTATIONS AND STAFF REPORTS

- 11a. Green Marine International Environmental Certification Program Briefing.
(memo and presentation enclosed)

- 11b. 2027 Central Services Preliminary Budget and Portwide Rollup Briefing.
(memo and presentation enclosed)

12. QUESTIONS on REFERRAL to COMMITTEE and CLOSING COMMENTS

13. ADJOURNMENT



P.O. Box 1209
Seattle, Washington 98111
www.portseattle.org
206.787.3000

APPROVED MINUTES COMMISSION REGULAR MEETING

September 9, 2026

The Port of Seattle Commission met in a regular meeting Wednesday, September 9, 2026. The meeting was held at the Port of Seattle Headquarters Building Commission Chambers, located at 2711 Alaska Way, Seattle Washington, and virtually on Microsoft Teams. All Commissioners were in attendance.

1. CALL to ORDER

The meeting was convened at 12:05 p.m. by Commission Vice-President Fred Felleman, who led the flag salute.

2. EXECUTIVE SESSION pursuant to RCW 42.30.110

No executive session was held.

3. APPROVAL of the AGENDA

The agenda was approved as amended, with Agenda Item 8d, removed from the Consent Agenda and addressed separately.

4. SPECIAL ORDERS OF THE DAY

There were no Special Orders of the Day presented.

[Clerk's Note: Commissioner Calkins arrived at 12:23 p.m.]

5. EXECUTIVE DIRECTOR'S REPORT

Executive Director Metruck previewed items on the day's agenda and made general and meeting-related announcements.

6. COMMITTEE REPORTS

Committee Strategic Advisor Francis Choe provided the report.

Waterfront Industrial Lands Committee

Commission Vice-President Felleman and Commissioner Cho convened the Waterfront Industrial Lands Committee on August 13, 2026. The committee reviewed the Port of Seattle's Economic Development and Action Plan. The report included an analysis of the Port's real estate portfolio, economic development programs, stakeholder feedback, and both near-term and long-term economic, workforce, and environmental goals. Committee Co-Chairs recommended a briefing on the report be offered to the rest of the Commission.

Aviation Committee

The Aviation Committee met on August 18, 2026, with Commissioners Cho and Mohamed in attendance. The committee continued its taxi discussion from the June committee meeting, including marketing, geofencing, and a multi-purpose room.

Audit Committee

The Audit Committee, chaired by Commission Vice-President Fred Felleman, joined by Commissioner Mohamed and Public Member Sarah Holmstron, met on September 3, 2026. The Committee received an Entrance Audit report from the Office of the Washington State Auditor. The audit to be conducted will cover January 1, 2025 through December 31, 2025, and will be an accountability audit -- examining management; use and safeguarding of public resources; and evaluation of adherence to applicable state laws, regulations, and policies and procedures.

The Committee then heard from Internal Audit Director Glenn Fernandes, and approved adjustments to the 2026 Audit Plan, approved the proposed 2027 audit budget, and approved internal audit charter adjustments reflecting an update to the source of auditing standards.

The Committee further heard audit reports from the Internal Audit team and management's responses to the audits. Audits included a performance audit for the Primary Fire Station Continuing Operations Preservation Project, and limited contract compliance audits for Sixt Rent A Car, LLC and Marmot Mountain, LLC.

Sustainability Environment and Climate Committee

The Sustainability Environment and Climate Committee met on September 8, 2026, with Commissioners Calkins and Felleman in attendance. The committee discussed two items at this time: a 60 percent update on S Concourse Expansion project and a briefing on the underwater noise program.

7. PUBLIC COMMENT

- The following people spoke regarding the American Cruise Line (ACL) agreement and spoke regarding labor standards, safety on the waterfront, and picketing taking place in opposition to the ACL agreement: Ron Finne, Patrick Johnston, Chris Peeler, and Dan McKisson, ILWU, Local 19.
- The following people spoke regarding community support for the Belltown community and thanked the Port for community grants that have made a difference: Pete Mills and Tom Graft, Belltown United. *(written comments also submitted.)*
- The following person spoke regarding shore power infrastructure and obstruction to residential views: Steve Danishek.
- The following person spoke regarding the Port's decision to close Salmon Bay Marina to its liveaboard residents and stewardship of the marina and public funds: John Chaney.
- The following person spoke regarding rules of procedure: Alex Tsimerman.

[Clerk's Note: All written comments are combined and attached here as Exhibit A.]

8. CONSENT AGENDA

[Clerk's Note: Items on the Consent Agenda are not individually discussed. Commissioners may remove items for separate discussion and vote when approving the agenda.]

8a. Approval of the Regular and Special Meeting Minutes of August 11, 2026.

8b. Monthly Notification of Prior Executive Director Delegation Actions August 2026. – For Information Only.

Request document(s) included an agenda memorandum for information only.

8c. Authorization for the Executive Director or Designee to Execute an Airport Term License Agreement with Comcast Cable Communications Management LLC and Other Service Providers to Use the Meet Me Room Building and Related Infrastructure at Seattle-Tacoma International Airport on a Non-Exclusive Basis for a Proposed Ten-Year License Term.

Request document(s) included an agenda memorandum and agreement.

~~8d.¹ Authorization for the Executive Director to Execute a Contract for Security Services to Support Employee Parking Operations at the North Employee Parking Lot and Three New Leased Parking Lots Known as Lots A, C, and M for a Total Estimated Cost of \$6,200,000.00 Over Five Years, and Request for \$700,000 to Fund and Maintain Existing Security Coverage for the Duration of the Request for Proposal Process and Through the Contract's Final Extension (October 2027), for a Total Authorization Requested of \$6,900,000.~~

~~Request document(s) included an agenda memorandum and presentation.~~

¹ Agenda Item 8d was removed from the Consent Agenda and addressed separately.

- 8e. Authorization for the Executive Director to Authorize an Additional \$400,000 to Complete the 3rd Floor Ground Transportation Booth Enhancements Project at Seattle-Tacoma International Airport, Increasing the Total Authorization Amount from \$5,000,000 to \$5,400,000. (CIP #C801128).**

Request document(s) included an agenda memorandum and presentation.

- 8f. Authorization for the Executive Director to Execute a New Collective Bargaining Agreement Between the Port of Seattle and the International Brotherhood of Teamsters, Local 117, Representing Non-Sworn Communication Supervisors at the Police Department for the Port of Seattle Covering the Period from January 1, 2026, through December 31, 2028.**

Request document(s) included an agenda memorandum and agreement.

The motion for approval of consent agenda items 8a, 8b, 8c, ~~8d~~, 8e, 8f, and 8g carried by the following vote:

In favor: Calkins, Cho, Felleman, Hasegawa, and Mohamed (5)

Opposed: (0)

ITEMS REMOVED FROM THE CONSENT AGENDA

- 8d. Authorization for the Executive Director to Execute a Contract for Security Services to Support Employee Parking Operations at the North Employee Parking Lot and Three New Leased Parking Lots Known as Lots A, C, and M for a Total Estimated Cost of \$6,200,000.00 Over Five Years, and Request for \$700,000 to Fund and Maintain Existing Security Coverage for the Duration of the Request for Proposal Process and Through the Contract's Final Extension (October 2027), for a Total Authorization Requested of \$6,900,000.**

Request document(s) included an agenda memorandum and presentation.

The motion, to approve Item 8d was made by Commissioner Felleman.

Commissioner Mohamed spoke to understanding labor standards, benefits, and safety provisions better prior to considering this item.

The motion, made by Commissioner Mohamed, to postpone Agenda Item 8d to the September 22, 2026, Commission meeting, carried by the following vote:

In favor: Calkins, Cho, Felleman, Hasegawa, and Mohamed (5)

Opposed: (0)

[Clerk's Note: This item will appear under New Business at the September 22, 2026, Commission business meeting.]

**In favor: Cho, Felleman, Hasegawa, and Mohamed (4)
Opposed: (0)**

9. UNFINISHED BUSINESS

There was no Unfinished Business presented.

10. NEW BUSINESS

10a. Authorization for the Executive Director to Execute a Guaranteed Maximum Price Contract Amendment to the Alternative Public Works Progressive Design Build Contract for the T91/P66 Cruise Shore Power Extension Project to Complete Construction of the Pier 66 and Pier 91 East Shore Power Extension Systems, Bollards, and Limited Deck Panels Replacement and to Authorize Funding for a Validation Phase to Include the Rehabilitation of the Section of Pier 91 Delineated as Development Unit #9202; for a Total Requested Amount of \$49,330,000, a Total Project Authorization of \$69,980,000, and an Estimated Total Project Cost of \$116,480,000. (CIP #C801983 and #C802116)

Request document(s) included an agenda memorandum and presentation.

Presenter(s):

Stephanie Jones Stebbins, Managing Director of Maritime
Kelly Purnell, Capital Project Manager, Waterfront Project Management

Clerk Hart read Item 10a into the record and Executive Director Metruck introduced the item.

The presentation addressed:

- shore power purpose and the Commission's previous mandate that all homeport cruise ships connect to shore power by 2027;
- structural scope addition at Pier 91 West;
- overlapping project areas;
- action requested to execute a Guaranteed Maximum Price (GMP) Contract amendment to the alternative public works Progressive Design Build Contract, MC-0322060, for the T91/P66 Cruise Shore Power Extension Project to complete construction of the Pier 66 and Pier 91 East shore power extension systems, bollards, and limited deck panels replacement and to authorize funding for a validation phase to include the rehabilitation of the section of Pier 91 deck delineated as Development Unit (DU) #9202;
- details of the requested action;
- Pier 66 and Pier 91 milestone scopes;
- project cost;
- project risks and current status of completion; and
- next steps for completion.

Discussion ensued regarding:

- no potential further obstruction of waterfront views due to this project and outreach to residents in this regard;
- profitability of cruise;

- if cruise ships berthing in Seattle will have attained full shore power readiness by 2027;
- all work for this project being done above water; and
- if federal funds have been obtained for the project.

**The motion, made by Commissioner Cho, to approve Item 10a carried by the following vote:
In favor: Calkins, Cho, Felleman, Hasegawa, and Mohamed (5)
Opposed: (0)**

11. PRESENTATIONS AND STAFF REPORTS

11a. Q2 2026 Financial Performance Briefing.

Presentation document(s) included an agenda memorandum and presentation.

Presenter(s):

Chris Wimsatt, Chief Financial Officer, Finance and Budget

Michael Tong, Director of Corporate Budget, Finance and Budget

Clerk Hart read Item 11a into the record and Executive Director Metruck introduced the item.

The presentation addressed:

- key economic indicators;
- Port fiscal health indicators;
- key financial highlights;
- key takeaways;
- Portwide year-to-date operating expense summary;
- Portwide comprehensive financial summary;
- Portwide capital spending;
- Aviation Division;
 - passenger growth;
 - financial summary;
 - operating expense summary;
 - aeronautical revenue – forecast decreased due to debt service decrease, partially offset by GASB 103 adjustments and slight operating and maintenance increase;
 - non-aeronautical revenue – key drivers;
 - debt service coverage ratio slightly below revised budget;
 - airport development fund balance;
 - 2026 capital spending forecast;
- Seaport;
 - key Q2 2026 metrics;
 - performance summary;
 - environmental remediation liabilities (ERL) – types and process;
 - Q3 legacy ERL projects tied to the Northwest Seaport Alliance (NWSA) licensed properties will be applied to the Joint Venture;
 - key ERL projects;
- Maritime Division;
 - maritime and NWSA/Joint Venture key takeaways;

- financial summary and business highlights;
 - maritime Q2 2026 financials;
 - NWSA financials;
 - Joint Venture Q2 2026 financials;
 - maritime capital;
- Economic Development Division;
 - Q2 summary;
- Central Services;
 - key takeaways;
 - year-to-date expense by category; and
 - financial summary.

Discussion ensued regarding:

- a lump sum payment received last year that distorted our year-over-year revenue, increase to operating expenses, and compensating for the one-time payment compared to revenues – and making notations to both variances – revenue and expenses;
- length of the annual forecast, updating the forecast on a quarterly basis, and taking into account unforeseen economic impacts;
- headlines overstating what the data shows with respect to local employment and consumer spending;
- revenue potentials in the non-aeronautical category;
- marketing to encourage people to come early to the airport;
- optimizing the airport experience;
- ad revenue potential at the airport;
- visioning and opportunities that can be considered for the 2027 budget;
- consumer confidence;
- controlling growth of expenses;
- tracking parking revenue holistically;
- ERL liability allocation;
- understanding revenue and expenses in Maritime beyond the net result to understand operations better;
- fishing subsidy and what that looks like, including justification and input from the division director;
- information on more detailed specific portfolio items like real estate in Salmon Bay;
- who fishing is performing year-of-year; and
- understanding the cost of the facilities the Port oversees.

12. QUESTIONS on REFERRAL to COMMITTEE and CLOSING COMMENTS

Commissioner Felleman spoke regarding the Rosh Hashanah holiday and acknowledged the anniversary of 9/11.

Commissioner Mohamed thanked all workers who keep our region moving; spoke regarding airport workers who continue to advocate for healthcare; and requested increased public access to Commission Committees' information.

13. ADJOURNMENT

The meeting recessed to Executive Session at 2:36 p.m. for approximately 75 minutes for the purpose of discussing three items regarding Litigation/Potential Litigation/Legal Risk per RCW 42.30.110(1)(i) and one item regarding RCW 42.30.110(1)(f); no action was taken, and the meeting adjourned at 4:47 p.m.

Prepared:

Attest:

Michelle M. Hart, Commission Clerk

Sam Cho, Commission Secretary

Minutes approved: September 22, 2026

COMMISSION
AGENDA MEMORANDUM

Item No. 8b

ACTION ITEM

Date of Meeting September 22, 2026

DATE: September 9, 2026
TO: Steve Metruck, Executive Director
FROM: Eloise Olivar, Assistant Director of Disbursements
SUBJECT: **Claim and Obligations – August 2026**

ACTION REQUESTED

Request Port Commission approval of the Port Auditor's payment of the salaries and claims of the Port pursuant to RCW 42.24.180 for payments issued during the period August 01 through 31, 2026 as follows:

Payment Type	Payment Reference Start Number	Payment Reference End Number	Amount
Accounts Payable Checks	965034	965557	\$17,257,204.41
Accounts Payable ACH	087442	088308	\$66,126,505.31
Accounts Payable EFT	069732	069756	\$17,553,458.27
Payroll Checks	230802	230911	\$110,964.15
Payroll ACH	1333720	1338967	\$19,830,461.42
Total Payments			\$120,878,593.56

Pursuant to RCW 42.24.180, "the Port's legislative body" (the Commission) is required to approve in a public meeting, all payments of claims within one month of issuance.

OVERSIGHT

All these payments have been previously authorized either through direct Commission action or delegation of authority to the Executive Director and through his or her staff. Detailed information on Port expenditures is provided to the Commission through comprehensive budget presentations as well as the publicly released Budget Document, which provides an even greater level of detail. The Port's operating and capital budget is approved by resolution in December for the coming fiscal year, and the Commission also approves the Salary and Benefit Resolution around the same time to authorize pay and benefit programs. Notwithstanding the Port's budget approval, individual capital projects and contracts exceeding certain dollar thresholds are also subsequently brought before the Commission for specific authorization prior to commencement of the project or contract - if they are below the thresholds the Executive Director is delegated authority to approve them. Expenditures are monitored against budgets monthly by management and reported comprehensively to the Commission quarterly.

Meeting Date: September 22, 2026

Effective internal controls over all Port procurement, contracting and disbursements are also in place to ensure proper central oversight, delegation of authority, separation of duties, payment approval and documentation, and signed perjury statement certifications for all payments. Port disbursements are also regularly monitored against spending authorizations. All payment transactions and internal controls are subject to periodic Port internal audits and annual external audits conducted by both the State Auditor's Office and the Port's independent auditors.

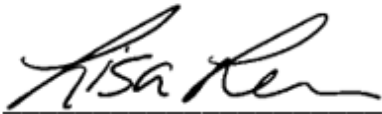
For the month of August 2026, over \$100,937,167.99 in payments were made to nearly 695 vendors, comprised of 2,331 invoices and over 8,784 accounting expense transactions. About 92 percent of the accounts payable payments made in the month fall into the Construction, Employee Benefits, Payroll Taxes, Contracted Services, Miscellaneous Expense, Janitorial Services, Utility Expenses, Sales Taxes, Maintenance Inventory and Parking Taxes. Net payroll expense for the month of August was \$19,941,425.57.

Top 10 Payment Category Summary:

Category	Payment Amount
Construction	40,637,504.74
Employee Benefits	12,989,555.19
Payroll Taxes	12,234,380.40
Contracted Services	10,124,238.81
Miscellaneous Expense	5,408,940.39
Janitorial Services	4,739,716.10
Utility Expenses	2,579,005.26
Sales Taxes	2,404,165.85
Maintenance Inventory	906,074.57
Parking Taxes	833,932.97
Other Categories Total:	8,079,653.71
Net Payroll	19,941,425.57
Total Payments	\$120,878,593.56

Meeting Date: September 22, 2026

Appropriate and effective internal controls are in place to ensure that the above obligations were processed in accordance with Port of Seattle procurement/payment policies and delegation of authority.



Lisa Lam/Port Auditor

At a meeting of the Port Commission held on September 22, 2026, it is hereby moved that, pursuant to RCW 42.24.180, the Port Commission approves the Port Auditor's payment of the above salaries and claims of the Port:

Port Commission

COMMISSION
AGENDA MEMORANDUM

Item No. 8b.1

ACTION ITEM

Date of Meeting September 22, 2026

DATE: August 14, 2026
TO: Steve Metruck, Executive Director
FROM: Eloise Olivar, Assistant Director of Disbursements
SUBJECT: **Claim and Obligations – July 2026**

ACTION REQUESTED

Request Port Commission approval of the Port Auditor's payment of the salaries and claims of the Port pursuant to RCW 42.24.180 for payments issued during the period July 01 through 31, 2026 as follows:

Payment Type	Payment Reference Start Number	Payment Reference End Number	Amount
Accounts Payable Checks	964498	965033	\$12,525,339.67
Accounts Payable ACH	086482	087441	\$87,712,227.98
Accounts Payable EFT	069713	069731	\$20,340,614.23
Payroll Checks	230632	230801	\$194,828.12
Payroll ACH	1325898	1333719	\$30,428,509.89
Total Payments			\$151,201,519.89

Pursuant to RCW 42.24.180, "the Port's legislative body" (the Commission) is required to approve in a public meeting, all payments of claims within one month of issuance.

OVERSIGHT

All these payments have been previously authorized either through direct Commission action or delegation of authority to the Executive Director and through his or her staff. Detailed information on Port expenditures is provided to the Commission through comprehensive budget presentations as well as the publicly released Budget Document, which provides an even greater level of detail. The Port's operating and capital budget is approved by resolution in December for the coming fiscal year, and the Commission also approves the Salary and Benefit Resolution around the same time to authorize pay and benefit programs. Notwithstanding the Port's budget approval, individual capital projects and contracts exceeding certain dollar thresholds are also subsequently brought before the Commission for specific authorization prior to commencement of the project or contract - if they are below the thresholds the Executive Director is delegated authority to approve them. Expenditures are monitored against budgets monthly by management and reported comprehensively to the Commission quarterly.

Meeting Date: September 22, 2026

Effective internal controls over all Port procurement, contracting and disbursements are also in place to ensure proper central oversight, delegation of authority, separation of duties, payment approval and documentation, and signed perjury statement certifications for all payments. Port disbursements are also regularly monitored against spending authorizations. All payment transactions and internal controls are subject to periodic Port internal audits and annual external audits conducted by both the State Auditor's Office and the Port's independent auditors.

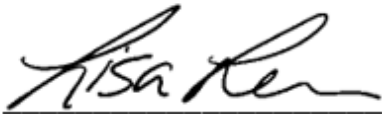
For the month of July 2026, over \$120,578,181.88 in payments were made to nearly 740 vendors, comprised of 2,609 invoices and over 8,933 accounting expense transactions. About 92 percent of the accounts payable payments made in the month fall into the Construction, Employee Benefits, Contracted Services, Payroll Taxes, Leasehold Taxes, Janitorial Services, Insurance, Utility Expenses, Sales Taxes and Software. Net payroll expense for the month of July was \$30,623,338.01.

Top 10 Payment Category Summary:

Category	Payment Amount
Construction	57,774,241.69
Employee Benefits	13,823,581.40
Contracted Services	9,157,811.17
Payroll Taxes	8,476,746.82
Leasehold Taxes	5,538,143.94
Janitorial Services	4,733,024.71
Insurance	4,279,873.42
Utility Expenses	3,531,818.10
Sales Taxes	2,063,435.23
Software	1,894,285.32
Other Categories Total:	9,305,220.08
Net Payroll	30,623,338.01
Total Payments	\$151,201,519.89

Meeting Date: September 22, 2026

Appropriate and effective internal controls are in place to ensure that the above obligations were processed in accordance with Port of Seattle procurement/payment policies and delegation of authority.


Lisa Lam/Port Auditor

At a meeting of the Port Commission held on September 22, 2026, it is hereby moved that, pursuant to RCW 42.24.180, the Port Commission approves the Port Auditor's payment of the above salaries and claims of the Port:

Port Commission

COMMISSION
AGENDA MEMORANDUM

Item No. 8c

ACTION ITEM

Date of Meeting September 22, 2026

DATE : August 17, 2026

TO: Stephen P. Metruck, Executive Director

FROM: Sarah Ogier, Director-Maritime Environment & Sustainability

Joanna Florer, Sr.Manager, Env. Programs, Maritime Environment & Sustainability

Joy Dunay, Sr.Env.Program Manager, Maritime Environment & Sustainability

SUBJECT: **Terminal 25 South Removal Design/ Removal Action Order**

Amount of this request: \$0

Total estimated project cost: \$132,000,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to (1) sign and execute an Administrative Settlement Agreement and Order on Consent (ASAOC) with EPA requiring removal design and removal action at Terminal 25 South (T-25S).

EXECUTIVE SUMMARY

Soil and sediments at T-25S contain contaminants that include polychlorinated biphenyls (PCBs), arsenic, dioxins/furans and polycyclic aromatic hydrocarbons (PAHs) that pose risk to human health and the environment and need to be addressed.

After completion of a comprehensive environmental investigation and development of cleanup alternatives, the Port has reached agreement with the U.S. Environmental Protection Agency (EPA) to conduct the removal design and removal action for the cleanup of contaminated soil and sediments at the site. Current spending for this work was included in the 2026 Environmental Remediation Liability (ERL) Program authorization, which is funded through the Environmental Liability Fund (ELF) via the tax levy. Additional Funding authorization will be proposed in subsequent annual ERL authorizations. The \$132 million cleanup cost is already identified in the Port's 5-year and long-term ERL plans.

Meeting Date: September 22, 2026

BACKGROUND

Terminal 25 is located along the East Waterway. The northern two thirds of the property is an active cargo facility, whereas the southern third of the property, known as T-25S, is an underutilized parcel that has primarily been used in recent years for bulk material storage, viaduct demolition material storage, and drayage parking. The eastern half of T-25S is licensed to the Northwest Seaport Alliance (NWSA), and the western half of the site, managed by the Port of Seattle (Port), has been identified as a future habitat restoration site.

The Port discovered a PCB hotspot at the T-25S site in 2020. An environmental investigation was performed with EPA’s oversight, to refine the nature and extent of contamination and ensure that the proposed habitat restoration meets EPA cleanup requirements for the East Waterway Superfund site. This investigation was completed with the submittal of the final Engineering Evaluation and Cost Analysis (EE/CA) on June 26, 2026. The cleanup alternative and cost estimates were presented in the EE/CA. EPA selected and memorialized their preferred alternative in their Action Memorandum issued June 24, 2026. The next phase of the cleanup process is to perform the removal design and a removal action, which is the subject of this Commission authorization request.

Although funding is not included for this request, the cost to complete the removal design and removal action is currently estimated to be \$132 million. Current year funding for this work was included in the 2026 Environmental Remediation Liability (ERL) Program authorization, which is funded through the Environmental Liability Fund (ELF) via the tax levy. Additional Funding authorization will be proposed in subsequent annual ERL authorizations. The \$132 million is already identified in the Port’s 5-year and long-term ERL plans.

JUSTIFICATION

The Administrative Settlement Agreement and Order on Consent (ASAOC or “EPA Order”) is a binding agreement to perform work by the Port; therefore, the signing of the EPA Order requires Commission authorization. The project will formally initiate the process of removal design and removal action for T25S, as necessary and required, to meet EPA’s cleanup objectives in its Action Memorandum. By cleaning up the site, the Port advances the long-term protection of human health and the environment, reduces our environmental liability, and enables the advancement of future habitat restoration at the site.

Diversity in Contracting

The removal design effort will utilize consultant services via existing environmental IDIQ contracts developed to serve design and permitting efforts such as those required by this program. The Maritime Environmental Site Management IDIQ contract and Maritime

Meeting Date: September 22, 2026

Environmental Review Permitting and Sustainability IDIQ contract have WMBE goals of 15% and 23%, respectively.

The removal action effort will utilize a General Contractor/Construction Manager (GC/CM) contract that is currently out for solicitation. The WMBE aspirational goal for the GC/CM contract is 10%.

DETAILS

The Statement of Work detailed in the EPA Order requires that the Port perform the work necessary to complete Removal Design and Removal Action.

Scope of Work

The design scope to be performed under this authorization will include:

- Coordination with EPA, Trustees, NWSA and other stakeholders
- Environmental, land use review and permitting
- Construction permitting
- Preparation of cleanup in conjunction with habitat construction documents
- Preparation of construction cost estimates

The proposed site improvements planned to be performed as a result of the project's design efforts consist of:

- Dredging and disposal of contaminated in-water sediment
- Removal and disposal of existing in-water/shoreline creosote treated timber piles and marine structural remnants
- Excavation and disposal of upland contaminated soils

Schedule

Activity *Estimated Schedule*

Commission Authorization of Order	Q3 – 2026
Removal Design	2027-2028
Removal Action	2029 -2031

Cost Breakdown

	This Request	Total Project
Design	\$4,000,000	\$4,000,000
Construction	\$128,000,000	\$128,000,000
Total	\$132,000,000	\$132,000,000

Meeting Date: September 22, 2026

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Do Not Authorize Signature of the Order

Cost Implications: Not signing the Order may result in the issuance of an enforcement order by EPA, or EPA may elect to perform this work itself. This would result in EPA recovering the cost of the work from the Port, increasing the Port's estimated costs by 1.5 to 3 times.

Pros:

- (1) May delay the Port's spending by a year or more while EPA prepares the enforcement order.

Cons:

- (1) Increased legal and staff time and efforts and costs to respond to an enforcement order and provide ancillary support to the EPA to carry out the enforcement order (gain access to the site, etc.)
- (2) The ultimate costs of the work will be much higher if EPA elects to perform the work itself.
- (3) Not performing this work could tarnish the Port's reputation with EPA and the community as having a commitment to public health and being a steward of community resources and the environment.

This is not the recommended alternative.

Alternative 2 – Authorize Signature of the Order and begin the required Statement of Work

Cost Implications: \$132,000,000

Pros:

- (1) Avoids potential delays and higher costs associated with an enforcement order (as an alternative to an agreed order) and furthers the Port's collaborative working relationship with EPA.
- (2) Takes the next step leading to T25S cleanup and long-term protection of human health and the environment.
- (3) Demonstrates the Port's value of being responsible stewards of community resources and the environment.
- (4) Allows for habitat restoration.

Cons:

- (1) None, but will cost approximately \$132,000,000 to complete the Order's Statement of Work.

This is the recommended alternative.

FINANCIAL IMPLICATIONS

There is no funding request as part of this authorization. Current year funding for the associated scope of work is included in the annual ERL authorization. Total project costs are anticipated in the ERL 5-year and long-term financial plans.

Meeting Date: September 22, 2026

Annual Budget Status and Source of Funds

The current year project cost is included in the Annual ERL Authorization. Future year funding will be subject to annual ERL authorizations. The funds for this work come from the ELF via the tax levy.

Financial Analysis and Summary

Project cost for analysis	\$132,000,000
Business Unit (BU)	Maritime Environmental Services
Effect on business performance (NOI after depreciation)	N/A
IRR/NPV (if relevant)	N/A
CPE Impact	N/A

Future Revenues and Expenses (Total cost of ownership)

The Port will pursue cost recovery options (e.g., grants, insurance or payments from other 3rd parties) to help support this work.

Future expenses may include long-term monitoring requirements to ensure that the clean-up remedy is performing as expected.

ATTACHMENTS TO THIS REQUEST

- (1) Administrative Settlement Agreement and Order on Consent for Removal Design and Removal Action (Terminal 25 South, East Waterway Operable Unit, Harbor Island Superfund Site, Seattle, WA)
- (2) PowerPoint

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

November 11, 2025 – Consent Item 8g. The Commission authorized the Environmental Remediation Liability (ERL) Programs fund for 2026 and approved a five-year spending plan for 2026 – 2031

February 8, 2022 - T25 South Restoration program EPA Order approval and Cleanup (106176) and Habitat (105562) ERL projects design authorization. The Commission authorized the Executive Director to (1) execute an Administrative Settlement Agreement and Order on Consent (ASAOC) with the U.S. Environmental Protection Agency (EPA); and (2) authorize completion of design and permitting for the Terminal 25 South Restoration Program Cleanup (106176) and Habitat Restoration (105562) projects

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 10

IN THE MATTER OF:

Terminal 25 South,
Harbor Island Superfund Site,
East Waterway Operable Unit,
Seattle, Washington

Port of Seattle,
Respondent.

Proceeding Under Sections 104, 106(a), 107
and 122 of the Comprehensive Environmental
Response, Compensation, and Liability Act

CERCLA Docket No. 10-2026-0216

**ADMINISTRATIVE
SETTLEMENT AGREEMENT
AND ORDER ON CONSENT
FOR REMOVAL ACTION**

TABLE OF CONTENTS

I.	JURISDICTION AND GENERAL PROVISIONS.....	3
II.	PARTIES BOUND	3
III.	DEFINITIONS.....	4
IV.	FINDINGS OF FACT.....	6
V.	CONCLUSIONS OF LAW AND DETERMINATIONS	7
VI.	ORDER AND AGREEMENT.....	8
VII.	COORDINATION AND SUPERVISION	8
VIII.	PERFORMANCE OF THE WORK.....	9
IX.	PROPERTY REQUIREMENTS	15
X.	FINANCIAL ASSURANCE	15
XI.	INDEMNIFICATION AND INSURANCE.....	19
XII.	PAYMENTS FOR RESPONSE COSTS.....	21
XIII.	FORCE MAJEURE	222
XIV.	DISPUTE RESOLUTION	233
XV.	STIPULATED PENALTIES	244
XVI.	COVENANTS BY EPA	255
XVII.	COVENANTS BY RESPONDENT.....	266
XVIII.	EFFECT OF SETTLEMENT; CONTRIBUTION	26
XIX.	RECORDS	27
XX.	NOTICES AND SUBMISSIONS.....	29
XXI.	APPENDICES	29
XXII.	ALTERATIONS/DEVIATIONS.....	29
XXIII.	SIGNATORIES	30
XXIV.	INTEGRATION	30
XXV.	EFFECTIVE DATE.....	30

I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent (Settlement) is entered into voluntarily by the United States Environmental Protection Agency (EPA) and the Port of Seattle (Respondent). This Settlement provides for performance by Respondent of a Non-Time-Critical Removal Action (NTCRA) and payment by Respondent of Future Response Costs incurred by the United States in connection with Terminal 25 South (T-25S), an area associated with the East Waterway Operable Unit (EWOU) of Harbor Island Superfund Site located in Seattle, Washington.

2. This Settlement is issued under the authority vested in the President of the United States by Sections 104, 106(a), 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §§ 9604, 9606(a), 9607, and 9622. This authority was delegated by the President to the Administrator of EPA on January 23, 1987, who in turn delegated the authority to the Regional Administrators in EPA Delegation Nos. 14-14A (Determinations of Imminent and Substantial Endangerment, Jan. 31, 2017), 14-14C (Administrative Actions through Consent Orders, Jan. 18, 2017), and 14-14D (Cost Recovery Non-Judicial Agreements and Administrative Consent Orders, Jan. 18, 2017). This authority was further redelegated by the Regional Administrator of EPA Region 10 through the Director of the Superfund and Emergency Management Division (SEMD) to the Branch Manager of the SEMD Remedial Cleanup Branch by Regional Delegations R10 14-14-A (April 15, 2019), R10 14-14-C (July 30, 2024), and R10 14-14-D (July 30, 2024).

3. EPA has notified the State of Washington (State) of this Settlement as prescribed by Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

4. EPA and Respondent recognize that this Settlement has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Settlement do not constitute an admission of any liability. Respondent does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement, the validity of the Findings of Fact and Conclusions of Law and Determinations in Sections IV and V. Respondent agrees to comply with and be bound by the terms of this Settlement and to not contest the basis or validity of this Settlement or its terms.

II. PARTIES BOUND

5. This Settlement is binding upon EPA and upon Respondent and its successors and assigns. Unless EPA consents otherwise, any change in ownership or corporate or other legal status of Respondent, including any transfer of assets, does not alter Respondent's obligations under this Settlement.

6. Respondent shall provide written notice of this Settlement to each contractor hired to perform the Work required by this Settlement and to each person representing Respondent with respect to T-25S or the Work. Respondent's contractors shall provide written notice of the Settlement to all subcontractors hired to perform any portion of the Work required by this Settlement. Respondent shall be responsible for ensuring that its contractors and subcontractors

perform the Work in accordance with the terms of this Settlement and shall be responsible for any violations of this Settlement committed by its contractors and sub-contractors.

III. DEFINITIONS

7. Terms not otherwise defined in this Settlement have the meanings assigned in CERCLA or in regulations promulgated under CERCLA. Whenever the terms set forth below are used in this Settlement, the following definitions apply:

“Action Memorandum” means the Action Memorandum and all attachments thereto, issued by EPA on June 24, 2026, setting forth the NTCRA decision for T-25S. The “Action Memorandum” is attached as Appendix A to this Settlement.

“CERCLA” means the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9675.

“Day” or “day” means a calendar day. In computing any period under this Settlement, the day of the event that triggers the period is not counted and, where the last day is not a working day, the period runs until the close of business of the next working day. “Working Day” means any day other than a Saturday, Sunday, or federal or State holiday.

“Effective Date” means the effective date of this Settlement as provided in Section XXVI.

“EPA” means the United States Environmental Protection Agency.

“Fund” means the Hazardous Substance Superfund established under Section 9507 of the Internal Revenue Code, 26 I.R.C. § 9507.

“Future Response Costs ” means all costs (including direct, indirect, payroll, contractor, travel, and laboratory costs) that the United States pays after the Effective Date in implementing, overseeing, or enforcing this Settlement, including: (i) in developing, reviewing and approving deliverables generated under this Settlement; (ii) in overseeing Respondent’s performance of the Work; (iii) in implementing community involvement activities under Paragraph 17; (iv) in assisting or taking action to obtain access or use restrictions under Paragraph 29; (v) in taking action under Paragraph 38 (Access to Financial Assurance); (vi) in taking response action described in Paragraph 64 because of Respondent’s failure to take emergency action under Paragraph 21; (vii) in implementing a Work Takeover under Paragraph 28; and (viii) in enforcing this Settlement, including all costs paid under Section XIV (Dispute Resolution) and all litigation costs. Future Response Costs also include all Interest accrued after the Effective Date on EPA’s unreimbursed Future Response Costs under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

“Including” or “including” means “including but not limited to.”

“Interest” means interest at the rate specified for interest on investments of the Fund, as provided under Section 107(a) of CERCLA, 42 U.S.C. § 9607, compounded annually on October 1 of each year. The applicable rate of interest will be the rate in effect at the time the

interest accrues. The rate of interest is subject to change on October 1 of each year. As of the date EPA signs this Settlement, rates are available online at <https://www.epa.gov/superfund/superfund-interest-rates>.

“National Contingency Plan” or “NCP” means the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, and codified at 40 C.F.R. Part 300, and any amendments thereto.

“NTCRA” means the Non-Time-Critical Removal Action to be implemented at T-25S in accordance with the Action Memorandum and this Settlement.

“Paragraph” means a portion of this Settlement identified by an Arabic numeral or an upper- or lower-case letter.

“Parties” means EPA and Respondent.

“Post-Removal Site Control” means actions necessary to ensure the effectiveness and integrity of the NTCRA consistent with Sections 300.415(l) and 300.5 of the NCP, 40 C.F.R. §§ 300.415(l) and 300.5, and the EPA “Policy on Management of Post-Removal Site Control” (OSWER 9360.2-02, Dec. 3, 1990).

“RCRA” means the Solid Waste Disposal Act, 42 U.S.C. §§ 6901-6992k (also known as the “Resource Conservation and Recovery Act”).

“Respondent” means the Port of Seattle and its successors and assigns.

“Section” means a portion of this Settlement identified by a Roman numeral.

“Settlement” means this Administrative Settlement Agreement and Order on Consent, all appendices attached hereto (listed in Section XXIXI), and all deliverables approved under and incorporated into this Settlement. If there is a conflict between a provision in Sections I through XXV and a provision in any appendix or deliverable, the provision in Sections I through XXV controls.

“State” means the State of Washington.

“Statement of Work” or “SOW” means the document attached as Appendix B to this Settlement, which describes the activities Respondent shall perform to implement and maintain the effectiveness of the NTCRA, and any modifications made thereto in accordance with this Settlement.

“T-25” shall mean the upland area and in-water sediments encompassing approximately 10 acres, generally located at the southwestern portion of parcel number 7666207905, 2917 East Marginal Way S, in the City of Seattle, King County, Washington, as depicted on the diagram attached as Appendix C.

“Transfer” means to sell, assign, convey, lease, mortgage, or grant a security interest in, or when used as a noun, a sale, assignment, conveyance, or other disposition of any interest by operation of law or otherwise.

“United States” means the United States of America and each department, agency, and instrumentality of the United States, including EPA.

“Waste Material” means (a) any “hazardous substance” as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (b) any pollutant or contaminant as defined in Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (c) any “solid waste” as defined in Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and (d) any “dangerous wastes” as defined in RCW 173-303-040.

“Work” means all obligations of Respondent under Sections VII (Coordination and Supervision) through XI (Indemnification and Insurance).

“Work Takeover” means EPA’s assumption of the performance of any of the Work in accordance with Paragraph 28.

IV. FINDINGS OF FACT

8. EPA makes the following findings of fact:

a. The Harbor Island Superfund Site encompasses a man-made industrial island of over 400 acres in the City of Seattle and associated sediments surrounding the island within Elliot Bay at the mouth of the Lower Duwamish Waterway. Harbor Island was created with, among other materials, dredged materials from a widening and straightening of the Lower Duwamish River by the United States Army Corps of Engineers, completed in the 1910s.

b. EWOU consists of contaminated sediments off the eastern shore of Harbor Island, and associated sources to the extent necessary to control those sources. EWOU is one of seven Harbor Island Superfund Site operable units. Remedial actions have been selected by EPA and have been implemented by various parties for all of the operable units except EWOU.

c. Major activities at Harbor Island have included: port and rail transport; petroleum product transfer and storage; secondary lead smelting; ship building, repair and maintenance; lead and other metals fabrication; plating; metals reclamation and recycling; and stormwater collection and discharge. Activities at T-25S may have affected the sediments of EWOU in the immediate vicinity of T-25S, due to their immediate proximity and reasonable fate and transport assumptions.

d. Pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, EPA placed the Harbor Island Superfund Site on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B, by publication in the Federal Register on September 8, 1983, 48 Fed. Reg. 40658.

e. Respondent is a Washington Port District, duly created under RCW Chapter 53. Respondent owned and operated facilities along the eastern shore of Harbor Island and has operated in EWOU. Respondent owns the upland area of T-25S.

f. An island-wide (except for the Lockheed Shipyard Upland and Petroleum Tank Farm operable units) remedial investigation and feasibility study (RI/FS), that included an evaluation of upland areas and sediments, was conducted by EPA in the late 1980s and early 1990s. Supplemental sediment data was also collected by various parties under oversight and direction of EPA in the late 1990s. Respondent then removed and disposed of 200,000 cubic yards of highly contaminated EWOU sediments under EPA oversight and direction pursuant to an Administrative Order on Consent in CERCLA Docket No. 10-2003-0166 issued on September 9, 2003. Following that work, Respondent performed a Supplemental RI/FS of EWOU under EPA oversight and direction pursuant to an Administrative Settlement Agreement and Order on Consent in CERCLA Docket No. 10-2007-0030 issued on October 11, 2006. These investigations demonstrate there are polychlorinated biphenyls (PCBs), poly-aromatic hydrocarbons (PAHs), mercury and other metals, and organic compounds in sediments of EWOU, including T-25S.

g. EPA issued an Interim Record of Decision (IROD) in 2024 which sets forth remedial action cleanup requirements for EWOU. The removal action cleanup determinations for T-25S set forth in the Action Memorandum are consistent with the remedial action requirements of the IROD.

h. Respondent identified soil contamination at T-25S in 2018. Under EPA oversight and direction, Respondent performed an Engineering Evaluation/Cost Analysis (EE/CA) for T-25S pursuant to an Administrative Settlement Agreement and Order on Consent in CERCLA docket no. 10-2022-0159 issued on February 8, 2022. The EE/CA along with other data and information provided the basis for EPA to make the soil removal action cleanup determinations for T-25S set forth in the Action Memorandum.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

9. Based on the Findings of Fact in Section IV and the administrative record for this matter, EPA has determined, and Respondent neither admits nor denies, that:

a. T-25S is a “facility” as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

b. At T-25S, there has been a “release” or substantial threat of “release,” as defined by Section 101(22) of CERCLA, 42 U.S.C. § 9601(22), into the “environment,” as defined by Section 101(8) of CERCLA, 42 U.S.C. § 9601(8), of a “hazardous substance” or “pollutant or contaminant,” as defined by Sections 101(14) and (33) of CERCLA, 42 U.S.C. §§ 9601(14) & (33).

c. The release or substantial threat of release into the environment of a pollutant or contaminant at T-25S “may present an imminent and substantial danger to the public health or welfare,” within the meaning of Section 104(a)(1)(B) of CERCLA, 42 U.S.C. § 9604(a)(1)(B).

d. There may be an “imminent and substantial endangerment to the public health or welfare or the environment because of an actual or threatened release of a hazardous

substance” at or from T-25S within the meaning of Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

e. The NTCRA is necessary to protect the public health or welfare or the environment from the release or substantial threat of release of a hazardous substance or pollutant of contaminant as provided in Section 104(a) of CERCLA, 42 U.S.C. § 9604(a).

f. Respondent is a “person” as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21), and a “person” and “responsible party” within the meaning of Section 104(a)(1) of CERCLA, 42 U.S.C. § 9604(a)(1).

g. The NTCRA set forth in the Action Memorandum and required by this Settlement is authorized by 40 C.F.R. § 300.415 of the NCP.

h. The NTCRA will be done “properly and promptly” by Respondent and consistent with the NCP, as provided in Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), when performed in accordance the Action Memorandum and this Settlement.

i. There has been “disposal,” within the meaning of Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), of hazardous substances at T-25S.

j. Respondent is the “owner and operator” of T-25S within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1).

k. Respondent “owned or operated” T-25S at the time of the disposal of a hazardous substance within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2).

l. Respondent arranged for the disposal of hazardous substances at T-25S with the meaning of Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3).

VI. ORDER AND AGREEMENT

10. Based upon the Findings of Fact, Conclusions of Law, and Determinations set forth above, and the administrative record for T-25S, it is hereby Ordered and Agreed that Respondent shall comply with all provisions of this Settlement as follows:

VII. COORDINATION AND SUPERVISION

11. Respondent’s Project Coordinator

a. Respondent shall notify EPA within 10 days after the Effective Date of the name and qualifications of Respondent’s proposed Project Coordinator. Respondent’s Project Coordinator shall be responsible for administration of all Work required by this Settlement.

b. Respondent’s Project Coordinator must have sufficient technical expertise to coordinate the Work. To the greatest extent possible, the Project Coordinator shall be present onsite or readily available during the Work.

c. Notice or communication relating to this Settlement from EPA to Respondent's Project Coordinator constitutes notice or communication to Respondent.

d. Respondent may change its Project Coordinator by following the procedures under Paragraph 12.

12. Procedures for Notice and Disapproval

a. Respondent shall notify EPA of the names and qualifications of any contractors or subcontractors retained to perform the Work at least 10 days prior to commencement of such Work.

b. EPA may issue a notice of disapproval for any proposed Project Coordinator, contractor, or subcontractor. Within 10 days of receipt of such notice, Respondent shall provide EPA with the name, title, contact information, and qualifications of an alternate proposed Project Coordinator, contractor or subcontractor, as the case may be.

c. EPA may disapprove a proposed Project Coordinator, contractor, or subcontractor based on objective assessment factors (*e.g.*, experience, capacity, technical expertise, conflict of interest regarding the project), or any combination of these factors.

d. EPA designates Dustan Bott of SEMD as its Project Manager. The EPA Project Manager has the authority to oversee Respondent's implementation of the Work, including the authority to halt, conduct, or direct any Work. Absence of the EPA Project Manager from T-25S is not a cause for stoppage of the Work. EPA may change its Project Manager and will notify Respondent of any such change.

VIII. PERFORMANCE OF THE WORK

13. Respondent shall perform the Work in accordance with this Settlement, including all EPA-approved, conditionally approved, or modified deliverables as required by this Settlement. The Work includes, at a minimum, all actions necessary to implement the NTCRA. Respondent shall also comply with the requirements and schedule contained in the SOW.

14. For any regulation or guidance referenced in this Settlement, the reference will be read to include any subsequent modification, amendment, or replacement of such regulation or guidance. Such modifications, amendments, or replacements apply to the Work only after Respondent receives notification from EPA of the modification, amendment, or replacement.

15. Removal Design and Removal Action

In accordance with the schedule provided in the SOW, Respondent shall submit a Removal Design and Removal Action Work Plan to EPA along with the other deliverables identified in the SOW.

16. Respondent shall submit a Post-Removal Site Control Plan in accordance with the schedule contained in the SOW. The Post-Removal Site Control Plan shall set for those actions deemed necessary to ensure the continued effectiveness and integrity of the NTCRA.

17. **Community Involvement.** EPA has lead responsibility for implementing community involvement activities for T-25S, including the preparation of a community involvement plan, as provided in the NCP and EPA guidance. As requested by EPA, Respondent shall participate in community involvement activities, including participation in: (a) the preparation of information regarding the Work for dissemination to the public (including compliance schedules and progress reports), with consideration given to the specific needs of the community, including translated materials and mass media and/or Internet notification; and (b) public meetings that may be held or sponsored by EPA to explain activities at or relating to T-25S.

18. **Deliverables: Specifications and Approval**

a. **General Requirements for Deliverables.** Respondent shall submit all deliverables to EPA in electronic form, unless otherwise specified by the EPA Project Manager. All deliverables shall meet the requirements detailed in the SOW.

b. **Technical Specifications for Deliverables.** Sampling and monitoring data shall be submitted in standard Regional Electronic Data Deliverable (“EDD”) format (Scribe database). Other delivery methods may be allowed by the EPA Project Manager if electronic direct submission presents a significant burden to Respondent or as technology changes.

c. **Approval of Deliverables.** After review of a deliverable required to be submitted by Respondent under this Settlement or the SOW, EPA may: (1) approve, in whole or in part, the deliverable; (2) approve the deliverable with specified conditions or required revisions; (3) modify and approve, in whole or in part, the deliverable; (4) disapprove, in whole or in part, the deliverable; or (5) any combination of the foregoing. If EPA requires revisions to a deliverable, EPA will provide a deadline for resubmission of that deliverable and Respondent shall revise the deliverable in accordance with all EPA-instructions and submit the revised deliverable by the EPA-established deadline. Once a deliverable is approved, approved with conditions or required revisions, or approved as modified by EPA, Respondent shall implement the activities required by that deliverable in accordance with the EPA-established schedule for the deliverable. Upon EPA-approval of a deliverable, or any portion thereof, such deliverable, or portion thereof, shall be incorporated into and enforceable under this Settlement, and Respondent shall take all action required by the deliverable, or portion thereof, according to the EPA-established schedule for that deliverable. Respondent shall not commence or perform any Work except in conformance with the terms of this Settlement.

19. **Off-Site Shipments**

a. Respondent may ship hazardous substances, pollutants and contaminants from T-25S to an off-site facility only if Respondent complies with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and the NCP at 40 C.F.R. § 300.440. Respondent will be deemed to be in compliance with those provisions for a shipment if Respondent obtains a prior determination from EPA that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b). Respondent shall utilize electronic manifests for hazardous waste disposal, except when extraordinary circumstances prevent their use (e.g., system malfunctions or inaccessibility).

b. Respondent may ship Waste Material from T-25S to an out-of-state waste management facility only if, prior to any shipment, Respondent provides written notice to the appropriate state environmental official in the receiving facility's state and to the EPA Project Manager. This written notice requirement will not apply to any off-site shipments when the total quantity of all such shipments does not exceed 10 cubic yards. The written notice must include the following information, if available: (1) the name and location of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. Respondent also shall notify the state environmental official referenced above and the EPA Project Manager of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. Respondent shall provide the written notice after the award of the contract for the NTCRA and before the Waste Material is shipped.

c. Respondent may ship Investigation Derived Waste ("IDW") from T-25S to an off-site facility only if Respondent complies with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and the NCP at 40 C.F.R. § 300.440, EPA's *Guide to Management of Investigation Derived Waste*, OSWER 9345.3-03FS (Jan. 1992) (<https://semspub.epa.gov/work/03/136166.pdf>), and any IDW-specific requirements contained in the Action Memorandum. Wastes shipped off-site to a laboratory for characterization, and RCRA hazardous wastes that meet the requirements for an exemption from RCRA under 40 C.F.R. § 261.4(e) shipped off-site for treatability studies, are not subject to 40 C.F.R. § 300.440.

20. Permits

a. As provided in Section 121(e) of CERCLA, 42 U.S.C. § 9621(e), and the NCP at 40 C.F.R. § 300.400(e), no permit is required for any portion of the Work conducted entirely onsite (*i.e.*, within the areal extent of contamination or in very close proximity to the contamination and necessary for implementation of the Work). Where any portion of the Work that is not onsite requires a federal or state permit or approval, Respondent shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals.

b. Respondent may seek relief under the provisions of Section XIII (Force Majeure) of this Settlement for any delay in the performance of the Work resulting from a failure to obtain, or a delay in obtaining, any permit or approval referenced in Paragraph 20.a and required for the Work, provided that Respondent has submitted timely and complete applications and taken all other actions necessary to obtain all such permits or approvals.

c. Nothing in this Settlement constitutes a permit issued under any federal or state statute or regulation.

21. **Emergency Response.** If any event occurs during performance of the Work that causes or threatens to cause a release of Waste Material on, at, or from T-25S and that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, Respondent shall: (a) immediately take all appropriate action to prevent, abate, or minimize such release or threat of release; (b) immediately notify the EPA

Project Manager or, in the event of the unavailability of the EPA Project Manager, the Regional Duty Officer at (206) 553-1263 of the incident or T-25S conditions; and (c) take such actions in consultation with the EPA Project Manager or authorized Regional Duty Officer and in accordance with all applicable provisions of this Settlement, the Health and Safety Plan, and any applicable deliverable approved by EPA under this Settlement.

22. **Release Reporting.** During performance of the Work should there be an event that is required to be reported pursuant to Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-Know Act (“EPCRA”), 42 U.S.C. § 11004, Respondent shall immediately provide notice of the event to the National Response Center at (800) 424-8802, and to EPA Project Manager or if the EPA Project Manager is unavailable, to the Regional Duty Officer at (206) 553-1263. Respondent shall also submit a written report to EPA within seven days after the onset of such an event, (a) describing the event, and (b) all explaining all measures taken and to be taken to mitigate the associated release or threat of release, mitigate any endangerment caused by the release or threat of release, prevent the reoccurrence of the release or threat of release. The reporting requirements under this Paragraph are in addition to the reporting required by Sections 103 and 111(g) of CERCLA, 42 U.S.C. §§ 9603 and 9611(g), or Section 304 of EPCRA, 42 U.S.C. § 11004.

23. **Progress Reports.** Commencing upon EPA-approval of the Removal Action Work Plan and continuing until EPA-issuance of a Notice of Completion of Work under Paragraph 26, Respondent shall submit written progress reports to EPA on a monthly basis, or as otherwise directed in writing by the EPA Project Manager. During performance of the Removal Design, Respondent shall submit written progress reports to EPA on a quarterly basis, or as otherwise directed in writing by the EPA Project Manager. These progress reports shall describe: (a) all significant developments during the preceding reporting period, including the actions performed and any problems encountered; (b) analytical data received during the reporting period; (c) the developments anticipated during the next reporting period, including a schedule of actions to be performed and anticipated problems; and (d) planned resolutions of past or anticipated problems.

24. **Additional Work.** If the EPA Project Manager determines that additional Work must be included in the Removal Action Work Plan or other approved deliverable to protect public health or welfare or the environment, and that such Work is consistent with the Action Memorandum, the EPA Project Manager will notify Respondent, in writing. Respondent may also request, in writing, that additional Work be included in the Removal Action Work Plan or other EPA-approved deliverable. Should EPA grant such a request, EPA will so notify Respondent, in writing. Within 30 days of receiving written notice from EPA under this Paragraph, Respondent shall submit a proposed supplemental plan or other deliverable, as the case may be, together with a proposed schedule for EPA approval. Respondent shall implement the supplemental plan or other deliverable pursuant to the schedule approved by EPA in accordance with Paragraph 18.c. This Paragraph does not limit the authority of the EPA Project Manager to authorize alterations or deviations to any plan or schedule as provided in Section XXII.

25. Final Report

a. Following completion of all Work required by this Settlement, other than the continuing obligations listed in Paragraph 26.a, and in accordance with the schedule provided in the SOW, Respondent shall submit for EPA review and approval a Final Report regarding the Work. The Final Report shall:

- (1) summarize the actions taken to comply with this Settlement;
- (2) conform to the requirements of Section 300.165 of the NCP, 40 C.F.R. § 300.165 (“OSC Reports”);
- (3) list the quantities and types of materials removed offsite or handled onsite;
- (4) describe the removal and disposal options considered for those materials;
- (5) identify the ultimate destination(s) of those materials;
- (6) include the analytical results of all sampling and analyses performed; and
- (7) include all relevant documentation generated during the Work (e.g., manifests, invoices, bills, contracts, and permits) and an estimate of the total costs incurred to complete the Work.

b. The Final Report must also include the following certification signed by a responsible corporate official of Respondent or Respondent’s Project Coordinator: “I certify under penalty of perjury that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

26. Notice of Completion of Work

a. If after reviewing the Final Report, EPA determines that all Work, other than the continuing obligations identified below, has been fully performed in accordance with this Settlement, EPA will notify Respondent. A notice of completion of Work is not a protectiveness determination and does not affect the following continuing obligations:

- (1) implementing and maintaining the requirements of the Post-Removal Site Control Plan;
- (2) obligations under Section IX (Property Requirements);
- (3) payment of Future Response Costs; and

(4) obligations under Section XIX (Records).

b. If EPA determines that any Work, other than the continuing obligations identified above, has not been completed in accordance with this Settlement, EPA will so notify Respondent and provide a list of deficiencies to be corrected and a schedule for correcting those deficiencies. Respondent shall correct all identified deficiencies in accordance with this schedule and shall submit a modified Final Report following completion of the corrected deficiencies. If any deficiencies are noted by EPA in response to a modified Final Report, such deficiencies shall be addressed in accordance with this Paragraph.

27. **Compliance with Applicable Law.** Nothing in this Settlement affects Respondent's obligations to comply with all applicable state and federal laws and regulations, except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 9621(e), and 40 C.F.R. §§ 300.400(e) and 300.415(j). In accordance with 40 C.F.R. § 300.415(j), all onsite actions required pursuant to this Settlement shall, to the extent practicable considering the exigencies of the situation, as determined by EPA, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws. Respondent shall comply with the ARARs provided in the Action Memorandum, and shall include those ARARs in the Removal Action Work Plan. The activities conducted in accordance with this Settlement, if approved by EPA, will be deemed to be consistent with the NCP as provided under 40 C.F.R. § 300.700(c)(3)(ii).

28. **Work Takeover**

a. If EPA determines that Respondent: (1) has ceased implementation of any portion of the Work required under this Settlement; (2) is seriously or repeatedly deficient or late in performing the Work required under this Settlement; or (3) is implementing the Work required under this Settlement in a manner that may cause an endangerment to public health or welfare or the environment, EPA may issue a notice of Work Takeover to Respondent, including a description of the grounds for the notice and a period of time ("Remedy Period") within which Respondent shall remedy the circumstances giving rise to the notice. The Remedy Period will be 20 days, unless EPA determines in its unreviewable discretion that there may be an endangerment, in which case the Remedy Period will be 10 days.

b. If, by the end of the Remedy Period, Respondent does not remedy to EPA's satisfaction the circumstances giving rise to the notice of Work Takeover, EPA may notify Respondent and, as it deems necessary, commence a Work Takeover.

c. EPA may conduct the Work Takeover during the pendency of any dispute under Section XIV (Dispute Resolution) but will terminate the Work Takeover if and when: (1) Respondent remedies, to EPA's satisfaction, the circumstances giving rise to the notice of Work Takeover; or (2) upon the issuance of a final determination under Section XIV (Dispute Resolution) that EPA is required to terminate the Work Takeover.

IX. PROPERTY REQUIREMENTS

29. If T-25S, or any other property where access is needed to implement this Settlement, is owned or controlled by Respondent, Respondent shall, commencing on the Effective Date, provide EPA and its representatives, including contractors, with access at all reasonable times to T-25S, or such other property, for the purpose of conducting any activity related to this Settlement. Where any action under this Settlement is to be performed in areas owned or controlled by someone other than Respondent, Respondent shall use best efforts to obtain all necessary agreements for access, enforceable by Respondent and EPA, within 30 days after the Effective Date, or as otherwise specified in writing by the EPA Project Manager.

30. As used in this Section, “best efforts” means the efforts that a reasonable person in the position of Respondent would use to achieve the goal in a timely manner, including the cost of employing professional assistance and the payment of reasonable sums of money to secure access or use restriction agreements, as required by this Section. If Respondent cannot accomplish what is required through “best efforts” in a timely manner, Respondent shall so notify EPA and include a description of the steps taken to obtain access or use restrictions. If EPA deems it appropriate, EPA may assist Respondent, or take independent action, to obtain such access or use restrictions.

31. If Respondent owns or controls any property at T-25S, Respondent shall, prior to entering into a contract to Transfer any of its property that is part of T-25S, or 60 days prior to a Transfer of such property, whichever is earlier, (a) give written notice to the proposed transferee that the property is subject to this Settlement; and (b) give written notice to EPA of the proposed Transfer and include the name and address of the transferee. Respondent shall also make sure that the transferee is committed to compliance with this Section and Section XIX (Records).

32. Notwithstanding any provision of this Settlement, EPA retains all of its access authorities and rights, as well as all of its rights to require land, water, or other resource use restrictions, including related enforcement authorities under CERCLA, RCRA, and any other applicable statute or regulations.

X. FINANCIAL ASSURANCE

33. To ensure completion of the upland Work required under Section VIII (Performance of Work), Respondent shall secure financial assurance, initially in the amount of \$53,000,000 (“Estimated Cost of the Upland Work”), for the benefit of EPA. The financial assurance must: (a) be one or more of the mechanisms listed below, in a form substantially identical to the relevant sample documents available from EPA; and (b) be satisfactory to EPA. As of the Effective Date of this Settlement, the sample documents can be found under the “Financial Assurance - Settlements” category on the Cleanup Enforcement Model Language and Sample Documents Database at <https://cfpub.epa.gov/compliance/models/>. Respondent may use multiple financial mechanisms if they are limited to surety bonds guaranteeing payment, letters of credit, trust funds, insurance policies, or some combination thereof. The following are acceptable financial mechanisms:

a. a surety bond guaranteeing payment, performance of the Upland Work, or both, that is issued by a surety company among those listed as acceptable sureties on federal bonds as set forth in Circular 570 of the U.S. Department of the Treasury;

b. an irrevocable letter of credit, payable to EPA or at the direction of EPA, that is issued by an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or state agency;

c. a trust fund established for the benefit of EPA that is administered by a trustee that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency;

d. a policy of insurance that provides EPA with acceptable rights as a beneficiary thereof and that is issued by an insurance carrier that has the authority to issue insurance policies in the applicable jurisdiction(s) and whose insurance operations are regulated and examined by a federal or state agency;

e. a demonstration by Respondent that it meets the relevant financial test criteria of Paragraph 34, accompanied by a standby funding commitment, that requires Respondent to pay funds to or at the direction of EPA, up to the amount financially assured through the use of this demonstration in the event of a Work Takeover; or

f. a guarantee to fund or perform the upland Work executed in favor of EPA by a company that: (1) is a direct or indirect parent company of Respondent or has a “substantial business relationship” (as defined in 40 C.F.R. § 264.141(h)) with Respondent; and (2) demonstrates to EPA’s satisfaction that it meets the financial test criteria of Paragraph 34.

34. If Respondent seeks to provide financial assurance by means of a demonstration or guarantee under Paragraph 33.e or 33.f, Respondent shall, within 270 days after the Effective Date:

a. Demonstrate that:

(1) Respondent or guarantor has:

- i. two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and
- ii. net working capital and tangible net worth each at least six times the sum of the Estimated Cost of the Upland Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; and
- iii. tangible net worth of at least \$10 million; and

- iv. assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the Estimated Cost of the Upland Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; or

(2) Respondent or guarantor has:

- i. a current rating for its senior unsecured debt of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A or Baa as issued by Moody's; and
- ii. tangible net worth at least six times the sum of the Estimated Cost of the Upland Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; and
- iii. tangible net worth of at least \$10 million; and
- iv. assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the Estimated Cost of the Upland Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; and

b. Submit to EPA for Respondent or guarantor: (1) a copy of an independent certified public accountant's report of the entity's financial statements for the latest completed fiscal year, which must not express an adverse opinion or disclaimer of opinion; and (2) a letter from its chief financial officer and a report from an independent certified public accountant substantially identical to the sample letter and reports available from EPA. As of the Effective Date of this Settlement, a sample letter and report are available under the "Financial Assurance - Settlements" subject list category on the Cleanup Enforcement Model Language and Sample Documents Database at <https://cfpub.epa.gov/compliance/models/>.

35. If Respondent provides financial assurance by means of a demonstration or guarantee under Paragraph 33.e or 33.f, Respondent shall also:

a. annually resubmit the documents described in Paragraph 34.b within 90 days after the close of Respondent's or guarantor's fiscal year and issuance of the accompanying audited financial report;

b. notify EPA within 30 days after Respondent or guarantor determines that it no longer satisfies the relevant financial test criteria and requirements set forth in this Section; and

c. provide to EPA, within 30 days of EPA's request, reports of the financial condition of Respondent or guarantor in addition to those specified in Paragraph 34.b; EPA may

make such a request at any time based on a belief that Respondent or guarantor may no longer meet the financial test requirements of this Section.

36. Respondent shall, within 30 days after the Effective Date, seek EPA's approval of the form of Respondent's financial assurance. Within 30 days after EPA's approval, Respondent shall secure all executed or otherwise finalized mechanisms or other documents consistent with the EPA-approved form of financial assurance and shall submit such mechanisms and documents to EPA in accordance with Paragraph 33.

37. Respondent shall diligently monitor the adequacy of the financial assurance. If Respondent becomes aware of any information indicating that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, Respondent shall notify EPA within 10 days of becoming aware of such information. If EPA determines that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, EPA will notify Respondent of such determination. Respondent shall, within 30 days after notifying EPA or receiving notice from EPA under this Paragraph, secure and submit to EPA for approval a proposal for a revised or alternative financial assurance mechanism that satisfies the requirements of this Section. EPA may extend this deadline for such time as is reasonably necessary for Respondent, in the exercise of due diligence, to secure and submit to EPA a proposal for a revised or alternative financial assurance mechanism, not to exceed 60 days. Respondent shall follow the procedures of Paragraph 39 (Modification of Amount, Form, or Terms of Financial Assurance) in seeking approval of, and submitting documentation for, the revised or alternative financial assurance mechanism. Respondent's inability to secure financial assurance in accordance with this Section does not excuse performance of any other requirement of this Settlement.

38. Access to Financial Assurance

a. If EPA issues a notice of a Work Takeover under Paragraph 28, then, in accordance with any applicable financial assurance mechanism, including the related standby funding commitment, EPA may require: (1) the performance of the Upland Work; and/or (2) that any funds guaranteed be paid in accordance with Paragraph 38.d.

b. If EPA is notified that the issuer of a financial assurance mechanism intends to cancel the mechanism, and Respondent fails to provide an alternative financial assurance mechanism in accordance with this Section at least 30 days prior to the cancellation date, the funds guaranteed under such mechanism must be paid prior to cancellation in accordance with Paragraph 38.d.

c. If, upon issuance of a notice of a Work Takeover under Paragraph 28, either: (1) EPA is unable for any reason to promptly secure the resources guaranteed under any applicable financial assurance mechanism, including the related standby funding commitment, whether in cash or in kind, to continue and complete the Upland Work; or (2) the financial assurance is a demonstration or guarantee under Paragraph 33.e or 33.f, then EPA is entitled to demand an amount, as determined by EPA, sufficient to cover the cost of the remaining Upland Work to be performed. Respondent shall, within 20 days after such demand, pay the amount demanded as directed by EPA.

d. Any amounts required to be paid under this Paragraph 38 must, as directed by EPA, be: (i) paid to EPA in order to facilitate the completion of the Upland Work by EPA, the State, or by another person; or (ii) deposited into an interest-bearing account, established at a duly chartered bank or trust company that is insured by the FDIC, in order to facilitate the completion of the Upland Work by another person. If payment is made to EPA, EPA may deposit the payment into the Hazardous Substance Superfund or into the Harbor Island East Waterway Special Account to be retained and used to conduct or finance response actions at or in connection with the Harbor Island Superfund Site, or to be transferred by EPA to the Hazardous Substance Superfund.

39. Modification of Amount, Form, or Terms of Financial Assurance. On any anniversary of the Effective Date, or at any other time agreed to by the Parties, Respondent may request a change to the form, terms, or amount of the financial assurance mechanism. Respondent shall submit any such request to EPA in accordance with Paragraph 37 and shall include an estimate of the cost of the remaining Upland Work, an explanation of the bases for the cost calculation, and a description of the proposed changes, if any, to the form or terms of the financial assurance. EPA will notify Respondent of EPA's decision regarding the request. Respondent may modify the form, terms, or the amount of the financial assurance mechanism only in accordance with: (a) EPA's approval; or (b) any resolution of a dispute on the appropriate amount of financial assurance under Section XIV (Dispute Resolution). Any decision made by EPA on a request submitted under this Paragraph to change the form or terms of a financial assurance mechanism shall not be subject to challenge by Respondent pursuant to the dispute resolution provisions of this Settlement or in any other forum. Respondent shall submit to EPA within 30 days after receipt of EPA's approval, or consistent with the terms of the resolution of the dispute, documentation of the change to the form, terms, or amount of the financial assurance instrument.

40. Release, Cancellation, or Discontinuation of Financial Assurance. Respondent may release, cancel, or discontinue any financial assurance provided under this Section only: (a) if EPA issues a Notice of Completion of Upland Work under Paragraph 26; (b) in accordance with EPA's approval of such release, cancellation, or discontinuation; or (c) if there is a dispute regarding the release, cancellation, or discontinuance of any financial assurance, in accordance with the agreement or final decision resolving such dispute under Section XIV (Dispute Resolution).

XI. INDEMNIFICATION AND INSURANCE

41. Indemnification

a. The United States does not assume any liability by entering into this Settlement or by virtue of any designation of Respondent as EPA's authorized representative under Section 104(e)(1) of CERCLA, 42 U.S.C. § 9604(e)(1). Respondent shall indemnify and save and hold harmless the United States, its officials, agents, employees, contractors, subcontractors, and representatives for or from any claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors, and any persons acting on Respondent's behalf or under their control, in carrying out activities under this Settlement, including any claims

arising from any designation of Respondent as EPA's authorized representatives under Section 104(e)(1) of CERCLA, 42 U.S.C. § 9604(e)(1). Further, Respondent agrees to pay EPA all costs it incurs including attorneys' fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States based on negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under its control in carrying out activities under with this Settlement. EPA may not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities under this Settlement. Respondent and any such contractor may not be considered an agent of EPA.

b. EPA will give Respondent notice of any claim for which EPA plans to seek indemnification in accordance with this Paragraph 41, and will consult with Respondent prior to settling such claim.

42. Respondent covenants not to sue and shall not assert any claim or cause of action against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work or other activities on or relating to T-25S, including claims on account of construction delays. In addition, Respondent shall indemnify and save and hold harmless the United States with respect to any claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of work at or relating to the T-25S, including claims on account of construction delays.

43. **Insurance.** Respondent shall secure, by no later than 15 days before commencing any on-site Work, the following insurance: (a) commercial general liability insurance with limits of liability of \$1 million per occurrence; (b) automobile liability insurance with limits of liability of \$1 million per accident; and (c) umbrella liability insurance with limits of liability of \$5 million in excess of the required commercial general liability and automobile liability limits. The insurance policy shall name EPA as an additional insured with respect to all liability arising out of the activities performed by or on behalf of Respondent under this Settlement. Respondent shall maintain this insurance until the first anniversary after EPA's issuance of the Notice of Completion of Work under Paragraph 26. In addition, for the duration of this Settlement, Respondent shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondent in furtherance of this Settlement. Prior to commencement of the Work, Respondent shall provide to EPA certificates of such insurance and a copy of each insurance policy. Respondent shall resubmit such certificates and copies of policies each year on the anniversary of the Effective Date. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering the same risks but in a lesser amount, then, with respect to that contractor or subcontractor, Respondent need provide only that portion of the insurance described above that is not maintained by the contractor or subcontractor. Respondent shall ensure that all submittals to EPA under this Paragraph identify T-25S, city, state, and EPA docket number of this Settlement.

XII. PAYMENTS FOR RESPONSE COSTS

44. Payments by Respondent for Future Response Costs

a. **Periodic Bills.** On a periodic basis, EPA will send Respondent a bill requiring payment that includes a regionally prepared cost summary, which includes direct and indirect costs incurred by EPA, its contractors, subcontractors, and the United States Department of Justice.

b. **Payment of Bill.** Respondent shall pay the bill, or if Respondent initiates dispute resolution under Section XIV (Dispute Resolution), the uncontested portion of the bill, if any, within 30 days after receipt of the bill and accompanying regionally prepared cost summary. Respondent shall pay the contested portion of the bill determined to be owed, if any, within 30 days after the determination regarding the dispute. Each payment for: (i) the uncontested bill or portion of bill, if late, and; (ii) the contested portion of the bill determined to be owed, if any, must include an additional amount for Interest accrued from the date of receipt of the bill through the date of payment. If requested by Respondent to do so, EPA may at its sole unreviewable discretion provide Respondent with the work performed documentation supporting the bill to the extent that such information is not subject to a claim of privilege, confidential business information, or personal identified information. Notwithstanding whether such documentation is provided by EPA, payment by Respondent is due within 30 days of receipt of each bill and accompanying regionally prepared cost summary. Respondent shall make all payments and send notice of the payments, in accordance with the procedures under Paragraph 44.c. Recognizing that EPA has the sole unreviewable discretion to provide each bill to the official or representative of Respondent selected by EPA, and that payment is due within 30 days of receipt of the bill by that official or representative, during the pendency of this Settlement and unless Respondent should notify EPA otherwise in writing, Respondent recommends that EPA send the periodic bills to:

Joy Dunay
2711 Alaskan Way
Seattle, WA 98121
maritime.env.invoices@portseattle.org

c. Respondent shall make all payments at <https://www.pay.gov> using the “EPA Miscellaneous Payments Cincinnati Center” link, and including references to T-25S, CERCLA Docket No. 10-2026-0216, and Site/Spill ID number 10TT, and stating the purpose of the payment. Respondent shall send notice of this payment to EPA and include the aforementioned references.

45. **Deposit of Payments.** EPA may, in its unreviewable discretion, deposit the amounts paid under Paragraph 44 in the Hazardous Substance Superfund, in the Harbor Island East Waterway Special Account, or both. EPA may, in its unreviewable discretion, retain and use any amounts deposited in the Harbor Island East Waterway Special Account to conduct or finance response actions at or in connection with the Harbor Island Superfund Site, or transfer those amounts to the Hazardous Substance Superfund.

XIII. FORCE MAJEURE

46. “Force majeure,” for purposes of this Settlement, means any event arising from causes beyond the control of Respondent, of any entity controlled by Respondent, or of Respondent’s contractors that delays or prevents the performance of any obligation under this Settlement despite Respondent’s best efforts to fulfill the obligation. Given the need to protect public health and welfare and the environment, the requirement that Respondent exercises “best efforts to fulfill the obligation” includes using best efforts to anticipate any potential force majeure and best efforts to address the effects of any potential force majeure (a) as it is occurring and (b) following the potential force majeure such that the delay and any adverse effects of the delay are minimized to the greatest extent possible. “Force majeure” does not include financial inability to complete the Work, increased cost of performance, or a failure to attain performance standards established in the Action Memorandum.

47. If any event occurs for which Respondent will or may claim a force majeure, Respondent shall notify the EPA Project Manager. The deadline for the initial notice is 10 days after the date Respondent first knew or should have known that the event would likely delay performance. Respondent shall be deemed to know of any circumstance of which any contractor, subcontractor, or entity controlled by Respondent knew or should have known. Within 10 days thereafter, Respondent shall send a further notice to EPA that includes: (a) a description of the event and its effect on Respondent’s completion of the requirements of the Settlement; (b) a description of all actions taken or to be taken to prevent or minimize the adverse effects or delay; (c) the proposed extension of time for Respondent to complete the requirements of the Settlement; (d) a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health or welfare, or the environment; and (e) all available proof supporting their claim of force majeure. Failure to comply with the notice requirements herein regarding an event precludes Respondent from asserting any claim of force majeure regarding that event, provided, however, that if EPA, despite the late or incomplete notice, is able to assess to its satisfaction whether the event is a force majeure under Paragraph 48 and whether Respondents has exercised best efforts under Paragraph 46, EPA may, in its unreviewable discretion, excuse in writing Respondent’s failure to submit timely or complete notices under this Paragraph.

48. EPA will notify Respondent of its determination whether Respondent is entitled to relief under Paragraph 47, and, if so, the duration of the extension of time for performance of the obligations affected by the force majeure. An extension of the time for performance of the obligations affected by the force majeure shall not, in itself, extend the time for performance of any other obligation. Respondent may initiate dispute resolution under Section XIV (Dispute Resolution) regarding EPA’s determination within 15 days after receipt of the determination. In any such proceeding, Respondent has the burden of proving that it is entitled to relief under Paragraph 47 and that its proposed extension was or will be warranted under the circumstances.

49. The failure by EPA to timely complete any activity under the Settlement is not a violation of the Settlement, provided, however, that if such failure prevents Respondent from completing a requirement of the Settlement in a timely manner, Respondent may seek relief under this Section.

XIV. DISPUTE RESOLUTION

50. Unless otherwise provided in this Settlement, the Parties will use the dispute resolution procedures of this Section to resolve any dispute arising under this Settlement.

51. A dispute will be considered to have arisen when Respondent sends a written notice of dispute (“Notice of Dispute”) to EPA. Disputes arising under this Settlement must in the first instance be the subject of informal negotiations between the Parties. If Respondent objects to any EPA action taken pursuant to this Settlement, Respondent shall send EPA a Notice of Dispute describing the objection(s) within seven days after such action. The period for informal negotiations may not exceed 20 days after the dispute arises, unless otherwise determined by EPA, which determination is not subject to dispute. If the Parties cannot resolve the dispute by informal negotiations, the position advanced by EPA is binding unless Respondent initiates formal dispute resolution under Paragraph 52.

52. Formal Dispute Resolution

a. **Statements of Position.** Respondent may initiate formal dispute resolution by submitting, within seven days after the conclusion of informal dispute resolution under Paragraph 51, an initial Statement of Position regarding the matter in dispute. An EPA responsive Statement of Position is due within 20 days after receipt of Respondent’s initial Statement of Position. All Statements of Position must include supporting factual data, analyses, opinions, and other appropriate documentation. EPA may extend the deadlines for filing the Statements of Position for up to 15 days and may allow the submission of supplemental Statements of Position. Any such extension determination is not subject to dispute.

b. **Formal Decision.** The Director of the Superfund & Emergency Management Division, EPA Region 10, will issue a formal decision resolving the dispute (“Formal Decision”) based on the Statements of Position. The Formal Decision is binding on Respondent, and shall be incorporated into and become an enforceable part of this Settlement.

53. **Escrow Account.** For disputes regarding a Future Response Cost billing, Respondent shall: (a) establish, in a duly chartered bank or trust company, an interest-bearing escrow account that is insured by the Federal Deposit Insurance Corporation (“FDIC”); (b) remit to that escrow account funds equal to the amount of the contested Future Response Costs; and (c) send to EPA a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that established and funded the escrow account, including the name of the bank, the bank account number, and a bank statement showing the initial balance in the account. EPA may, in its unreviewable discretion, waive the requirement to establish the escrow account. Respondent shall cause the escrow agent to pay the amounts due to EPA under Paragraph 44, if any, by the deadline for such payment in Paragraph 44. Respondent is responsible for any balance due under Paragraph 44 after the payment by the escrow agent.

54. The initiation of dispute resolution procedures under this Section does not extend, postpone, or affect in any way any requirement of this Settlement, except as may otherwise be determined by EPA, which determination is not subject to dispute. Stipulated penalties with

respect to the disputed matter will continue to accrue, but payment is stayed pending resolution of the dispute, as provided in Paragraph 58.

XV. STIPULATED PENALTIES

55. Unless the noncompliance is excused under Section XIII (Force Majeure), Respondent is liable to EPA for payment of the following stipulated penalties. For any failure: (1) to pay any amount due under Section XII (Payment for Response Costs); (2) to establish and maintain financial assurance in accordance with Section X (Financial Assurance); (3) to establish any escrow account required under Paragraph 53; (4) or to submit timely or adequate deliverables in accordance with this Settlement:

Period of Noncompliance	Penalty Per Noncompliance Per Day
1st through 14th day	\$ 750
15th through 30th day	\$ 2,000
31st day and beyond	\$ 4,000

56. **Work Takeover Penalty.** If EPA commences a Work Takeover under Paragraph 28 , Respondent shall be liable for payment of a stipulated penalty in the amount of \$10,000. This stipulated penalty is in addition to the remedy available to EPA under Paragraph 38 (Access to Financial Assurance).

57. **Accrual of Penalties.** Stipulated penalties accrue from the date performance is due, or the day a noncompliance occurs, whichever is applicable, until the date the requirement is completed or the final day of the correction of the noncompliance. Nothing in this Settlement prevents the simultaneous accrual of separate penalties for separate noncompliance with this Settlement. Stipulated penalties accrue regardless of whether Respondent has been notified of its noncompliance, and regardless of whether Respondent has initiated dispute resolution under Section XIV (Dispute Resolution), provided, however, that no penalties will accrue as follows:

a. with respect to a submission that EPA subsequently determines is deficient, during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Respondent of any deficiency; or

b. with respect to a matter that is the subject of dispute resolution under Section XIV (Dispute Resolution), during the period, if any, beginning on the 21st day after EPA's Statement of Position is received until the date of the Formal Decision under Paragraph 52.b.

58. **Demand and Payment of Stipulated Penalties.** EPA may send Respondent a demand for stipulated penalties. The demand will include a description of the noncompliance and will specify the amount of the stipulated penalties owed. Respondent may initiate dispute resolution under Section XIV (Dispute Resolution) within 30 days after receiving the demand. Respondent shall pay the amount demanded or, if Respondent initiates dispute resolution, the uncontested portion of the amount demanded, within 30 days after receipt of the demand. Respondent shall pay the contested portion of the penalties determined to be owed, if any, within 30 days after the resolution of the dispute. Each payment for: (a) the uncontested penalty demand

or uncontested portion, if late, and (b) the contested portion of the penalty demand determined to be owed, if any, must include an additional amount for Interest accrued from the date of receipt of the demand through the date of payment. Respondent shall make payment at <https://www.pay.gov> using the link for “EPA Miscellaneous Payments Cincinnati Finance Center,” including references to the Site Name, Docket Number, and Site/Spill ID number and the purpose of the payment. Respondent shall send notices of this payment to EPA. The payment of stipulated penalties and Interest, if any, does not alter any obligation of Respondent under this Settlement.

59. Nothing in this Settlement limits the authority of the EPA to seek any other remedies or sanctions available by virtue of Respondent’s noncompliance with this Settlement or of the statutes and regulations upon which this Settlement is based, including penalties under Sections 106(b) and 122(l) of CERCLA, 42 U.S.C. §§ 9606(b) and 9622(l), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3), provided, however, that EPA may not seek civil penalties under section 122(l) of CERCLA, 42 U.S.C. § 9622(c)(3), for any noncompliance for which a stipulated penalty is provided for in this Settlement, except in the case of a willful noncompliance with this Settlement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 28 (Work Takeover).

60. Notwithstanding any other provision of this Section, the EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued under this Settlement.

XVI. COVENANTS BY EPA

61. **Covenants for Respondent.** Subject to Paragraph 72, EPA covenants not to sue or to take administrative action against Respondent under Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 & 9607(a), regarding the Work and Future Response Costs.

62. The covenants under Paragraph 61: (a) take effect upon the Effective Date; (b) are conditioned on the complete and satisfactory performance by Respondent of the requirements of this Settlement; (c) extend to the successors of Respondent but only to the extent that the alleged liability of the successor of Respondent is based solely on its status as a successor of the Respondent; and (d) do not extend to any other person.

63. **General Reservations.** Notwithstanding any other provision of this Settlement, EPA reserves, and this Settlement is without prejudice to, all rights against Respondent regarding the following:

- a. liability for failure by Respondent to meet a requirement of this Settlement;
- b. liability for performance of response action other than the Work;
- c. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;

d. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and

e. criminal liability.

64. Subject to Paragraph 61, nothing in this Settlement limits any authority of EPA to take, direct, or order all appropriate action to protect human health and the environment or to prevent, abate, respond to, or minimize an actual or threatened release of Waste Material on, at, or from T-25S, or to request a court to order such action.

XVII. COVENANTS BY RESPONDENT

65. Covenants by Respondent

a. Subject to Paragraph 65.d, Respondent covenants not to sue and shall not assert any claim or cause of action against the United States under CERCLA, Section 7002(a) of RCRA, 42 U.S.C. § 6972(a), the United States Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, the State Constitution, State law, or at common law regarding the Work, Future Response Costs, and this Settlement.

b. Subject to Paragraph 65.c, Respondent covenants not to seek reimbursement from the Fund through CERCLA or any other law for costs of the Work, Future Response Costs, or any claim arising out of response actions at or in connection with T-25S.

c. The covenants in Paragraph 65.a do not apply to any claim or cause of action brought, or order issued, after the Effective Date by the United States to the extent such claim, or cause of action, or order is issued within the scope of a reservations under Paragraph 63.a through e.

d. Notwithstanding any other provision of this Settlement, this Settlement shall not have any effect on claims or causes of action that Respondent has or may have pursuant to Section 113(f) of CERCLA, 42 U.S.C. § 9613(f), against the United States on behalf of the United States General Services Administration, the United States Postal Service, the United States Coast Guard, and the United States Department of Defense based on a claim that the United States is a potentially responsible party pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), relating to the Work, Future Response Costs, and this Settlement. The United States Department of Defense shall mean the United States Department of Defense, also known as the United States Department of War, as described in 10 U.S.C. § 111 and its successor departments, agencies, or instrumentalities.

XVIII. EFFECT OF SETTLEMENT; CONTRIBUTION

66. The Parties agree that: (a) this Settlement constitutes an administrative settlement under which Respondent has, as of the Effective Date, resolved its liability to EPA within the meaning of Sections 113(f)(2), 113(f)(3)(B), and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2), 9613(f)(3)(B) & 9622(h)(4); and (b) Respondent is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) & 9622(h)(4), or as may be otherwise provided by law, for

the “matters addressed” in this Settlement. The “matters addressed” in this Settlement are the Work and Future Response Costs, provided, however, that if EPA exercises rights against Respondent under the reservations in Paragraph 63.a through e., the “matters addressed” in this Settlement do not include those response costs or response actions that are within the scope of the exercised reservation.

67. Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement, notify EPA no later than 60 days prior to the initiation of such suit or claim. Respondent shall, with respect to any suit or claim brought against it for matters related to this Settlement, notify EPA within 10 days after service of the complaint on Respondent. In addition, Respondent shall notify EPA within 10 days after service or receipt of any Motion for Summary Judgment and within 10 days after receipt of any order from a court setting a case for trial.

68. **Res Judicata and Other Defenses.** In any subsequent administrative or judicial proceeding initiated against Respondent by EPA or by the United States on behalf of EPA for injunctive relief, recovery of response costs, or other appropriate relief relating to the Site, Respondent shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, claim preclusion (res judicata), issue preclusion (collateral estoppel), claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case.

69. Nothing in this Settlement creates any rights in, or grants any defense or cause of action to, any person not a Party to this Settlement. Except as provided in Section XVII (Covenants by Respondent), each Party expressly reserves any and all rights (including pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action that each Party may have with respect to any matter, transaction, or occurrence relating in any way to T-25S against any person not a Party hereto. Nothing in this Settlement diminishes the right of the United States under Sections 113(f)(2) and (3) of CERCLA, 42 U.S.C. §§ 9613(f)(2) & (3), to pursue any person not a party to this Settlement to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2).

XIX. RECORDS

70. Retention of Records and Information

a. Respondent shall retain, and instruct its contractors and agents to retain, the following documents and electronically stored data (“Records”) until 10 years after the Notice of Completion of the Work under Paragraph 26 (“Record Retention Period”):

- (1) All records regarding Respondent’s liability and the liability of any other person under CERCLA regarding the Site;
- (2) All reports, plans, permits, and documents submitted to EPA in accordance with this Settlement, including all underlying research and data; and

- (3) All data developed by, or on behalf of, Respondent in the course of performing the Work.

b. At the end of the Record Retention Period, Respondent shall notify EPA that EPA has 90 days to request Respondent's retained Records. Respondent shall continue to retain and preserve its Records for this 90-day period. Upon request by EPA, and except as provided below (Privileged and Protected Claims), Respondent shall deliver any requested Records to EPA. These Records retention requirements apply regardless of any corporate record retention policy.

71. Privileged and Protected Claims

a. Respondent may assert that all or part of a record requested by EPA is privileged or protected as provided under federal law, in lieu of providing the record, provided that Respondent complies with Paragraph 71.b, and except as provided in Paragraph 71.c.

b. If Respondent asserts a claim of privilege or protection, Respondent shall provide EPA with the following information regarding such record: its title; its date; the name, title, affiliation (e.g., company or firm), and address of the author, of each addressee, and of each recipient; a description of the record's contents; and the privilege or protection asserted. If a claim of privilege or protection applies only to a portion of a record, Respondent shall provide the record to EPA in redacted form to mask the privileged or protected portion only. Respondent shall retain all records that they claim to be privileged or protected until EPA has had a reasonable opportunity to dispute the privilege or protection claim and any such dispute has been resolved in Respondent's favor.

c. Respondent shall not make any claim of privilege or protection regarding: (1) any data regarding T-25S, including all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological or engineering data, or the portion of any other record that evidences conditions at or around T-25S; or (2) the portion of any record that Respondent is required to create or generate in accordance with this Settlement.

72. Confidential Business Information Claims. Respondent is entitled to claim that all or part of a record submitted to EPA under this Section is Confidential Business Information ("CBI") that is covered by Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Respondent shall segregate all records or parts thereof submitted under this Settlement which Respondent claims is CBI and label those records as "claimed as confidential business information" or "claimed as CBI." Records that a submitter properly labels in accordance with the preceding sentence will be afforded the protections specified in 40 C.F.R. Part 2, Subpart B. If the records are not properly labeled when they are submitted to EPA, or if EPA notifies the submitter that the records are not entitled to confidential treatment under the standards of Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), or 40 C.F.R. Part 2, Subpart B, the public may be given access to such records without further notice to the submitter.

73. Notwithstanding any provision of this Settlement, EPA retains all of its information gathering and inspection authorities and rights, including enforcement actions related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

XX. NOTICES AND SUBMISSIONS

74. All agreements, approvals, consents, deliverables, modifications, notices, notifications, objections, proposals, reports, waivers, and requests specified in this Settlement must be in writing unless otherwise specified. Whenever a notice is required to be given or a report or other document is required to be sent by one Party to another under this Settlement, it must be sent as specified below. All notices under this Section are effective upon receipt, unless otherwise specified. In the case of emailed notices, there is a rebuttable presumption that such notices are received on the same day that they are sent. Any Party may change the method, person, or address applicable to it by providing notice of such change to the other Party.

As to EPA: *via email to:*
Dustan Bott
bott.dustan@epa.gov
Re: Site/Spill ID # 10TT

As to *via email to:*
Respondent: Julia Fitts
jfitts@anchorqea.com

XXI. APPENDICES

75. The following appendices are attached to and incorporated into this Settlement:

“Appendix A” is the Action Memorandum.

“Appendix B” is the Statement of Work.

“Appendix C” is a diagram of T-25S.

XXII. ALTERATIONS/DEVIATIONS

76. The EPA Project Manager may alter a deliverable or schedule by written notice or oral direction. The EPA Project Manager will memorialize in writing each such oral direction, but the effective date of that alteration will be the date of oral direction. Otherwise, the effective date of an alteration will be the date of written notice. Once so acted upon by the EPA Project Manager, the altered deliverable or schedule will be deemed approved by EPA. Any other requirement of this Settlement may be changed only by the written mutual consent of the Parties.

77. If Respondent seeks to deviate from the approved Removal Action Work Plan or schedule or any other approved deliverable or schedule, Respondent’s Project Coordinator shall submit a written request to EPA for approval outlining the proposed deviation and reasons therefore. Respondent may proceed in accordance with such a requested deviation only after receiving written approval to do so from the EPA Project Manager.

78. No advice, guidance, suggestion, or comment by the EPA Project Manager or other EPA representative regarding any proposed deliverable or schedule submitted by Respondent relieves Respondent of the obligation to obtain EPA-approval as required by this Settlement, or to otherwise comply with all requirements of this Settlement.

XXIII. SIGNATORIES

79. The undersigned representative of EPA and Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement and to execute and legally bind such party to this Settlement.

XXIV. INTEGRATION

80. This Settlement constitutes the entire agreement among the Parties regarding the subject matter of the Settlement and supersedes all prior representations, agreements and understandings, whether oral or written, regarding the subject matter of the Settlement.

XXV. EFFECTIVE DATE

81. This Settlement is effective when it is executed by EPA.

IT IS SO AGREED AND ORDERED:

**BY THE U.S. ENVIRONMENTAL
PROTECTION AGENCY:**

Dated

Laura Buelow
Acting Remedial Program Manager
Superfund and Emergency Management Division
Region 10

Signature Page for Settlement Regarding Terminal 25 South and area associated with the East
Waterway Operable Unit of the Harbor Island Superfund Site

FOR: PORT OF SEATTLE

Dated

Name: Stephen P. Metruck
Title: Executive Director



REGION 10

SEATTLE, WA 98101

MEMORANDUM

SUBJECT: Action Memorandum for a Non-Time Critical Removal Action at Terminal 25 South, Seattle, Washington

FROM: Dustan Bott, Remedial Project Manager
Site Cleanup Section 3
Remedial Cleanup Branch

THRU: Laura Buelow, Acting Branch Manager
Remedial Cleanup Branch

TO: Daniel D. Opalski, Director
Superfund Emergency Management Division

SITE ID: EPA 1D – WAD980722839, Site ID – 1000949

1 PURPOSE

The purpose of this Action Memorandum (AM) is to request and document approval of a Non-Time Critical Removal Action (NTCRA) for Terminal 25 South (T-25S), located in Seattle, Washington (Figure 1). The NTCRA is authorized by Section 104(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9604(a), and Section 300.415 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. 300.415. An Engineering Evaluation and Cost Analysis (EE/CA) for T-25S was prepared by the Port of Seattle (Port) under United States Environmental Protection Agency (EPA) oversight in accordance with the Administrative Settlement Agreement and Order on Consent in CERCLA Docket No. 10-2022-0159 (ASAOC).

T-25S is located partially within the East Waterway (EW) Operable Unit (OU) of the Harbor Island Superfund Site (Figure 2). EPA issued an Interim Record of Decision (IROD) in 2024 that selected the interim remedial action for the EW OU, including the overlapping sediment portion of T-25S. Remedial Action Levels (RALs) for sediment in the EW OU are established in the IROD and are presented in Table 1.

The Port plans to construct a habitat restoration project at T-25S to restore intertidal and shallow subtidal habitat. Prior to implementing that project, removal of contaminated sediments from the EW OU and contaminated soils from the adjacent upland area of T-25S will occur. Currently, T-25S is

comprised of EW OU sediments (referred to as the in-water portion) and an upland area that will become marsh habitat (below the future relocated mean higher high-water elevation) as part of the habitat restoration project (referred to as the upland portion). The NTCRA will address the in-water portion of T-25S in a manner that is consistent with applicable components of the EW OU IROD. In addition, the EW OU RALs will apply to the upland portion of T-25S that is anticipated to become marsh habitat. Implementation of the NTCRA is planned to occur ahead of the habitat restoration project construction activities.

2 SITE CONDITIONS AND BACKGROUND

The EPA/CERCLIS ID for the Harbor Island Superfund Site (Site) is WAD980722839, Site ID – 1000949. The Site was placed on the National Priorities List (NPL) on September 8, 1983, pursuant to Section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9605. Harbor Island is one of the primary industrial and commercial areas in Seattle and was constructed in the early 20th century in the Duwamish River. The East Waterway is approximately 1.5 miles long and 750 feet wide and was formed by dredging the Elliott Bay tidelands and the construction of Harbor Island in the early 1900s (Anchor QEA and Windward Environmental LLC [Windward], 2019). To the south of Harbor Island and upstream of the EW OU is the Lower Duwamish Waterway (LDW) Superfund Site.

T-25S is one of the Port's earliest operating commercial terminals (Pinnacle Geosciences 2003). Its origins and commercial use date back to the original filling of the intertidal lands. T-25S was initially constructed by dredging and filling activities in the early 1900s, when the Duwamish River was reconfigured to the current channel location. In addition to sediment fill placement at T-25S, other upland fill materials (associated with the regrading of Beacon Hill and Denny Hill) were placed at the site. T-25S was used for cold storage, logging facilities, and as a sawmill from 1915 to approximately 1930. The mill site was removed to allow for lumber storage and automobile staging in the early 1960s. Automobile undercoating facilities were constructed in the 1970s. The current terminal area north of T-25S was a turning basin until 1972, when it was filled in. During the 1980s, T-25S was used for cold storage, seafood processing, and shipping operations. Most structures and buildings at the site were demolished in the 1990s, the cold storage building was demolished in the early 2000s. Historical operations are depicted on Figure 3.

2.1 Site description

2.1.1 Removal site evaluation

An initial remedial investigation (RI) was completed by EPA for the Site in 1993 (Weston, R.F., 1993). That RI focused primarily on the upland areas of Harbor Island. Work began in 2006 to specifically characterize the nature and extent of contamination in the sediments of the EW OU. Together, the Port, the City of Seattle, and King County make up the East Waterway Group (EWG), which has been performing or funding investigations and studies of the EW OU. A supplemental remedial investigation (SRI) focusing on the EW OU was completed in 2014 (Windward and Anchor QEA, 2014), and a feasibility study (FS) was completed in 2019 (Anchor QEA and Windward, 2019), and were performed by the Port under the supervision of EPA. The nature and extent of contamination in the EW OU and alternatives for remediation of that contamination are detailed in the SRI and FS. These evaluations and studies included the current in-water portion of T-25S.

Environmental investigations of soil, intertidal bank sediment, groundwater and stormwater have been conducted at T-25S for various purposes beginning in the late 1960s, as follows:

Blymyer Engineers, Inc., 1989, conducted a Phase 1 Environmental Site Assessment (ESA) on behalf of Matson Terminals, Inc. Historical research and completion of a series of soil explorations were conducted. Boring locations were selected based on historical research of past T-25S uses. Twelve soil borings were drilled to approximately 10 feet below ground surface (bgs) and analyzed for one or more of the following: total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs).

Sweet-Edwards/EMCON, Inc., 1990, prepared a Subsurface Investigation Report to document the excavation and removal of an Investigation documented the excavation and removal of a 3,000-gallon underground storage tank (UST) from the southwestern portion of T-25S. Soil samples were collected from the excavation area, and four groundwater monitoring wells were installed. Soil and groundwater samples were analyzed for petroleum-related benzene, toluene, ethylbenzene, and xylene and TPH compounds. The wells were decommissioned and are no longer present. The Washington State Department of Ecology (Ecology) issued a No Further Action determination in 2012 for T-25S, establishing that no further remedial action was necessary to clean up contamination associated with the leaking UST.

Landau Associates, Inc. and EcoChem, Inc., 1990, conducted an upland soil and groundwater investigation near the location of a former maintenance building in the southwestern portion of T-25S to characterize contamination observed in soil and groundwater in the vicinity of a Phase 1 ESA boring from 1989. Three soil borings were drilled, and groundwater monitoring wells were installed to assess potential TPH impacts in nearshore soil and groundwater. The groundwater monitoring wells were decommissioned and are no longer present at T-25S.

Anchor QEA and Aspect, 2012; samples of nearshore groundwater and intertidal bank sediments were collected and analyzed for metals, SVOCs, polycyclic aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs). Four shallow groundwater wells were installed at approximately 13 to 14.5 feet bgs along the nearshore portion of T-25S to assess the quality of groundwater discharging from T-25S to the EW OU.

Anchor QEA, 2019–2020, conducted in-water sediment and upland soil investigations to support planning and design of T-25S habitat restoration project and implementation of the EW OU interim remedial action. Eleven borings were collected in upland locations to characterize the lateral and vertical extent of PCB contamination encountered during the 2019 upland sampling event and for additional waste characterization of the restoration project excavation material.

Sediment cores were collected from nine nearshore locations in and around the piling field to support planning for habitat restoration. The cores were collected to characterize the planned dredge prism, the post-dredge (Z-layer) surface, and the nature and extent of contamination using a floating vibracore unit that could access coring locations without significant piling removal activities. Due to substantial debris encountered, several locations were offset from the target locations; two were collected outside of the project area and one had refusal after recovery of 2 feet of material. Because the in-water sediment portion of T-25S is part of the EW OU, it was presumed that the top 4 to 5 feet of the dredge prism was contaminated and would be sent to an upland landfill once removed. Sediment intervals were analyzed based on coordination with EPA to map the vertical extent of contamination.

Anchor QEA, 2020, T-25S Phase 2 Quality Assurance Project Plan; nineteen subsurface sediment cores were collected throughout the subtidal areas of the planned habitat restoration footprint to support

delineation of the vertical extent of contamination and dredge design evaluations for the future habitat project restoration. Twenty locations were planned but one was abandoned due to the presence of shallow rock or other hard material encountered. All samples were analyzed for total solids, total organic carbon, metals, SVOCs, PAHs, total PCB Aroclors and dioxins/furans (D/F) and select samples were analyzed for tributyltin (TBT) and pesticides.

Anchor 2023-2024, EE/CA upland soil and groundwater investigations; soil borings were collected at 42 locations. Samples were analyzed for a subset of metals, PAHs, SVOCs, PCBs, VOCs, D/F, pesticides, TBT, and TPH. Six groundwater wells were installed along the perimeter of T-25S to understand groundwater quality entering the project area. Groundwater wells were sampled twice, once during wet conditions and once during dry conditions.

2.1.2 Physical location

T-25 is located at 2917 East Marginal Way South, Seattle, Washington, and consists of a single parcel that is owned and managed by the Port. The parcel (Assessor's Parcel Number 7666207905) is approximately 37 acres in size. T-25S includes approximately 5 acres of upland area generally located at the southwestern portion of the parcel and 5 acres of submerged and intertidal areas within the EW OU. The upland portion of T-25S includes the area that is anticipated to become marsh habitat, which is below the future planned mean higher high water (MHHW) elevation (approximately +12 feet mean lower low water [MLLW]). T-25S is bounded to the east by the NW Seaport Alliance Lease Area, to the south by Spokane Street, to the west by the EW OU, and to the north by a currently vacant terminal facility (Figure 2). The upland portion of T-25S and surrounding properties are zoned Industrial General 1.

T-25S is partially located within the EW OU and within the source control area for the EW OU. The eastern and western boundaries of the EW OU are delineated by the existing MHHW elevation (Anchor QEA and Windward Environmental LLC 2019). The EW OU is within the Usual and Accustomed fishing and hunting areas for the Muckleshoot Indian Tribe, Suquamish Tribe, and Yakama Nation. The EW OU is subject to large tidal swings, up to 12 feet per day, and is subject to king tides in the winter months.

The Puget Sound and East Waterway are home to various species that are protected, including Steelhead (*Oncorhynchus mykiss*), Chinook salmon (*Onchorhynchus tshawytscha*), Bull trout (*Salvelinus confluentus*), Bocaccio rockfish (*Sebastes paucispinis*), Yelloweye rockfish (*Sebastes ruberrimus*), and Killer whale (*Orcinus orca*). Essential fish habitat at the Site is regulated under the Magnuson-Stevens Fishery Conservation Management Act and Fisheries Management Plans published by the Pacific Fishery Management Council for Pacific Coast Salmon, Pacific Groundfish, and Coastal Pelagic species. There are three Pacific Coast Salmon, 24 Pacific Groundfish, and four Coastal Pelagic species that are known or have the potential to occur in the East Waterway, and the southeastern portion of Elliott Bay.

2.1.3 Site characteristics

T-25S is paved or covered with compacted gravel. It is graded to drain stormwater to a collection system consisting of catch basins, collected stormwater is discharged to the EW OU through outfall locations on the west end of T-25S. A piling field (former Pier 24) is present within the sediment area adjacent to most of the western and all of the north shoreline areas. The deck was removed from this structure in 2006 by the Port, and the area is currently not in use. No vessel moorage activities occur within T-25S.

The Port currently leases the upland portions of T-25S to various tenants who use the area for equipment and material laydown, light industrial activity, and truck parking. The southeastern portion of T-25S includes the City's right of way and is paved with asphalt and used as an active construction laydown area and parking area for trucks. The western portion of T-25S contains paved and unpaved portions and abuts the eastern shoreline of the EW OU. The southwestern portion of T-25S is used as a log and woody debris storage area. The northern portions of the T-25S upland area are currently unused.

2.1.4 Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant.

Based on the findings of a Phase I ESA Report (Pinnacle Geosciences 2003), floor drains in the former compressor building and maintenance shop area may have drained spills of hydraulic oil or transformer oil directly into a void space beneath the building floors, which were pile-supported. It is unknown whether the former void space communicated directly with the river; however, the buildings would flood during high tide. This historical T-25S condition may explain the source of PCBs and non-aqueous phase liquid (NAPL) identified in subsurface soils within the footprint of the former compressor building and maintenance shop. In the 1960s, the transformer pad located on the east side of the former compressor building was remodeled, and three 5,400-pound transformers were added to this area. Transformer spills in this area may have been a historical source of PCB contamination.

The CERCLA investigation process has documented the release of hazardous substances to the sediment and upland soil at T-25S. Multiple investigations have shown that contaminants in sediments are present at concentrations that pose unacceptable risks to human health and the environment, and are present in soil that would pose unacceptable risk to human health and the environment following the conversion of the upland area to intertidal aquatic habitat. These contaminants are present from past industrial and commercial activities at T-25S and throughout the EW OU, and include PAHs, PCBs, and chlorinated dibenzo-dioxins and -furans. These contaminants are hazardous substances as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

PCBs as Aroclors were analyzed in 181 samples from 56 locations across T-25S. Concentrations greater than the EW OU RAL are limited to the southern half of T-25S, with a maximum concentration of 2,500,000 µg/kg. The maximum PCB concentration identified was between 9 and 10 feet bgs, concentrations decreased significantly to 11 feet bgs.

PAHs were analyzed in 80 samples from 40 locations across T-25S. Concentrations greater than the EW OU RALs were identified for each of the four PAHs with EW OU RALs at locations spread across T-25S and are bounded at all locations and are primarily located in the western portion of the site. Concentrations of PAHs greater than the EW OU RALs are found from the ground surface to 10 feet bgs.

Dioxins/furans were analyzed in 40 samples from 25 locations across T-25S, concentrations greater than the EW OU RAL (calculated as a TEQ) were detected in six samples, with a maximum concentration of 40 times the EW OU RAL. All locations with concentrations greater than the EW OU RALs are located in the southern portion of T-25S.

Sample locations are shown on Figures 4 and 5. The locations where concentrations are greater than the EW OU RALs in soil and sediment are presented on Figures 6 and 7, respectively.

2.1.5 NPL status

The current in-water portion of T-25S is part of the EW OU of the Site that was listed on the NPL on September 9, 1983.

2.2 Other actions to date

2.2.1 Previous actions

There have been no previous CERCLA removal actions or remedial actions at T-25S. However, a leaking underground storage tank (LUST) was removed in 1989, and Ecology issued a No Further Action determination following the LUST removal and confirmatory sampling (Ecology 2012).

2.2.2 Current Actions

The Port has conducted characterization of the nature and extent of contamination at T-25S under the oversight of EPA. The EWG, which includes the Port, has entered into a settlement with EPA pursuant to which the EWG is designing the EW OU interim remedial action. The NTCRA will result in the T-25S portion of the EW OU being remediated in advance of other areas of the EW OU.

2.3 State and local authorities' role

2.3.1 State and local actions to date

EPA is the lead agency under the NCP for the EW OU. EPA coordinated with Ecology during development of the EW OU IROD, which includes the in-water portion of T-25S. Ecology has participated in reviewing and commenting on documents, briefings, and public meetings associated with the EW OU, including T-25S. Ecology concurred on the interim remedial action selected by EPA in the IROD for the EW OU.

2.3.2 Potential for continued state/local response

This NTCRA for T-25S is expected to be conducted by the Port under EPA oversight and in accordance with CERCLA and this Action Memorandum. Coordination efforts with Ecology and local authorities will occur throughout the NTCRA.

2.3.3 Availability of other appropriate federal or state response mechanisms to respond to the release

T-25S is in part located within the EW OU and the NTCRA will be consistent with the interim remedy selected in the EW OU IROD. The state's involvement in T-25S has been limited due to resource constraints, and it has expressed a preference to defer to EPA in this instance.

3 THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

A removal action is warranted under the NCP, 40 C.F.R. § 300.415(b)(1), due to the threat to public health or welfare or the environment from the release of hazardous substances at T-25S. This threat is based on consideration of NCP factors at 40 C.F.R. §§ 300.415(b)(2)(i) and (ii), including the actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, and the actual or potential contamination of sensitive ecosystems. Concentrations of PAHs, PCBs, and dioxins/furans are present in sediment at T-25S and in upland soil of T-25S that is anticipated to become intertidal marsh habitat.

3.1.1 Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants (40 C.F.R. § 300.415(b)(2)(i)).

The primary exposure pathways for human health and ecological risks are direct contact with contaminated sediment and consumption of contaminated fish and/or shellfish by people and ecological receptors. PAHs PCBs, and dioxins/furans are human carcinogens which accumulate and magnify in the aquatic food chain.

3.1.2 Actual or potential contamination of drinking water supplies or sensitive ecosystems (40 C.F.R. § 300.415(b)(2)(ii)).

The EW OU connects Puget Sound to the Green River/Duwamish River watershed and serves as an important migratory pathway for both juvenile and adult salmon. Aquatic and semi-aquatic wildlife that use the EW OU include river otters, harbor seals, and a variety of marine birds and ducks. Sixteen aquatic and aquatic-dependent species reported in the vicinity of Elliott Bay area are listed under either the Endangered Species Act or by the Washington Department of Fish and Wildlife as candidate species, threatened species, endangered species, or species of concern. Of these species, Chinook salmon, Coho salmon, steelhead salmon, and western grebe are commonly observed in or around the EW OU.

There are no known impacts to drinking water as the groundwater at T-25S is not considered by EPA to be potable.

3.1.3 Other situations or factors that may pose threats to public health or welfare of the United States or the environment.

A treated-wood piling field from the historical Pier 24 currently remains in the subtidal area on the northern half of T-25S and is likely an ongoing source of releases of PAHs to the aquatic environment.

4 ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from T-25S, if not addressed by implementation of the NTCRA, consistent with the IROD, may present an imminent and substantial endangerment to public health, welfare, or the environment due to risks to human health and the environment from human consumption of contaminated seafood and benthic exposure to contaminated sediment.

The baseline human health risk assessment (BHHA) (Windward, 2012a) evaluated cancer and non-cancer health hazards associated with exposure to EW OU-related contamination that may occur during recreational, occupational, or cultural activities. Populations were identified that could potentially be exposed to EW OU-related contamination through a variety of activities consistent with both current and future use of the EW OU. These activities included consumption of fish and shellfish by adults and children based on Tribal members exercising their U&A fishing rights and following traditional practices. Consumption of fish and shellfish by adults and children as represented by an Asian & Pacific Islander scenario engaged in cultural seafood consumption traditions was also evaluated. The estimated cancer risks associated with consumption of fish and shellfish are 1×10^3 , PCBs and dioxins/furans are the primary contributors to these estimates. Because PCB concentrations in the current upland portion of T-25S are anticipated to become inundated during the planned habitat restoration project are substantially greater than found in the EW OU sediments, the estimated risks associated with consumption of fish and shellfish would also be greater.

The Baseline Ecological Risk Assessment (BERA, Windward, 2012b) evaluated the potential for adverse

effects to benthic invertebrates, shellfish (crabs), fish, and birds and mammals from exposure to contaminants at the EW OU. Risk to different exposed ecological receptors was quantified as hazard quotients (HQs), representing the ratio of contaminant concentration to a given toxicological benchmark. Measured PCB concentrations in tissue are predicted to adversely affect English Sole and Rockfish.

5 PROPOSED ACTIONS AND ESTIMATED COSTS

5.1 Proposed action

5.1.1 Proposed action description

NTCRA areas to be addressed were delineated using Thiessen data interpolation to identify the lateral and vertical extents of areas with contaminant concentrations greater than the EW OU RALs (Figures 8 and 9). The Thiessen polygons were further grouped into dredge units (DUs for the current in-water portion of T-25S) or excavation units (EUs for the current upland portion of T-25S) based on similar removal depths and/or similar type of contamination. The NTCRA consists of the full excavation of upland soils exceeding EW OU RALs in the area with the highest EW OU RALs exceedances and presence of NAPL, and full excavation of soils exceeding EW OU RALs in other focused upland areas of T-25S. The Port anticipates exceeding the requirements of the NTCRA by excavating soils without EW OU RAL exceedances down to habitat restoration subgrade elevations followed by clean backfill placement to achieve the planned final habitat design elevations.

Upland removal is comprised of 9 EUs with excavation depths ranging from 2 to 16 feet bgs. The assumptions for each EU are described below:

EU-1: Soils with contaminant concentrations exceeding EW OU RALs will be removed down to 16 feet bgs. PCB concentrations in samples below 11 ft decrease substantially, and no PCB RAL exceedances were identified within the sample intervals from native soil, which was encountered at 16 feet bgs. Following soil removal, the Port plans to exceed NTCRA requirements by the placement of clean backfill to the Port's separate final habitat design elevations.

EU-2 through EU-4 include full excavation of soil with concentrations exceeding EW OU RALs. Removal thickness assigned to each EU was defined as the deepest interval that exceeded EW OU RALs. If the vertical extent of an EW OU RAL exceedance was not reached, the required excavation depth was increased by an additional 1 foot below the bottom of the deepest sampled extent of contamination to address the vertical bounding uncertainty (Table 5-2). Following soil removal, the Port plans exceed NTCRA requirements by the placement of clean backfill to the final habitat design elevations in these EUs.

EU-5 through EU-8 include full excavation of soils exceeding EW OU RALs down to habitat subgrade elevations. All soils with EW OU RAL exceedances within these EUs are within the removed depths needed to reach habitat subgrade elevations and to accommodate for 2 feet of clean backfill needed for the future marsh construction throughout the upland of T-25S. Following soil removal, the Port plans to exceed NTCRA requirements by the placement of clean backfill to the planned final habitat design elevations.

EU-9: includes non-NTCRA work by the Port to excavate soil without EW RAL exceedances down to the proposed habitat subgrade elevations, followed the placement of 2 feet of clean backfill to the final habitat design elevations.

A summary of the T-25S data is presented in Table 2, Tables 3 through 9 present a screening of the upland data against the EW OU RALs, contaminants for which concentrations are greater than the RALs are summarized in Tables 10 through 13, a plan view of the upland excavation areas is presented on Figure 10.

In-water actions are consistent with the interim remedy selected in the EW OU IROD, which includes removal of debris and pilings and dredging of contaminated sediments, followed by residual management cover (RMC) and placement of sloped backfill and armor (Figures 11 and 12). The in-water portion of T-25S is composed of 18 DUs with dredging depths ranging from 3 to 11 feet below mudline to address the full extent of sediment contamination.

The rationale for selecting the depth of excavation in the upland area and in-water locations is presented in Tables 14 and 15, respectively.

A treated-wood piling field from the former Pier 24 remains in the subtidal area on the northern half of the in-water portion of T-25S. Bathymetric contours within the piling field are above -20 feet MLLW. All pilings and other debris will be removed to the maximum extent practicable, followed by dredging to depths established for each DU to remove EW OU RAL exceedances. Removal will be followed by placement of a sloped backfill (at a 3H:1V slope), with an armor rock layer placed above at a 2H:1V slope (assumed thickness of 3 feet) from the post-dredge surface (ranging from approximately -48 to -5 feet MLLW) up to 0 feet MLLW. Clean backfill will be placed above 0 feet MLLW to the Port's anticipated final habitat design elevations (berm backfill). Areas lower than -40 feet MLLW are assumed to be covered with a 1.5-foot-thick RMC layer. The NTCRA is the most protective action for the upland area which best addresses the anticipated future use of this area.

EPA will consult with the United States Fish and Wildlife Service (USFWS) and United States Marine Fisheries Service (USMFS) regarding Endangered Species Act compliance. In-water work windows and physical best management practices (BMPs) that may be recommended through a Biological Assessment/Biological Opinion process, if necessary, will be incorporated into the project as appropriate to protect water quality and potential species of concern. Stormwater BMPs will also be determined in the NTCRA design phase to prevent water quality impact. An EPA approved Quality Assurance Project Plan (QAPP) and construction quality control plan is expected to be developed by the Port for EPA approval, and conformation sampling will be conducted to ensure that the NTCRA objectives are achieved. If determined in design that further samples are required for delineation, these will also be collected under an EPA-approved QAPP.

EPA will require post removal site controls for the uplands should any contamination remain above levels that would allow for unlimited use/unlimited exposure (UU/UE). In water post removal site controls will be required until the completion of the EW OU IROD interim remedial action, at which point it is expected that T-25S monitoring will be incorporated into the monitoring for the interim remedial action implemented for the EW OU under the IROD. All institutional controls (ICs) determined to be needed by EPA for T-25S are expected to be implemented by the Port.

Under the NTCRA, approximately 61,000 cubic yards (cy) of soil/sediment will be disposed of offsite at a Resource Conservation and Recovery Act (RCRA) Subtitle D landfill, and 19,500 cys of soil/sediment will be disposed of as hazardous waste at a RCRA Subtitle C landfill. All hazardous substances, pollutants or contaminants will be disposed of in compliance with the offsite rule established under Section 121(d)(3) of CERCLA, 42 U.S.C. 9621(d)(3), and in accordance with State regulations. Any soils/sediment with PCB concentrations will be disposed of at a facility that is in compliance with Toxic

Substance Control Act requirements as well as RCRA requirements. Sediments will be dewatered as detailed in the NTCRA design, in accordance with Sections 401 and 404(d) of the Clean Water Act (CWA), 33 U.S.C. 1341 and 1344(d).

5.1.2 Contribution to remedial performance

The NTCRA is consistent with the interim remedy selected in the EW OU IROD for the existing portion of T-25S that is within the EW OU, as well as for the upland area that is expected to become subtidal and intertidal habitat. The NTCRA provides for the cleanup of hazardous substances that have been released to the upland area of T-25S in a manner consistent with the EW OU IROD. Because the NTCRA removes all contamination where concentrations are greater than the EW OU RALs selected in the IROD, with the exception of institutional controls, no further actions under the EW OU IROD are anticipated to be needed for T-25S.

5.1.3 Engineering Evaluation/Cost Analysis

An EE/CA was prepared by Anchor QEA for the Port (Anchor QEA, 2025) under the oversight and direction of EPA. The EE/CA identified technologies for T-25S that address sediment and soil contamination, that are readily available, and that can be implemented within the anticipated NTCRA timeframe. The in-water technologies that are applicable to the in-water portion of T-25S are mechanical dredging, RMC, backfill, disposal, and institutional controls; these technologies were selected for the EW OU as part of the EW IROD. Applicable upland technologies are excavation, engineered capping with amendments, backfill, containment barrier, ex situ treatment, disposal, and institutional controls.

Three alternatives were developed for T-25S, although only one in-water alternative was considered in order to be consistent with the interim remedy selected in EW OU IROD. Alternatives for the upland portion of T-25S considered a range of lateral and vertical extents of contaminated soil removal, backfill, and capping. Though not required by EPA as part of the NTCRA, all alternatives include some excavation of soils without EW OU RAL exceedances down to the Port's anticipated final habitat design subgrade elevations, followed by placement of clean 2-foot backfill in certain areas.

Alternative 1 included partial excavation of 11.5 feet of upland contaminated soil in the area with the highest EW OU RAL exceedances (primarily the highest PCB RAL exceedances) and presence of NAPL, followed by placement of an amended cap (composed of a 0.5-foot-thick organoclay-amended sand for NAPL sorption and a 1-foot-thick granular activated carbon [GAC]-amended sand for chemical isolation), and an average of 5 feet of clean backfill atop the cap to accommodate the Port's anticipated final habitat design elevations. Alternative 1 also includes partial excavation of contaminated soils in other focused upland areas to address EW OU RAL exceedances, followed by 2 feet of clean backfill placement to accommodate the Port's final habitat design elevations. Alternative 1 also includes excavation of soils without EW RAL exceedances down to habitat subgrade elevations followed by placement of 2 feet of clean backfill to required final habitat design elevations. Consistent with the EW OU IROD, the in-water portion includes removal of debris and pilings to the maximum extent practicable, dredging of contaminated sediments, followed by RMC and placement of sloped backfill and armor. The total estimated cost for Alternative 1 is \$88.5 million

Alternative 2 included partial excavation of 13.5 feet of upland contaminated soil in the area with the highest EW OU RAL exceedances (primarily the highest PCB RAL exceedances) and presence of NAPL, followed by placement of an amended cap (composed of a 0.5-foot-thick organoclay-amended sand for NAPL sorption, and a 1-foot-thick GAC-amended sand for chemical isolation), and an average of 7 feet

of clean backfill atop the cap to accommodate the Port's final habitat design elevations. Partial excavation of contaminated soils in other focused upland areas would address EW OU RAL exceedances down to the Port's anticipated habitat subgrade elevations, followed by placement of a 1-foot-thick GAC-amended cap and 2 feet of clean backfill. Alternative 2 also includes excavation of soil without EW RAL exceedances down to habitat subgrade elevations followed by placement of 2 feet of clean backfill to the required final habitat design elevations. The total estimated cost for this alternative is \$91.9 million.

Alternative 3 involves the full excavation of upland soils exceeding EW OU RALs in the area with the highest EW OU RAL exceedances and the presence of NAPL (EU-1), and full excavation of soils exceeding EW OU RALs in other focused upland areas (EU-2 through EU-8). Although not required as part of this NTCRA, EPA is aware that the Port's plans for the habitat restoration project will also result in the excavation of soil within EU-9 that does not contain contamination at concentrations greater than the EW OU RALs in order to achieve the final habitat design elevations after placement of 2 feet of clean backfill. The total estimated cost for Alternative 3 is \$99.1 million.

EPA issued the EE/CA identifying Alternative 3 as the preferred action for a 30-day public comment period on January 26, 2026, which was extended through March 12, 2026. A total of seven individual comments were received, all expressed support for Alternative 3. A few comments requested clarity or minor revisions to the habitat restoration portion of the overall project. While the EE/CA stated that habitat restoration was outside of the scope of the CERCLA response action. EPA has forwarded the habitat restoration comments to the Port for its consideration.

5.1.4 Applicable or Relevant and Appropriate Requirements (ARARs)

The NCP at 40 C.F.R. § 300.415 requires removal actions to comply with (or formally waive) ARARs to the extent practicable considering the exigencies of the situation. In determining whether compliance with ARARs is practicable, EPA may consider the scope of the removal action and the urgency of the situation. ARARs for the T-25S NTCRA, which are consistent with the ARARs identified for the EW OU cleanup and include standards, requirements, criteria, or limitations promulgated by both the federal government and the State of Washington. Some ARARs prescribe minimum requirements or standards. Other ARARs place requirements or limitations on actions that may be undertaken as part of a removal action. ARARs for T-25S are presented in Attachment A.

5.1.5 Project schedule

Implementation of this project by the Port under EPA oversight and direction is expected following issuance of the Action Memorandum. The current project schedule is as follows:

30 percent design: January 2027 to March 2027

60 percent design: July 2027 to September 2027

90 percent design: February 2028 to March 2028

100 percent design: March 2028 to July 2028, with construction anticipated to begin in Fall 2028.

5.2 Estimated cost

The total estimated cost for the NTCRA is approximately \$99 million (Table 16), representing \$46.1 million to implement the in-water portion of the NTCRA and \$52.9 million to implement the NTCRA in the upland portion of T-25S. The NTCRA is expected to be funded and implemented by the Port under EPA oversight and direction. The cost estimate in the EE/CA was developed by the Port.

6 EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Should the NTCRA be delayed or not taken, hazardous substances, or pollutants or contaminants will remain as a soil and sediment with ongoing public health and environmental risks.

7 OUTSTANDING POLICY ISSUES

EPA has relied on the EW OU IROD and EE/CA process to satisfy the requirement of 40 C.F.R. 300.415(b)(4)(i) for the NTCRA, and no outstanding policy issues are associated with the NTCRA.

8 ENFORCEMENT

EPA anticipates entering into an Administrative Settlement Agreement and Order on Consent that requires the Port to implement the NCTRA under EPA oversight and direction.

9 RECOMMENDATION

This decision document presents the selected removal action for T-25S within the EW OU of the Harbor Island Superfund Site in Seattle, WA, and was developed in accordance with CERCLA and is consistent with the NCP. This decision is based on the Administrative Record for the Site.

Conditions at T-25S meet the NCP criteria in 40 C.F.R. 300.415(b) for a removal and I recommend your approval of the NTCRA. The total project cost, if approved, will be \$99 million, and is expected to be funded by the Port.

10 APPROVAL/DISAPPROVAL

APPROVAL:

Daniel D. Opalski, Director
Superfund Emergency Management Division

Date

DISAPPROVAL:

Daniel D. Opalski, Director
Superfund Emergency Management Division

Date

References

- Anchor QEA and Aspect (Anchor QEA and Aspect Consulting, LLC), 2012. Field Investigation Report, Terminal 25S Site Investigation. Prepared for Port of Seattle. December 2012.
- Anchor QEA and Windward (Anchor QEA and Windward Environmental LLC), 2019. Final Feasibility Study. East Waterway Operable Unit Supplemental Remedial Investigation/Feasibility Study. Prepared for the U.S. Environmental Protection Agency, Region 10, Seattle Washington. June 2019.
- Anchor QEA, 2020. Terminal 25 Phase 2 Quality Assurance Project Plan Addendum. Prepared for the Port of Seattle. July 2020.
- Anchor QEA, 2021a. Data Report: Soil and Subsurface Sediment Characterization. Prepared for U.S. Environmental Protection Agency. Prepared by Anchor QEA on behalf of Port of Seattle. June 2021.
- Anchor QEA, 2025. Draft Engineering Evaluation and Cost Analysis, Terminal 25 South Site. Prepared by Anchor QEA on behalf of Port of Seattle. December 2025.
- BEI (Blymyer Engineers, Inc.), 1989. Environmental Site Assessment of 3225 East Marginal Way (Terminal 25), Seattle, Washington. Prepared for Matson Terminals, Inc., San Francisco, California. January 1989.
- Ecology (Washington State Department of Ecology), 2012. Regarding: No Further Action Determination associated with Leaking Underground Storage Tank Site: Terminal 25 LUST ID: 1591. February 2012.
- EPA (U.S. Environmental Protection Agency), 2022. Administrative Settlement Agreement and Order on Consent for Removal Action Engineering Evaluation and Cost Analysis. Harbor Island Superfund Site. King County, Washington. April 2023.
- EPA, 2024. Interim Record of Decision. Harbour Island Superfund Site, East Waterway Operable Unit, Seattle, Washington. May 2024.
- Landau and EcoChem (Landau Associates, Inc., and EcoChem, Inc.), 1990. Soil and Ground Water Investigation, Maintenance Building – Terminal 25. Prepared for Port of Seattle, Seattle, Washington. October 1990.
- Pinnacle Geosciences (Pinnacle Geosciences, Inc.), 2003. Phase I Environmental Site Assessment. Terminal 25, South Section. Prepared for Port of Seattle. Seattle, Washington. September 2003.
- Pinnacle Geosciences (Pinnacle Geosciences, Inc.), 2003. Phase I Environmental Site Assessment. Terminal 25, South Section. Prepared for Port of Seattle. Seattle, Washington. September 2003.
- Sweet-Edwards/EMCON, Inc., 1990. Underground Storage Tank Removal and Subsurface Investigation Report. Prepared for Port of Seattle, Seattle, Washington. January 1990.
- Windward and Anchor QEA, 2019. East Waterway Operable Unit Supplemental Remedial Investigation/Feasibility Study. Final Feasibility Study. June 2019.
- Weston, R.F., 1993. Remedial Investigation and Feasibility Study, Harbor Island. Prepared for the U.S. Environmental Protection Agency, Region X, Seattle, Washington, February 1993.
- Windward (Windward Environmental LLC), 2012a. Baseline Human Health Risk Assessment. Appendix B, East Waterway Operable Unit Supplemental Remedial Investigation/Feasibility Study. Final. September 2012.

Windward, 2012b. Baseline Ecological Risk Assessment. Appendix A, East Waterway Operable Unit Supplemental Remedial Investigation/Feasibility Study. Final. August 2012.

Responsiveness Summary

Tables

Table 1:	East Waterway Remedial Action Levels
Table 2:	Soil Summary Statistics and RAL Exceedances
Table 3:	Vertical Profile of Soil Borings with EW RAL Screening
Table 4:	Vertical Profile of Soil Boring with EW RAL Screening – PCBs
Table 5:	Vertical Profile of Soil Borings with EW RAL Screening – Dioxins/Furans
Table 6:	Vertical Profile of Soil Borings with EW RAL Screening – Metals
Table 7:	Vertical Profile of Soil Borings with EW RAL Screening – PAHs
Table 8:	Vertical Profile of Soil Borings with EW RAL Screening – SVOCs
Table 9:	Vertical Profile of Soil Borings with EW RAL Screening – Tributyltin
Table 10:	Summary of RAL Exceedances in Soil and Sediment
Table 11:	Sediment Summary Statistics and RAL Exceedances
Table 12:	Upland Area Excavation Depth Determination
Table 13:	Upland Area Proposed Excavation Depths
Table 14:	Sediment Area Dredge Depth Determination
Table 15:	Summary of Selected Alternative
Table 16:	Selected Alternative Estimated Cost Summary

Figures

Figure 1:	Terminal 25 South Site Vicinity Map
Figure 2:	Terminal 25 South Site
Figure 3:	Historical Operations, Previous Remedial Actions, and Potential Source Areas
Figure 4:	Sample Locations
Figure 5:	Sample Locations - Focused Investigation Area
Figure 6:	Upland Soil East Waterway RAL Screening
Figure 7:	East Waterway Sediments RAL Screening
Figure 8:	Thiessen Interpolation of Deepest Exceedances of East Waterway RALs
Figure 9:	Thiessen Interpolation of Maximum Exceedances of East Waterway RALs
Figure 10:	Alternative 3 Removal - Plan View
Figure 11:	Alternative 3 Placement - Plan View
Figure 12:	Alternative 3 – Conceptual Cross Section

Attachments

Attachment A – Applicable or Relevant and Appropriate Requirements for the T-25S Site

Responsiveness Summary

1 Introduction

This Responsiveness Summary provides a summary of the significant comments submitted by the public on the on the Engineering Evaluation/Cost Analysis for the Terminal 25 South Site, and EPA's responses to those comments. This Responsiveness Summary is required by the Comprehensive Environmental Response, Compensation, and Livability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) at 40 C.F.R. § 300.415(n)(4)(iv). All comments summarized in this document have been considered in EPA's selection of the interim remedy to address the contamination in the EW OU.

EPA worked closely with federally recognized Tribes, community members, and other stakeholders throughout the development of the Remedial Investigation (RI), Feasibility Study (FS), and Proposed Plan for the EW OU. Community participation played an essential role in the development of the Proposed Plan and interim Record of Decision (IROD) for the EW OU. As the alternatives in the EE/CA all implement the remedy selected in the IROD, the primary focus of the public comment period was on the proposed alternatives for the upland portion of the T-25S Site.

EPA published a notice of availability of the Proposed Plan and Administrative Record in the Seattle Times on April 20, 2023, at which time the Proposed Plan was posted on a publicly accessible link on EPA's website. Public notices of the availability of the Proposed Plan and Administrative Record were also placed in El Siete Dias (translated into Spanish), the Georgetown Gazette, the South Seattle Emerald, the West Seattle Blog, and the Vietnamese Today Weekly News (translated into Vietnamese). A radio ad in Spanish was run on both Amigos de Seattle and El Rey 1360.

An initial thirty-day public comment period was provided from January 26 through February 25, 2026, during which public comments were accepted on the alternatives presented in the EE/CA, including EPA's preferred alternative. Upon request, EPA granted a 15-day extension of the comment period through March 12, 2026. All written comments received during the comment period have been included in the Administrative Record.

1.1 Activities Before Issuing the EE/CA

1.1.1 Tribal Consultation

The East Waterway is within the usual and accustomed fishing areas for the Muckleshoot Indian Tribe, the Suquamish Tribe, and the Yakama Nation. Prior to the release of the EE/CA, EPA offered formal government to government consultation to all three Tribes from September 12, 2022 – October 11, 2025. Letters were sent to each Tribe. No request for formal government to government consultation was made from any of the three tribes; however, technical staff from the Muckleshoot Indian Tribe and the Suquamish Tribe requested a briefing on the alternatives proposed and opportunities to ask questions. The meeting took place on October 8, 2025.

1.1.2 Community Involvement

Prior to the release of the East Waterway Proposed Plan, EPA initiated an update to the Harbor Island Community Involvement Plan (CIP). The CIP provides an overview of the outreach tools and techniques that EPA will use throughout the cleanup of the Site, including the EW OU, and also serves as a guide for meaningfully involving community members in the cleanup. In 2022, EPA conducted over 90 interviews

with community members to guide an update of the CIP and issued a draft updated CIP for public feedback in January 2023. The updated CIP is planned to be released in late Spring or Summer 2024.

1.1.3 Activities after issuing the EE/CA

Notices of the availability of the Proposed Plan were published in the Seattle Times (print edition), El Siete Dias (online and print edition, translated into Spanish), the Georgetown Gazette (online and print edition), the South Seattle Emerald (online), the West Seattle Blog (online), and the Vietnamese Today Weekly News (online and print edition, translated into Vietnamese).

2 Public Comments and Responses

This section provides summaries of significant comments received during the public comment period and EPA's responses. A total of seven individual comment submissions were received by email. Names of individuals who submitted comments were recorded and tracked but are not available to the public due to EPA's Privacy Policy and commitment to protect personally identifiable information. In addition to individuals, comments were also received from the Duwamish River Community Coalition (DRCC), the National Oceanic and Atmospheric Administration on behalf of the Elliott Bay Trustee Council, and the Suquamish Indian Tribe.

2.1 Support for the Preferred Alternative

The majority of comments received explicitly expressed support for Alternative 3 because it removes all contamination at concentrations greater than the EW RALs. Other comments more generally supported the idea of cleaning up contamination at the T-25 Site. No comments were received recommending EPA select a different alternative.

2.2 Concerns Related to the Habitat Restoration Project

Both the Suquamish Indian Tribe and DRCC provided comments on issues related to the habitat restoration project. The habitat restoration portion of the overall T-25S project will occur following the removal action described in this Action Memorandum, and is outside the authority of the CERCLA action for this site. For this reason, EPA is not providing responses to comments regarding the restoration phase of the project. Comments regarding the habitat restoration have been provided to the Port for its consideration.

2.3 Concerns Related to Public Access

DRCC noted that it disagreed with the EE/CA recommendation that recreational access be excluded from the cleanup plan. The EE/CA does not make any recommendations regarding recreational access, as it is the habitat restoration activities, and EPA does not have a role in overseeing the restoration work except to the extent of ensuring it does not interfere with the cleanup. These concerns have been provided to the Port for its consideration.

2.4 Concerns Related to Recontamination Potential

DRCC and the Suquamish Tribe expressed concerns related to potential recontamination of the sediment and surface water in the proposed habitat area from the EW itself or groundwater beneath the site. Consistent with the EW IROD, the cleanup requirement for the CERCLA action is to remediate

contamination where concentrations are greater than the RALs. While EPA has no role in the design of the habitat, we are aware that the proposed design will incorporate measures to limit transport of sediment from the EW into the habitat area.

Tables

Table 1: East Waterway Remedial Action Levels

Analyte	Units	EW RAL ^{1,2}
Arsenic	mg/kg	57
Mercury	mg/kg	0.41
Tributyltin (ion)	mg/kg-OC	7.5
Acenaphthene	mg/kg-OC	16
Fluoranthene	mg/kg-OC	160
Fluorene	mg/kg-OC	23
Phenanthrene	mg/kg-OC	100
Acenaphthene	µg/kg	500
Fluoranthene	µg/kg	1700
Fluorene	µg/kg	540
Phenanthrene	µg/kg	1500
PCBs	mg/kg-OC	12
PCBs	µg/kg	130
1,4-Dichlorobenzene	mg/kg-OC	3.1
Butylbenzyl phthalate	mg/kg-OC	4.9
1,4-Dichlorobenzene	µg/kg	110
Butylbenzyl phthalate	µg/kg	63
Total dioxins/furans (as TCDD-eq)	ng/kg	25

Notes:

1. RALs are from EW OU Final Feasibility Study (Anchor QEA and Windward 2019).

2. Consistent with the EW FS, the LAET is used as the dry weight equivalent to SQS for compounds with OC-normalized criteria for samples outside of the appropriate TOC range. The TOC range for OC-normalization used for the T-25S Site is 0.5 to 3.5%.

--: not applicable

µg/kg: micrograms per kilogram

EW: East Waterway

FS: Feasibility Study

mg/kg: milligrams per kilogram

mg/kg-OC: milligrams per kilogram-organic carbon

ng/kg: nanograms per kilogram

OC: organic carbon

OU: Operable Unit

PCB: polychlorinated biphenyl

RAL: remedial action level

LAET: lowest apparent effects threshold TEQ: toxic equivalents quotient

TOC: total organic carbon

U: compound analyzed, but not detected above detection limit

Reference:

Anchor QEA and Windward (Anchor QEA and Windward Environmental LLC), 2019. Final Feasibility Study. East Waterway Operable Unit Supplemental Remedial Investigation/Feasibility Study. Prepared for the U.S. Environmental Protection Agency, Region 10, Seattle Washington. June 2019.

Table 2: Soil Summary Statistics and RAL Exceedances

Analyte	Number of Locations ¹	Number of Samples	Number of Detections	Number of Samples In or Out of TOC Range ²	Maximum Detected Result	Maximum Exceedance Ratio ³	Minimum Detected Result	Units	East Waterway RAL	Number of Detections > East Waterway RAL ²	Number of Non-Detects > East Waterway RAL ²
Metals											
Arsenic	32	49	49	--	17.7	0.3	1.3	mg/kg	57	0	0
Mercury	29	38	33	--	2.5	6	0.0093	mg/kg	0.41	1	0
Organometals											
Tributyltin (ion)	8	10	0	--	--	--	--	mg/kg-OC	7.5	0	1
Semivolatile Organics											
1,4-Dichlorobenzene ⁴	46	101	18	In range: 20	0.65	0.2	0.09	mg/kg-OC	3.1	0	0
				Out of range: 81	240	2	0.7	µg/kg	110	1	2
Butylbenzyl phthalate	40	75	12	In range: 19	4.65	1	0.21	mg/kg-OC	4.9	0	0
				Out of range: 56	58.5	0.9	0.9	µg/kg	63	0	1
Polycyclic Aromatic Hydrocarbons											
Acenaphthene	40	80	49	In range: 21	33	2	0.11	mg/kg-OC	16	1	0
				Out of range: 59	426	0.9	6	µg/kg	500	0	0
Fluoranthene	40	80	58	In range: 21	173	1	0.33	mg/kg-OC	160	1	0
				Out of range: 59	3,280	2	8.6	µg/kg	1,700	4	0
Fluorene	40	80	42	In range: 21	29	1	0.091	mg/kg-OC	23	1	0
				Out of range: 59	480	0.9	8.7	µg/kg	540	0	0
Phenanthrene	40	80	55	In range: 21	135	1	1.1	mg/kg-OC	100	5	0
				Out of range: 59	3,810	3	11.8	µg/kg	1,500	4	0
Dioxin Furans											
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	25	40	35		1,000	40	0.12	ng/kg	25	6	0
PCB Aroclors – All Data											
Total PCB Aroclors (U = 0 max limit)	56	181	157	In range: 42	28,600	2000	0.67	mg/kg-OC	12	28	0
				Out of range: 139	2,500,000	20,000	3	µg/kg	130	87	0
PCB Aroclors – Excluding Focused Investigation Area											
Total PCB Aroclors (U = 0 max limit)	27	57	34	In range: 20	721	60	0.67	mg/kg-OC	12	7	0
				Out of range: 37	14,100	100	3	µg/kg	130	10	0

Notes:

1. Locations may have multiple sample intervals; therefore, there may be multiple SL exceedances at the same location.

2. Samples with OC between 0.5 to 3.5 percent are screened against the OC-normalized RAL, while samples outside this range are screened against the dry-weight RAL. Non-detects are also screened against the dry-weight RAL. .

3. Maximum exceedance ratios are rounded to show one significant figure.

4. 1,4-dicholorobenzene is reported under two methods, most frequently under the semivolatile organic method (SW8270). Results from the volatile organic method (SW8260) are also presented in this row.

5. U = 1/2: totals are calculated as the sum of all detected results and half of the reporting limit of nondetect results. If all results are not detected, the highest limit value is reported as the sum.

6. U = 0: totals are calculated as the sum of all detected results. If all results are not detected, the highest limit value is reported as the sum.

7. --: not applicable

µg/kg: micrograms per kilogram

µg/kg: micrograms per kilogram

mg/kg: milligrams per kilogram

mg/kg-OC: milligrams per kilogram-organic carbon

ng/kg: nanograms per kilogram

PCB: polychlorinated biphenyl

RAL: remedial action level

TEQ: toxic equivalents quotient

TOC: total organic carbon

Table 3: Vertical Profile of Soil Borings with EW RAL Screening

Location ID	T25-GW-01	T25-GW-02	T25-GW-03	T25-GW-04	T25-GW-05	T25-GW-06	T25-SB-03B	T25-SB-03D	T25-SB-03E	T25-SB-03F	T25-SB-03G	T25-SB01	T25-SB02	T25-SB03
Location within Focused Investigation Area	--	--	--	--	--	--	Yes	Yes	Yes	Yes	Yes	--	--	Yes
Expected Habitat Type	Riparian	Marsh	Riparian	Riparian	Riparian	Riparian	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh
Current Elevation (ft MLLW)	12.5	13.6	16.3	16.8	17.1	16.6	15.4	15.5	15.9	15.9	16.0	15.7	12.0	15.6
Habitat Restoration Design Elevation (ft MLLW)	13.5	10.9	12.8	16.2	15.6	12.5	9.7	9.5	9.8	10.0	9.2	10.7	7.5	9.6
Removal Depth Required to Get to Habitat (ft)	N/A	2.6	3.6	0.7	1.5	4.1	5.7	6.0	6.1	5.9	6.8	5.0	4.5	6.0
Removal Depth Required to Get to Habitat Subgrade (2 ft below habitat restoration design elevation)	1.0	4.6	5.6	2.7	3.5	6.1	7.7	8.0	8.1	7.9	8.8	7.0	6.5	8.0
0–1 ft														
1–2 ft														
2–3 ft														
3–4 ft														
4–5 ft														
5–6 ft														
6–7 ft														
7–8 ft														
8–9 ft														
9–10 ft														
10–11 ft														
11–12 ft														
12–13 ft														
13–14 ft														
14–15 ft														
15–16 ft														
16–17 ft														
17–18 ft														
18–19 ft														
19–20 ft														

Table 3 (con't): Vertical Profile of Soil Borings with EW RAL Screening

Location ID	T25-SB04B	T25-SB05	T25-SB06	T25-SB07	T25-SB08	T25-SB09	T25-SB10	T25-SB11	T25-SB12	T25-SB13	T25-SB17	T25-SB18	T25-SB19	T25-SB20
Location within Focused Investigation Area	--	--	--	Yes	--	--	--	--	--	--	--	--	--	--
Expected Habitat Type	Riparian	High Intertidal	High Intertidal	Marsh	Marsh/High Intertidal	Marsh	Marsh	Riparian	Riparian/ Stormwater Bioswale	Riparian/ Stormwater Bioswale	Marsh	Marsh	Stormwater swale	Marsh
Current Elevation (ft MLLW)	16.6	10.6	10.5	14.9	16.3	15.6	16.4	17.0	16.8	13.9	12.0	12.4	17.1	13.0
Habitat Restoration Design Elevation (ft MLLW)	11.0	11.0	10.6	10.2	11.2	6.7	11.6	16.6	16.8	13.9	11.4	11.6	17.0	9.6
Removal Depth Required to Get to Habitat (ft)	5.6	N/A	N/A	4.7	5.1	8.9	4.8	0.4	0.0	0.0	0.7	0.8	0.1	3.4
Removal Depth Required to Get to Habitat Subgrade (2 ft below habitat restoration design elevation)	7.6	1.7	2.0	6.7	7.1	10.9	6.8	2.4	2.0	2.0	2.7	2.8	2.1	5.4
0–1 ft														
1–2 ft														
2–3 ft														
3–4 ft														
4–5 ft														
5–6 ft														
6–7 ft														
7–8 ft														
8–9 ft														
9–10 ft														
10–11 ft														
11–12 ft														
12–13 ft														
13–14 ft														
14–15 ft														
15–16 ft														
16–17 ft														
17–18 ft														
18–19 ft														
19–20 ft														

Table 3 (con't): Vertical Profile of Soil Borings with EW RAL Screening

Location ID	T25-SB21	T25-SB22	T25-SB22B	T25-SB23	T25-SB24	T25-SB25	T25-SB26	T25-SB27	T25-SB28	T25-SB29	T25-SB29C	T25-SB30	T25-SB31	T25-SB32
Location within Focused Investigation Area	--	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Expected Habitat Type	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh
Current Elevation (ft MLLW)	11.8	15.4	15.4	14.6	15.5	15.9	15.8	16.1	16.3	16.3	16.2	16.2	15.4	15.2
Habitat Restoration Design Elevation (ft MLLW)	9.7	10.4	10.4	10.0	9.9	9.8	10.3	10.1	9.9	9.4	9.6	9.4	9.9	10.1
Removal Depth Required to Get to Habitat (ft)	2.1	5.0	5.0	4.6	5.5	6.1	5.6	6.0	6.4	6.9	6.6	6.8	5.5	5.2
Removal Depth Required to Get to Habitat Subgrade (2 ft below habitat restoration design elevation)	4.1	7.0	7.0	6.6	7.5	8.1	7.6	8.0	8.4	8.9	8.6	8.8	7.5	7.2
0–1 ft														
1–2 ft														
2–3 ft														
3–4 ft														
4–5 ft														
5–6 ft														
6–7 ft														
7–8 ft														
8–9 ft														
9–10 ft														
10–11 ft														
11–12 ft														
12–13 ft														
13–14 ft														
14–15 ft														
15–16 ft														
16–17 ft														
17–18 ft														
18–19 ft														
19–20 ft														

Table 3 (con't): Vertical Profile of Soil Borings with EW RAL Screening

Location ID	T25-SB33	T25-SB34	T25-SB35	T25-SB36	T25-SB37	T25-SB38	T25-SB39	T25-SB40	T25-SB42A	T25-SB43	T25-SB44	T25-SB46	T25-SB47	T25-SB48
Location within Focused Investigation Area	Yes	Yes	Yes	--	--	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Expected Habitat Type	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh
Current Elevation (ft MLLW)	15.7	16.5	16.5	16.2	16.2	15.8	16.2	16.3	15.6	16.1	16.0	14.6	15.5	15.5
Habitat Restoration Design Elevation (ft MLLW)	10.3	9.3	9.1	10.8	8.6	10.2	10.1	9.6	9.7	9.4	9.7	10.5	10.4	10.5
Removal Depth Required to Get to Habitat (ft)	5.3	7.2	7.4	5.3	7.6	5.6	6.2	6.7	5.9	6.7	6.3	4.1	5.1	5.0
Removal Depth Required to Get to Habitat Subgrade (2 ft below habitat restoration design elevation)	7.3	9.2	9.4	7.3	9.6	7.6	8.2	8.7	7.9	8.7	8.3	6.1	7.1	7.0
0–1 ft														
1–2 ft														
2–3 ft														
3–4 ft														
4–5 ft														
5–6 ft														
6–7 ft														
7–8 ft														
8–9 ft														
9–10 ft														
10–11 ft														
11–12 ft														
12–13 ft														
13–14 ft														
14–15 ft														
15–16 ft														
16–17 ft														
17–18 ft														
18–19 ft														
19–20 ft														

Table 3 (con’t): Vertical Profile of Soil Borings with EW RAL Screening

Location ID	T25-SB49	T25-SB50	T25-SB51	T25-SB52
Location within Focused Investigation Area	Yes	Yes	Yes	Yes
Expected Habitat Type	Marsh	Marsh	Marsh	Marsh
Current Elevation (ft MLLW)	15.8	14.5	14.8	15.0
Habitat Restoration Design Elevation (ft MLLW)	10.4	10.9	9.6	10.2
Removal Depth Required to Get to Habitat (ft)	5.4	3.5	5.2	4.8
Removal Depth Required to Get to Habitat Subgrade (2 ft below habitat restoration design elevation)	7.4	5.5	7.2	6.8
0–1 ft				
1–2 ft				
2–3 ft				
3–4 ft				
4–5 ft				
5–6 ft				
6–7 ft				
7–8 ft				
8–9 ft				
9–10 ft				
10–11 ft				
11–12 ft				
12–13 ft				
13–14 ft				
14–15 ft				
15–16 ft				
16–17 ft				
17–18 ft				
18–19 ft				
19–20 ft				

Notes

No Data Available

Less than RAL

RAL Exceedance

Red line indicates approximate depth of habitat subgrade at each boring location, actual planned habitat subgrade values are provided in the header.

EW: East Waterway MLLW: mean lower low water RAL: remedial action level ft: feet

Table 4: Vertical Profile of Soil Boring with EW RAL Screening – PCBs

Location ID	T25-GW-01	T25-GW-02	T25-GW-03	T25-GW-04	T25-GW-05	T25-GW-06	T25-SB-03B	T25-SB-03D	T25-SB-03E	T25-SB-03F	T25-SB-03G	T25-SB01	T25-SB02	T25-SB03
Location within Focused Investigation Area	--	--	--	--	--	--	Yes	Yes	Yes	Yes	Yes	--	--	Yes
Expected Habitat Type	Riparian	Marsh	Riparian	Riparian	Riparian	Riparian	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh
Current Elevation (ft MLLW)	12.5	13.6	16.3	16.8	17.1	16.6	15.4	15.5	15.9	15.9	16.0	15.7	12.0	15.6
Removal Depth Required to Get to Habitat (ft)	N/A	2.6	3.6	0.7	1.5	4.1	5.7	6.0	6.1	5.9	6.8	5.0	4.5	6.0
Removal Depth Required to Get to Habitat Subgrade (2 ft below habitat restoration design elevation)	1.0	4.6	5.6	2.7	3.5	6.1	7.7	8.0	8.1	7.9	8.8	7.0	6.5	8.0
0–1 ft														
1–2 ft														
3–4 ft														
5–6 ft														
6–7 ft														
7–8 ft														
8–9 ft														
9–10 ft														
10–11 ft														
11–12 ft														
12–13 ft														
13–14 ft														
14–15 ft														
15–16 ft														
16–17 ft														
17–18 ft														
18–19 ft														
19–20 ft														

Table 4 (con't): Vertical Profile of Soil Boring with EW RAL Screening – PCBs

Location ID	T25-SB04B	T25-SB05	T25-SB06	T25-SB07	T25-SB08	T25-SB09	T25-SB10	T25-SB11	T25-SB12	T25-SB13	T25-SB17	T25-SB18	T25-SB19	T25-SB20
Location within Focused Investigation Area	--	--	--	Yes	--	--	--	--	--	--	--	--	--	--
Expected Habitat Type	Riparian	High Intertidal	High Intertidal	Marsh	Marsh/High Intertidal	Marsh	Marsh	Riparian	Riparian/ Stormwater Bioswale	Riparian/ Stormwater Bioswale	Marsh	Marsh	Stormwater swale	Marsh
Current Elevation (ft MLLW)	16.6	10.6	10.5	14.9	16.3	15.6	16.4	17.0	16.8	13.9	12.0	12.4	17.1	13.0
Removal Depth Required to Get to Habitat (ft)	5.6	N/A	N/A	4.7	5.1	8.9	4.8	0.4	0.0	0.0	0.7	0.8	0.1	3.4
Removal Depth Required to Get to Habitat Subgrade (2 ft below habitat restoration design elevation)	7.6	1.7	2.0	6.7	7.1	10.9	6.8	2.4	2.0	2.0	2.7	2.8	2.1	5.4
0–1 ft														
1–2 ft														
3–4 ft														
5–6 ft														
6–7 ft														
7–8 ft														
8–9 ft														
9–10 ft														
10–11 ft														
11–12 ft														
12–13 ft														
13–14 ft														
14–15 ft														
15–16 ft														
16–17 ft														
17–18 ft														
18–19 ft														
19–20 ft														

Table 4 (con't): Vertical Profile of Soil Boring with EW RAL Screening – PCBs

Location ID	T25-SB21	T25-SB22B	T25-SB24	T25-SB25	T25-SB26	T25-SB27	T25-SB28	T25-SB29C	T25-SB30	T25-SB31	T25-SB32	T25-SB33	T25-SB34	T25-SB35
Location within Focused Investigation Area	--	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Expected Habitat Type	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh
Current Elevation (ft MLLW)	11.8	15.4	15.5	15.9	15.8	16.1	16.3	16.2	16.2	15.4	15.2	15.7	16.5	16.5
Removal Depth Required to Get to Habitat (ft)	2.1	5.0	5.5	6.1	5.6	6.0	6.4	6.6	6.8	5.5	5.2	5.3	7.2	7.4
Removal Depth Required to Get to Habitat Subgrade (2 ft below habitat restoration design elevation)	4.1	7.0	7.5	8.1	7.6	8.0	8.4	8.6	8.8	7.5	7.2	7.3	9.2	9.4
0–1 ft														
1–2 ft														
3–4 ft														
5–6 ft														
6–7 ft														
7–8 ft														
8–9 ft														
9–10 ft														
10–11 ft														
11–12 ft														
12–13 ft														
13–14 ft														
14–15 ft														
15–16 ft														
16–17 ft														
17–18 ft														
18–19 ft														
19–20 ft														

Table 4 (con't): Vertical Profile of Soil Boring with EW RAL Screening – PCBs

Location ID	T25-SB36	T25-SB37	T25-SB38	T25-SB39	T25-SB40	T25-SB42A	T25-SB44	T25-SB46	T25-SB47	T25-SB48	T25-SB49	T25-SB50	T25-SB51	T25-SB52
Location within Focused Investigation Area	--	--	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Expected Habitat Type	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh
Current Elevation (ft MLLW)	16.2	16.2	15.8	16.2	16.3	15.6	16.0	14.6	15.5	15.5	15.8	14.5	14.8	15.0
Removal Depth Required to Get to Habitat (ft)	5.3	7.6	5.6	6.2	6.7	5.9	6.3	4.1	5.1	5.0	5.4	3.5	5.2	4.8
Removal Depth Required to Get to Habitat Subgrade (2 ft below habitat restoration design elevation)	7.3	9.6	7.6	8.2	8.7	7.9	8.3	6.1	7.1	7.0	7.4	5.5	7.2	6.8
0–1 ft														
1–2 ft														
3–4 ft														
5–6 ft														
6–7 ft														
7–8 ft														
8–9 ft														
9–10 ft														
10–11 ft														
11–12 ft														
12–13 ft														
13–14 ft														
14–15 ft														
15–16 ft														
16–17 ft														
17–18 ft														
18–19 ft														
19–20 ft														

No data available

Less than RAL

RAL Exceedance

Notes

Red line indicates approximate depth of habitat subgrade at each boring location, actual planned habitat subgrade values are provided in the header

EW: East Waterway

ft: feet

MLLW: mean lower low water

PCB: polychlorinated biphenyl

RAL: remedial action level

Table 5: Vertical Profile of Soil Borings with EW RAL Screening – Dioxins/Furans

Location ID	T25-GW-01	T25-GW-02	T25-GW-03	T25-GW-04	T25-GW-05	T25-GW-06	T25-SB01	T25-SB02	T25-SB03	T25-SB04B	T25-SB05	T25-SB06	T25-SB07	T25-SB08
Location within Focused Investigation Area	--	--	--	--	--	--	--	--	Yes	--	--	--	Yes	--
Expected Habitat Type	Riparian	Marsh	Riparian	Riparian	Riparian	Riparian	Marsh	Marsh	Marsh	Riparian	High Intertidal	High Intertidal	Marsh	Marsh/ High Intertidal
Current Elevation (ft MLLW)	12.5	13.6	16.3	16.8	17.1	16.6	15.7	12.0	15.6	16.6	10.6	10.5	14.9	16.3
Habitat Restoration Design Elevation (ft MLLW)	13.5	10.9	12.8	16.2	15.6	12.5	10.7	7.5	9.6	11.0	11.0	10.6	10.2	11.2
Removal Depth Required to Get to Habitat (ft)	N/A	2.6	3.6	0.7	1.5	4.1	5.0	4.5	6.0	5.6	N/A	N/A	4.7	5.1
Removal Depth Required to Get to Habitat Subgrade (2 ft below habitat restoration design elevation)	1.0	4.6	5.6	2.7	3.5	6.1	7.0	6.5	8.0	7.6	1.7	2.0	6.7	7.1
0–1 ft														
1–2 ft														
2–3 ft														
3–4 ft														
4–5 ft														
5–6 ft														
6–7 ft														
7–8 ft														
8–9 ft														
9–10 ft														
10–11 ft														
11–12 ft														
12–13 ft														
13–14 ft														
14–15 ft														
15–16 ft														
16–17 ft														
17–18 ft														

Table 5 (con't): Vertical Profile of Soil Borings with EW RAL Screening – Dioxins/Furans

Location ID	T25-SB09	T25-SB10	T25-SB11	T25-SB12	T25-SB13	T25-SB17	T25-SB18	T25-SB20	T25-SB21	T25-SB37	T25-SB42A
Location within Focused Investigation Area	--	--	--	--	--	--	--	--	--	--	Yes
Expected Habitat Type	Marsh	Marsh	Riparian	Riparian/ Stormwater Bioswale	Riparian/ Stormwater Bioswale	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh
Current Elevation (ft MLLW)	15.6	16.4	17.0	16.8	13.9	12.0	12.4	13.0	11.8	16.2	15.6
Habitat Restoration Design Elevation (ft MLLW)	6.7	11.6	16.6	16.8	13.9	11.4	11.6	9.6	9.7	8.6	9.7
Removal Depth Required to Get to Habitat (ft)	8.9	4.8	0.4	0.0	0.0	0.7	0.8	3.4	2.1	7.6	5.9
Removal Depth Required to Get to Habitat Subgrade (2 ft below habitat restoration design elevation)	10.9	6.8	2.4	2.0	2.0	2.7	2.8	5.4	4.1	9.6	7.9
0–1 ft											
1–2 ft											
2–3 ft											
3–4 ft											
4–5 ft											
5–6 ft											
6–7 ft											
7–8 ft											
8–9 ft											
9–10 ft											
10–11 ft											
11–12 ft											
12–13 ft											
13–14 ft											
14–15 ft											
15–16 ft											
16–17 ft											
17–18 ft											

Notes

No Data Available

Less than RAL

RAL Exceedance

Red line indicates approximate depth of habitat subgrade at each boring location, actual planned habitat subgrade values are provided in the header

EW: East Waterway

MLLW: mean lower low water

ft: feet

RAL: remedial action level

Table 6: Vertical Profile of Soil Borings with EW RAL Screening - Metals

Location ID	T25-GW-01	T25-GW-02	T25-GW-03	T25-GW-04 ¹	T25-GW-05	T25-GW-06	T25-SB01	T25-SB02	T25-SB03	T25-SB04B	T25-SB05	T25-SB06	T25-SB07	T25-SB08
Location within Focused Investigation Area	--	--	--	--	--	--	--	--	Yes	--	--	--	Yes	--
Expected Habitat Type	Riparian	Marsh	Riparian	Riparian	Riparian	Riparian	Marsh	Marsh	Marsh	Riparian	High Intertidal	High Intertidal	Marsh	Marsh/High Intertidal
Current Elevation (ft MLLW)	12.5	13.6	16.3	16.8	17.1	16.6	15.7	12.0	15.6	16.6	10.6	10.5	14.9	16.3
Habitat Restoration Design Elevation (ft MLLW)	13.5	10.9	12.8	16.2	15.6	12.5	10.7	7.5	9.6	11.0	11.0	10.6	10.2	11.2
Removal Depth Required to Get to Habitat (ft)	N/A	2.6	3.6	0.7	1.5	4.1	5.0	4.5	6.0	5.6	N/A	N/A	4.7	5.1
Removal Depth Required to Get to Habitat Subgrade (2 ft below habitat restoration design elevation)	1.0	4.6	5.6	2.7	3.5	6.1	7.0	6.5	8.0	7.6	1.7	2.0	6.7	7.1
0–1 ft														
1–2 ft														
2–3 ft														
3–4 ft														
4–5 ft														
5–6 ft														
6–7 ft														
7–8 ft														
8–9 ft														
9–10 ft														
10–11 ft														
11–12 ft														
12–13 ft														
13–14 ft														
14–15 ft														
15–16 ft														
16–17 ft														
17–18 ft														

Table 6 (con't): Vertical Profile of Soil Borings with EW RAL Screening - Metals

Location ID	T25-SB09	T25-SB10	T25-SB11	T25-SB12	T25-SB13	T25-SB17	T25-SB18	T25-SB19	T25-SB20	T25-SB21	T25-SB34	T25-SB36	T25-SB37	T25-SB42A
Location within Focused Investigation Area	--	--	--	--	--	--	--	--	--	--	Yes	--	--	Yes
Expected Habitat Type	Marsh	Marsh	Riparian	Riparian/ Stormwater Bioswale	Riparian/ Stormwater Bioswale	Marsh	Marsh	Stormwater swale	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh
Current Elevation (ft MLLW)	15.6	16.4	17.0	16.8	13.9	12.0	12.4	17.1	13.0	11.8	16.5	16.2	16.2	15.6
Habitat Restoration Design Elevation (ft MLLW)	6.7	11.6	16.6	16.8	13.9	11.4	11.6	17.0	9.6	9.7	9.3	10.8	8.6	9.7
Removal Depth Required to Get to Habitat (ft)	8.9	4.8	0.4	0.0	0.0	0.7	0.8	0.1	3.4	2.1	7.2	5.3	7.6	5.9
Removal Depth Required to Get to Habitat Subgrade (2 ft below habitat restoration design elevation)	10.9	6.8	2.4	2.0	2.0	2.7	2.8	2.1	5.4	4.1	9.2	7.3	9.6	7.9
0–1 ft														
1–2 ft														
2–3 ft														
3–4 ft														
4–5 ft														
5–6 ft														
6–7 ft														
7–8 ft														
8–9 ft														
9–10 ft														
10–11 ft														
11–12 ft														
12–13 ft														
13–14 ft														
14–15 ft														
15–16 ft														
16–17 ft														
17–18 ft														

Table 6 (con't): Vertical Profile of Soil Borings with EW RAL Screening - Metals

Location ID	T25-SB46	T25-SB48	T25-SB49	T25-SB50
Location within Focused Investigation Area	Yes	Yes	Yes	Yes
Expected Habitat Type	Marsh	Marsh	Marsh	Marsh
Current Elevation (ft MLLW)	14.6	15.5	15.8	14.5
Habitat Restoration Design Elevation (ft MLLW)	10.5	10.5	10.4	10.9
Removal Depth Required to Get to Habitat (ft)	4.1	5.0	5.4	3.5
Removal Depth Required to Get to Habitat Subgrade (2 ft below habitat restoration design elevation)	6.1	7.0	7.4	5.5
0–1 ft				
1–2 ft				
2–3 ft				
3–4 ft				
4–5 ft				
5–6 ft				
6–7 ft				
7–8 ft				
8–9 ft				
9–10 ft				
10–11 ft				
11–12 ft				
12–13 ft				
13–14 ft				
14–15 ft				
15–16 ft				
16–17 ft				
17–18 ft				
Notes:				

Red line indicates approximate depth of habitat subgrade at each boring location, actual planned habitat subgrade values are provided in the header

Metals with RALs include arsenic and mercury

The mercury concentrations in GW-04 were greater than the EW RAL for the 6 to 8 ft interval. The 10 to 12 ft interval was also analyzed for mercury, and the results were non-detect. However the mercury testing in the 10 to 12 ft interval was performed outside of the 28 day hold time (testing occurred after two times the hold time had lapsed), and the results were rejected during validation.

EW: East Waterway MLLW: mean lower low water

ft: feet RAL: remedial action level

Table 7: Vertical Profile of Soil Borings with EW RAL Screening – PAHs

Location ID	T25-GW-01	T25-GW-02	T25-GW-03	T25-GW-04	T25-GW-05	T25-GW-06	T25-SB01	T25-SB02	T25-SB03	T25-SB04B	T25-SB05	T25-SB06	T25-SB07	T25-SB08
Location within Focused Investigation Area	--	--	--	--	--	--	--	--	Yes	--	--	--	Yes	--
Expected Habitat Type	Riparian	Marsh	Riparian	Riparian	Riparian	Riparian	Marsh	Marsh	Marsh	Riparian	High Intertidal	High Intertidal	Marsh	Marsh/High Intertidal
Current Elevation (ft MLLW)	12.5	13.6	16.3	16.8	17.1	16.6	15.7	12.0	15.6	16.6	10.6	10.5	14.9	16.3
Habitat Restoration Design Elevation (ft MLLW)	13.5	10.9	12.8	16.2	15.6	12.5	10.7	7.5	9.6	11.0	11.0	10.6	10.2	11.2
Removal Depth Required to Get to Habitat (ft)	N/A	2.6	3.6	0.7	1.5	4.1	5.0	4.5	6.0	5.6	N/A	N/A	4.7	5.1
Removal Depth Required to Get to Habitat Subgrade (2 ft below habitat restoration design elevation)	1.0	4.6	5.6	2.7	3.5	6.1	7.0	6.5	8.0	7.6	1.7	2.0	6.7	7.1
0–1 ft														
1–2 ft														
2–3 ft														
3–4 ft														
4–5 ft														
5–6 ft														
6–7 ft														
7–8 ft														
8–9 ft														
9–10 ft														
10–11 ft														
11–12 ft														
12–13 ft														
13–14 ft														
14–15 ft														
15–16 ft														
16–17 ft														
17–18 ft														
18–19 ft														
19–20 ft														

Table 7 (con't): Vertical Profile of Soil Borings with EW RAL Screening – PAHs

Location ID	T25-SB09	T25-SB10	T25-SB11	T25-SB12	T25-SB13	T25-SB17	T25-SB18	T25-SB19	T25-SB20	T25-SB21	T25-SB22B	T25-SB23	T25-SB29C	T25-SB34
Location within Focused Investigation Area	--	--	--	--	--	--	--	--	--	--	Yes	Yes	Yes	Yes
Expected Habitat Type	Marsh	Marsh	Riparian	Riparian/ Stormwater Bioswale	Riparian/ Stormwater Bioswale	Marsh	Marsh	Stormwater swale	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh
Current Elevation (ft MLLW)	15.6	16.4	17.0	16.8	13.9	12.0	12.4	17.1	13.0	11.8	15.4	14.6	16.2	16.5
Habitat Restoration Design Elevation (ft MLLW)	6.7	11.6	16.6	16.8	13.9	11.4	11.6	17.0	9.6	9.7	10.4	10.0	9.6	9.3
Removal Depth Required to Get to Habitat (ft)	8.9	4.8	0.4	0.0	0.0	0.7	0.8	0.1	3.4	2.1	5.0	4.6	6.6	7.2
Removal Depth Required to Get to Habitat Subgrade (2 ft below habitat restoration design elevation)	10.9	6.8	2.4	2.0	2.0	2.7	2.8	2.1	5.4	4.1	7.0	6.6	8.6	9.2
0–1 ft														
1–2 ft														
2–3 ft														
3–4 ft														
4–5 ft														
5–6 ft														
6–7 ft														
7–8 ft														
8–9 ft														
9–10 ft														
10–11 ft														
11–12 ft														
12–13 ft														
13–14 ft														
14–15 ft														
15–16 ft														
16–17 ft														
17–18 ft														
18–19 ft														
19–20 ft														

Table 7 (con't): Vertical Profile of Soil Borings with EW RAL Screening – PAHs

Location ID	T25-SB35	T25-SB36	T25-SB37	T25-SB38	T25-SB39	T25-SB42A	T25-SB46	T25-SB47	T25-SB48	T25-SB49	T25-SB50	T25-SB51
Location within Focused Investigation Area	Yes	--	--	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Expected Habitat Type	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh
Current Elevation (ft MLLW)	16.5	16.2	16.2	15.8	16.2	15.6	14.6	15.5	15.5	15.8	14.5	14.8
Habitat Restoration Design Elevation (ft MLLW)	9.1	10.8	8.6	10.2	10.1	9.7	10.5	10.4	10.5	10.4	10.9	9.6
Removal Depth Required to Get to Habitat (ft)	7.4	5.3	7.6	5.6	6.2	5.9	4.1	5.1	5.0	5.4	3.5	5.2
Removal Depth Required to Get to Habitat Subgrade (2 ft below habitat restoration design elevation)	9.4	7.3	9.6	7.6	8.2	7.9	6.1	7.1	7.0	7.4	5.5	7.2
0–1 ft												
1–2 ft												
2–3 ft												
3–4 ft												
4–5 ft												
5–6 ft												
6–7 ft												
7–8 ft												
8–9 ft												
9–10 ft												
10–11 ft												
11–12 ft												
12–13 ft												
13–14 ft												
14–15 ft												
15–16 ft												
16–17 ft												
17–18 ft												
18–19 ft												
19–20 ft												

Notes

	No Data Available
	Less than RAL
	Greater than RAL

Red line indicates approximate depth of habitat subgrade at each boring location, actual planned habitat subgrade values are provided in the header.

EW: East Waterway ft:-feet PAH: polycyclic aromatic hydrocarbons MLLW: mean lower low water RAL: remedial action level

Table 8: Vertical Profile of Soil Borings with EW RAL Screening – SVOCs

Location ID	T25-GW-01	T25-GW-02	T25-GW-03	T25-GW-04	T25-GW-05	T25-GW-06	T25-SB01	T25-SB02	T25-SB03	T25-SB04B	T25-SB05	T25-SB06	T25-SB07	T25-SB08
Location within Focused Investigation Area	--	--	--	--	--	--	--	--	Yes	--	--	--	Yes	--
Expected Habitat Type	Riparian	Marsh	Riparian	Riparian	Riparian	Riparian	Marsh	Marsh	Marsh	Riparian	High Intertidal	High Intertidal	Marsh	Marsh/High Intertidal
Current Elevation (ft MLLW)	12.5	13.6	16.3	16.8	17.1	16.6	15.7	12.0	15.6	16.6	10.6	10.5	14.9	16.3
Habitat Restoration Design Elevation (ft MLLW)	13.5	10.9	12.8	16.2	15.6	12.5	10.7	7.5	9.6	11.0	11.0	10.6	10.2	11.2
Removal Depth Required to Get to Habitat (ft)	N/A	2.6	3.6	0.7	1.5	4.1	5.0	4.5	6.0	5.6	N/A	N/A	4.7	5.1
Removal Depth Required to Get to Habitat Subgrade (2 ft below habitat restoration design elevation)	1.0	4.6	5.6	2.7	3.5	6.1	7.0	6.5	8.0	7.6	1.7	2.0	6.7	7.1
0–1 ft														
1–2 ft														
2–3 ft														
3–4 ft														
4–5 ft														
5–6 ft														
6–7 ft														
7–8 ft														
8–9 ft														
9–10 ft														
10–11 ft														
11–12 ft														
12–13 ft														
13–14 ft														
14–15 ft														
15–16 ft														
16–17 ft														
17–18 ft														
18–19 ft														
19–20 ft														

Table 8 (con't): Vertical Profile of Soil Borings with EW RAL Screening – SVOCs

Location ID	T25-SB09	T25-SB10	T25-SB11	T25-SB12	T25-SB13	T25-SB17	T25-SB18	T25-SB19	T25-SB20	T25-SB21	T25-SB22B	T25-SB23	T25-SB29C	T25-SB34
Location within Focused Investigation Area	--	--	--	--	--	--	--	--	--	--	Yes	Yes	Yes	Yes
Expected Habitat Type	Marsh	Marsh	Riparian	Riparian/ Stormwater Bioswale	Riparian/ Stormwater Bioswale	Marsh	Marsh	Stormwater swale	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh
Current Elevation (ft MLLW)	15.6	16.4	17.0	16.8	13.9	12.0	12.4	17.1	13.0	11.8	15.4	14.6	16.2	16.5
Habitat Restoration Design Elevation (ft MLLW)	6.7	11.6	16.6	16.8	13.9	11.4	11.6	17.0	9.6	9.7	10.4	10.0	9.6	9.3
Removal Depth Required to Get to Habitat (ft)	8.9	4.8	0.4	0.0	0.0	0.7	0.8	0.1	3.4	2.1	5.0	4.6	6.6	7.2
Removal Depth Required to Get to Habitat Subgrade (2 ft below habitat restoration design elevation)	10.9	6.8	2.4	2.0	2.0	2.7	2.8	2.1	5.4	4.1	7.0	6.6	8.6	9.2
0–1 ft														
1–2 ft														
2–3 ft														
3–4 ft														
4–5 ft														
5–6 ft														
6–7 ft														
7–8 ft														
8–9 ft														
9–10 ft														
10–11 ft														
11–12 ft														
12–13 ft														
13–14 ft														
14–15 ft														
15–16 ft														
16–17 ft														
17–18 ft														
18–19 ft														
19–20 ft														

Table 8 (con't): Vertical Profile of Soil Borings with EW RAL Screening – SVOCs

Location ID	T25-SB35	T25-SB36	T25-SB37	T25-SB38	T25-SB39	T25-SB42A	T25-SB46	T25-SB47	T25-SB48	T25-SB49	T25-SB50	T25-SB51
Location within Focused Investigation Area	Yes	--	--	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Expected Habitat Type	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh	Marsh
Current Elevation (ft MLLW)	16.5	16.2	16.2	15.8	16.2	15.6	14.6	15.5	15.5	15.8	14.5	14.8
Habitat Restoration Design Elevation (ft MLLW)	9.1	10.8	8.6	10.2	10.1	9.7	10.5	10.4	10.5	10.4	10.9	9.6
Removal Depth Required to Get to Habitat (ft)	7.4	5.3	7.6	5.6	6.2	5.9	4.1	5.1	5.0	5.4	3.5	5.2
Removal Depth Required to Get to Habitat Subgrade (2 ft below habitat restoration design elevation)	9.4	7.3	9.6	7.6	8.2	7.9	6.1	7.1	7.0	7.4	5.5	7.2
0–1 ft												
1–2 ft												
2–3 ft												
3–4 ft												
4–5 ft												
5–6 ft												
6–7 ft												
7–8 ft												
8–9 ft												
9–10 ft												
10–11 ft												
11–12 ft												
12–13 ft												
13–14 ft												
14–15 ft												
15–16 ft												
16–17 ft												
17–18 ft												
18–19 ft												
19–20 ft												

Notes

No Data Available

SVOCs with RALs include 1,4-dichlorobenzene and butylbenzyl phthalate

1,4-dicholorobenzene is reported by both SW8260 and SW8270. Results from both methods are presented.

Less than RAL

EW: East Waterway

MLLW: mean lower low water

SVOCs: semivolatile organic compounds

ft: feet

RAL: remedial action level

Red line indicates approximate depth of habitat subgrade at each boring location, actual planned habitat subgrade values are provided in the header.

Table 9: Vertical Profile of Soil Borings with EW RAL Screening - Tributyltin

Location ID	T25-GW-02	T25-GW-03	T25-GW-05	T25-SB17	T25-SB19	T25-SB21	T25-SB24	T25-SB37
Location within Focused Investigation Area	--	--	--	--	--	--	Yes	--
Expected Habitat Type	Marsh	Riparian	Riparian	Marsh	Stormwater swale	Marsh	Marsh	Marsh
Current Elevation (ft MLLW)	13.6	16.3	17.1	12.0	17.1	11.8	15.5	16.2
Habitat Restoration Design Elevation (ft MLLW)	10.9	12.8	15.6	11.4	17.0	9.7	9.9	8.6
Removal Depth Required to Get to Habitat (ft)	2.6	3.6	1.5	0.7	0.1	2.1	5.5	7.6
Removal Depth Required to Get to Habitat Subgrade (2 ft below habitat restoration design elevation)	4.6	5.6	3.5	2.7	2.1	4.1	7.5	9.6
0–1 ft								
1–2 ft								
2–3 ft								
3–4 ft								
4–5 ft								
5–6 ft								
6–7 ft								
7–8 ft								
8–9 ft								
9–10 ft								
10–11 ft								
11–12 ft								

	No Data
	Less than RAL
	Greater than RAL

Red line indicates approximate depth of habitat subgrade at each boring location, actual planned habitat subgrade values are provided in the header.

EW: East Waterway RAL: remedial action level

ft,: feet

MLLW: mean lower low water

Table 10: Summary of RAL Exceedances in Soil and Sediment

Analyte	EW RAL Exceedances in Soil ¹	EW RAL Exceedances in Sediment ¹
Metals		
Arsenic	No	No
Mercury	No	Yes
Organometals		
Tributyltin (ion)	Yes (non-detect only)	Yes
Semivolatile Organics		
1,4-Dichlorobenzene	Yes	Yes
Butylbenzyl phthalate	Yes (non-detect only)	Yes
Polycyclic Aromatic Hydrocarbons		
Acenaphthene	Yes	Yes
Fluoranthene	Yes	Yes
Fluorene	Yes	Yes
Phenanthrene	Yes	Yes
Dioxins/Furans		
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Yes	Yes
PCB Aroclors		
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Yes	Yes

Notes:

1. If only non-detect exceedances were identified for a given analyte, "non-detect only" is noted parenthetically.

EW: East Waterway

PCB: polychlorinated biphenyl

RAL: remedial action level

TEQ: toxic equivalents quotient

Table 11: Sediment Summary Statistics and RAL Exceedances

Analyte	Number of Locations ¹	Number of Samples	Number of Detections	Number of Samples In or Out of TOC Range ²	Maximum Detected Result	Maximum Exceedance Ratio ³	Minimum Detected Result	Units	East Waterway RAL	Number of Detections > East Waterway RAL ²	Number of Non-Detects > East Waterway RAL ²
Metals											
Arsenic	46	106	105	--	32.4	0.6	1.11	mg/kg	57	0	0
Mercury	46	125	113	--	2.35	6	0.00541	mg/kg	0.41	38	0
Organometals											
Tributyltin (ion)	9	12	7	--	8.5	1	0.061	mg/kg-OC	7.5	1	2
Semivolatile Organics											
1,4-Dichlorobenzene	46	118	44	In range: 59	8.79	3	0.1	mg/kg-OC	3.1	1	0
				Out of range: 59	2,300	20	1.1	µg/kg	110	2	0
Butylbenzyl phthalate	46	118	19	In range: 59	9.01	2	0.77	mg/kg-OC	4.9	1	0
				Out of range: 59	76	1	47	µg/kg	63	1	5
Polycyclic Aromatic Hydrocarbons											
Acenaphthene	46	139	105	In range: 67	462	30	0.697	mg/kg-OC	16	15	0
				Out of range: 72	8,620	20	8.2	µg/kg	500	14	0
Fluoranthene	46	136	115	In range: 66	3,910	20	0.834	mg/kg-OC	160	7	0
				Out of range: 70	33,900	20	8.3	µg/kg	1,700	28	0
Fluorene	46	139	101	In range: 67	500	20	0.86	mg/kg-OC	23	11	0
				Out of range: 72	5,540	10	15.8	µg/kg	540	13	0
Phenanthrene	46	136	114	In range: 66	4,470	50	0.855	mg/kg-OC	100	7	0
				Out of range: 70	10,600	7	9.7	µg/kg	1,500	15	0
Dioxins/Furans											
Total Dioxin/Furan TEQ (Mammal) (U = 1/2 max limit)	31	93	74	--	890	40	0.22	ng/kg	25	31	0
PCB Aroclors											
Total PCB Aroclors (U = 0 max limit)	46	126	102	In range: 64	300	30	0.059	mg/kg-OC	12	26	0
				Out of range: 62	16,800	100	0.8	µg/kg	130	28	0

Notes:

1. Locations may have multiple sample intervals; therefore, there may be multiple SL exceedances at the same location.

2. For chemicals and chemical totals with a dry-weight and OC-normalized SL, samples with OC between 0.5 to 3.5 percent are screened against the OC-normalized SL, while samples outside this range are screened against the dry-weight SL. Non-detects are also screened against the dry-weight SL. The dry-weight SL for these chemicals is equivalent to the RALs on a dry-weight basis (e.g., 130 µg/kg is equivalent to the 12 mg/kg-OC RAL).

3. Maximum exceedance ratios are rounded to show one significant figure.

--: not applicable

µg/kg: micrograms per kilogram

mg/kg: milligrams per kilogram

mg/kg-OC: milligrams per kilogram-organic carbon

ng/kg: nanograms per kilogram

OC: organic carbon

PCB: polychlorinated biphenyl

RAL: remedial action level

SL: screening level

TEQ: toxic equivalents quotient

TOC: total organic carbon

U = 1/2: totals are calculated as the sum of all detected results and half of the reporting limit of nondetect results. If all results are not detected, the highest limit value is reported as the sum.

U = 0: totals are calculated as the sum of all detected results. If all results are not detected, the highest limit value is reported as the sum.

Table 12: Upland Area Excavation Depth Determination

Location	EW RAL Exceedance (Yes/No)	Sample Interval (ft bgs)	Bounded / Unbounded ¹	NAPL Observations ²	Depth to Contamination (ft bgs)	Removal Depth Required to Habitat Subgrade Elevation (ft bgs)	Elevation 2 ft Below Habitat Subgrade Elevation (Post-Excavation Depth; ft bgs)
T25-SB-03B	Yes	9-10	Unbounded	--	10	5.7	7.7
T25-SB-03E	Yes	10-11	Unbounded	--	11	6.1	8.1
T25-SB-03F	Yes	10-11	Unbounded	--	11	5.9	7.9
T25-SB-03G	Yes	9-10	Unbounded	--	10	6.8	8.8
T25-SB03/T25-SB42A	Yes	14.2-16.2	Unbounded	--	16.2	6.0	8.0
T25-SB22/T25-SB22B	Yes	8-9	Bounded	SB22: Visible NAPL Coated Sample Liner 14-16 ft bgs SB22B: Sheen and NAPL Blebs in rinse water 14-16 ft bgs	9	5.0	7.0
T25-SB24	Yes	11-12	Unbounded	--	12	5.5	7.5
T25-SB25	Yes	11-12	Unbounded	--	12	6.1	8.1
T25-SB26	Yes	11-12	Unbounded	--	12	5.6	7.6
T25-SB27	Yes	11-12	Unbounded	--	12	6.0	8.0
T25-SB28	Yes	11-12	Unbounded	--	12	6.4	8.4
T25-SB29/T25-SB29C	Yes	12-13	Unbounded	--	13	6.8	8.8
T25-SB30	Yes	11-12	Unbounded	--	12	6.8	8.8
T25-SB31	Yes	10-11	Unbounded	--	11	5.5	7.5
T25-SB32	Yes	10-11	Bounded	--	11	5.2	7.2
T25-SB33	Yes	9-10	Unbounded	Visible NAPL blebs observed in rejected core at 12 ft bgs	11	5.3	7.3
T25-SB34	Yes	9-10	Unbounded	--	10	7.2	9.2
T25-SB35	Yes	9-10	Unbounded	--	10	7.4	9.4
T25-SB38	Yes	10-11	Unbounded	Positive NAPL Shake Test: 5-6 and 13-14 ft bgs	11	5.6	7.6
T25-SB39	Yes	9-10	Unbounded	--	10	6.2	8.2
T25-SB40	Yes	9-10	Unbounded	--	10	6.7	8.7
T25-SB43	No	--	--	--	--	6.7	8.7
T25-SB44	Yes	9-10	Unbounded	--	10	6.3	8.3
T25-SB47	Yes	8-9	Unbounded	Visible NAPL-like substance and amber staining on sample liner, Postive shake test at 20 ft bgs	9	5.1	7.1
T25-SB46	--	--	--	NAPL blebs observed in drill cuttings from 10-15 ft bgs	--	4.1	6.1
T25-SB48	Yes	--	--	NAPL blebs observed in drill cuttings from 10-15 ft bgs	13	5.0	7.0
T25-SB49	Yes	--	--	Positive NAPL Shake Test: 1-2, 2-3, 3-3.5, and 12-13 ft bgs	13	5.4	7.4
T25-SB50	Yes	7-8	--	Positive NAPL Shake Test: 9-10 ft bgs	8	3.5	5.5
T25-SB52	Yes	8-9	Unbounded	--	9	4.8	6.8
T25-SB51	Yes	8-9	Unbounded	Positive NAPL Shake Test: 10-11 ft bgs	9	5.2	7.2
T25-SB08/T25-SB36	Yes	12-14	Bounded	--	14	5.2	7.2
T25-SB37	Yes	12-14	Unbounded	--	14	7.6	9.6
T25-GW-04	Yes	6-8	Unbounded	--	8	0.7	2.7

Table 12: Upland Area Excavation Depth Determination

Location	EW RAL Exceedance (Yes/No)	Sample Interval (ft bgs)	Bounded / Unbounded ¹	NAPL Observations ²	Depth to Contamination (ft bgs)	Removal Depth Required to Habitat Subgrade Elevation (ft bgs)	Elevation 2 ft Below Habitat Subgrade Elevation (Post-Excavation Depth; ft bgs)
T25-G (W-05/T25-SB11	Yes	9-11	Bounded	--	11	1.5	3.5
T25-SB12/T25-SB19	Yes	0-2	Bounded	--	2	0.1	2.1
T25-SB09	Yes	9.1-10	Unbounded	--	10	8.9	10.9
T25-SB-03D	Yes	9-10	Unbounded	--	10	6.0	8.0
T25-SB20	Yes	2-4	Bounded	--	4	3.4	5.4
T25-SB06	Yes	0-2	Unbounded	--	2	0.0	2.0
T25-SB02	Yes	3-5	Bounded	--	5	4.5	6.5
T25-GW-01	No	--	Bounded	--	0	0.0	1.0
T25-GW-02	No	--	Bounded	--	0	2.6	4.6
T25-GW-03	No	--	Bounded	--	0	3.6	5.6
T25-GW-06	No	--	Bounded	--	0	4.1	6.1
T25-SB01	No	--	Bounded	--	0	5.0	7.0
T25-SB04B	No	--	Bounded	--	0	5.6	7.6
T25-SB05	No	--	Bounded	--	0	0.0	1.7
T25-SB07	No	--	Bounded	--	0	4.7	6.7
T25-SB10	No	--	Bounded	--	0	4.8	6.8
T25-SB13	No	--	Bounded	--	0	0.0	2.0
T25-SB17	No	--	Bounded	--	0	0.7	2.7
T25-SB18	No	--	Bounded	--	0	0.8	2.8
T25-SB21	No	--	Bounded	--	0	2.1	4.1
T25-SB23	No	--	Bounded	--	0	4.6	6.6

Notes:

1. Bounded is defined by at least one sample interval having no EW RAL exceedances.
2. Soil-water shake tests (NAPL shake tests) where used when PID readings were greater than 50 ppm and no other visual observations of NAPL were present.

bgs: below ground surface

EW: East Waterway

ft: feet/ foot

NAPL: non-aqueous phase liquid

PID: photoionization detector

RAL: remedial action level

Table 13: Upland Area Proposed Excavation Depths

Excavation Unit (EU)	Station ID	Uncertainty Addition ¹ (ft)	Proposed EU Excavation Depth (ft bgs)	Notes
1	T25-SB-03B	--	16.0	Applied a 16 ft excavation cut depth bgs to reach the average native depth.
	T25-SB-03E			
	T25-SB-03F			
	T25-SB-03G			
	T25-SB03/T25-SB42A			
	T25-SB42A			
	T25-SB42			
	T25-SB22/T25-SB22B			
	T25-SB22			
	T25-SB22B			
	T25-SB24			
	T25-SB25			
	T25-SB26			
	T25-SB27			
	T25-SB28			
	T25-SB29/T25-SB29C			
	T25-SB29			
	T25-SB29C			
	T25-SB30			
	T25-SB31			
	T25-SB32			
	T25-SB33			
	T25-SB34			
	T25-SB35			
	T25-SB38			
	T25-SB39			
	T25-SB40			
	T25-SB43			
	T25-SB44			
	T25-SB47			
	T25-SB46			
	T25-SB48			
	T25-SB49			
	T25-SB50			
	T25-SB52			
	T25-SB51			
2	T25-SB08/T25-SB36	--	14	Applied a 14 ft
	T25-SB37	1		--
3	T25-GW-04	--	9	--
4	T25-GW-05/T25-SB11	--	11	--
5	T25-SB12/T25-SB19		2.1	Applied a 2.1 ft
6	T25-SB09	1	11	--
	T25-SB-03D	1		--

Table 13 (con’t): Upland Area Proposed Excavation Depths

Excavation Unit (EU)	Station ID	Uncertainty Addition ¹ (ft)	Proposed EU Excavation Depth (ft bgs)	Notes
7	T25-SB20	--	5.4	Applied a 5.4 ft excavation cut depth bgs to reach habitat subgrade elevation
	T25-SB06	--		Applied a 5.4 ft excavation cut depth for constructability purposes
8	T25-SB02	--	6.5	Applied a 6.5 ft excavation cut thickness to reach habitat subgrade elevation
9	T25-GW-01	--	1.0	Applied excavation cut depth bgs to reach habitat subgrade elevation
	T25-GW-02	--	4.6	
	T25-GW-03	--	5.6	
	T25-GW-06	--	6.1	
	T25-SB01	--	7.0	
	T25-SB04B	--	7.6	
	T25-SB05	--	1.7	
	T25-SB07	--	--	No excavation cut depth bgs applied, within daylight area of EU-1
	T25-SB10	--	6.8	Applied excavation cut depth bgs to reach habitat subgrade elevation
	T25-SB13	--	2.0	
	T25-SB17	--	2.7	
	T25-SB18	--	2.8	
	T25-SB21	--	4.1	
	T25-SB23	--	6.6	

Notes:

1. Cores with insufficient data at depth or an unbounded core include an additional 1-ft of removal to address uncertainty associated with RAL exceedances below the deepest interval with EW RAL exceedance.

bgs: below ground surface EU: excavation unit

EW: East Waterway ft: foot

RAL: Remedial Action Level

Table 14: Sediment Area Dredge Depth Determination

Location	EW RAL Exceedance (Yes/No)	Sample Interval		Bounded/ Unbounded¹	Core Recovery Information	Depth of Contamination (ft below mudline)	Uncertainty Addition² (ft)	Proposed DU Dredge Depth (ft below mudline)	Proposed Dredge Unit (DU)	Notes
		Start Depth (ft below mudline)	End Depth (ft below mudline)							
T25-SC-13_2021	Yes	6.5	7.5	Bounded	--	7.5	--	7.5	DU-18	Applied 5-ft dredge depth for constructability purposes to locations T25-SC-13_2021 and EW10-SC09 that is outside of the T-25S Site boundary, with a very small footprint interpolated within project footprint.
EW10-SC09	Yes	6	7.2	Bounded	--	7.2	--	7.2		
T25-SC-09B	Yes	3	4	Unbounded	4 ft recovered, 5 ft drive	4	1	5.0		
T25-SC02	Yes	4.6	5.6	Unbounded	core to 7 ft, only ran 4.6-5.6	5.6	1	6.6	DU -17	--
T25-SC-12_2021	Yes	8.4	9.4	Bounded	--	9.4	--	9.4	DU -16	Applied 11-ft dredge depth for constructability purposes to Location T25-SC-12_2021 that is outside of the T-25S Site boundary with a very small footprint interpolated within project footprint.
T25-SC08	Yes	9	10	Unbounded	10 ft recovered, 12 ft drive	10	1	11		
T25-SC-14_2021	Yes	8.7	9.7	Bounded	--	9.7	--	9.7	DU-15	--
T25-SC03	Yes	4.7	5.7	Bounded	--	5.7	--	5.7	DU-14	--
T25-SC-15_2021	Yes	7	8	Bounded	--	8	--	8.0	DU-13	--
T25-SC-16_2021	Yes	10.3	11.3	Unbounded	11.3 ft recovered, drove 14 ft	11.3	1	12.3	DU-12	--
T25-SC-11_2021	Yes	7	8	Bounded	--	8	--	8.0	DU-11	--
EW10-SC08	Yes	6	8	Bounded	--	8	--	8.0		
T25-SC-17_2021	Yes	7	8	Bounded	--	8	--	8.0		
T25-SC07	Yes	6	7	Unbounded	7 ft recovered, 9.5 ft drive	7	1	8.0		
T25-SC-18_2021	Yes	6	7	Bounded	--	7	--	7.0	DU-10	--
EW-167	Yes	2.5	3.5	Unbounded	--	3.5	1	4.5	DU-9	--
T25-SC-19_2021	Yes	3	4.3	Bounded	--	4.3	--	4.5		
T25-SC-20_2021	Yes	6.5	7.5	Unbounded	8.1 ft recovered, drove 10 ft	7.5	1	8.5	DU-8	--
T25-SC04	Yes	6	6.7	Unbounded	8 foot core	6.7	1	7.7	DU -7	--
T25-SC-21_2021	Yes	5	6	Bounded	--	6	--	6.3	DU-6	Assumed a proposed dredge depth of 6.3 ft for locations T25-SC-21-2021 and EW10-SC06 for constructability purposes
EW10-SC06	Yes	4	6	Bounded	--	6	--	6.3		
T25-SC-22_2021	Yes	4.3	5.3	Unbounded	5.0 ft recovered, drove 7.7 ft	5.3	1	6.3		
T25-SC-06	Yes	2.5	3.3	Unbounded	Refusal at 4 ft	3.3	1	4.3	DU- 5	--
T25-SC-23_2021	Yes	8	9	Bounded	--	9	--	9.0	DU -4	--
T25-SC-25_2021	Yes	6	7	Bounded	--	7	--	7.0	DU -3	--
T25-SC-26_2021	Yes	4	5	Bounded	--	5	--	5.0	DU-2	--
T25-SC-24_2021	No		--	--	--	0	--	3.0	DU-1	Location T25-SC-24_2021 does not have any EW RAL exceedances and includes a proposed dredge depth of 3 ft for constructability purposes. Does not include side slope near the bridge
T25-SC-05	Yes	1	2	Unbounded	Refusal at 2 ft	2	1	3.0		
T25-SC-28_2021	Yes	2	3	Bounded	--	3	--	3.0		
T25-SC-29_2021	Yes	2	3	Bounded	--	3	--	3.0		

Notes:

1. Bounded is defined by at least one sample interval having no EW RAL exceedances.
2. Cores with insufficient data at depth or an unbounded core include an additional 1-ft of removal to address uncertainty associated with RAL exceedances below the deepest interval with EW RAL exceedance.

--: not available/not applicable

DU: dredge unit

EW: East Waterway

ft: feet/ foot

RAL: remedial action level

Table 15: Summary of Selected Alternative

Removal Action Areas		Description of Alternatives	Surface Area (SF)	Piling Removal (EA)	Removal Volumes ¹ (CY)		Placement Volumes ² (CY)			
					Dredge / Excavation Volumes		Allowance Volume ³			
							RMC	Slope Backfill ⁴	Backfill in the Upland Area (including to construct Berm) ⁵	Backfill to Construct Berm in the In-Water Area ⁶
In-Water Action	DU-1 through DU-18	Dredging of sediments to address EW RAL exceedances; placement of 1.5-ft of RMC, a sloped backfill with an armor rock layer and clean backfill	183,240	1,718	64,600	4,450	7,980	20,630	--	--
Upland Action	EU-1	Full excavation down to 16 ft bgs; backfill to final habitat design grade	43,340	--	35,170	800	--	--	21,780	17,330
	EU-2	Full excavation down to the deepest EW RAL exceedances; backfill to final habitat design grade	24,400	--	15,820	240	--	--	10,130	
	EU-3		5,850	--	1,150		--	--	900	
	EU-4		6,350	--	3,230		--	--	1,680	
	EU-5	Partial excavation of EW RAL exceedances down to habitat subgrade elevations; backfill to final habitat design grade	3,410	--	330	240	--	--	330	
	EU-6		12,910	--	3,710		--	--	2,690	
	EU-7		16,580	--	3,810		--	--	3,650	
	EU-8		11,910	--	2,600		--	--	2,160	
	EU-9	Excavation of material without EW RAL exceedances down to habitat subgrade elevations; backfill to final habitat design grade	87,390	--	14,630	0	0			

Table 15 (con’t): Summary of Selected Alternative

Removal Action Areas		Construction Duration (work days ⁷)				Total Construction Duration (work months)	In-Water / Upland Costs (\$ Million)	Total Cost (\$ Million)
		Mobilization/ Demobilization	Piling Removal	Removal	Placement			
In-Water Action	DU-1 through DU-18	15	86	99	48	16.1	\$46.1	\$99.0
Upland Action	EU-1		--	147	95			
	EU-2							
	EU-3							
	EU-4							
	EU-5							
	EU-6							
	EU-7							
	EU-8							
	EU-9							

Notes:

1. Removal volumes associated with either dredging in in-water areas or excavation in upland areas. The in-water dredge volume includes a 1.5x constructability factor and the upland excavation volume includes a 1.3x constructability factor. The constructability factor accounts for additional dredge/ excavation volume required to perform dredging/ excavation in practice, for overdredge/overexcavation volumes allowances, and for additional volume to design elevation-based dredge/excavation prisms.

2. Placement volumes include placement of RMC and In-Water Slope Backfill in the in-water areas and in the upland portion, placement of Amended Cap, and Backfill, and Berm Backfill. The in-water placement volumes includes a 1.5x constructability factor and the upland placement volume includes a 1.3x (with the exception of Berm Backfill that assumes a 1.5x) constructability factor. The constructability factor accounts for additional placement volume required offset the total removal volume (required to perform dredging/ excavation in practice, for overplacement allowances, and for additional volume to design elevation- based dredge/ excavation prisms).

3. Allowance volumes are associated with either contingency re-dredging in in-water areas or contingency re-excavation in upland areas, based on confirmational sampling conducted during construction. Contingency re-dredging volume is based re-dredging conducted over a portion of the total in-water dredge area, applied to a 1-ft thickness to address generated residuals (15% of area; 1-ft thickness) and 2.5-ft thickness to remove missed inventory (20% of area; 2.5-ft thickness). Contingency re-excavation for the remaining upland area (outside of TSCA and NAPL Area) assumes re-excavation conducted over 20% of the remaining upland area (outside of EU-1), applied at a 1-ft thickness to address missed inventory; and for EU-1, assumes re-excavation conducted over 50% of EU-1, applied at a 1-ft thickness to address missed inventory.

4. Slope Backfill volume includes volume for placement from post-dredge surface up to 0 ft MLLW.

5. Backfill volume includes the volume includes to restore to habitat design elevations in the upland area.

6. Backfill volume includes volume for placement above 0 feet MLLW to required final design habitat elevations.

7. Work days required to complete the construction (i.e., not including weekends, holidays, or any other non-working periods). 9a. Costs are presented in 2025 dollars (see Appendix D for alternative detailed cost estimates).

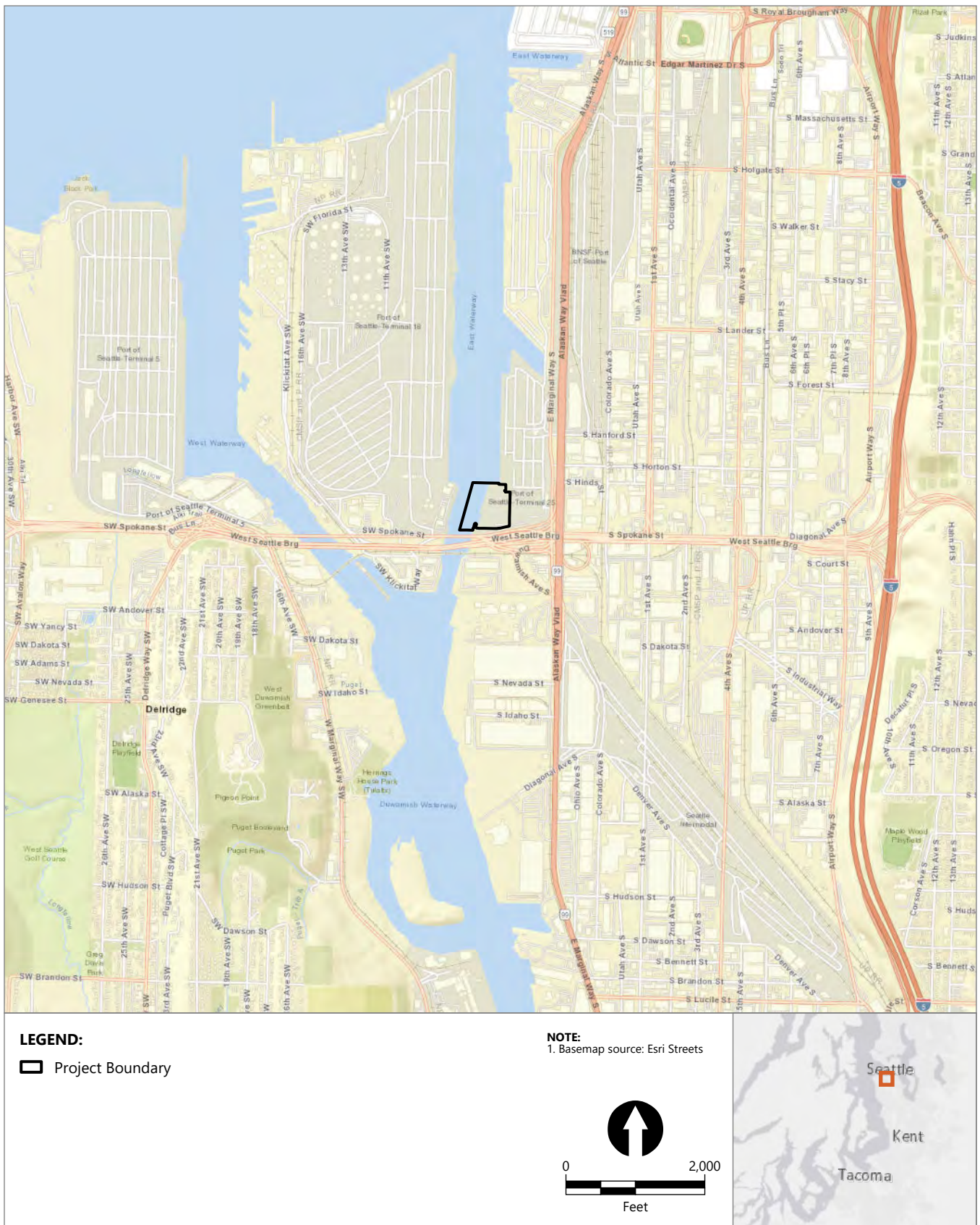
--: not applicable

bgs: below ground surface CY: cubic yard
DU: dredge unit EA: each
EE/CA: Engineering Evaluation and Cost Analysis EU: excavation unit
EW: East Waterway ft: feet
GAC: granular activated carbon NAPL: non-aqueous phase liquid NPV: net present value
RAL: Remedial Action Level
RMC: residuals management cover SF: square feet

Table 16: Selected Alternative Estimated Cost Summary

Task ID	Task Description	In-Water Costs	Upland Costs	Total Project Costs
DIRECT CONSTRUCTION COSTS				
1	Mobilization/Demobilization	\$ 1,430,000.00	\$ 780,000.00	\$ 2,210,000.00
2	Site Preparation	\$ 250,000.00	\$ 769,100.00	\$ 1,019,100.00
3	Surveys	\$ 796,461.00	\$ 1,008,812.00	\$ 1,805,273.00
4	In-Water Structural Work	\$ 3,760,913.00	\$ -	\$ 3,760,913.00
5	Dredging, Transloading, Upland Transportation, and Disposal	\$ 20,138,432.00	--	\$ 20,138,432.00
6	Excavation, Transfer, Upland Transportation, and Disposal	--	\$ 28,398,037.00	\$ 28,398,037.00
7	In-Water Material Placement	\$ 2,929,762.00	--	\$ 2,929,762.00
8	Upland Material Placement	--	\$ 5,015,953.00	\$ 5,015,953.00
9	Environmental Controls	\$ 500,000.00	\$ 150,000.00	\$ 650,000.00
Direct Construction Costs Subtotal		\$ 29,805,568.00	\$ 36,121,902.00	\$ 65,927,470.00
10	Direct Cleanup Construction Contingency (30%)	\$ 8,941,670.00	\$ 10,836,571.00	\$ 19,778,241.00
Direct Construction Cost Subtotal with Contingency		\$ 38,747,238.00	\$ 46,958,473.00	\$ 85,705,711.00
11	Sales Tax (10.35%)	\$ 4,010,339.00	\$ 4,860,202.00	\$ 8,870,541.00
Total Direct Construction Costs (with Contingency and Sales Tax) - Rounded		\$ 42,757,600.00	\$ 51,818,700.00	\$ 94,576,300.00
INDIRECT CONSTRUCTION COSTS				
12	Indirect Construction Costs	\$ 2,593,484.00	\$ 795,000.00	\$ 3,388,484.00
Indirect Construction Costs Subtotal		\$ 2,593,484.00	\$ 795,000.00	\$ 3,388,484.00
13	Indirect Construction Contingency (30%)	\$ 778,045.00	\$ 238,500.00	\$ 1,016,545.00
Indirect Construction Costs Subtotal with Contingency		\$ 3,371,529.00	\$ 1,033,500.00	\$ 4,405,029.00
Total Indirect Construction Costs (with Contingency) - Rounded		\$ 3,371,500.00	\$ 1,033,500.00	\$ 4,405,000.00
Total Project Cost - Rounded		\$ 46,129,100.00	\$ 52,852,200.00	\$ 98,981,300.00

Figures



Publish Date: 2025/05/02, 2:36 PM | User: emueller

Filepath: \\GSTFile01\GIS\Jobs\PortofSeattle_0003\T25\Maps\Reports\EECA_Report\EECA_Report.aprx\AQ_POS_T25_EECA_Fig1-1_VicinityMap

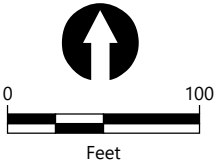


Figure 1
Terminal 25 South Site Vicinity Map



LEGEND:
Terminal 25 South Site

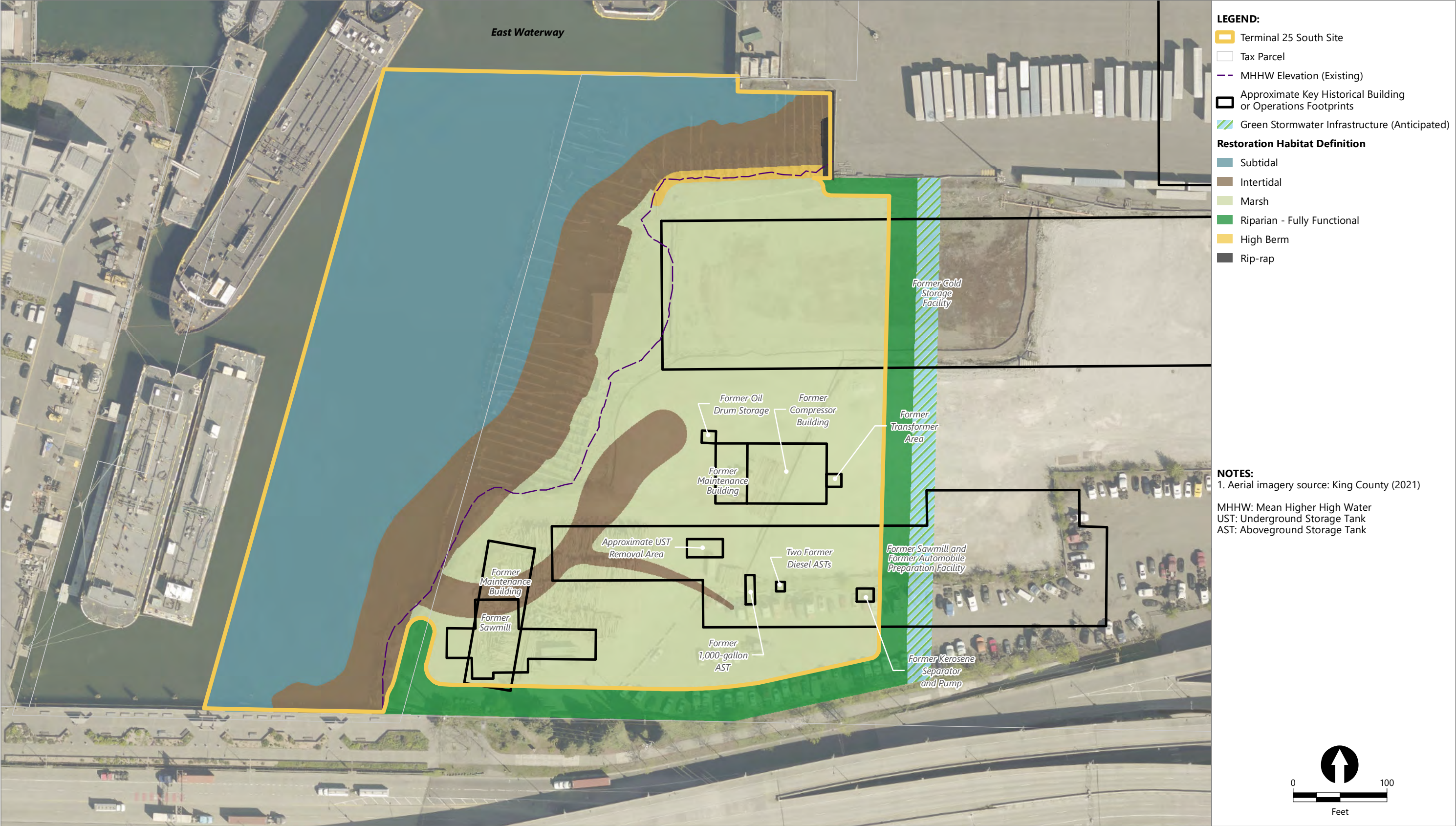
NOTE:
1. Aerial imagery source: King County (2021)



Publish Date: 2025/05/02, 2:41 PM | User: emueller
Filepath: \\GSTFile01\\GIS\\Jobs\\PortofSeattle_0003\\T25\\Maps\\Reports\\EECA_Report\\AQ_POS_T25_EECA_Fig1-2_T25Site.mxd



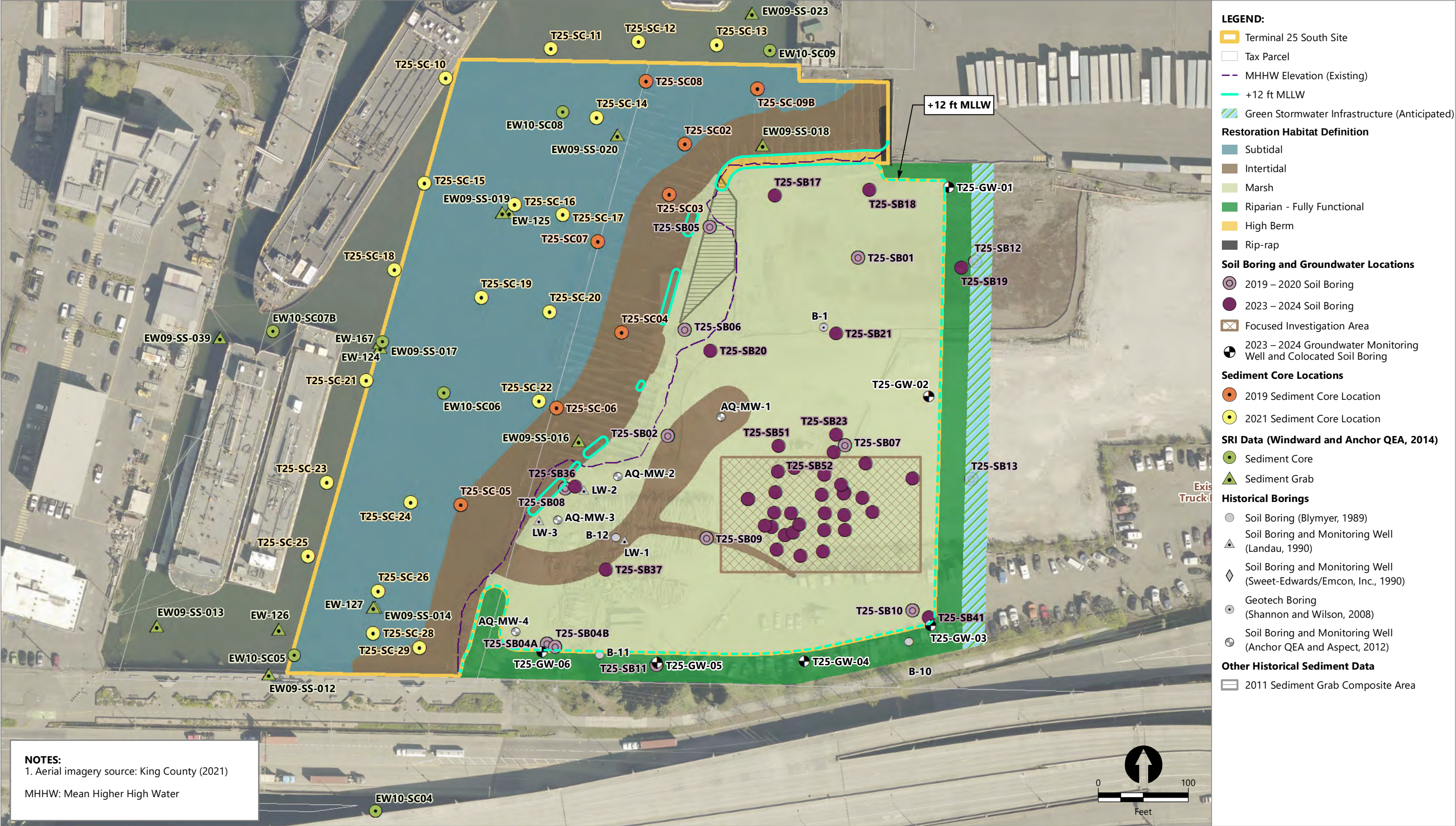
Figure 2
Terminal 25 South Site



Publish Date: 2025/05/02, 2:49 PM | User: emueller
Filepath: \\GSTFile01\\GIS\\Jobs\\PortofSeattle_0003\\T25\\Maps\\Reports\\EECA_Report\\AQ_POS_T25_EECA_Fig2-3_HistoricalOperations.mxd



Figure 3
Historical Operations, Previous Remedial Actions, and Potential Source Areas



Publish Date: 2025/05/02, 3:04 PM | User: emueller
Filepath: \\GSTFile01\\GIS\\Jobs\\PortofSeattle_0003\\T25\\Maps\\Reports\\EECA_Report\\AQ_POS_T25_EECA_Fig2-5a_SamplingLocations.mxd



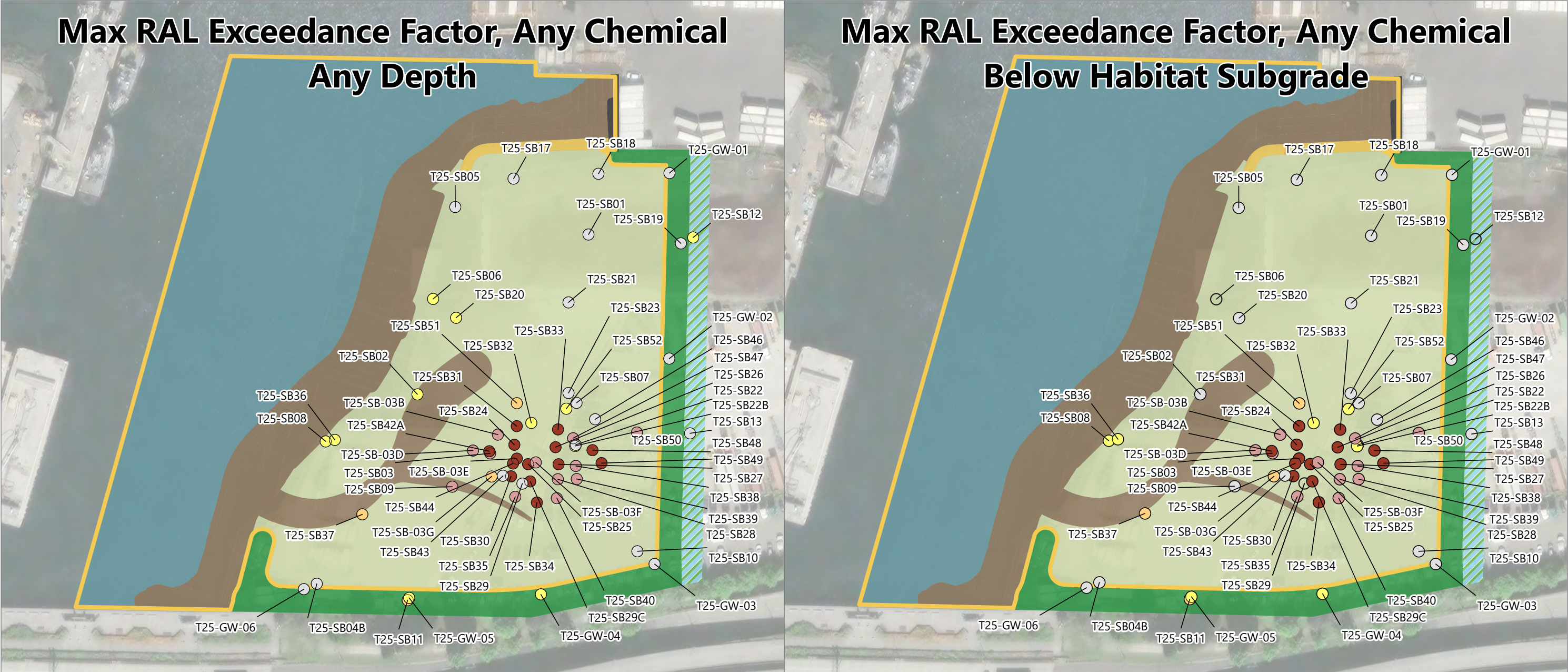
Figure 4
Sample Locations



Publish Date: 2025/05/02, 3:11 PM | User: emueller
Filepath: \\GSTFile01\\GIS\\Jobs\\PortofSeattle_0003\\T25\\Maps\\Reports\\EECA_Report\\AQ_POS_T25_EECA_Fig2-5b_SamplingLocations.mxd



Figure 5
Sample Locations - Focused Investigation Area



LEGEND:

Terminal 25 South Site

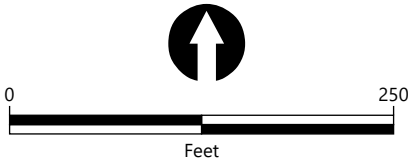
Maximum RAL Exceedance Factor, Any Chemical

- No RAL Exceedance
- 1-20
- 20-100
- 100-1000
- > 1000
- No Data Available
- Green Stormwater Infrastructure (Anticipated)

Restoration Habitat Definition

- Subtidal
- Intertidal
- Marsh
- Riparian - Fully Functional
- High Berm
- Rip-rap

NOTE:
1. Aerial Imagery courtesy of ESRI.
RAL: Remedial Action Level



Publish Date: 2025/09/23, 10:06 AM | User: dmiller
Filepath: \\GSTFile01\\GIS\\Jobs\\PortofSeattle_0003\\T25\\Maps\\Reports\\EECA_WorkPlan\\POS_EECAWP_Report.aprx | AQ_POS_EECA_F2-6a_UplandSoilEastWaterwayRALScreening



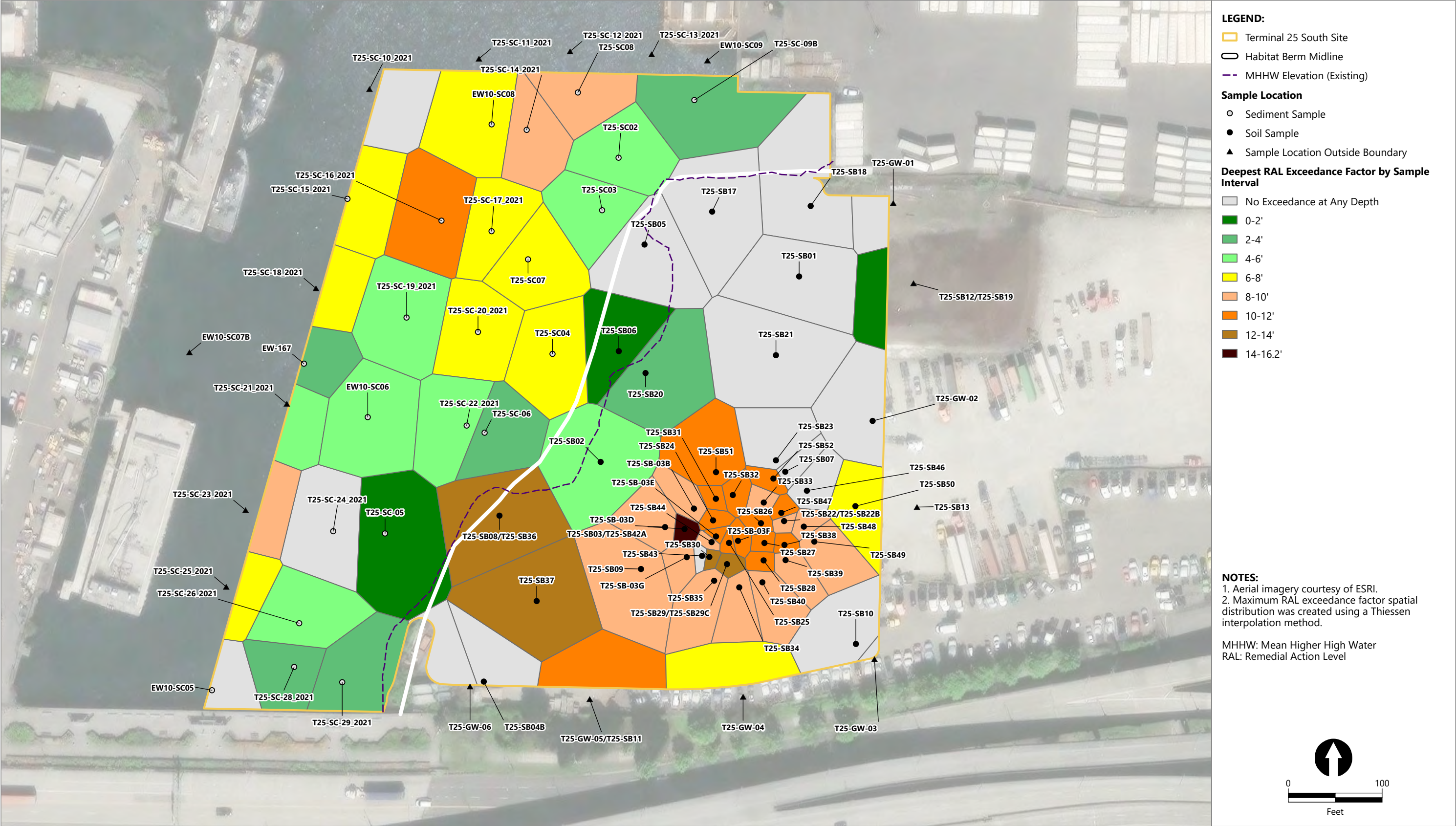
Figure 6
Upland Soil East Waterway RAL Screening



Publish Date: 2025/05/02, 4:18 PM | User: emueller
Filepath: \\GSTFile01\\GIS\\Jobs\\PortofSeattle_0003\\T25\\Maps\\Reports\\EECA_Report\\AQ_POS_T25_EECA_Fig2-8a_EW_deepestexceedance.mxd



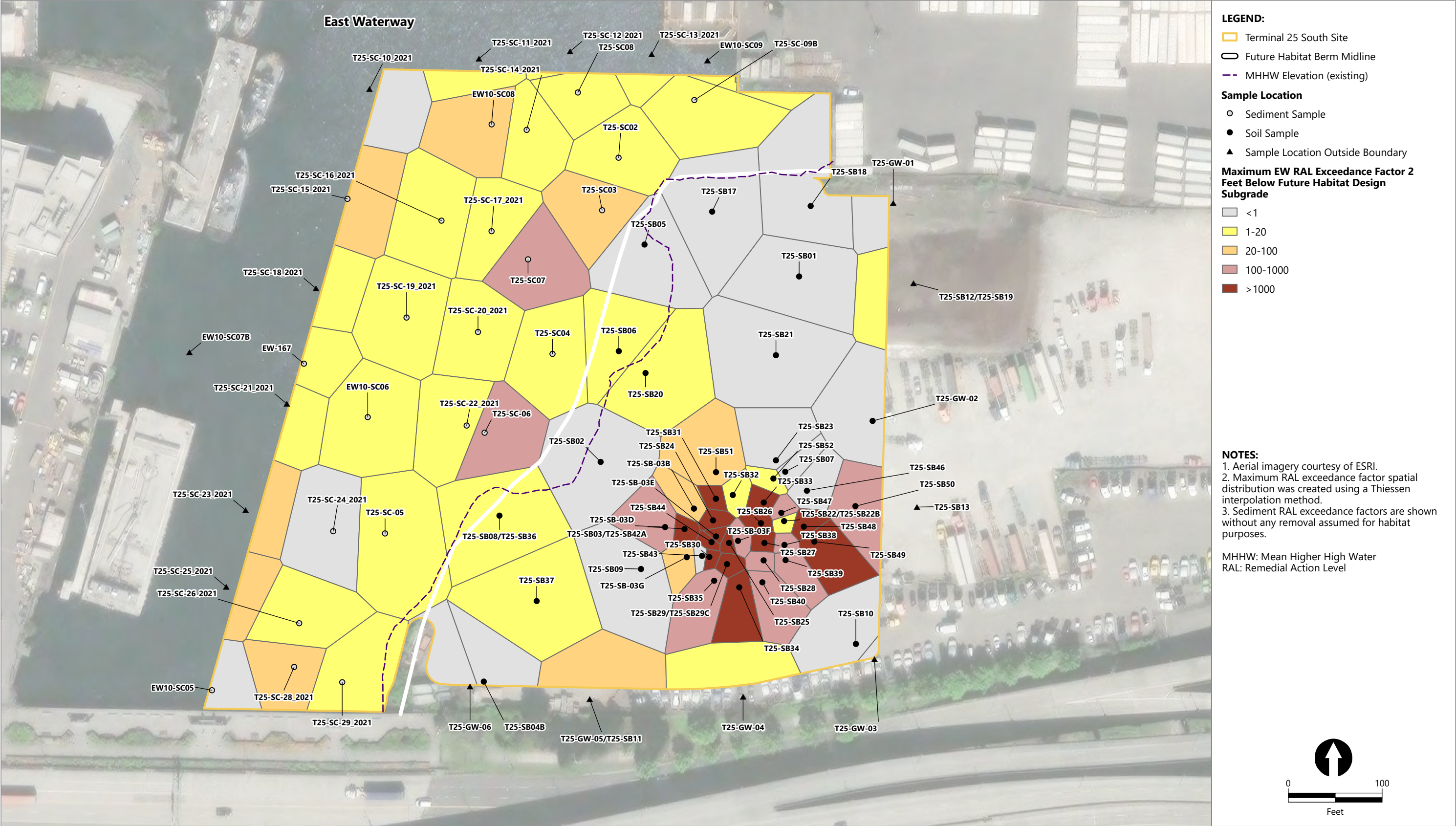
Figure 7
East Waterway Sediments RAL Screening



Publish Date: 2025/09/12, 10:32 AM | User: emueller
Filepath: \\GSTFile01\\GIS\\Jobs\\PortofSeattle_0003\\T25\\Maps\\Reports\\EECA_WorkPlan\\POS_EECAWP_Report.aprx | AQ_POS_EECA_F5-1_Deeppest_Exceedance_of_EastWaterwayRALInFutureSedimentArea



Figure 8
Thiessen Interpolation of Deepest Exceedances of East Waterway RALs



Publish Date: 2025/09/12, 10:36 AM | User: emueller
Filepath: \\GSTFile01\\GIS\\Jobs\\PortofSeattle_0003\\T25\\Maps\\Reports\\EECA_WorkPlan\\POS_EECAWP_Report.aprx | AQ_POS_EECA_F5-2_MaxExceedanceOfEastWaterwayRALsInFutureSedimentArea



Publish Date: 2025/12/03, 11:01 AM | User: emueller
Filepath: \\GSTFile01\\GIS\\Jobs\\PortofSeattle_0003\\T25\\Maps\\Reports\\EECA_WorkPlan\\POS_EECAWP_Report.aprx | AQ_POS_EECA_F5-5a_Alternative_3_Removal_Plan_View



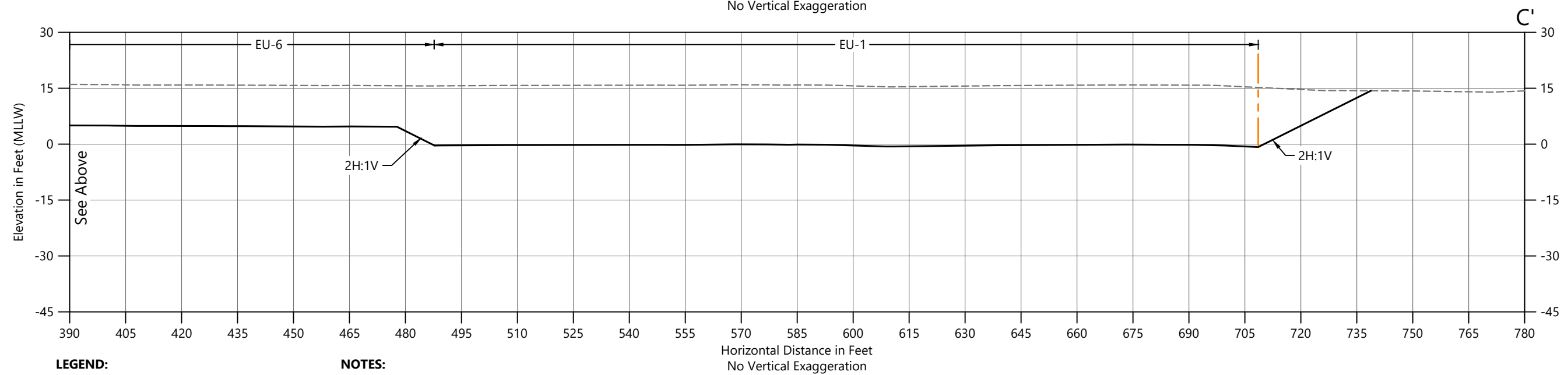
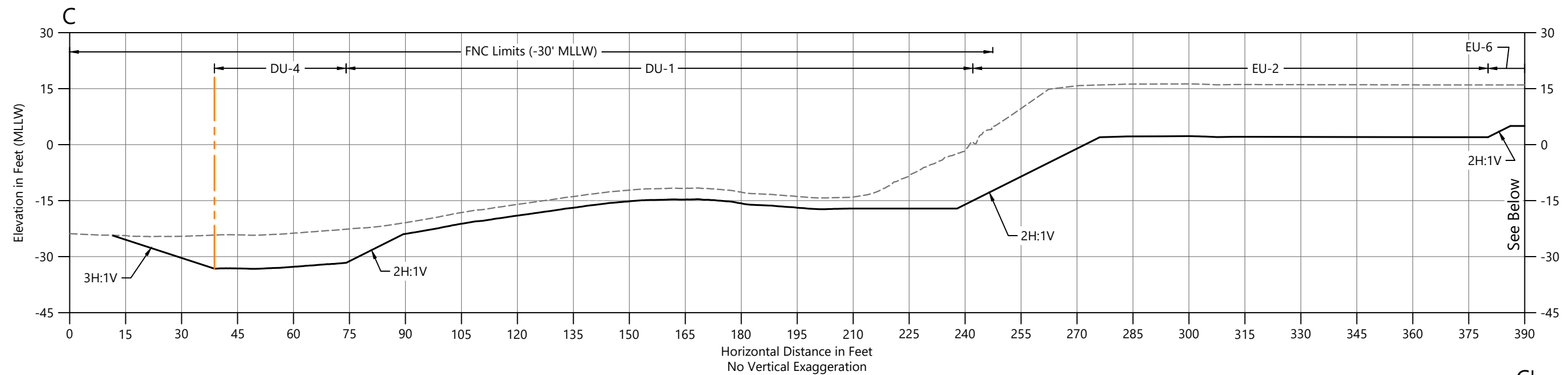
Figure 10
Alternative 3 Removal - Plan View



Publish Date: 2025/12/03, 11:02 AM | User: emueller
Filepath: \\GSTFile01\\GIS\\Jobs\\PortofSeattle_0003\\T25\\Maps\\Reports\\EECA_WorkPlan\\POS_EECAWP_Report.aprx | AQ_POS_EECA_F5-5b_Alternative_3_Placement_Plan_View



Figure 11
Alternative 3 Placement - Plan View



LEGEND:

- Existing Mudline or Grade
- Required Dredge or Required Excavation Depth (Below Mudline)
- Terminal 25 South Site

NOTES:

- DU: Dredge Unit
EU: Excavation Unit
FNC: Federal Navigation Channel
1. Required dredge/excavation depths are assumed to address contamination and to support habitat design.
 2. Side slopes to be determined during design.

Attachment A

Applicable or Relevant and Appropriate Requirements

Appropriate or Relevant and Appropriate Requirements for the Terminal 25 South Site

Chemical-Specific			
Requirement	Citation	Comments	Status
Recommended water quality criteria and other information is published at https://www.epa.gov/wac/national-recommended-water-quality-criteria-tables .	Clean Water Act Section 304(a) 33 U.S.C. § 1314(a) EPA develops and publishes recommended water quality criteria and other information which may be used for the establishment of state water quality standards to protect, restore, and maintain surface water.	The recommended water quality criteria and other information are important to follow if doing so during dredging and other removal activities will improve water quality.	To be Considered

ARARs/TBCs for the Terminal 25 South Site

Location-Specific			
Requirement	Citation	Comments	Status
Provides for best management practices during activities that may impact sediment quality.	State Antidegradation and Designated Use Policies WAC 173-204-120	To the extent practicable employ these best management practices during performance of the remedial action.	To be Considered
Provides for obtaining recommendation from U.S. Fish and Wildlife Service on avoiding, minimizing, and mitigating adverse impacts of land and water development projects on fish, wildlife, plants, and habitats.	U.S. Fish and Wildlife Service Mitigation Policy, as revised 81 FR 83440 (November 21, 2016)	Consult with U.S. Fish and Wildlife Service in order to obtain recommendations on ways to avoid, minimize, and mitigate damage to natural resources, including fish, wildlife, plants, and habitats, during implementation of the remedial action.	To be Considered
Provides U.S. Fish and Wildlife Service with authority to investigate and report on proposed federal action that affects a stream or other body of water, and to provide recommendations to minimize impacts to fish and wildlife resources. Channel deepening or other modifications to a body of water are subject to this law.	U.S. Fish and Wildlife Coordination Act 16 U.S.C. §§ 661, 662(a)	Consult with U.S. Fish and Wildlife Service and obtain its recommendations on how to conserve wildlife resources and prevent loss or damage to such resources during implementation of the remedial action.	Applicable

ARARs/TBCs for the Terminal 25 South Site

Location-Specific			
Requirement	Citation	Comments	Status
Prohibits the killing, capturing, selling, trading or transporting of protected migratory bird species without prior authorization of the U.S. Fish and Wildlife Service. Applies to migratory birds native to the U.S. or U.S. territories, and to any part, nest, egg, or product associated with such migratory birds. 50 CFR § 10.13 (provides list of protected migratory bird species)	Migratory Bird Treaty Act of 1918, as amended. 16 U.S.C. §§ 703, 704, 705	Consult with U.S. Fish and Wildlife Service to identify protected migratory bird species and their nests which may be present during implementation of the removal action, and to obtain recommendations for protecting such species and their nests.	Applicable
Provides a program for conservation of threatened and endangered plants and animals and their habitats. Requires consultation by a federal agency with U.S. Fish and Wildlife Service and National Oceanic Atmospheric Administration Fisheries Service to ensure action taken by such agency is not likely to jeopardize the continued existence of listed endangered or threatened species or result in destruction or adverse modification of their critical habitat.	Endangered Species Act of 1973 Sections 2(c), 3, 7(a)(1)-(4), 7(b)(1)(A), 7(b)(3), 7(b)(4), 7(c), 9 16 U.S.C. §§ 1531(c), 1532, 1536(a)(1)-(4), 1536(b)(1)(A), 1536(b)(3), 1536(b)(4), 1536(c), 1538 50 CFR §§ 17.3, 17.11, 17.12, 17.21(c), 17.21(d), 17.31, 17.51, 17.61(c), 17.71(a), 17.71(c)	Consult with U.S. Fish and Wildlife Service and National Oceanic Atmospheric Administration Fisheries Service to ensure removal activities do not jeopardize threatened or endangered species or destroy or adversely modify the habitat of such species. May include the preparation of a biological assessment which assesses such removal action and its effects on protected species and their habitats.	Applicable

ARARs/TBCs for the Terminal 25 South Site

Location-Specific			
Requirement	Citation	Comments	Status
Promotes the protection of essential fish habitat through coordination and consultation between the National Marine Fisheries Service, the Regional Fishery Management Council, and each federal agency whose action or proposed actions may adversely affect such habitat.	Magnuson-Stevens Fishery Conservation and Management Act Sections 305(b)(1)(D); 305(b)(2-4) 16 U.S.C. §§ 1855(b)(1)(D), 1855 (b)(2-4) 50 CFR § 600.920	Provide notice to the National Marine Fisheries Service and Regional Fishery Management Council of the planned removal action and consider their comments and recommendations for conserving essential fish habitat. Implement measures to conform to the recommendations designed to avoid, mitigate, or otherwise offset any adverse effects on essential fish habitat or provide reasons for not following the recommendations.	Applicable
Establishes regulations, goals, policies and objectives for protecting and enhancing state of Washington shoreline areas.	Shoreline Management Act of 1971 WAC 173-18-020, -030, -040 WAC 173-27-060 King County Shoreline Management Master Program Ordinance 3688 Sections 325, 412, 413, 414	Consider the implications of the King County preferred practices and restrictions in undertaking removal action that may impact shoreline areas.	To be Considered
Provides for authorized work times, construction techniques, shoreline stabilization requirements, and test boring requirements in saltwater areas.	State Hydraulic Code Rules WAC 220-660-330, Table 4; 220-660-360; 220-660-370; 220-660-410; 220-660-450(1), (2), (3)(b), (3)(c).	Adhere to the directions in these provisions of State law during implementation of the removal action.	Applicable
Establishes maximum permissible noise levels in identified environments at specified times.	State Noise Control RCW 70A.20.010, 70A.20.020 WAC 173-60-010, 173-60-020, 173-60-030, 173-60-040, 173-60-050, 173-60-120	Protect workers and others from experiencing excessive noise during removal activities.	Applicable

ARARs/TBCs for the Terminal 25 South Site

Location-Specific			
Requirement	Citation	Comments	Status
Requires federal agencies which have possession of or control over Native American cultural items (including human remains, associated and unassociated funerary objects, sacred objects and objects of cultural patrimony) located on federal land or tribal lands to compile an inventory of such items and consult with affected tribes. Prescribes when federal agencies must return such Native American cultural items.	Native American Graves Protection and Repatriation Act 25 U.S.C. §§ 3001-3006, 3009, 3011	Should Native American items be discovered during removal activities, an inventory will be created to document these items and, if possible, the items will be secured. In addition, upon such discovery, the Muckleshoot and Suquamish Tribes and Yakama Nation will be informed of the discovery and consulted as to the handling and disposition of such items.	Relevant and Appropriate
It is the policy of the United States protect and preserve for American Indians certain rights, including but not limited to, access to sites and use and possession of sacred objects.	American Indian Religious Freedom Act 42 U.S.C. § 1996	Should American Indian sacred objects to discovered, an effort will be made to safely secure these objects, and the Muckleshoot and Suquamish Tribes and Yakama Nation will be notified of the discovery and provided an opportunity to obtain possession of the objects.	To be Considered

ARARs/TBCs for the Terminal 25 South Site

Location-Specific			
Requirement	Citation	Comments	Status
Requires a federal agency to: (1) identify historic properties potentially affected by an agency undertaking; (2) assess the potential effects on such properties from the undertaking; (3) provide the Advisory Council on Historic Preservation an opportunity to comment on the agency decision regarding the properties; and (4) consider ways to avoid, minimize or mitigate potential effects on the properties. Historic properties include any district, site, building, structure, archaeological site, traditional cultural landscape, traditional cultural property, or object included in or eligible for the National Register of Historic Places, including artifacts, records, and material remains related to such properties.	National Historic Preservation Act 16 U.S.C. § 470f 36 CFR §§ 60.2(a), 60.3, 60.4, 800.2(c)(1)(i), 800.2(c)(2)(ii), 800(c)(3), 800(c)(4), 800(c)(5), 800.2(d), 800.3(c), 800.3(e), 800.3(f), 800.3(g), 800.4(d)(2), 800.5(a), 800.6(a), 800.6(b)	Although no historic properties have been identified at the site, should such properties be encountered during remedial activities, assess the potential effects on the properties from the remedial activities, provide the Advisory Council on Historic Preservation or its designee (often the State Historic Preservation Officer), and perhaps other interested parties, an opportunity to comment on the potential effects, and decide how to proceed in a way that, if possible, avoids, minimizes or mitigates the potential effects on the properties.	Applicable
Federal agencies need to evaluate actions and impacts on flood plains and mitigate such impacts. Criteria established for best management of flood prone areas.	42 Fed. Reg. 26951, 3 CFR 1977 Comp. p. 77	If the site is determined to be within a floodplain or flood prone area, actions should be take to prevent the risk of floods due to remedial activities.	To be Considered

ARARs/TBCs for the Terminal 25 South Site

Action-Specific			
Requirement	Citation	Comments	Status
Provides disposal requirements of PCB-contaminated material..	Toxic Substances Control Act Section 6(e) 15 U.S.C. § 2605(e) 40 CFR §§ 761.61(a)(4), 761.61(a)(5); or § 761.61(b)	Actions handling PCB remediation wastes and PCB containing material.	Applicable

ARARs/TBCs for the Terminal 25 South Site

Action-Specific			
Requirement	Citation	Comments	Status
Assures that alteration or use of a federal civil works project will not impair the usefulness of that project or be injurious to the public.	Rivers and Harbors Act of 1899 Section 14(a) 33 U.S.C. § 408(a)	Should it be determined that any portion of the removal action may impair the usefulness of a structure or project of the United States Army Corps of Engineers, there will be consultation with the Corps to determine how to best avoid or mitigate such impairment.	Applicable
Provides regulatory requirements for generators and transporters of hazardous waste. Also provides regulatory standards for owners and operators of hazardous waste treatment, storage or disposal facilities.	Resource Conservation and Recovery Act (a.k.a. Solid Waste Disposal Act) Sections 3002, 3003, 3004 42 U.S.C. §§ 6922, 6923, 6924 40 C.F.R. Part 262, Subparts A-D, L, M (generators) 40 C.F.R. Part 263, Subparts A-C (transporters) 40 C.F.R. Parts 264 to 270 (owners and operators)	Comply with the generator and transporter requirements for all hazardous waste generated and transported as part of the removal action. Confirm there is compliance with owner and operator regulations for each hazardous waste treatment, storage, or disposal facility which is to receive hazardous waste as a result of implementation of the removal action. See, also, Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), which requires that each treatment, storage or disposal facility which is to receive hazardous waste must first be deemed to be in compliance with the Solid Waste Disposal Act.	Applicable as to onsite generator and transporter requirements, and otherwise CERCLA requires that a receiving facility be in compliance with the owner and operator standards of RCRA.

STATEMENT OF WORK
Terminal 25 South
East Waterway Operable Unit – Harbor Island Superfund Site
Seattle, Washington
Administrative Settlement Agreement and Order on Consent for Removal Action

I. Purpose and Scope

The purpose of this Statement of Work (SOW) is to fully implement the Administrative Settlement Agreement and Order on Consent (Settlement) requiring the performance of a non-time critical removal action (NTCRA) for soil and sediments at Terminal 25 South (T-25S) of the East Waterway Operable Unit of the Harbor Island Superfund Site. The NTCRA will be conducted by the Port of Seattle (Respondent) and consists of a removal design and removal action for the excavation and disposal of contaminated soil and sediments.

The documentation tasks to generally be completed under this SOW include preparation and delivery of a Removal Design, Biological Assessment, Removal Action Work Plan, and Final Report. The cleanup task to be performed under this SOW is implementation of the NTCRA.

This SOW is incorporated into the Settlement in CERCLA Docket No. 10-2026-0216. The NTCRA is required by the Action Memorandum signed and issued by EPA on June 24, 2026, for T-25S.

The specific documentation tasks to be completed by Respondent under this SOW include preparation and delivery of the documents identified in Table 1. Schedule of Project Deliverables.

II. General Requirements

Respondent shall perform the Work as defined and required by the Settlement and in accordance with all EPA-approved, conditionally approved, or modified deliverables. The Work includes, at a minimum, all actions necessary to implement the NTCRA, including, but not limited to, the actions set forth in this SOW.

- A. **Deliverables.** Respondent shall submit all deliverables to EPA in electronic form, unless otherwise specified by the EPA Project Manager.
- B. **Technical Specifications for Deliverables.** Sampling and monitoring data shall be submitted in standard Regional Electronic Data Deliverable (EDD) and SCRIBE format. Other delivery methods may be required or approved by the EPA Project Manager if electronic direct submission presents a significant burden or as technology changes.
- C. **Approval of Deliverables.** The approval of all deliverables by EPA will be accomplished in accordance with Paragraph 18.c of the Settlement.
- D. Respondent shall perform in accordance with the Removal Action Work Plan and all other deliverables as approved by EPA and in accordance with the associated schedule approved by EPA. Upon approval or subsequent modification by EPA of any deliverable, or any portion thereof: (1) such deliverable, or portion thereof, and any subsequent modifications, will be incorporated into and enforceable under the Settlement; and (2) Respondent shall take any action required by such deliverable, or portion thereof. Respondent shall not

commence or perform any Work except in conformance with the terms of the Settlement and this SOW.

- E. **Field Activity Notification.** Respondent shall notify EPA not less than 14 calendar days in advance of initiating any field activity conducted under this SOW or the Settlement, unless shorter notice is agreed to or approved by the EPA Project Manager.

III. Removal Design

Respondent shall submit a Removal Design with a basis of design narrative for review and approval by EPA. The Removal Design shall, at a minimum, include the following elements:

IV. An Introduction/Purpose.

- A brief description of project history, previous reports and planned actions.
- A Basis of Design that explains the input parameters to design calculations and summarizes specifications and drawings related to the removal action. The Basis of Design shall include a narrative of what is being designed with each major step of the work, including assumptions for each step of the work being performed, regulatory requirements or standards or guidance that Respondent will follow, general assumptions used for design, as well as specifications and drawings.
- The implementation of treatment technologies, if applicable, including specifications on the products to be utilized and how placement, measurements, handling and storage are to be conducted.
- Confirmation sampling protocols and Quality Assurance/Quality Control (QA/QC) procedures.
- A 30% Design, 60% Design, 90% Design and 100% Design.
- A schedule and project milestones.
- Design review meetings between Respondent and EPA will be held as needed to expedite project schedules and approvals, and at a minimum of once per month.
- The 100% Design shall include the final Basis of Design: final construction documents, schedule, final plans and specifications. Respondent shall implement the 100% Design as approved by EPA.

V. Removal Action Work Plan

Respondent shall submit a Removal Action Work Plan for review and approval by EPA. Among other components, Removal Action Work Plan shall include the sub-plans identified below. The Removal Action Work Plan shall also include an implementation schedule.

Respondent shall coordinate the following activities with EPA:

- Providing access to the project site for EPA and its oversight contractor.
- Submittal of specifications for any placed material.
- Completion of daily field reports documenting environmental controls and mitigations as outlined in the Biological Assessment and Clean Water Act 404 Memorandum developed for the project. These daily field reports shall be provided as attachments to the required progress reports as outlined in Table 1. These submissions shall include:
 - Copies of any correspondence or communications with the Endangered Species Act resource agencies (National Marine Fisheries Service or U.S. Fish & Wildlife Service), if any.

- Copies of turbidity monitoring results, if any, Applicable or Relevant and Appropriate Requirements (ARARs) compliance monitoring results, if any, and a description of response actions taken, if any.

In addition to other elements of the Work, the Removal Action Work Plan must describe all community impact mitigation activities to be performed to: (i) reduce impacts (e.g., air emissions, dust, odor, traffic, noise, temporary relocation, negative economic effects) to residential areas, schools, playgrounds, healthcare facilities, or recreational public areas frequented by community members (Community Areas) during implementation of the NTCRA; (ii) conduct monitoring in Community Areas of impacts from the implementation of the NTCRA; (iii) communicate validated sampling data; and (iv) make adjustments during the implementation of the NTCRA in order to further reduce negative impacts to affected Community Areas. The Removal Action Work Plan shall contain information about impacts to Community Areas that is sufficient to assist the EPA Project Manager and EPA Community Involvement Coordinator in performing the evaluations described in the *Superfund Community Involvement Handbook*, OLEM 9230.0-51 (Mar. 2020). This *Handbook* may be found at <https://www.epa.gov/superfund/superfund-community-involvement-tools-and-resources#handbook>.

Respondent shall prepare a Removal Action Work Plan and schedule that, at a minimum, contains the following elements:

- Construction Quality Assurance Plan
- Quality Assurance Project Plan
- Data Management Plan
- Dredge/Excavation, Barge Transport, and Dewatering
- Traffic Control and Vessel Management Plan
- Waste Management, Transportation and Disposal
- Water Quality Monitoring
- Best Management Practices
- Fish and Wildlife Resources Protection
- Waste Characterization Sampling
- Backfill, Site Restoration and Demobilization
- Confirmation Sampling Plan
- Historical and Archaeological Resource Protection
- Health and Safety Plan
- Post Removal Site Controls
- Biological Assessment/Opinion and Clean Water Act 404 Memorandum

Respondent shall submit for EPA review and comment a Health and Safety Plan (HASP) that, at a minimum, meets the requirements of 29 C.F.R. § 1910.120 and otherwise describes all activities to be performed to protect on-site personnel and area residents from physical, chemical, biological and all other hazards related to performance of Work. The HASP shall be prepared in accordance with *EPA's Emergency Responder Health and Safety Manual*, OSWER 9285.3-12 (July 2005 and updates), available on EPA's website at https://www.epaossc.org/_HealthSafetyManual/manual-index.htm. In addition, Respondent shall ensure that the HASP complies with all currently applicable Occupational Safety and Health Administration regulations found at 29 C.F.R. part 1910. If EPA determines that it is

appropriate, the HASP shall also include contingency planning. Respondent shall incorporate all changes to the HASP recommended by EPA and shall implement the HASP during performance of the Work.

Following implementation of the activities required by the Removal Action Work Plan, Respondent shall submit a Final Report for review and approval by EPA. The Final Report will contain, at a minimum, the following sections:

- Executive summary and introduction.
- NTCRA activities conducted.
- Confirmation sampling results.
- As built drawings.
- QA/QC findings.

Respondent shall submit sampling laboratory data to include an independent Stage 2B validation report to EPA within five working days of Respondent's receipt of the data validation report from the third-party validation contractor.

Field work progress meetings will be held once per month or as otherwise determined by the EPA Project Manager.

EPA will provide field oversight as determined to be necessary by the EPA Project Manager.

The schedule for submission to EPA of deliverables described in this SOW is presented in Table 1 below. This schedule may be updated if determined to be necessary by EPA.

VI. Biological Assessment, Biological Opinion, and Clean Water Act 404 Memorandum

Respondent shall prepare a Biological Assessment and following review by EPA, Respondent shall submit the Biological Assessment to the resource agencies. Respondent shall engage in meaningful coordination with the resource agencies or request that a Biological Opinion be provided by the resource agencies. EPA will provide a schedule by which coordination must be completed between Respondent and the resource agencies. Respondent shall implement any measures recommended by the resource agencies in the Biological Opinion, or if there is no Biological Opinion, Respondent shall implement any measures that are otherwise communicated by the resource agencies to Respondent. Respondent is not required to obtain permits for onsite cleanup action but will be required to comply with all ARARs, consistent with the T-25S Action Memorandum to the extent practicable considering the exigencies of the situation as determined by EPA.

Respondent shall prepare a draft Clean Water Act 404 Memorandum that details how substantive requirements of the Clean Water Act will be met during performance of the NTCRA. Submission to EPA of the draft Clean Water Act 404 Memorandum will be according to the schedule in Table 1. The draft Clean Water Act 404 Memorandum shall include proposed best management practices (BMPs) and mitigation measures. The proposed BMPs and mitigation measures should include the use of operational or engineering resuspension controls silt screen or bubble curtains, monitoring for water quality parameters, and temporary pausing work as needed to prevent water quality exceedances. EPA will issue the final Clean Water Act 404 Memorandum which contains those BMPs and mitigation measures that Respondent is required to follow during performance of the Work.

VII. Implementation of NTCRA

Respondent shall provide notification to EPA at least 14 days prior to initiation of fieldwork to allow EPA to coordinate field oversight activities.

Respondent shall complete the sediment and soil removal and disposal in accordance with the EPA-approved 100% Design and Removal Action Work Plan, including undertaking the following activities.

EPA and Respondent shall participate in a preconstruction meeting to:

- Review methods for documenting and reporting data, and compliance with specifications and plans including methods for processing design changes and securing EPA review and approval of such changes as necessary;
- Review methods for distributing and storing documents and reports;
- Demonstrate that construction management is in place, and discuss any appropriate modifications of the CQAP to ensure that project- specific considerations are addressed;

Respondent shall conduct a site tour with EPA in the project area to verify that the design criteria, plans, and specifications are understood and to review material and equipment storage locations, as appropriate.

Respondent shall transmit (electronically) to EPA the key points and action items discussed during the preconstruction meeting within seven (7) days of the meeting. Respondent shall submit to EPA the final key points and action items from the preconstruction meeting, incorporating all input from EPA, within fourteen (14) days of the meeting.

Pursuant to the CQAP, written progress reports shall be prepared by Respondent and submitted to EPA for review during performance of the Work. The progress reports shall be submitted by Respondent on a quarterly basis during development of the Removal Design and on a monthly basis during performance of the NTCRA field work. The EPA Project Manager may change the timing for submission of progress reports. The progress reports shall include work performed, problems encountered and solutions proposed, water quality monitoring results, and work to be performed during the following period. Respondent shall inform EPA of the disposal facility proposed by Respondent to receive any debris or dredged/excavated materials from T-25S.

Within seven (7) days after Respondent makes a preliminary determination that construction is complete, Respondent shall orally notify EPA for the purposes of scheduling a final inspection and/or meeting. Within fourteen (14) days after the final inspection and/or meeting, if Respondent still believes construction is complete, Respondent shall send a letter to EPA stating that construction is complete and describing and responding to all issues that were raised by EPA during the final inspection/meeting.

VIII. Major Deliverable Schedule

The schedule for submission of deliverables to EPA is presented in Table 1. This schedule may be updated, as necessary, in the Removal Action Work Plan. Respondent may request, and the EPA Project Manager, at their discretion, may approve schedule changes to be documented in writing.

Table 1. Schedule of Project Deliverables

30% Design	Respondent will provide to EPA no later than 180 days after the Effective Date of the Settlement
Comments on 30% Design	EPA will provide comments to Respondent on the 30% Design as soon as practicable.
60% Design	Respondent will provide to EPA no later than 180 days after receipt of EPA comments on 30% Design
Comments on 60% Design	EPA will provide comments to Respondent on the 60% Design as soon as practicable.
90% Design	Respondent will provide to EPA no later than 120 days after receipt of EPA comments on 60% Design
Comments on 90% Design	EPA will provide comments to Respondent on the 90% Design as soon as practicable.
Draft Removal Action Work Plan ¹	Concurrent with 90% Design
Comments on Draft Removal Action Work Plan	EPA will provide Respondent with comments on the draft Removal Action Work Plan as soon as practicable.
Final (100%) Design	Respondent will provide to EPA no later than 120 days after receipt of EPA comments on 90% Design
Final Removal Action Work Plan	Concurrent with 100% Design
Biological Assessment submitted to resource agencies and draft CWA 404 Memorandum provided to EPA	Concurrent with Draft Removal Action Work Plan
Comments on draft CWA 404 Memorandum	EPA will provide Respondent comments on the draft CWA 404 Memorandum as soon as practicable.
Final CWA 404 Memorandum	Concurrent with Final Removal Action Work Plan
Progress Reports	Submitted quarterly during the Removal Design, monthly during the field work or as otherwise directed by the EPA Project Manager
Draft – Final Report (completed after the final phase of construction)	Within 90 days after completion of construction
Comments on draft Final Report	EPA will provide Respondent comments on the draft Final Report as soon as practicable.
Final Report	Within 30 days after receipt of EPA comments on the draft Final Report

IX. Content of Supporting Plans

Quality Assurance Project Plan

Respondent shall develop a project-specific Quality Assurance Project Plan (QAPP) for sample analysis and data handling for post-construction/confirmation samples and other samples that may be required to be collected as part of the NTCRA for T-25S. Respondent shall use quality assurance, quality control, and other technical activities and chain of custody procedures for all samples consistent with EPA's Environmental Information Quality Policy, CIO 2105.1) (Mar. 2021) at <https://www.epa.gov/irmpoli8/environmental-information-quality-policy>, the most recent version of Quality Management Systems for Environmental Information and Technology

¹ The Removal Action Work Plan will include the subplans identified in this SOW.

Programs – Requirements with Guidance for Use, ASQ/ANSI E-4 (Feb. 2014), and EPA Requirements for Quality Assurance Project Plans, EPA QA/G-5 (EPA/240/B-01/02) (Mar. 2001) at <https://www.epa.gov/quality/epa-qar-5-epa-requirements-quality-assurance-project-plans>.

The QAPP will define in detail the sampling and data-gathering methods that will be used on the project. It will include sampling objectives, a detailed description of sampling activities, sample locations, sample analysis, sampling equipment and procedures, sampling schedule, station positioning, and sample handling (such as sample containers and labels, sample preservation). The QAPP will also describe the quality assurance and quality control protocols necessary to achieve required data quality objectives.

Respondent shall ensure that the laboratories it utilizes for the analysis of samples meet the competency requirements set forth in the *Policy to Assure Competency of Laboratories, Field Sampling, and Other Organizations Generating Environmental Measurement Data under Agency-Funded Acquisitions* (Directive No. FEM-2011-01) (Nov. 2016) available at <http://www.epa.gov/measurements/documents-about-measurement-competency-under-acquisition-agreements> and that the laboratories perform all analyses according to EPA-accepted methods. Such EPA-accepted methods are documented in EPA's Contract Laboratory Program (<http://www.epa.gov/clp>), SW 846 *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (<https://www.epa.gov/hw-sw846>), *Standard Methods for the Examination of Water and Wastewater* (<http://www.standardmethods.org/>), 40 C.F.R. part 136, *Air Toxics - Monitoring Methods* (<http://www3.epa.gov/ttnamtl1/airtox.html>).

Upon request by EPA, Respondent shall have such laboratory analyze samples submitted by EPA for quality-assurance monitoring. EPA personnel may audit any laboratory that performs analytical work under this ASAOC. Prior to awarding any work to an analytical laboratory, Respondent will inform the laboratory that an audit may be performed, and that the laboratory agrees to coordinate with EPA prior to performing analyses. Respondent shall provide to EPA the quality assurance/quality control procedures followed by all sampling teams and laboratories performing data collection and/or analysis.

All analytical data collected under the Settlement and this SOW shall be provided electronically to EPA.

For purposes of confirmation samples, EPA and Respondent may use preliminary data that is not flagged, or screening data collected from mobile equipment to make construction decisions (specifically to remove additional contaminated sediment), with the understanding that validated data is required to verify construction completion.

Upon request, Respondent shall provide split or duplicate samples to EPA or its authorized representatives. Respondent shall notify EPA not less than 10 days prior to any sample collection activity unless shorter notice is agreed to by EPA. In addition, EPA has the authority to take any other samples that EPA deems necessary. Upon timely request, EPA may provide Respondent with split and/or duplicate samples in connection with any EPA sampling.

Respondent shall submit to EPA all sampling and test results and other data obtained or generated by or on behalf of Respondent or in connection with implementation of the Work.

Construction Quality Assurance Plan

The CQAP shall describe the project-specific components of the performance methods and quality assurance program to ensure that the completed project meets or exceeds all design criteria, plans, and specifications. The draft CQAP shall be submitted with the 90% Design and

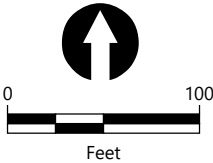
the Final CQAP shall be submitted with the Final 100% Design. The Final CQAP shall be submitted prior to the start of construction in accordance with the approved construction schedule. The CQAP shall provide requirements for the following elements:

- Responsibilities and authorities of all organization and key personnel involved in the NTCRA construction, including EPA and other agencies.
- Qualifications of the Construction Quality Assurance (CQA) Officer. Establish the minimum training and experience of the CQA Officer and supporting inspection personnel.
- Inspection and verification activities. Establish the observations and tests that will be required to monitor the construction and/or installation of the components of the NTCRA. The CQAP shall include the scope and frequency of each type of inspection to be conducted. Inspections shall be required to verify compliance with environmental requirements and ensure compliance with all health and safety procedures.
- Performance standards and methods. Describe all performance standards and methods necessary to ensure implementation of the removal construction. Performance monitoring requirements shall be stated to demonstrate that best management practices have been implemented for dredging operations, transportation of dredged or excavated material, and proper cap placement techniques.
- Documentation. Establish the reporting requirements for construction quality assurance activities. This shall include such items as daily and weekly summary reports, inspection data sheets, problem identification and corrective measures reports, design acceptance reports, and final documentation. A description of the provisions for final storage of all records consistent with the requirements of the Settlement shall be included.



LEGEND:
 Terminal 25 South Site

NOTE:
1. Aerial imagery source: King County (2021)



Publish Date: 2025/05/02, 2:41 PM | User: emueller





Item No. 8c supp
Meeting Date: Sept. 22, 2026

Terminal 25 South Cleanup

Authorization for Removal Design/Removal Action Order with EPA

September 22, 2026



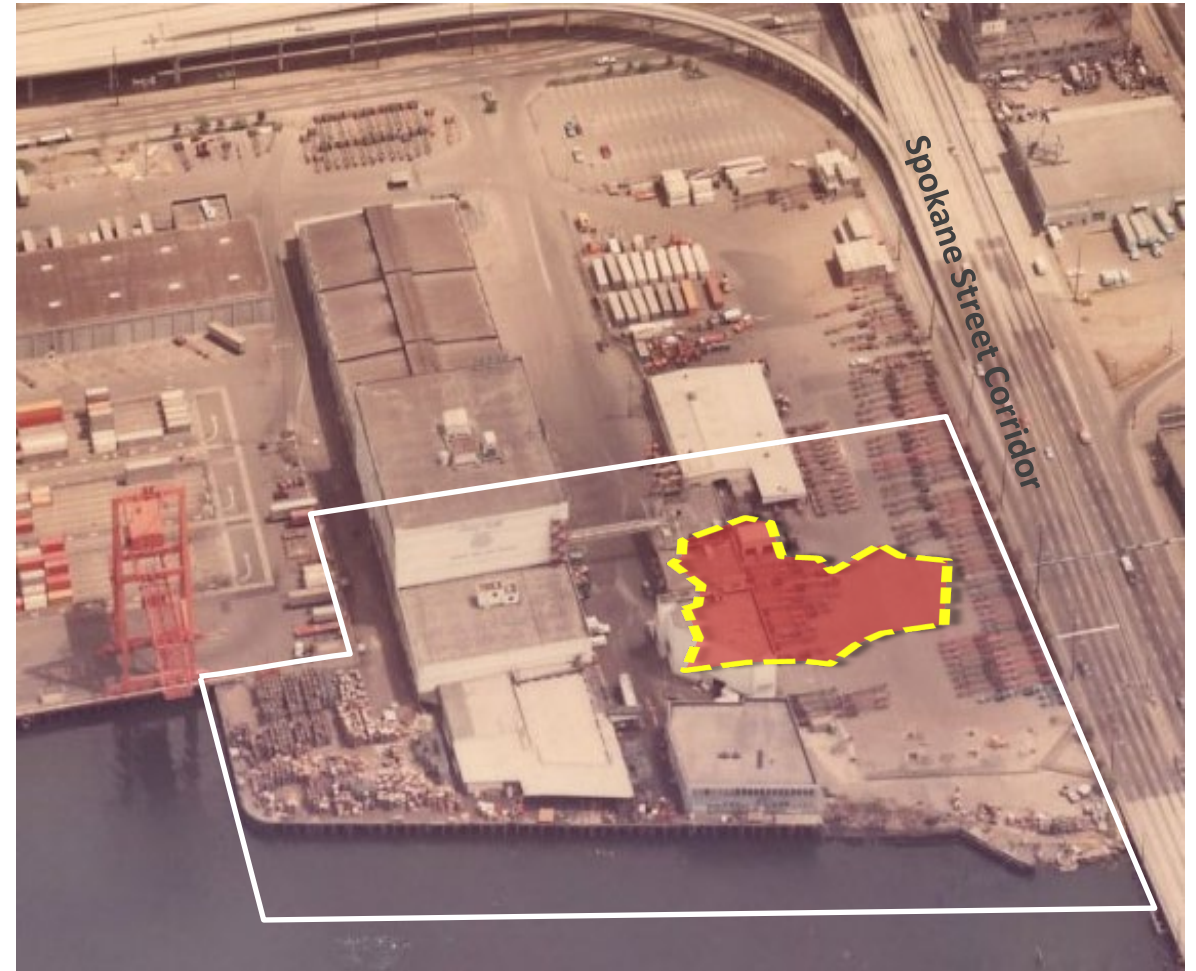
Project Site: T25 South

- Unique, very high ecological value in saltwater transition zone
- Three related projects, one mobilization:
 - Upland cleanup required by EPA
 - Sediments cleanup required as East Waterway “Early Action” pursuant to EPA interim record of decision (IROD)
 - 10-acre habitat restoration



Soil & Sediment Cleanup

- Cleanup must satisfy EPA
- In-water cleanup treated as East Waterway “early action,” must meet IROD
- Upland cleanup to remove historical PCB hotspot discovered in 2019
- Estimated cost for cleanup (full removal)
 - Sediments Cleanup: \$61 M
 - Upland Cleanup: \$71 M
- Habitat design and construction will be integrated with the cleanup



Key Schedule Milestones

Field Investigation/Data Approval	Q1 2025 (complete)
EPA EE/CA Approval/Action Memo	Q3 2026 (complete)
GC/CM Solicitation	Q3 2026 (complete)
EPA Design and Action Order	Q3 2026 (This Item)
30% Design to EPA	Q1 2027
GC/CM Contractor Inclusion	Q1 2027
60% Design to EPA	Q3 2027
90% Design to EPA	Q1 2028
100% Design & Permitting	Q3 2028
Construction	Q1 2029 – Q2 2031

QUESTIONS?



1936



2026



2031

Habitat Restoration



Restores 10 acres to fully functioning riparian, marsh, intertidal, and subtidal habitat:

- Install substrates, vegetation, anchored wood, cobble, and intertidal channels
- Green stormwater infrastructure to protect site from runoff from adjacent NWSA site
- Public access not permitted, but site contributes to viewshed and popular fishing area



**COMMISSION
AGENDA MEMORANDUM**

Item No. 9a

ACTION ITEM

Date of Meeting September 22, 2026

DATE: September 9, 2026
TO: Stephen P. Metruck, Executive Director
FROM: Peter Lindsay, Assistant Director, Airport Operations
SUBJECT: SEA Airport Tenant Employee Parking Security Contract

Amount of this request: \$6,900,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to execute a contract for security services to support employee parking operations at the North Employee Parking Lot and three new leased parking lots known as Lots A, C, and M for a total estimated cost of \$6,200,000 over five years. The initial contract will be for a 1-year base term with four annual renewal options at the discretion of the Port, for a maximum term of five years. Additionally, requesting \$700,000 to fund & maintain existing security coverage for the duration of the RFP process and through the contract's final extension (October 2027). Total authorization requested is \$6,900,000.

EXECUTIVE SUMMARY

On-site guard services are an expected service and best practice to safeguard tenant employees, Port of Seattle staff, and port assets supporting the airport's employee parking operation. For this procurement, guard services are proposed for the North Employee Parking Lot (NEPL) located north of the airfield and newly leased areas, specifically parking lots A, C, and M—located along International Boulevard in the City of SeaTac. Collectively, these parking facilities provide over 5,500 parking stalls and are designed to accommodate the needs of more than 18,000 airport tenants who work at SEA airport, ensuring they have reliable access to parking for the next decade.

Security guards provide essential support and access control for the airport's employee parking facilities. They continuously monitor the premises, manage access, and report any criminal or suspicious activities with either on-premises surveillance or patrol surveillance. Additionally, these guards oversee traffic control and deliver high-quality customer service to our airport tenant parkers.

This action seeks to award a contract for comprehensive security guard services for a duration of up to five (5) years through an RFP process. The contract will consist of an initial 1-Year term,

Meeting Date: September 22, 2026

with options for four (4) additional 1-Year extensions based on performance and service evaluations such as dependability, customer feedback, and responsiveness.

Guard service staffing is estimated at \$1.2M to \$1.3M annually, expenditures which are recovered through parking fees. The proposed expenditures will be absorbed within the existing phased annual rate plan, which assumes an average year-over-year increase of approximately 7.3% through 2031.

Employee Parking's existing security contract (S-00321204) is scheduled to expire in October 2027. Existing funds are insufficient to support the remaining term of the contract while completing procurement and transition to a successor contract. This authorization is requesting funding to both maintain uninterrupted security services under S-00321204 and procure a new security services contract.

JUSTIFICATION

To maintain a safe operation, security and access control are needed for airport employee parking lots as staff anticipate constant year-round use by employees. The contract specifications call for a constant guard presence, patrol, and on-duty 24-hours, 7-days a week, and 365-days per year with the following key scope elements:

- Ensure only authorized persons have access to the lot
- Assist customers when they have issues with their access cards
- Provide 24-hour surveillance of the lot
- Available security presence on-hand and ready to react to emergent issues if necessary

Diversity in Contracting

Staff have contacted the Diversity in Contracting Office, which recommended a 5% women and minority owned-business participation (WMBE). Previous iterations of the contract have successfully added to the Port of Seattle's diversity in contracting goals, and the current contract holder is a WMBE firm.

DETAILS

This request is to provide site security for the entire employee parking operation, to reduce the risk of criminal activity, provide customer assistance, and monitor access control for facility security. Some units will be located on-site while others will provide mobile patrol surveillance with a vehicle.

Scope of Work

The successful contractor shall provide patrol and on-duty guard services for the NEPL and Lot C. A mobile patrol guard service shall be provided to Lots A and M. The service shall be performed 24-hours, 7-days a week, including holidays. The contractor will ensure only authorized personnel

Meeting Date: September 22, 2026

are allowed access to the lot, report any operational issues to the Landside Control Center, maintain a daily log of events, and provide a weekly update to Landside Management.

Specific scope elements include:

- (1) Security Guard Presence – one security guard on-duty throughout the day, including a mobile patrol guard
- (2) Regular Operational Reports and Daily Log – regular communications to advise management of lot activity, irregularities, and concerns
- (3) Access Control – assist with lot access and customer service
- (4) Supplemental Security – enhanced patrols and security evaluations around the lot perimeter

Airport Operations intends to continue offering guard services with increased resources to allow flexibility, greater response for site security, and public safety needs.

Schedule***Activity***

Commission Authorization	2026 Quarter 3
RFP Development	2026 Quarter 4
Solicitation	2027 Quarter 1
Proposal Reviews	2027 Quarter 2
Award Contract	2027 Quarter 3
Contract Start Date	2027 Quarter 4

Meeting Date: September 22, 2026

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Add Port staff to perform these functions. This option would eliminate the need for a contract to provide guard services at Employee Parking facilities and task the Port of Seattle and SEA with responsibility for all site-security services.

Cost Implications: Preliminary analysis estimates an approximate cost of \$2.1M annually to transition security services to Port employees. This estimate only includes wages and benefits required for a minimum staffing model of 15 full-time employees (FTE) which satisfy three required security posts for 24-hour, 7-days a week, and 365-days coverage. This estimate does not include indirect and overhead costs such as uniforms, equipment, fuel, training, and recruitment. The estimate also assumes no collective bargaining-related costs or negotiated wage adjustments.

Pros:

- (1) Port staff are more knowledgeable of Port policies and procedures and Employee Parking procedures and could answer questions and provide improved customer service to Employee Lot customers.

Cons:

- (1) Disruptive to business operations. New staff would be needed to perform this new role, and many lines of business have difficulty filling existing positions. Staff is concerned that business continuity and site security may suffer from a lack of headcount or the inability to find qualified personnel.
- (2) Women and Minority Business Enterprise (WMBE) participation. The current security contract is 100% WMBE. Transitioning to a Port of Seattle employment model would eliminate the guard service contract opportunity for WMBE firms.
- (3) Conflicting roles. There are multiple workgroups at the Port that may contest the right to this work and further disrupt the ability to staff this vital position.

This is not the recommended alternative.

Alternative 2 – Discontinue dedicated security services at Employee Parking facilities and rely on existing Port passive security measures such as cameras, lighting, access controls, and standard operational reporting procedures.

Cost Implications: Eliminates the cost of a dedicated security contract or equivalent in-house staffing costs. Reduces ongoing expenses to zero relating to security personnel, vehicles, & associated operating costs. May require future investments in security technology or infrastructure enhancements to mitigate reduced on-site presence.

Pros:

- (1) Lowest overall operating costs while also allowing funding to be redirected to other operational or capital priorities.

Meeting Date: September 22, 2026

- (2) Eliminates long-term contractual or staffing obligations while reducing administrative oversight associated with managing a security program.

Cons:

- (1) No site security presence to deter criminal activity or provide immediate response.
- (2) Increased risk of theft, vandalism, trespassing, and customer safety concerns.
- (3) Reduced ability to proactively identify and resolve operational or safety incidents.
- (4) Increases potential for liability and risk following security and safety-related incidents.
- (5) Increased reliance on Port Police or King County law enforcement, which may result in longer response times.

This is not the recommended alternative.

Alternative 3 – Execute a contract for security services. Consistent with existing customer expectations and service levels since the NEPL began operations, this option would maintain the practice of using a contract security firm for NEPL guard services.

Cost Implications: Guard service staffing is estimated at \$1.2M to \$1.3M annually, expenditures which are recovered through parking fees.

Pros:

- (1) Provides operational flexibility to supplement security needs without adding Full Time Equivalent (FTE) employees.
- (2) Efficient use of Port funds as the procurement process helps the business unit attain competitive rates for services.
- (3) Provides opportunity for WMBE contract participation. The current contractor is a 100% WMBE firm.

Cons:

- (1) Variability in guard experience due to third-party scheduling needs and staffing requirements. Although guards are typically dedicated to the operation, at times, personnel are moved between sites.

This is the recommended alternative.

FINANCIAL IMPLICATIONS

As an enterprise, Employee Parking is a cost-recovery business whereby the expenditures necessary to operate and maintain the service are recovered directly from tenant customers and users of the service, inclusive of all necessary taxes and fees. As per existing SLOA agreements, current 2026 monthly parking rates are fixed at \$107 per month; monthly parking rates are projected to increase to \$114 per month for the 2027 calendar year, with the forecasted increase of approximately 7.3% annually through 2031.

Annual Budget Status and Source of Funds

The Employee Parking baseline budget in 2026 includes \$1.19M in 2027 for guard services across all employee parking lots.

Meeting Date: September 22, 2026

Financial Analysis and Summary

Project cost for analysis	\$6,900,000.00
Business Unit (BU)	Landside Operations, Employee Parking
Effect on business performance (NOI after depreciation)	Absorbed in phased annual rate plan per SLOA, assuming average YOY increase of approx. 7.3% through 2031
IRR/NPV (if relevant)	N/A
CPE Impact	N/A

Future Revenues and Expenses (Total cost of ownership)

Current financial analysis forecasts \$14.1M in 2026 year-end revenue. This figure includes revenue generated from the recently opened employee expansion parking lots.

Cost Breakdown

This Request

Existing Contract (S-00321204) Expires Oct 2027	\$700,000
Contract Year 1 (New Executed Agreement)	\$1,165,000
Contract Year 2	\$1,200,000
Contract Year 3	\$1,236,000
Contract Year 4	\$1,273,000
Contract Year 5	\$1,311,000
Total	\$6,900,000

Note: Total sums are rounded.

ADDITIONAL BACKGROUND

None.

ATTACHMENTS TO THIS REQUEST

(1) Presentation

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

September 9, 2026 – Action postponed to September 22, 2026, meeting.

August 9, 2022 – The Commission authorized a 5-year contract for NEPL security services.

August 4, 2017 – The Commission authorized a 5-year contract for NEPL security services.

SEA Employee Parking Security Contract

SEA Employee Parking Facilities

Locations: Four (4) Remote Parking Sites

- North Employee Parking Lot (NEPL)
- Lot A
- Lot C
- Lot M

Purpose: To provide on site security guard services for 24-hour, 7-days a week, 365-days a year

Scope: Security guard presence; regular operational reports & daily log; Access Control; Supplemental Security

Facility Map



Action Requested

Request Commission authorization for the Executive Director to execute a new contract for security services in Q4 2027 to support employee parking operations at NEPL, Lot A, Lot C, & Lot M for a total estimated cost of \$6,200,000.00 over five (5) years.

Additionally, requesting \$700,000.00 to fund the existing security contract (S-00321204) for the duration of the new contract's RFP process and through the contract's final extension.

Total authorization requested is \$6,900,000.00.

Contract Schedule

Cost Breakdown	This Request
Existing Contract (S-00321204) Expires Oct 2027	\$700,000
Contract Year 1 (New Executed Agreement)	\$1,165,000
Contract Year 2	\$1,200,000
Contract Year 3	\$1,236,000
Contract Year 4	\$1,273,000
Contract Year 5	\$1,311,000
Total	\$6,900,000.00

Scheduled Milestones:

- RFP Development – 2026 Q4
- Solicitation & Reviews – 2027 Q1 to Q2

With additional authorization, existing security contract (S-00321204) expected to expire Q3 2027.

Anticipated completion of RFP process and award of new contract Q3 2027.



QUESTIONS?

**COMMISSION
AGENDA MEMORANDUM**

Item No. 10a

ACTION ITEM

Date of Meeting September 22, 2026

DATE: August 20, 2026

TO: Stephen P. Metruck, Executive Director

FROM: Jeffrey Wolf, Director, Aviation Commercial Management
Khalia Moore-Parkes, Assistant Director, Airport Dining and Retail
Scott Van Horn, Manager of Business Development, Airport Dining and Retail

SUBJECT: **Execution of a Lease and Concession Agreement between the Port of Seattle and AD Partnership, LLC to operate a Non-Aeronautical Financial Institution (Credit Card) Lounge at Seattle-Tacoma International Airport**

ACTION REQUESTED

Request Commission authorization for the Executive Director or his designee to execute a Lease and Concession Agreement for a Non-Aeronautical Financial Institution (Credit Card) Lounge on A Concourse with AD Partnership, LLC, operating a Chase Sapphire Lounge.

JUSTIFICATION

The Airport Dining and Retail (ADR) team issued Request for Information 26-7 (RFI 26-7) for a new non-aeronautical alliance or financial institution lounge located at the end of A Concourse. Based on the submission received, AD Partnership, LLC (Selected Operator) was selected to operate a Chase Sapphire Lounge.

Staff requests authorization for the Executive Director or his designee to execute a Lease and Concession Agreement with the following terms:

- Fifteen (15) years lease term
- Approximately 16,000 square feet (SF)
- Projected Revenue to the Port: Five Hundred Dollars and 00/100 (\$500.00) per square foot per year.
 - This rate will increase on the sixth (6th) and eleventh (11th) year by ten percent (10%).
 - Estimated annual revenue to the Port will be approximately \$7.9 million per year.
- Security Deposit: \$4,000,000

Meeting Date: September 22, 2026

This location on A Concourse was originally planned as an upgraded, Port-owned common use lounge, which would require significant capital investment. However, after additional analysis and review of the lounge program, it was determined that utilizing this space as a non-aero financial institution or airline alliance lounge provided increased financial returns and lower capital burdens for the Port. An alternative location for the current common-use lounge was identified, which required lower investment by the Port and further improves the Port's overall financial performance.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1- Proceed with the previously approved project and build out the full expanded Club SEA footprint provided by the Concourse A Building Expansion for Lounges project in this location.

Cost Implications: Incremental \$24,360,000 plus Port Sunk Costs of \$25.9M (allocated base building costs)

Pros:

- (1) Improve the Port's level of service supporting international operations on Concourse A.

Cons:

- (1) Significant capital cost incurred.
- (2) Breakeven point for investment is expected to be 11 years.

This is not the Recommended Alternative.

Alternative 2- Proceed with the request to execute the Lease and Concessions Agreement with AD Partnership, LLC for a Chase Sapphire Lounge in the A Concourse location.

Cost Implications: Port Sunk Costs: \$25.9M (allocated base building costs) plus previously incurred \$8M attributable to common-use lounge design efforts already undertaken.

Pros:

- (1) Provide lounge capacity to serve passenger growth.
- (2) Provide a significantly higher non-aeronautical revenue growth without additional, unplanned Port investment.
- (3) Decreases in future capital investment and expenses for the Port, which would be incurred with the build-out and operation of the space as previously approved.

Cons:

- (1) The new location for The Club at SEA may require some upgrades and with a set turnover date of the current The Club at SEA space for the Chase Sapphire Lounge, there may be a short period of time that no common-use lounge services will be available on Concourse A.

This is the Recommended Alternative.

Meeting Date: September 22, 2026

FINANCIAL IMPLICATIONS

This authorization will create a new non-aeronautical revenue stream of approximately \$7,900,000 annually to the Port. No additional Port investment will be required.

Analysis Period: 2026-2043	Chase Lounge
Square Footage (approximate)	16,000
Lease Revenue	\$ 131,690,000
Sunk Costs:	\$ -
Common Use Construction Costs	\$ 8,000,000
Allocated Base Building Costs	\$ 25,910,000
Net Income	\$ 97,780,000
Non-Aero Net Present Value	\$ 36,440,000
Payback	4

NPV assumes 7.1% discount rate per Port risk scoring matrix

ATTACHMENTS TO THIS REQUEST

- (1) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

April 8, 2025 – The Commission authorized \$24,360,000 to complete the A Concourse Shared-Use Lounge Project (Club at SEA).

Item No.	10a_supp
Date of Meeting	September 22, 2026

A Concourse Non-Aeronautical Lounge

Jeff Wolf, Director, Aviation Commercial Management

Khalia Moore-Parkes, Assistant Director, ADR

Scott Van Horn, Manager, Business Development, ADR



September 22, 2026

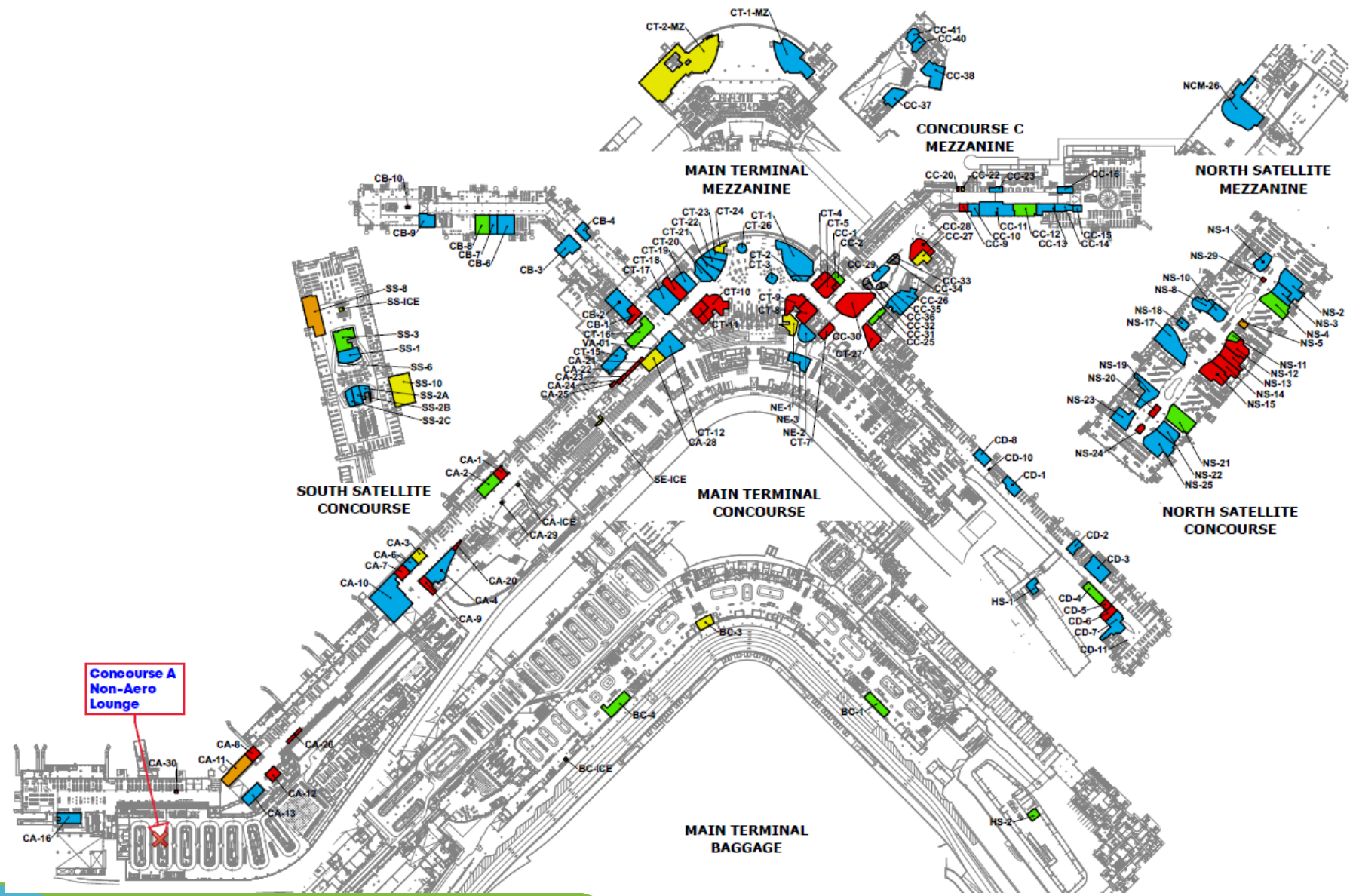
Request

Request Commission authorization for the Executive Director or his delegates to execute the Lease and Concessions Agreement for the non-aeronautical airport lounge on A Concourse.

Brief History

- Previous Aviation lounge plans were to provide a Port-controlled premium lounge product to the traveling public.
 - As part of the Delta Lounge buildout, a secondary lounge was built to support A Concourse Shared-Use Lounge operations.
- In April 2025, Commission approved the completion of the new A Concourse Shared-Use Lounge Project for \$24,360,000.
- After additional financial review of the project, the Port determined that this space was better fit for a non-aero revenue opportunity.
 - A Shared-Use Lounge on A Concourse is currently being planned for a lounge location set to be vacated by United in 2027 with reduced Port investment.

Location Map



CHASE SAPPHIRE LOUNGE BY AIRPORT DIMENSIONS

A Concourse Non-Aeronautical Lounge



Lease Terms

- 15-year lease term
- \$500/SF per year
- 10% rent step in years 6 and 11
- Total tenant investment (Initial Capital Investment and Midterm Refurbishment): \$70M
- Rent to the Port over the 15-year lease term: \$135.6M
- No additional Port of Seattle investment
- 15-year NPV of over \$36M with a four (4)-year payback period

Lounge Amenities Offering



Luxury shower
suites



Pop-up activations with
local partners



Comfortable
lounge seating



High-speed Wi-Fi
and outlets throughout
the lounge



Digital media, including
newspapers and
magazines



Digital
food ordering



Well-designed,
all-gender restrooms



Curated menus with
locally inspired dishes



Locally inspired
beverages



Unique artwork
from emerging local artists



Nursing
room



Family
room



Base Building
Finishes



**SAPPHIRE
LOUNGE**
BY THE CLUB

Entrance View



Main Bar View



Collector's Lounge



Main Seating View



Main Dining View

QUESTIONS?





COMMISSION
AGENDA MEMORANDUM

Item No. 11a

BRIEFING ITEM

Date of Meeting September 22, 2026

DATE: August 12, 2026

TO: Stephen P. Metruck, Executive Director

FROM: Stephanie Jones Stebbins, Managing Director Maritime
Sarah Ogier, Director, Maritime Environment & Sustainability
Jon Sloan, Sr. Manager, Environmental Programs
Mike DeSota, Sr. Env. Program Manager, Maritime Environment & Sustainability

SUBJECT: Green Marine International Environmental Certification Program

EXECUTIVE SUMMARY

Green Marine International is a voluntary environmental certification program developed specifically for the maritime industry. The program provides ports, ship owners, terminals, shipyards, and other maritime organizations with a structured and transparent framework for measuring environmental performance, implementing best practices, and demonstrating continual improvement beyond regulatory compliance. The Port of Seattle has participated in Green Marine since 2013 and was the first U.S. West Coast port to achieve Green Marine certification. Through annual evaluations and periodic independent verification, the program provides an objective framework to benchmark environmental performance and identify opportunities for continued improvement. This briefing will provide the Commission with an overview of the Green Marine program, the Port's participation and performance over time, and opportunities for continued environmental improvement. No Commission authorization or funding action is requested.

GREEN MARINE PROGRAM AND PORT PARTICIPATION

Green Marine provides a transparent framework for measuring maritime environmental performance beyond regulatory compliance. The Port has consistently demonstrated strong performance across applicable environmental performance indicators addressing greenhouse gas and air emissions, spill prevention, stormwater management, aquatic ecosystems, waste management, community relations, environmental leadership, and underwater noise.

Port Environmental Performance

The Port's Green Marine performance is one of the highest scores among all ports participating in the program and it reflects the Port's continued investment in shore power and maritime electrification, habitat restoration, stormwater management, spill prevention, community engagement, and efforts to better understand and reduce underwater noise. Green Marine participation supports the Port's broader environmental and sustainability objectives and aligns

Meeting Date: September 22, 2026

with the Century Agenda goal of positioning the Port of Seattle as one of the greenest and most energy-efficient ports in North America. Tables 1 and 2 illustrate the Port's Green Marine Performance from 2013 to 2025. Achieving Level 5 - the program's highest rating requires participants to demonstrate environmental excellence and leadership through rigorous, measurable criteria that go beyond regulatory compliance.

Table 1. Port of Seattle – Green Marine Performance (2025)

GREEN MARINE INDICATOR	BRIEF DESCRIPTION	CURRENT PORT SCORE
 Air Emissions – GHG & Air Pollutants	Measures efforts to reduce greenhouse gas and air pollutant emissions through inventories, reduction strategies, cleaner technologies, fuels, and electrification.	5
 Aquatic Ecosystems	Measures actions to protect and improve aquatic ecosystems, habitat, water quality, and biodiversity within and beyond the Port's area of influence.	5
 Community Impacts	Addresses impacts of port activities on nearby communities, including noise, dust, odors, lighting, and other operational impacts.	4
 Community Relations	Evaluates engagement with communities and stakeholders through open communication, consultation, transparency, and opportunities for meaningful participation.	5
 Environmental Leadership	Recognizes environmental management, innovation, partnerships, and the Port's influence on the environmental practices of tenants and other port users.	5
 Spill Prevention & Stormwater Management	Measures practices to prevent spills and pollutant releases and manage stormwater to minimize contamination of land and water.	5
 Underwater Noise	Evaluates efforts to understand, manage, and reduce underwater noise associated with port operations, vessel activity, construction, and maintenance to reduce impacts on marine mammals.	3
 Waste Management	Measures efforts to reduce waste generated by administrative and operational activities while increasing reuse, recycling, and responsible waste management.	5



Green Marine performance scale: 1 = Monitoring of Regulations | 5 = Excellence & Leadership

Table 2. Port of Seattle- Green Marine Performance (2013-2025)

Meeting Date: September 22, 2026



ADDITIONAL BACKGROUND

Eleanor Kirtley, Ph.D., of Green Marine International will provide an overview of the program, with Port staff available to discuss the Port's performance, programs, and ongoing environmental initiatives. Results are publicly reported annually and independently verified every two years, providing Commissioners, customers, community members, and other stakeholders with an external measure of the Port's environmental performance.

ATTACHMENTS TO THIS BRIEFING

- (1) Presentation slides

Green Marine International Environmental Certification Program

September 22, 2026, Commission Meeting

- Stephanie Jones-Stebbins, Managing Director, Maritime Division, Port of Seattle
- Sarah Ogier, Director of Maritime Environment and Sustainability, Port of Seattle
- Mike DeSota, Senior Environmental Program Manager, Port of Seattle
- Eleanor Kirtley, Senior Program Manager, Green Marine



WHY GREEN MARINE?



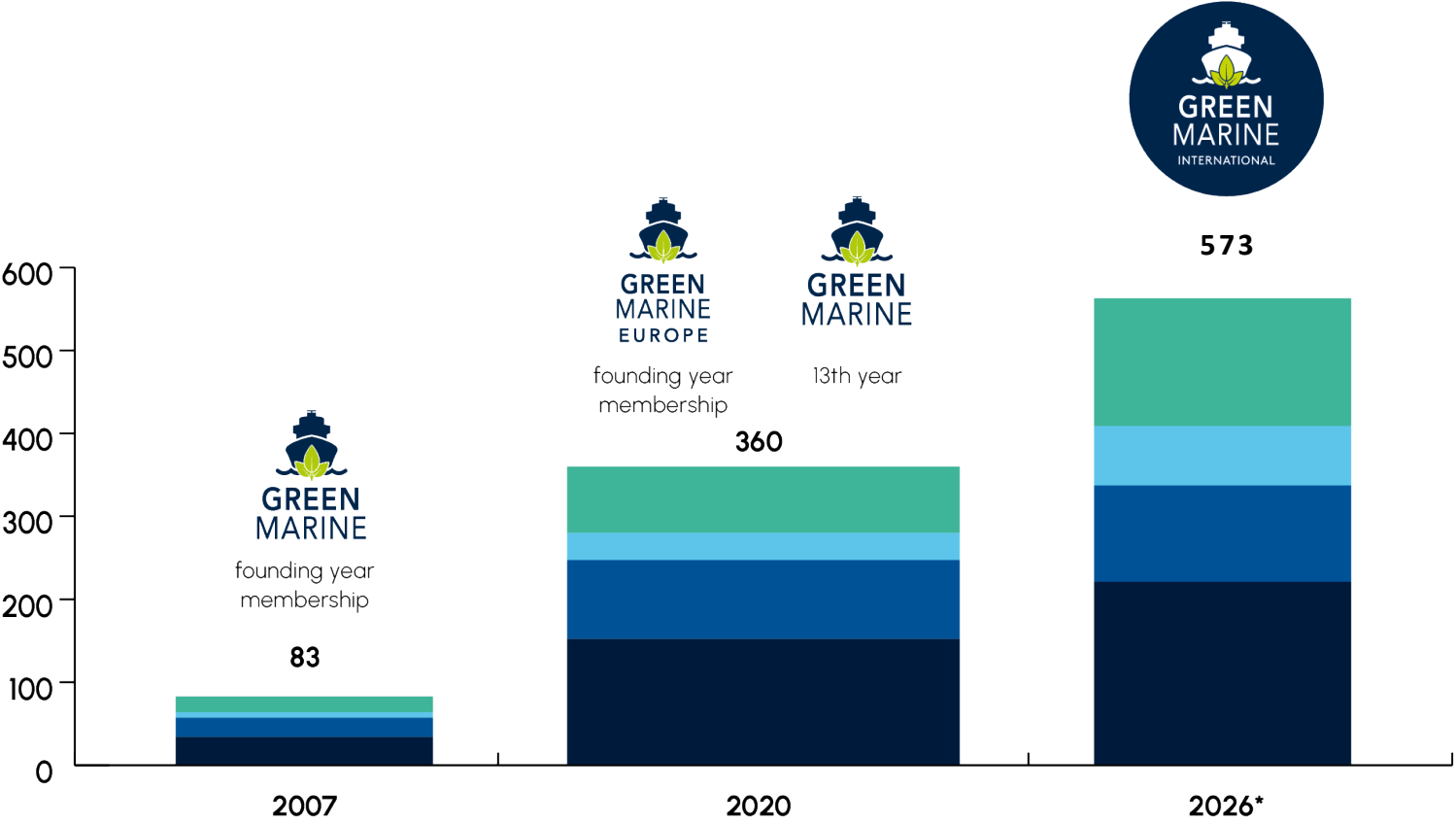
Green Marine is the **most comprehensive** environmental program for the maritime industry that exists today.

- **Participants from across sectors** – ship owners, port authorities, terminal operators, shipyards, and Seaway corporation



- Founded in **2007** in the Great Lakes & Saint Lawrence Region
- Action plan addressing **key environmental issues** with 15 performance indicators
- Opportunity for **NGO and governmental participation**
- Certification with **independent verification**
- Transparent, **public reporting** of individual results

MEMBERSHIP EVOLUTION



- 155 Supporters**
Environmental Groups and Government Agencies
- 72 Associations**
Industry Advocacy
- 122 Partners**
Suppliers of products, equipment, technologies and/or services
- 224 Participants**
GM 177; GME 47
Ship owners, ports, terminals, shipyards, and the Seaway

**Green Marine International Members List as of July 30, 2026*

GREEN MARINE INTERNATIONAL - STRATEGIC PLAN



Mission

Advancing sustainability in the maritime industry through a voluntary certification program that drives continual improvement.



Vision

Serving the maritime industry as a worldwide leader, charting the course to sustainability.



Core values



Collaboration



Integrity



Commitment

GREEN MARINE INTERNATIONAL – VALUE PROPOSITION



ROADMAP AND ACTION PLAN

Annual benchmarking based on a common standard and concrete actions;
External verification bolsters the program's **rigor and credibility**



RECOGNITION AND VISIBILITY

Maintaining **social acceptability** and enhancing reputational capital;
A suite of **communication tools** to amplify engagement with stakeholders.



UNIQUE NETWORK

The program is developed based on a collaborative approach, in **partnership with an extensive network** of environmental groups, government agencies and academic experts.



ADDED VALUE

A **cost-effective way** to initiate a sustainable development process validated by a third party;
Can allow access to **financial incentives**.

PROGRAM SCOPE - PERFORMANCE INDICATORS



AIR EMISSIONS -
GREENHOUSE GASES



AIR EMISSIONS - NOX



AIR EMISSIONS - SOX &
PM



AQUATIC ECOSYSTEMS



AQUATIC INVASIVE
SPECIES



COMMUNITY IMPACTS



COMMUNITY RELATIONS



DRY BULK HANDLING
AND STORAGE



ENVIRONMENTAL
LEADERSHIP



OILY DISCHARGE



SHIP RECYCLING



SPILL PREVENTION AND
STORMWATER
MANAGEMENT



VIEW THE PIs



SURFACE TREATMENTS
AND COATINGS



UNDERWATER NOISE



WASTE MANAGEMENT

 Ship owners	 Ports & Seaway
 Terminals	 Shipyards

PERFORMANCE INDICATOR FRAMEWORK



PERFORMANCE INDICATOR DEVELOPMENT

Each year, select PIs are reviewed based on the collaborative approach at the heart of Green Marine to maintain criteria beyond regulation and to keep pace with latest best practices and technologies.

WORKGROUPS

Late August – Early October

Ad-hoc to review or develop specific program indicators, includes **subject matter experts** among all members



TECHNICAL COMMITTEES

Early November

Participants review and recommend annual updates to performance indicators



ADVISORY COMMITTEES

December – January

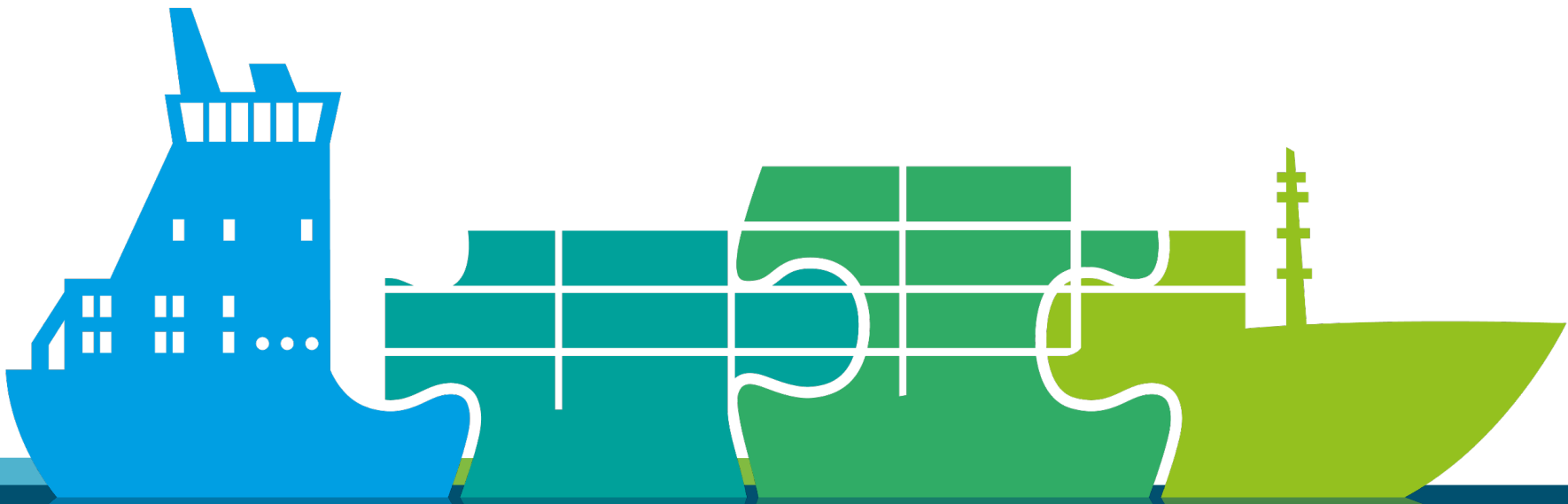
Direct program revision and development priorities, includes all four member categories: participant, supporter, partner and association; and a verifier.



BOARD OF DIRECTORS

~ February

Participants executive leadership



ANNUAL CERTIFICATION PROCESS



ANNUAL SELF-EVALUATION



Online **Smart Guide** tool for participants and verifiers
Due March 15

EXTERNAL VERIFICATION



Verification every 2 years by an accredited external verifier
Due May 1

PUBLICATION OF THE RESULTS



Annual Performance Report released at **GreenTech**
In June

CONTINUAL IMPROVEMENT

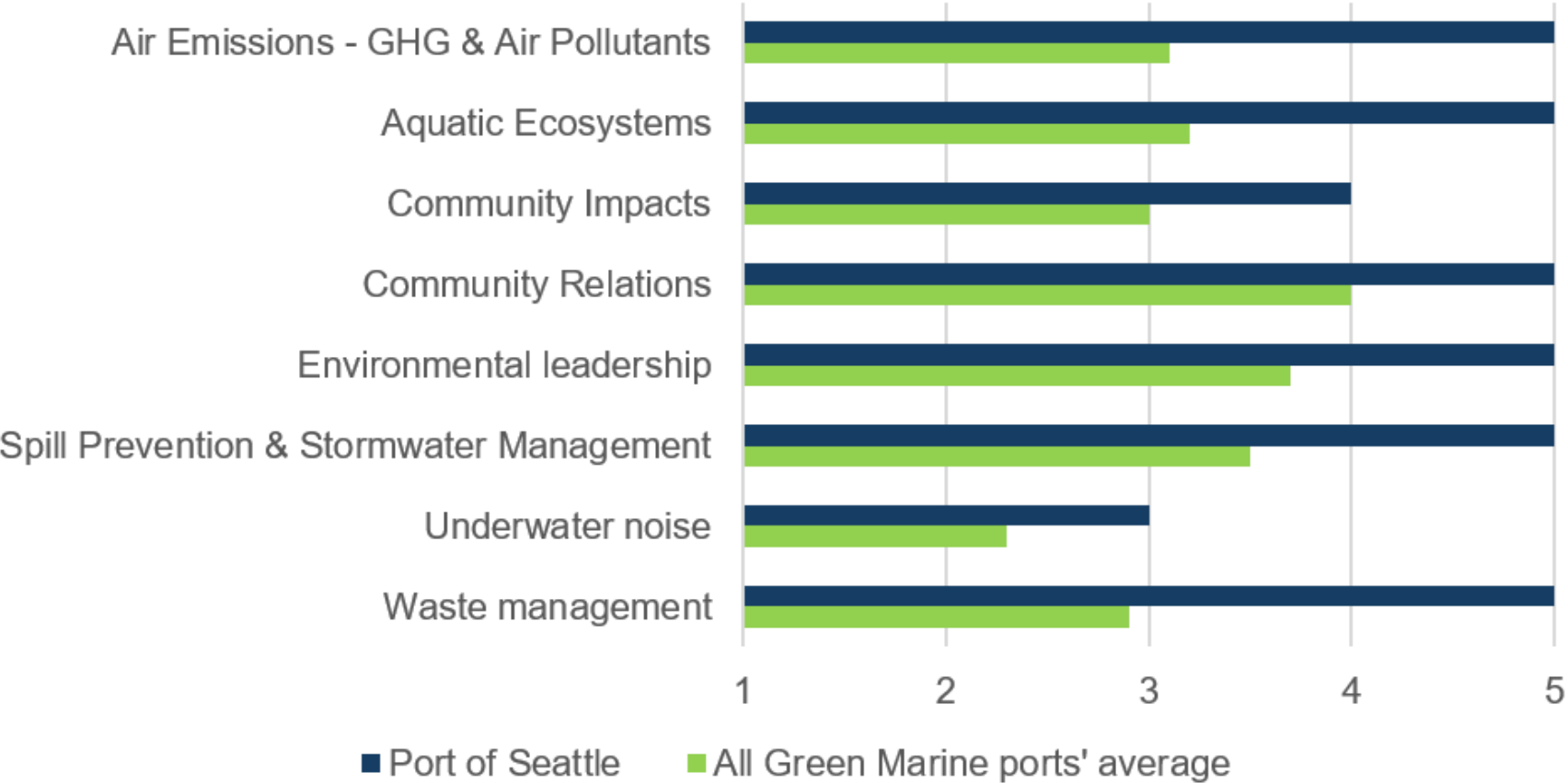


To **become** certified: achieve at least one level 2 in the 1st year;
To **maintain** certification: continual improvement of one level each year until all applicable indicators $\geq$ level 2

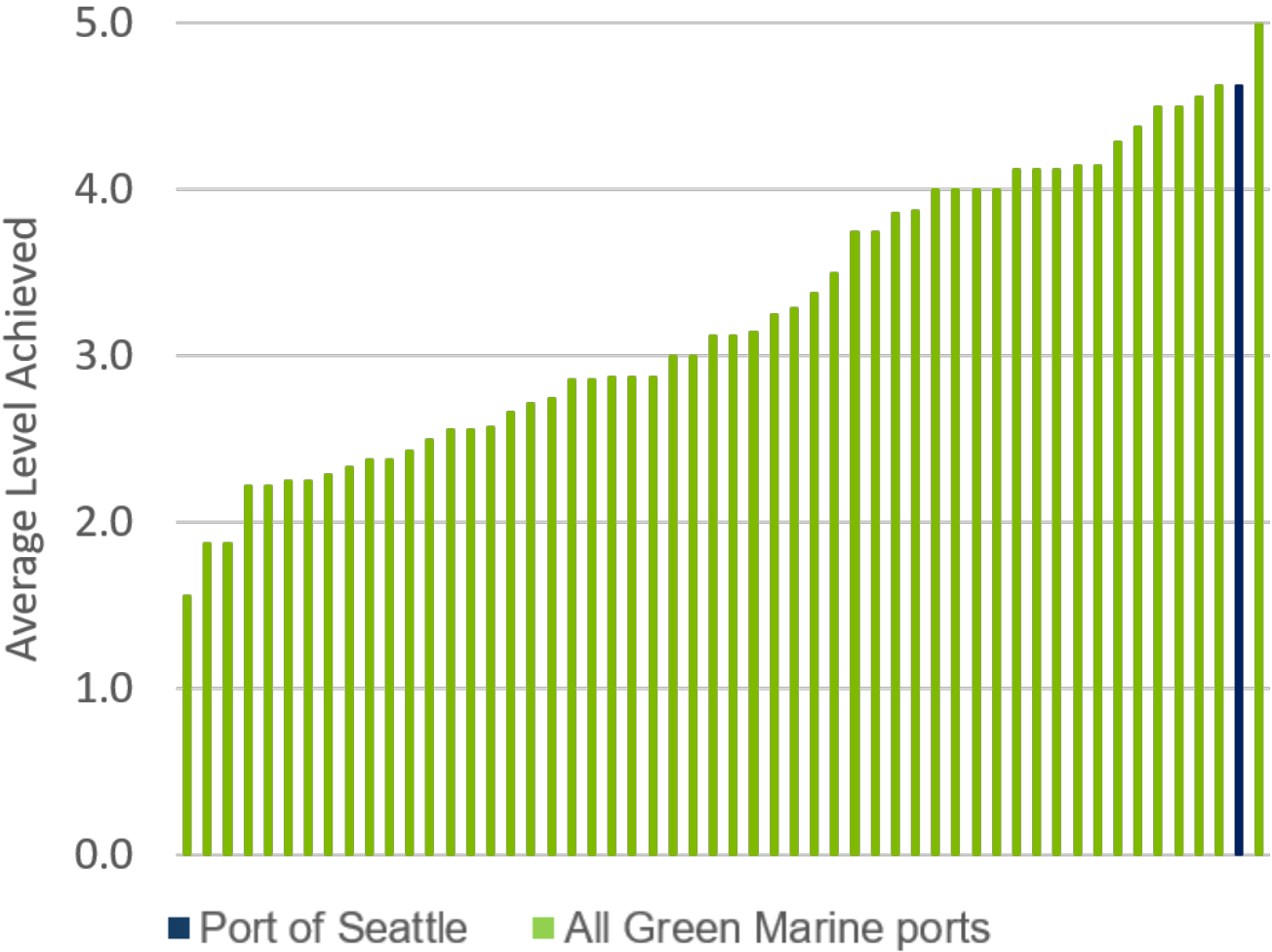
CERTIFICATION



2025 PORT OF SEATTLE RESULTS



2025 PORT OF SEATTLE RESULTS



An average of 4.6 places the Port of Seattle in the top 3 of 54 certified ports

A SUSTAINED RECORD OF LEADERSHIP

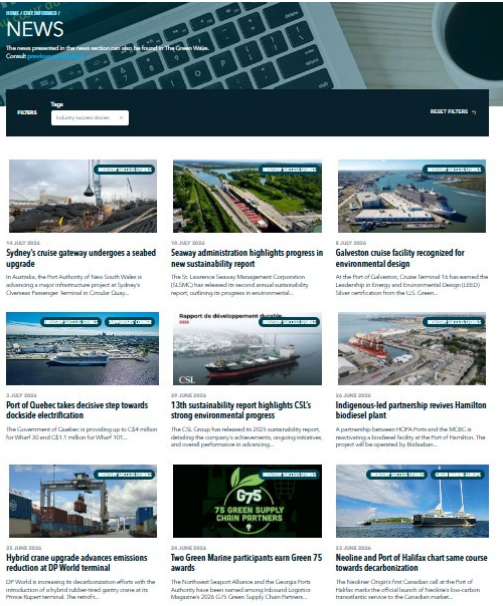
Port of Seattle Performance 2013-2025

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Air Emissions - GHG & Air Pollutants	3	3	3	4	5	5	5	5	5	5	5	5	5
Aquatic Ecosystems												5	5
Community Impacts	5	5	2	5	3	4	5	5	5	5	5	4	4
Community Relations										5	5	5	5
Environmental Leadership	5	5	5	5	5	5	5	5	5	5	5	5	5
Spill Prevention & Stormwater Management	4	4	2	4	3	4	5	5	5	5	5	5	5
Underwater Noise						2	2	2	2	3	3	3	3
Waste Management				4	5	5	5	5	5	5	5	5	5

COMMUNICATION TOOLS

Green Marine loves highlighting inspiring initiatives and celebrating participants' achievements. They are featured in the 'Industry Success Stories' section on our website or in our newsletter — each week, some are the subject of our #FridayGreenFact on LinkedIn!

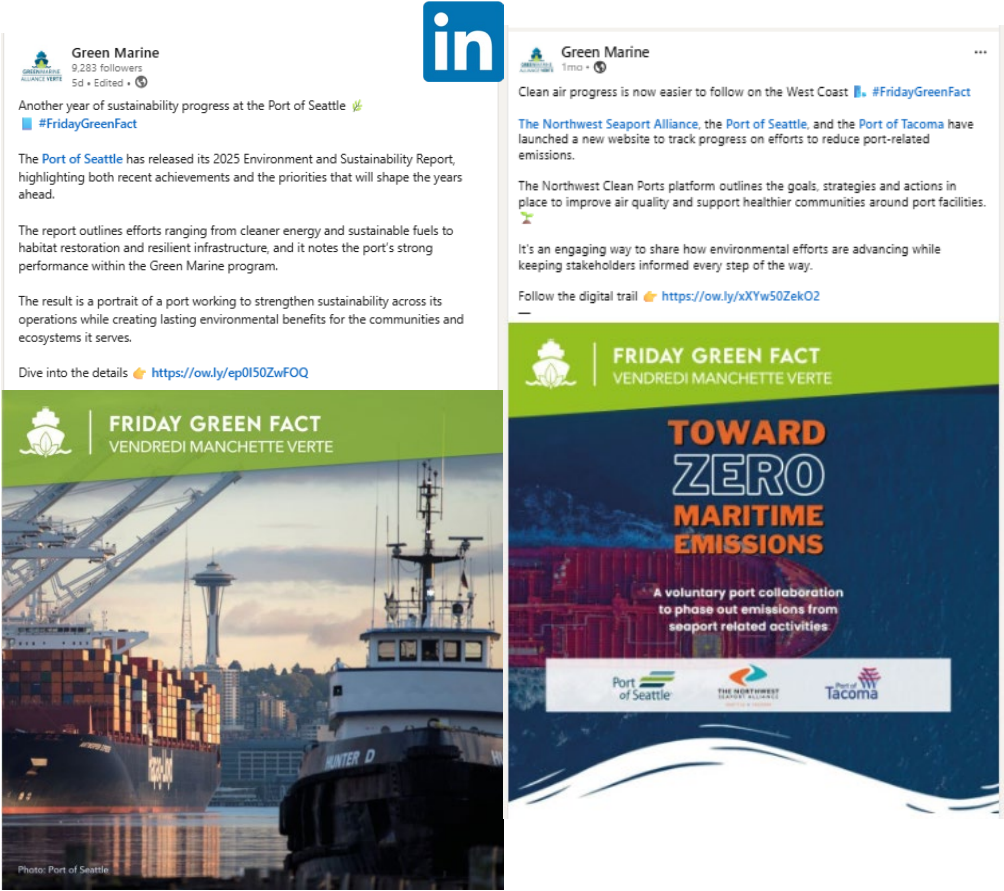
WEBSITE



NEWSLETTER



SOCIAL MEDIA

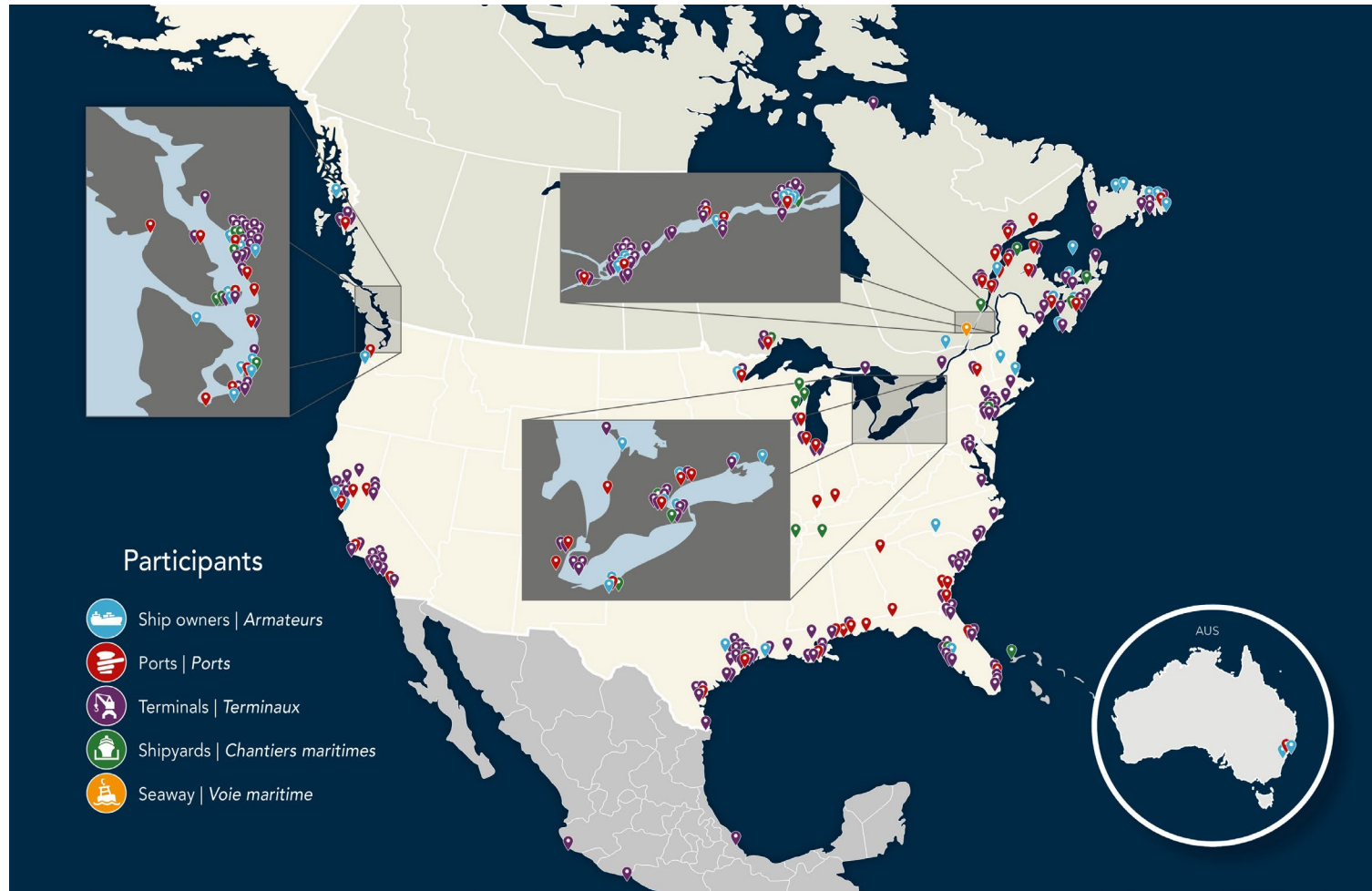


WHY GREEN MARINE CERTIFICATION MATTERS?

- Independent, third-party **credibility**
- The Port of Seattle is not just in compliance, but it's a recognized **leader**. Stephanie Jones Stebbins served on the Board of Directors, 2020 – 2026.
- **Benchmarking** against peer ports and the global industry and a **structured framework for continual improvement**
- Direct alignment with **Century Agenda**
- **First Mover / Legacy Leadership**: In 2013, the Port of Seattle was the first U.S. West Coast participant to achieve Green Marine certification. That "first" is a durable reputational asset.
- **Stakeholder, peer, and customer trust**: Peers certified participants, ex. NWSA, Ports America, SSA Marine, Motive Power Marine, Washington United Terminals, Puget Sound Pilots, and FRS Clipper, share the same goals, language, and commitments.

END OF PRESENTATION

FROM THE GREAT LAKES REGION TO THROUGHOUT NORTH AMERICA AND BEYOND

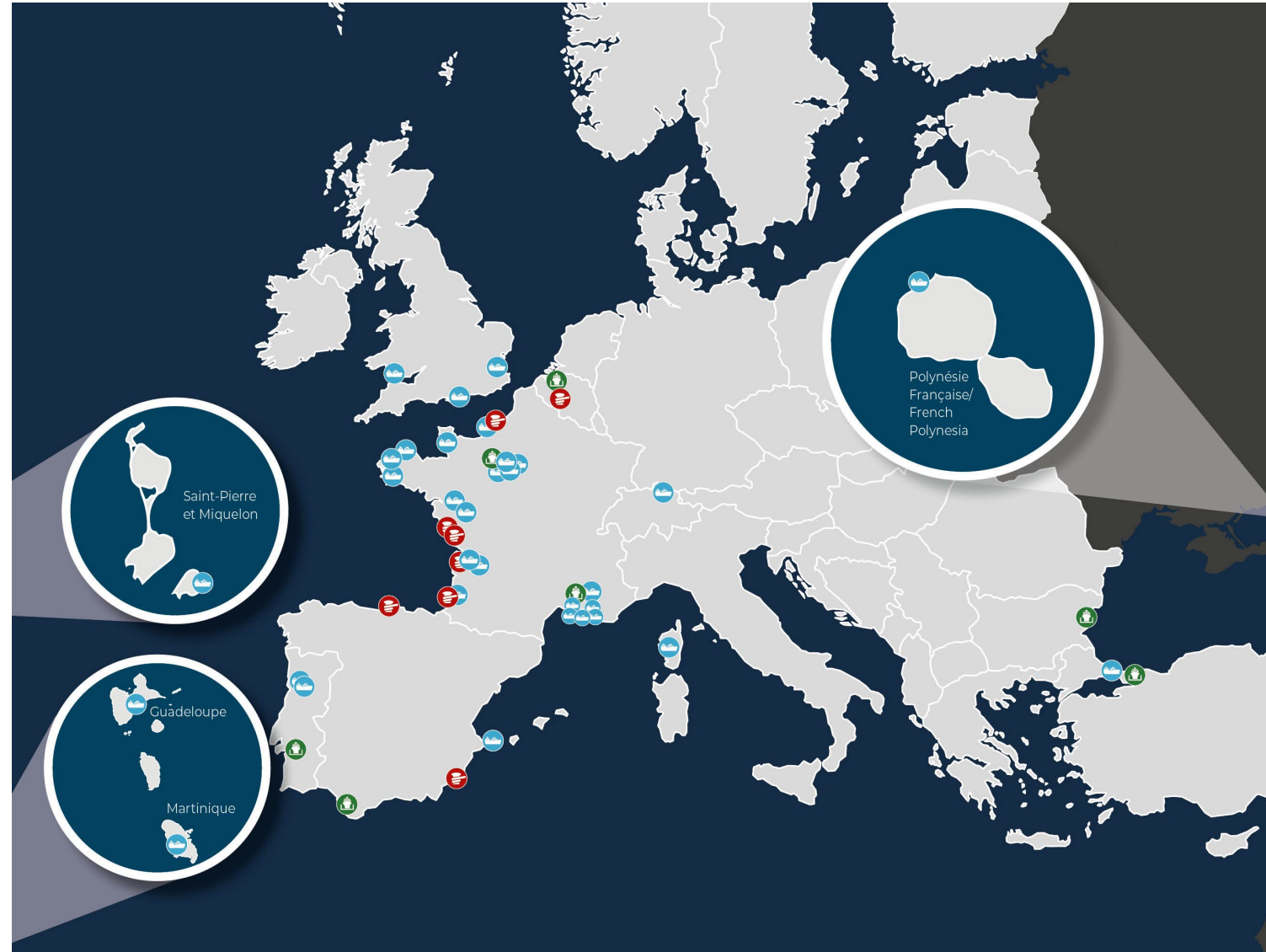


>175
PARTICIPANTS:
U.S., Canada,
Mexico, Bahamas,
Australia

**In 2013, Port of
Seattle was the
first participant on
the US West Coast.**

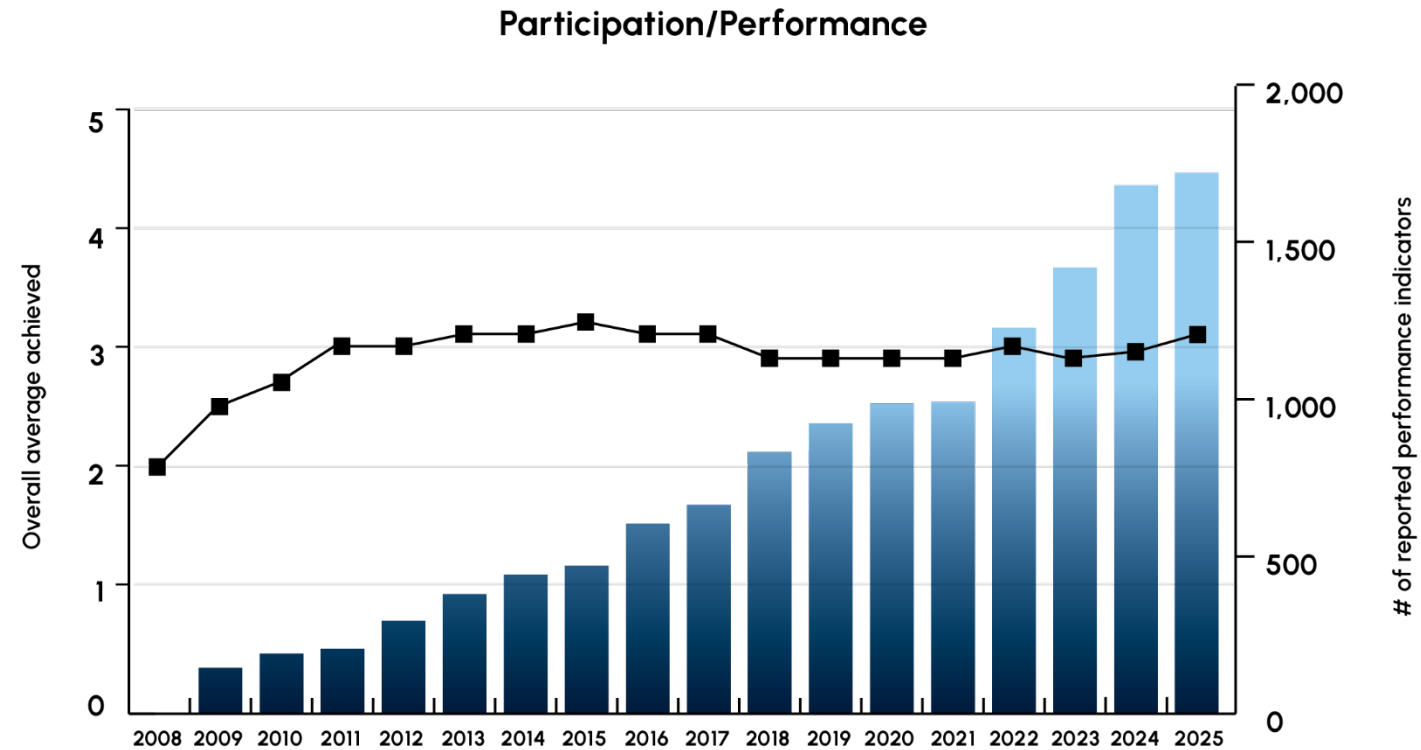
EUROPE: 45+ PARTICIPANTS

- Certification launched in **2020** in collaboration with Surfrider Foundation Europe
- **33** ship owners (an overall fleet of 530+ vessels)
- Addition of **7** shipyards since 2023
- **8** Ports (certification launched in Spring 2026)



2025 RESULTS

- **244** self-evaluations submitted
- **1,690** performance indicators reported
- Overall average increased from 2.9 to **3.1**



2025 PERFORMANCE REPORT

Green Marine's Annual Performance Report presents the latest results achieved by participants, along with an in-depth analysis of year-over-year improvements in their environmental sustainability.

[Read the 2025 performance report](#)

[View the past performance reports](#)



2025-2026 BOARD OF DIRECTORS



JAN ALLMAN

Chief Executive Officer, Fincantieri
Marinette Marine



BJÖRN BIJMA

Executive Operations Officer,
CSL Group



FRÉDÉRIC BOUTEILLE

Chief of Staff to the Deputy CEO,
CMA CGM



ISABELLE BRASSARD

Executive Vice President and Chief
Operating Officer, Fednav



DANIEL DAGENAIS

President & CEO, NEAS



KRISTIN DECAS

Chief Executive Officer, Port of Hueneme



FULVIO FRACASSI

Chief Executive Officer, Halifax Port
Authority



CHRISTOPHE MATHIEU

Chief Executive Officer,
Brittany Ferries



CAPT. MINAS MYRTIDIS

Vice President of Environmental Operations
and Compliance, MSC Cruises



SEAN PIERCE

CEO, Logistec



ERIK VARELA

Executive Director, Illinois International
Port Authority

WHY GREEN MARINE?

The Port of Seattle isn't just a participant: it's a **proven leader that other ports and industry benchmark against.**

- The Port served on the Board of Directors, 2020 - 2026 (the max, two 2-year terms), with Stephanie Jones Stebbins leading as Chair through the transition and establishment of Green Marine International in 2024;
- Track record of **13** years, **first U.S. West Coast** participant certified, sustained **top-tier results**;
- Proof, not promises: independent verification + public reporting = **credibility**
- Leadership has a cost, but so does losing it. The "cons" are the price of staying ahead of the industry, not a reason to fall back.

WHY GREEN MARINE MATTERS

- **Independent, third-party credibility:** in an environment where "greenwashing" accusations are a real reputational risk, an independently verified result is a defensible, third-party-backed answer to anyone who questions the Port's environmental claims.
- The Port of Seattle is not just in compliance, but it's a **recognized leader**: the Port achieved Level 5 (excellence and leadership) across nearly all applicable indicators for 2025.
- **A structured framework for continual improvement:** Green Marine forces discipline: participants must improve year over year across indicators as criteria get more rigorous – this converts "*we care about the environment*" into a measurable, auditable improvement trajectory.
- **Benchmarking against peer ports and the global industry:** Green Marine now spans more than 220 participants across a dozen countries, including 53 ports in the United States and Canada, 1 in Australia, and 8 in Europe, where the ports program just launched. The program also certifies terminals, ship owners, and shipyards.

WHY GREEN MARINE MATTERS

- Direct alignment with **Century Agenda** and existing commitments: Green Marine participation is not an add-on cost center – it's the measurement and accountability layer for goals the Commission has already committed to.
- **First Mover / Legacy Leadership:** The Port of Seattle was the first U.S. West Coast participant to achieve Green Marine certification (2013). That "first" is a durable reputational asset – competitor and peer ports now point to Seattle as the benchmark.
- **Stakeholder, peers, and customer trust:** Green Marine certification is a recognized signal across the maritime industry precisely because of its rigor and third-party verification. Peers certified participants (NWSA, Ports America, SSA Marine, Motive Power Marine, Washington United Terminals, Puget Sound Pilots, and FRS Clipper) share the same goals and speak the same language.

RIGOR REQUIRES INVESTMENT

- **Annual staff effort to document/evaluate/report:** This effort is the Port's existing environmental management discipline. Green Marine channels work already being done into a comparable, externally recognized format. The "cost" is largely reporting overhead on programs the Port runs regardless of certification.
- **Criteria get more rigorous over time:** This prevents complacency and keeps the Port ahead of where regulation will eventually land.
- **Public reporting increases transparency/accountability for weak spots:** Transparency about a few areas needing improvement, delivered inside a track record of Level 5 excellence in almost everything else, is a credibility strength; it's what separates real ESG from a marketing claim. Hiding underperformance is a bigger reputational risk than disclosing it inside a broader story of leadership.

FURTHER GLOBAL REACH

In 2026, Green Marine International is undertaking a second cohort of pilot projects in the **southern hemisphere**.

The newest Green Marine International potential participants are located in:

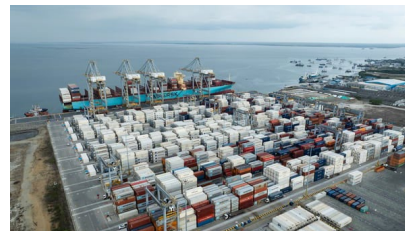
- Argentina
- Brazil
- New Zealand
- Peru
- Ecuador



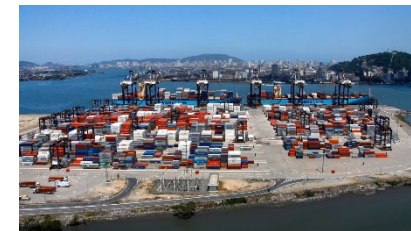
Puerto Bahia Blanca



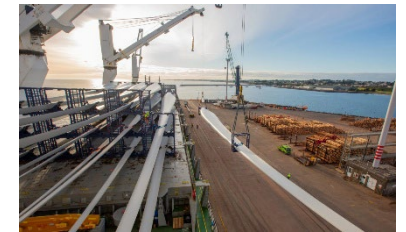
DP World - Callao



DP World - Posorja



DP World - Santos



3 Islands Intermodal

U.N. SUSTAINABLE DEVELOPMENT GOALS

- Study by **Clear Seas** in collaboration with ACPA & Green Marine
- The Green Marine program addresses 25 targets of **11 of the 17 SDGs**
- Green Marine’s newest performance indicator, **Aquatic Ecosystems**, has the **greatest correlation** with SDGs

PERFORMANCE INDICATORS

AIR EMISSIONS - GREENHOUSE GASES



AIR EMISSIONS - NOx



AIR EMISSIONS - SOx & PM



AQUATIC ECOSYSTEMS



AQUATIC INVASIVE SPECIES



COMMUNITY IMPACTS



COMMUNITY RELATIONS



DRY BULK HANDLING AND STORAGE



ENVIRONMENTAL LEADERSHIP



OILY DISCHARGE



SHIP RECYCLING



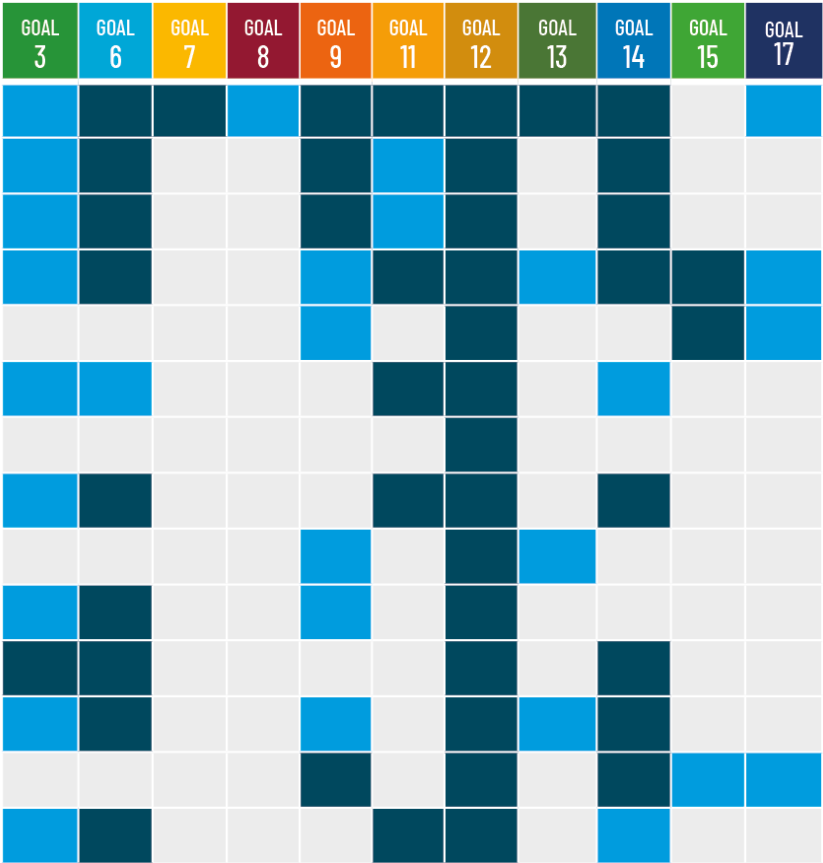
SPILL PREVENTION AND STORMWATER MANAGEMENT



UNDERWATER NOISE



WASTE MANAGEMENT



CONCLUSION: INVESTING IN OUR TRANSITION

Green Marine’s membership is a **smart investment**. Annual fees are calibrated to each organization’s size, so the **cost of credibility never outweighs the value** it brings. The grid presents a transparent, tiered fee structure, ensuring the participants know exactly what to expect.



FAIR & SCALABLE

A fee structure that grows with your organization. Annual fees are calibrated by fleet size, revenue, or workforce, so every participant, large or small, pays a proportionate share.



PREDICTABLE INVESTMENT

One clear, no-surprise annual fee, ranging from \$4,700 to \$20,500. Any increases are announced in advance and capped at a level close to the annual inflation rate.



TAILORED TO OUR SECTOR

Five sector-specific fee tracks: ship owners, port authorities, terminals, shipyards, and Seaway members each follow a schedule reflecting their industry's realities.



STRONG RETURN ON INVESTMENT

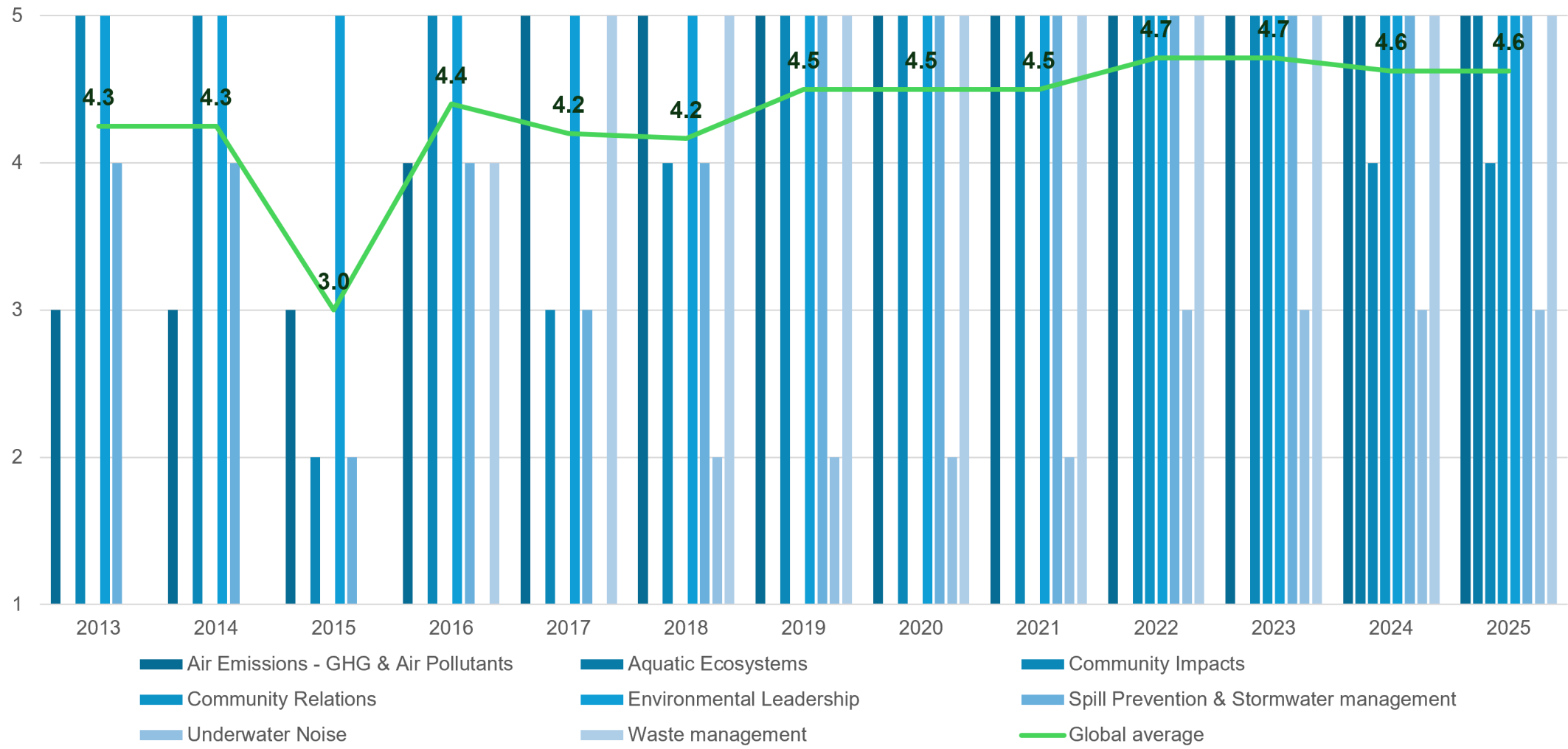
A modest cost for third-party-validated credibility. Your fee funds a detailed framework, tailored sector benchmarking tools, and access to an 18+ year network of experience and growth.



EXTERNAL VERIFICATION COSTS

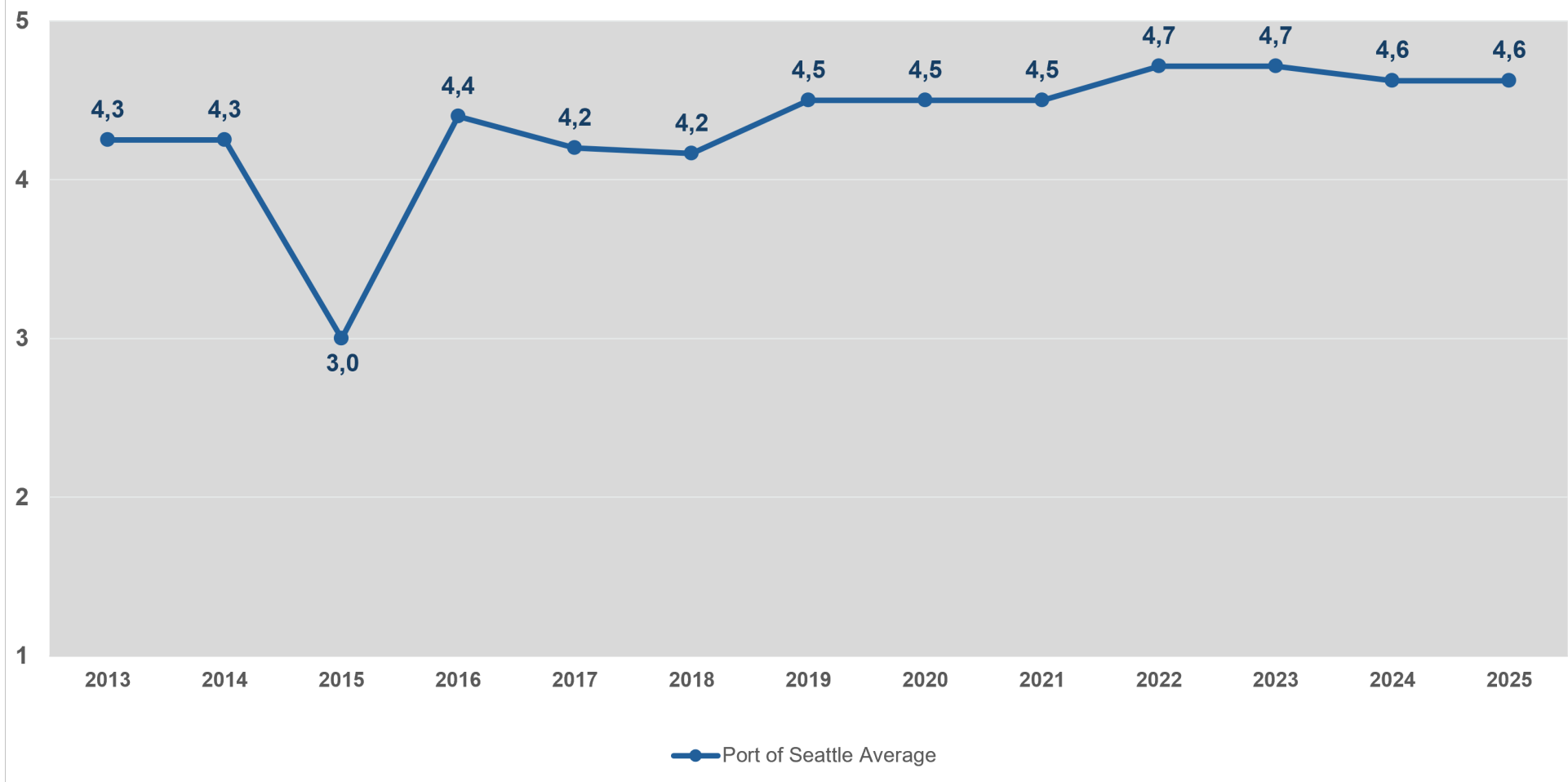
The only other cost is third-party verification, required once every two years. With Green Marine’s free-market approach, participants can request quotes from any accredited verifier, ensuring competitive pricing and full flexibility.

PORT OF SEATTLE LONGITUDINAL RESULTS



A SUSTAINED RECORD OF LEADERSHIP

Port of Seattle Performance 2013-2025



**COMMISSION
AGENDA MEMORANDUM**

Item No. 11b

BRIEFING ITEM

Date of Meeting September 22, 2026

DATE: September 2, 2026

TO: Stephen P. Metruck, Executive Director

FROM: Chris Wimsatt, Chief Financial Officer
Michael Tong, Director, Corporate Budget

SUBJECT: 2027 Central Services Preliminary Budget and Portwide Rollup Briefing

EXECUTIVE SUMMARY

The purpose of this briefing is to discuss with the Commission the 2027 preliminary operating and capital budgets for Central Services and to provide a Portwide budget rollup to the Commission.

Staff would also like to seek the Commission's feedback on the preliminary Central Services operating and capital budgets. This is one of a series of budget briefings to the Commission starting from July. Staff also plans to discuss the three operating division operating and capital budgets on October 13, 2026 and the Tax Levy and Draft Plan of Finance on October 27, 2026 prior to the formal Commission reviews and approvals of the 2027 budget in November.

ATTACHMENTS TO THIS BRIEFING

- (1) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

July 14, 2026 – 2027 Budget Development Briefing

June 11, 2026 – Commission Budget Study Session on Commission Priorities

March 12, 2026 – Commission Retreat on Resource Conscious & Levy Scenario



Item No. 11b_supp

Date of Meeting: September 22, 2026

Proposed 2027 Central Services Budget and Preliminary Port-wide Roll-up Commission Briefing

9/22/2026

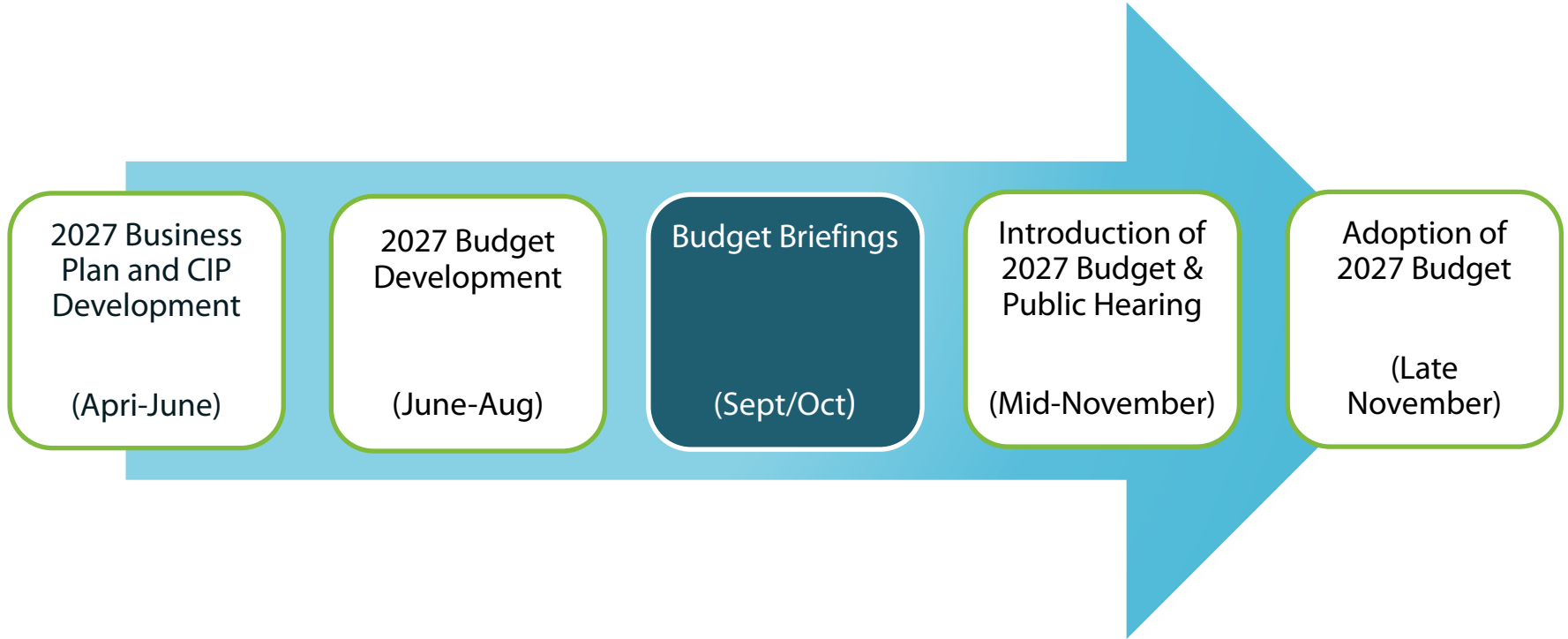




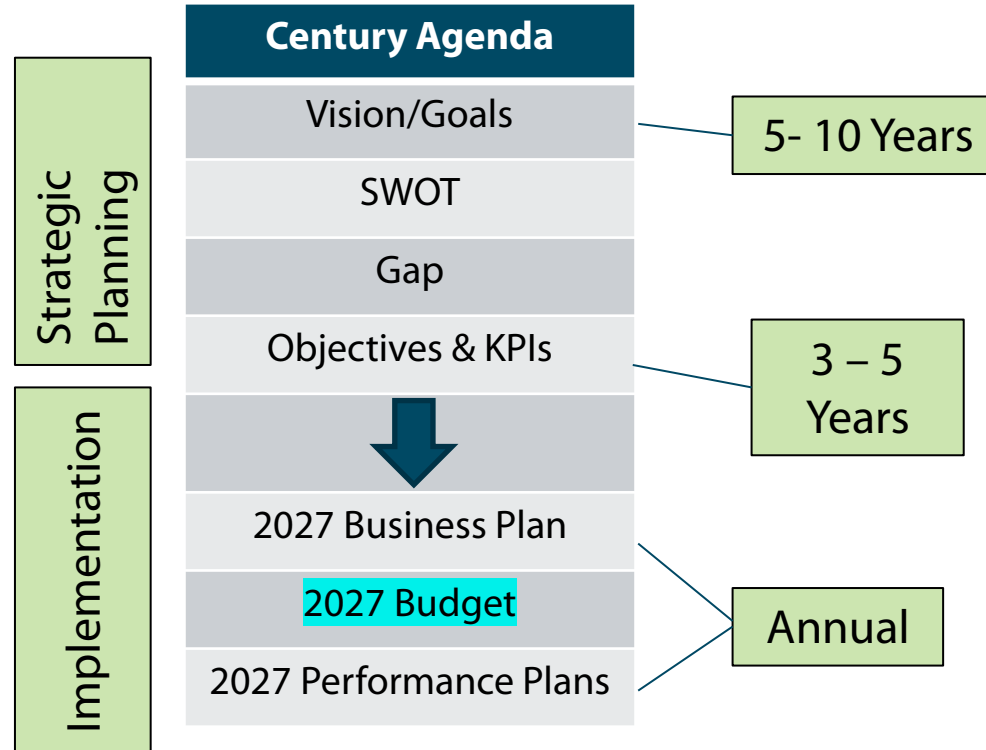
Overview

- 2027 Budget Timeline
- Strategy to Budget Process
- Portwide Budget Rollup
- Central Services Operating budget
- Equity in Budgeting
- Community Programs Summary
- Central Services CIP
- Remaining Budget Schedule

2027 Budget Timeline



Strategy to Budget Process



Environmental Scan Summary



Unprecedented **political and economic uncertainty**



Effects of **trade, immigration and other policy actions**



Post pandemic **growth moderating**



Multiple years of **rapid expense growth**



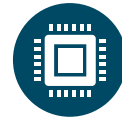
Federal funding reductions and weakening operating revenues



Cuts in federal climate change programs and funding



Impact of **increased inflation due to tariffs** on operating, capital and environmental costs

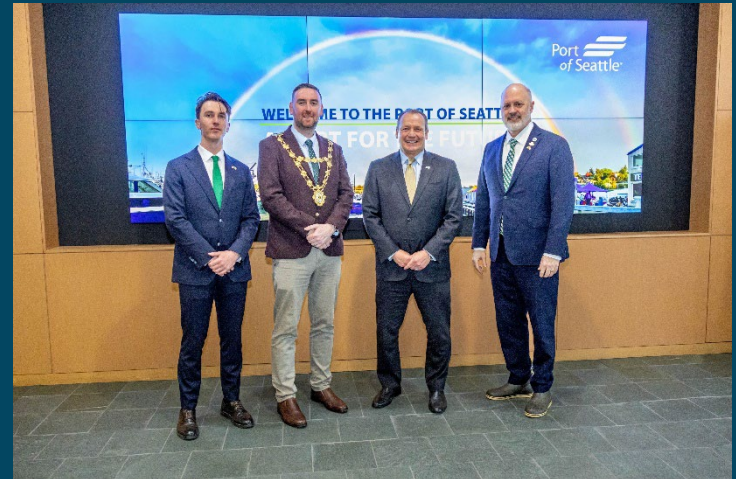


Rapid technological advances including Artificial Intelligence and growing sophistication of cyber threats

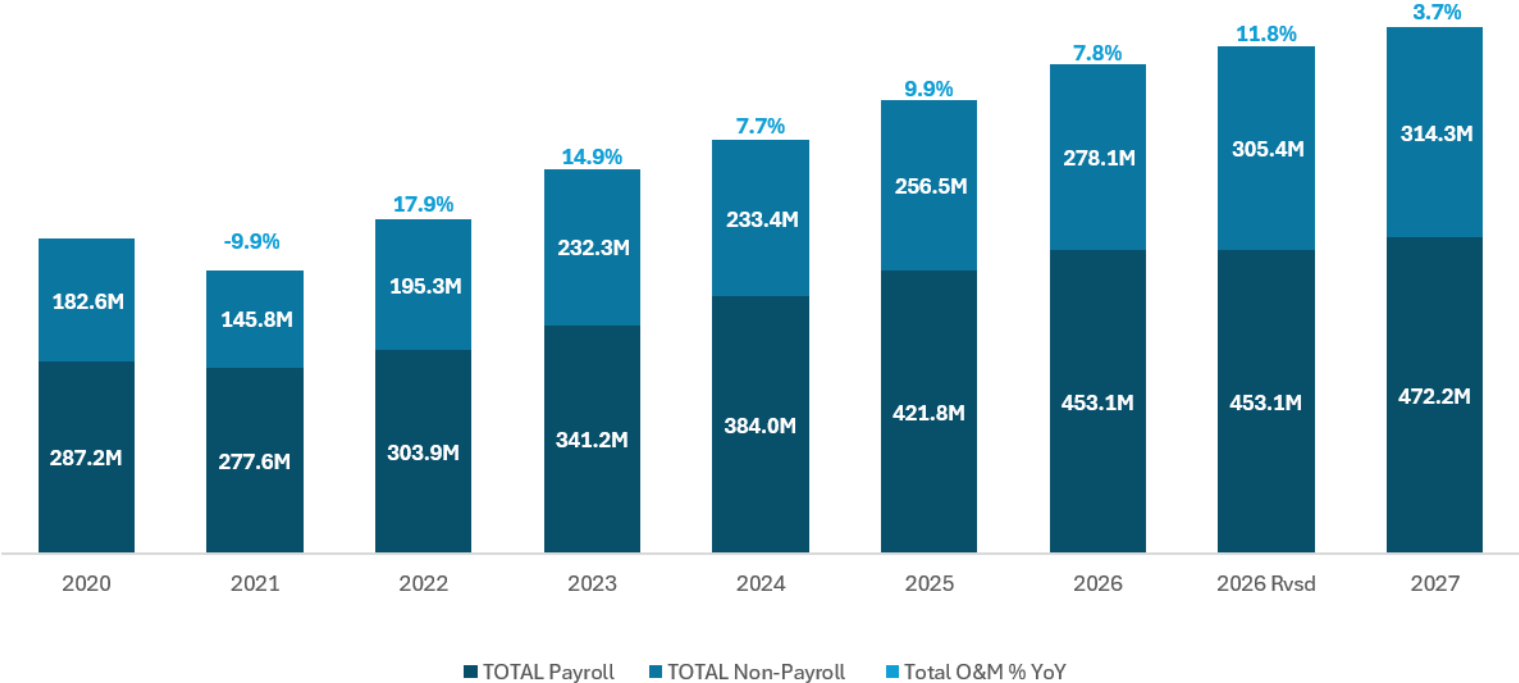
2027 Budget Strategies

- Review and prioritize operational needs to **limit expense growth**
- Review the needs to fill **all the vacant positions**
- **Limit new FTEs** to roles that support revenue growth, economic development, or efficiency measures
- Assess **affordability of capital plans** considering increased inflation and revenue risks
- Strengthen the **focus on sustainability, adaptability and resiliency** in spending and business plans

2027 Port-wide Budget Rollup



2020-2027 Port-wide O&M Budget Summary



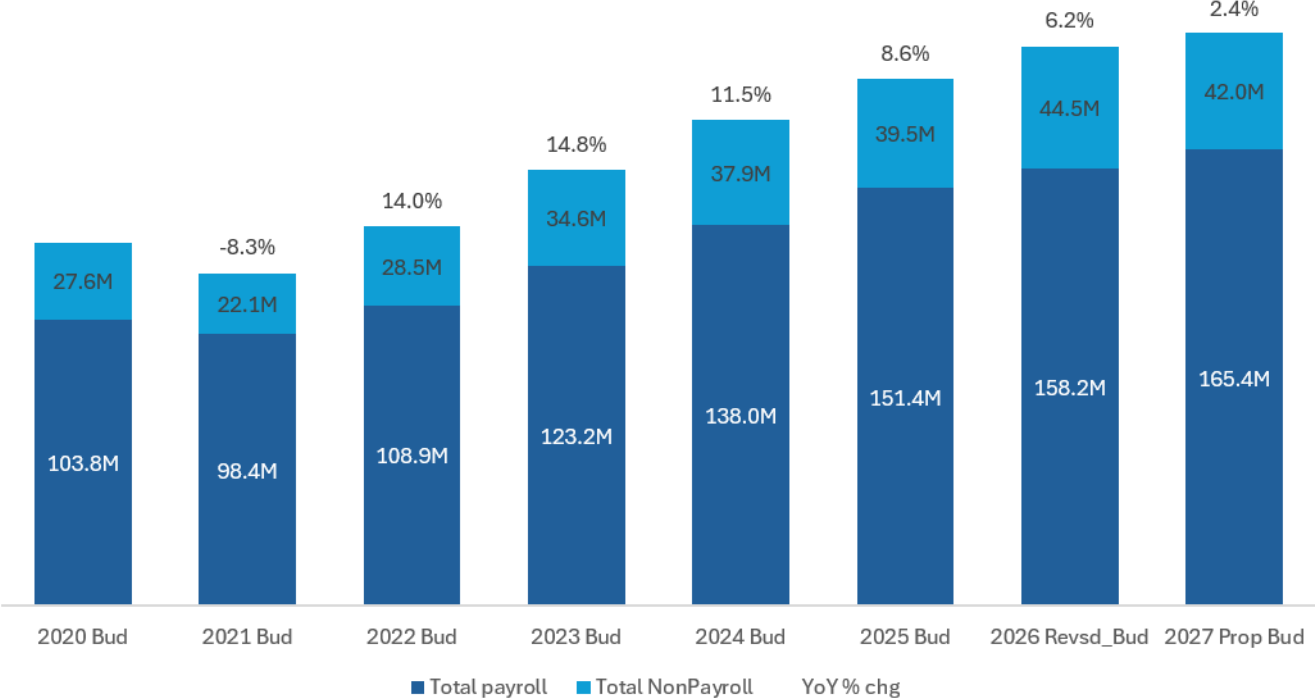
2027 Port-wide O&M Budget Summary

	2023	2024	2025	2026	2026	2027	Inc/(Dec) from 2026	
(in \$000's)	Actuals	Actuals	Actuals	Budget	Revsd_Bud	Proposed Budget	Revsd_Bud	% Change
Total Payroll Costs (with Capital)	358,865	424,933	458,710	504,483	504,483	517,400	12,917	2.6%
Total Non-Payroll Costs (with Capital)	266,046	312,567	304,923	339,736	367,079	358,268	(8,810)	-2.4%
Total Costs (with Capital)	624,911	737,500	763,632	844,218	871,561	875,668	4,107	0.5%
Sal/Wage-Cap/Govt/Envrs Proj	(32,448)	(33,047)	(39,024)	(51,431)	(51,431)	(45,185)	6,246	-12.1%
Dept Expense Charged - CapProj	697	785	2,448	0	0	0	0	0.0%
Cap/Govt/Envrs Projects OH	(16,799)	(20,243)	(20,053)	(19,438)	(19,438)	(15,974)	3,464	-17.8%
OnsiteConsult-Cap/Gov/Env Proj	(17,754)	(24,429)	(25,356)	(32,077)	(32,077)	(17,427)	14,650	-45.7%
Total Charges to Capital	(66,304)	(76,934)	(81,985)	(102,946)	(102,946)	(78,586)	24,360	-23.7%
Total Payroll Expenses	326,417	391,886	419,686	453,052	453,052	472,215	19,163	4.2%
Non-Payroll O&M Expense	224,481	260,755	252,626	278,090	305,432	314,374	8,943	2.9%
O&M Expenses	550,899	652,642	672,311	731,141	758,484	786,589	28,106	3.7%
GASB 87_96_103 Expenses	14,128	6,731	4,698	35,864	8,521	8,795	274	3.2%
Total Operating Exp GASB Comparable Bas	565,026	659,373	677,009	767,005	767,004	795,384	28,379	3.7%

Central Services Proposed 2027 Budget



2020-2027 Central Services O&M Budget Summary



2027 Central Services Budget Results

- **Central Services Budget Target**

- Target: 4.5% Increase compared to the 2026 revised budget
- Current: 2.4% higher than the 2026 revised budget

- **Payroll & Non-Payroll Budget Summary**

- Payroll increase \$7.2M or 4.5% mainly due to
 - Pay & benefit increase
 - Partially offset by a reduction of 39 filled and unfilled FTEs
- Non-Payroll decrease \$2.5M or 5.6% mainly due to:
 - Lower On-site Consultants cost from Engineering (\$9.8M)
 - One-time items in the 2026 revised budget (\$3.3M)
 - Partially offset by contractual increases and unbudgeted/under budget items in the 2026 revised budget

Modified ZBB Summary by Dept

Org	Dept Name	FY26 Budget	FY27 Budget	Change from FY26 Budget
O1100	Executive Office	786,160	740,586	(45,574)
O1200	Commission Office	568,733	566,333	(2,400)
O1310	Legal	1,914,878	1,800,165	(114,713)
O1330	Risk Management	7,377,834	7,383,834	6,000
O1400	External Relations	5,818,750	5,657,076	(157,374)
O1460	OEDI	758,035	626,835	(131,200)
O1500	Business Intelligence	553,566	490,866	(62,700)
O1600	Engineering	24,758,947	23,939,229	(819,718)
O1700	PCS	1,562,079	1,535,039	(27,040)
O1800	Human Resources	2,225,519	2,158,168	(67,351)
O1810	Labor Relations	69,274	64,716	(4,558)
O1900	ICT	15,029,951	15,788,277	758,326
O1980	Info Sec	1,552,912	1,552,912	-
O2100	Finance & Budget	243,746	201,219	(42,527)
O2200	AFR	997,941	1,015,301	17,360
O2280	Internal Audit	69,980	81,180	11,200
O2400	OSI	188,804	183,804	(5,000)
O2700	E&S COE	1,099,490	929,490	(170,000)
O4300	Police	4,924,758	7,214,064	2,289,306
O9200	CPO	650,200	578,855	(71,345)
Grand Total		71,151,556	72,507,948	1,360,693

ICT (1900)

- Microsoft Enterprise: increases by \$528K driven primarily by higher costs in the Enterprise Agreement, Azure consumables, and Defender overages.
- Checkpoint: increases by \$216K

Police (4300)

- \$1.8M increase in Outside Services is primarily driven by SCORE (Jail) at \$1.2M, City of SeaTac Court fees at \$580K, and Public Defender costs at \$75K.

***Excluding ICT and Police, the total budget reduction is \$1,687K**

2027 Central Services Payroll Budget

- COLA @ 2.0% and average Pay for Performance increase @ 1.76% for non-rep employees
- Represented employees based on union contracts
- Benefits cost based on HR Budget Guidelines
- Annualized payroll for the new FTEs in 2026 budget
- Added the mid-year approved new FTEs to the baseline
- Eliminated 39 FTEs
- Used 2.0% vacancy factor, instead of 4.0% in the 2026 budget
- Payroll budget is pre-populated into the budget system

2027 Central Services FTEs Summary

Description	FTEs	Notes
2026 Approved Budget	985.0	
Changes in 2026:		
Mid-Year Approvals	1.5	1.0 Police, 0.50 Ext Rel
Eliminated	-3.6	1.0 CPO, 1.0 Commission, 1.0 LR, 0.55 LTD EDI
Transfer	-5.0	5.0 WFD transferred to ED
2026 Baseline	977.9	
2027 Budget Changes:		
Transfer	0.0	
Eliminated	-39.0	23.0 ENG, 12.0 PCS, 4.0 CPO
New FTEs Approved	2.0	2.0 Police
Repurposed	-2.0	2.0 Police
Net Change	-39.0	
2027 Proposed FTEs	938.9	

Note: 39.0 FTEs to be eliminated in 2027 include filled and unfilled positions. Police will repurpose 2 vacant to accommodate 2 new approved FTEs

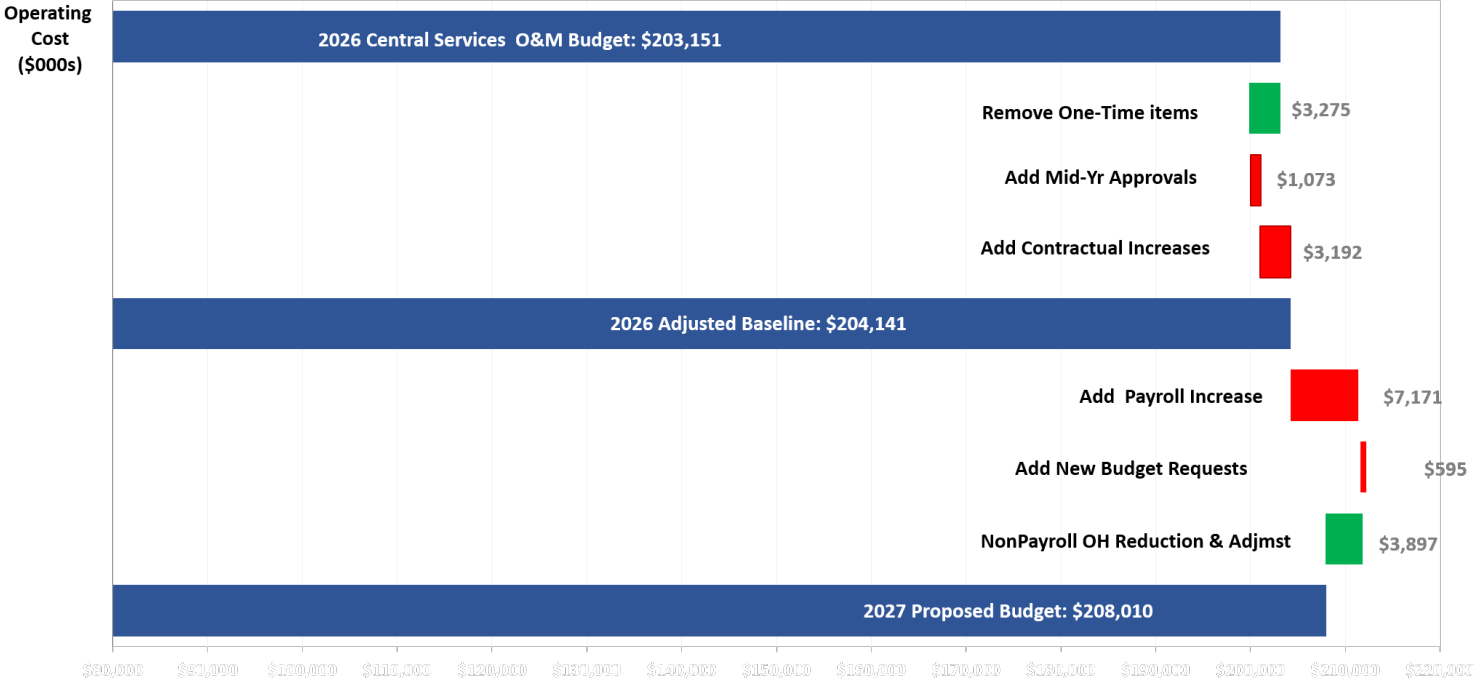


2027 Central Services Non-Payroll Budget

- Baseline Target: Based on the Modified ZBB Results
- Exceptions:
 - Property Rentals
 - Insurance
 - Utilities
 - Worker's Comp & OPEB
- Budget Adjustments Include:
 - One-Time Items in the 2026 budget
 - Mid-Year Approvals
 - Contractual Increases
 - Other Budget Adjustments



2027 Operating Expense Budget Changes



2027 Baseline Budget Summary

Description (in \$000s)	Amount	%	Notes
2026 Revised Budget for Central Services	203,151		2026 Revised Budget for Central Services
Minus: 2026 One-Time Items	(3,275)	-1.6%	Exclude the one-time items
Add: Mid-Year Approvals	1,073	0.5%	Include 2026 mid-year approvals
Add: Contractual Increase	3,192	1.6%	Include 2027 planned contractual increases
Adjusted 2026 Baseline Budget	204,141	0.5%	Change from 2026 revised budget
Payroll Increase	7,171	3.5%	As a percentage of the 2026 revised budget
Non-Payroll Change	(2,480)	-1.2%	As a percentage of the 2026 revised budget
2027 Baseline Budget	208,010	2.3%	As a percentage of the 2026 revised budget
Change from Adjusted 2026 Baseline	3,869	1.9%	
Change from 2026 Revised Budget	4,859	2.4%	

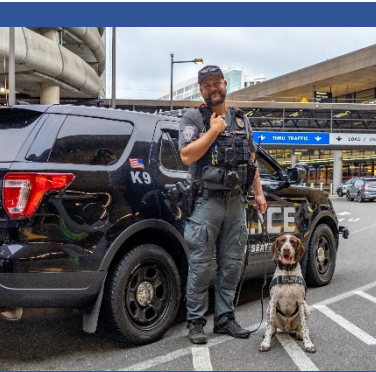
2027 Baseline Budget Summary

	2023	2024	2025	2026	2026	2027	Inc/(Dec) from 2026	
(in \$000's)	Actuals	Actuals	Actuals	Budget	Revsd_Bud	Proposed Budget	Revsd_Bud	% Change
							\$ Change	% Change
Total Payroll Costs (with Capital)	132,947	158,211	169,494	187,393	187,393	190,679	3,286	1.8%
Total Non-Payroll Costs (with Capital)	53,966	87,678	40,843	68,886	71,870	61,500	(10,369)	-14.4%
Total Costs (with Capital)	186,914	245,889	210,337	256,279	259,263	252,179	(7,083)	-2.7%
Sal/Wage-Cap/Govt/Envrs Proj	(19,886)	(20,441)	(22,296)	(29,160)	(29,160)	(25,276)	3,885	-13.3%
Cap/Govt/Envrs Projects OH	(8,731)	(10,438)	(10,124)	(9,470)	(9,470)	(8,538)	931	-9.8%
OnsiteConsult-Cap/Gov/Env Proj	(10,409)	(13,563)	(14,893)	(17,925)	(17,925)	(10,967)	6,958	-38.8%
Total Charges to Capital	(39,025)	(44,296)	(47,312)	(56,555)	(56,555)	(44,781)	11,774	-20.8%
Total Payroll Expenses	113,061	137,769	147,198	158,232	158,232	165,403	7,171	4.5%
Non-Payroll O&M Expense	34,827	63,824	15,827	41,492	44,475	41,995	(2,480)	-5.6%
O&M Expenses	147,888	201,593	163,025	199,724	202,708	207,398	4,691	2.3%
GASB 87_96_103 Expenses	3,003	3,227	1,131	4,983	443	611	169	38.1%
Total Operating Exp GASB Comparable Basis	150,892	204,820	164,156	204,707	203,151	208,010	4,859	2.4%

2027 New Budget Requests Summary

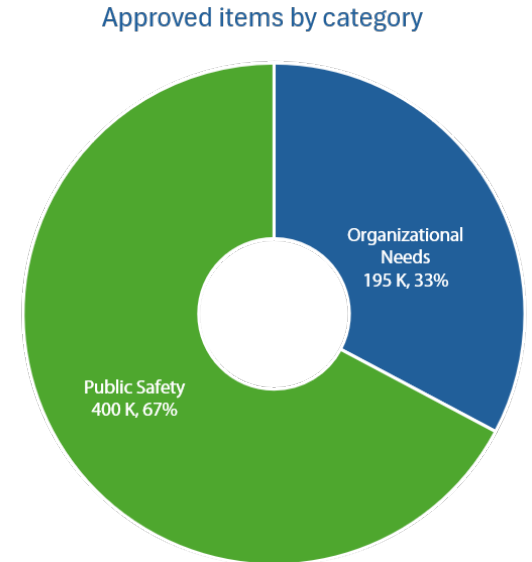
- Total # of Requests: 23 items
- Total Full Year Amount: \$1,467K
- Total Amount based on start date: \$1,433K
- Total FTE-Related Amount: \$354K
 - (for 2.0 new proposed FTEs: Jan & Apr start date)
- Total Non-FTE Amount: \$1,078K
- None of the request can be capitalized
- Approved \$595K for ICT & Police

Dept Name	FTE	FY Cost	Based on start date	Approved Amount	Comments
ICT	0.0	95,000	95,000	95,000	
Police	2.0	1,349,877	1,315,733	500,000	Repurpose vacant
Internal Audit	0.0	22,559	22,559	0	
Grand Total	2.0	1,467,436	1,433,292	595,000	



Approved 2027 Division New Budget Request Items

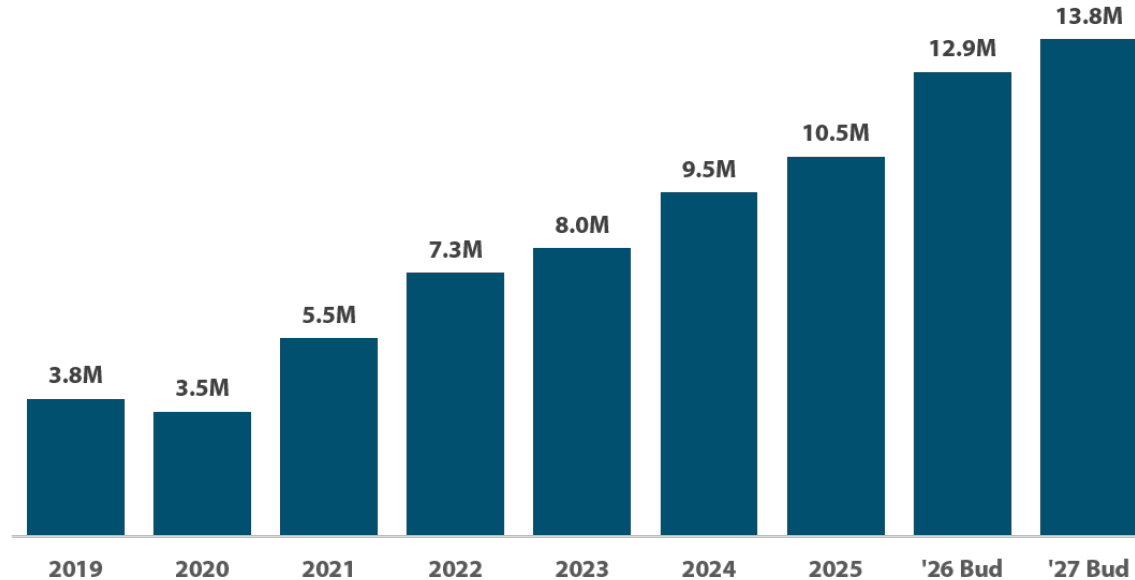
- Data Modernization (\$50K)
- Group Policy Management (GPO) Tool (\$45K)
- Public Defenders Office and King County Jail Contract (\$185K)
- Computer Replacement (\$100K)
- Police Portable Radios (\$90K)
- Mental Health and Wellness Program (\$71K)
- Marine Patrol Unit Dive Equipment (\$21K)
- Other Police items (\$33K)
- Police Specialist - Public Disclosure (\$0)
(repurpose existing vacant position)
- Video Technology Manager (\$0)
(repurpose existing vacant position)



ESAP/Budgeting With Equity Summary



Central Services Equity Spending Trend



*WFD moved to EDD when comparing to prior year presentations

2027 Central Services Equity Spending Highlights

- South King and Port Communities Fund (\$2,398K)
 - Total SKPCF is \$2,648K if including \$250K in Diversity in Contracting in EDD
- Duwamish Valley Community Equity Program (\$626K)
- Veteran's Program (\$378K)
- High School Internship Program (\$299K)
- Language Access Fund (\$134K)
- Clean Fuel Policy Advocacy and Coalition Building (\$100K)
- Anti-Human Trafficking (\$83K)
- Equity Assessment Implementation (\$50K)*
- Equity Index (\$50K)
- Employee Resource Groups (\$32K)

Equity Impact from Budget Reductions

- With resources conscious efforts and expense targets for 2027, our equity in budgeting effort this year included analyzing impacts related to our workforce, communities, contracting, and operations for any reductions of \$10K or more.
- Most of the budget reductions have no impacts on equity.
- There are equity impacts on some departments from the budget reductions.

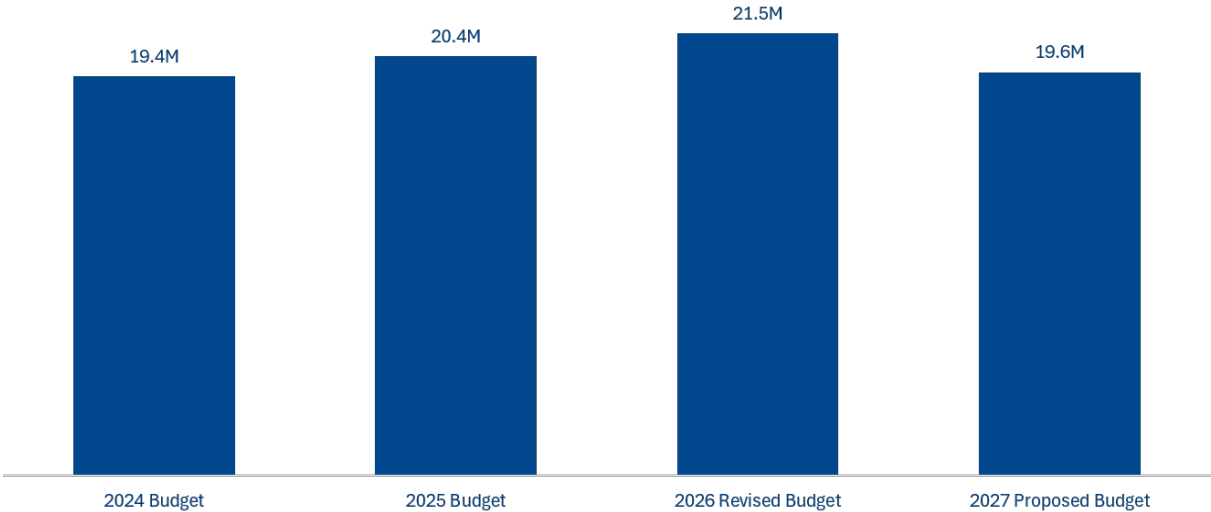
Examples are:

- Engineering: significant reductions in outside consultants and training budget will increase operational burden and risk
- AFR: temp agency services reduction (\$34K) will increase operational burden and risk
- PCS: development & training budget reduction (\$10K) will have some equity impacts
- CPO: reduction in Continuous Improvement and Leadership Services (\$35K) may have impacts on vendor & contract equity

Port-wide Community Program Summary



Port Community Programs



* Detailed list included in the Appendix.

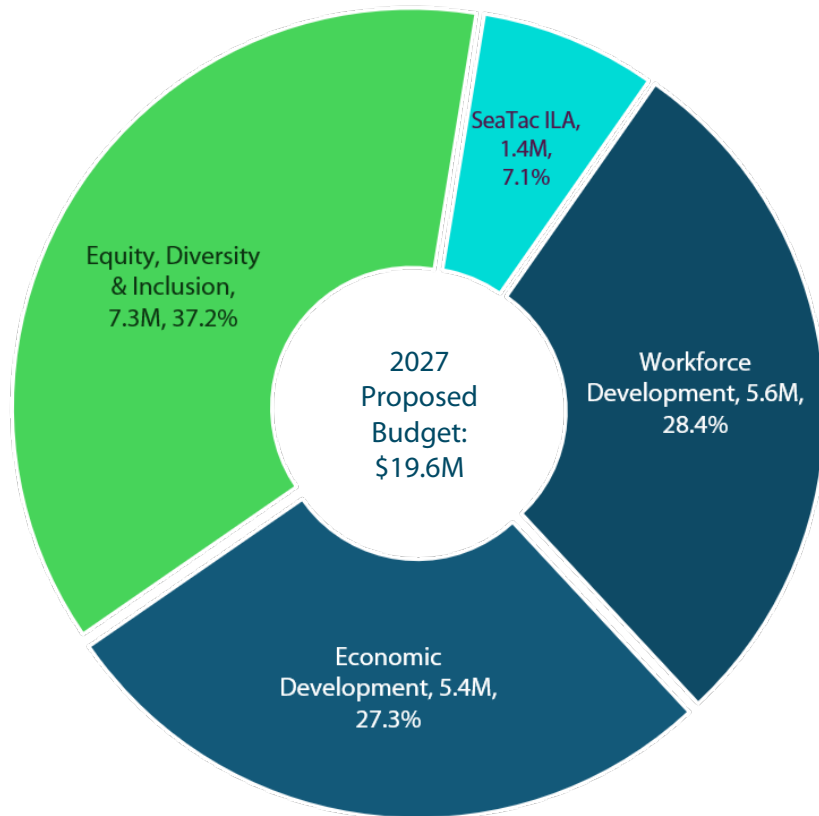
Duwamish Valley job fair



SKPC EIP Meeting



2027 Port Community Program Funding by Activity



Economic Development

- Diversity in Contracting - \$2.4M
- Tourism Marketing Support - \$2.1M
- EDD Partnership Grants - \$950K
- Maritime Blue - \$100K

Workforce Development

- Workforce Development Department - \$5.0M
- High School Interns - \$550K

Equity, Diversity & Inclusion

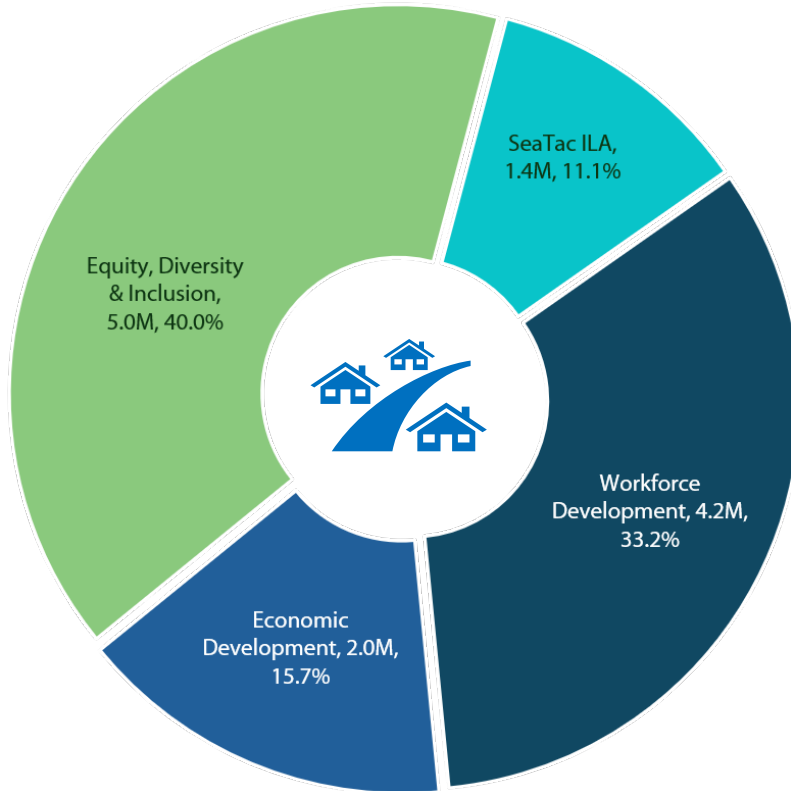
- OEDI Department - \$4.4M
- South King and Port Communities Fund - \$2.6M
- Friends of the Waterfront - \$750K
- Staff Costs supporting DVCEP & SKCCIF - \$776K
- Duwamish Community Equity program (DVCEP) - \$627K

SeaTac ILA

- \$1.4M

* Detailed list included in the Appendix.

2027 Port Community Program funded by the levy



2027 Proposed Budget funded by the levy: \$12.6M

Economic Development

- EDD Partnership Grants - \$950K
- Tourism Marketing Support - \$870K
- Diversity in Contracting - \$300K
- Maritime Blue - \$100K

Workforce Development

- Workforce Development Department - \$3.9M
- High School Interns - \$299K

Equity, Diversity & Inclusion

- South King and Port Communities Fund - \$2.6M
- OEDI Department - \$2.1M
- Staff Costs supporting DVCEP & SKCCIF - \$776K
- Friends of the Waterfront - \$750K
- Duwamish Community Equity program (DVCEP) - \$627K

SeaTac ILA

- \$1.4M

* Detailed list included in the Appendix.



Central Services CIP

Central Services Capital Projects Summary

Five Year Capital Plan (\$000's) *	2027	2028	2029	2030	2031	2027-2031 Total
Commission Authorized Projects	8,894	1,529	1,329	1,329	1,329	14,410
Projects Pending Authorization	7,228	9,804	7,700	3,000	3,000	30,732
Small Capital	6,379	4,619	5,105	5,660	6,445	28,208
CIP Cashflow Management Reserve	(6,500)	(3,000)	500	5,000	4,000	-
Total	16,001	12,952	14,634	14,989	14,774	73,350

* Excludes ICT projects budgeted within operating divisions as well as ICT portions of PMG led projects.

Commission Authorized Projects

Five Year Capital Plan (\$000's)	*	2027	2028	2029	2030	2031	2027-2031 Total
Commission Authorized Projects							
2025 Police Axon Contract (capital portion)	N	1,329	1,329	1,329	1,329	1,329	6,645
Enterprise Network Refresh	U	2,384	-	-	-	-	2,384
PeopleSoft Financial System Upgrade	U	2,212	-	-	-	-	2,212
Phys Access Contrl System Refresh	U	1,111	-	-	-	-	1,111
Property Management System Upgrade	U	600	200	-	-	-	800
Public Safety Dispatch & Police	N	674	-	-	-	-	674
Maximo Software System Upgrade	U	584	-	-	-	-	584
Total		8,894	1,529	1,329	1,329	1,329	14,410

* N = New System or Function U = System Upgrades or Replacements

Projects Pending Authorization

Five Year Capital Plan (\$000's)	*	2027	2028	2029	2030	2031	2027-2031 Total
Projects Pending Authorization							
IT Renewal/Replacement	U	-	500	3,000	3,000	3,000	9,500
Private Cellular Network (LTE)	U	-	2,000	3,000	-	-	5,000
Badge Readers Replacement	U	300	3,000	1,700	-	-	5,000
Police RMS	N	1,002	2,004	-	-	-	3,006
SAN Capacity Increase	U	1,501	-	-	-	-	1,501
Procure Connect	U	450	550	-	-	-	1,000
Fleet Management Software	N	400	450	-	-	-	850
Web Accessibility Compliance	U	600	-	-	-	-	600
SEA SQL ESX Refresh	U	-	600	-	-	-	600
Tierpoint ESX Refresh	U	600	-	-	-	-	600
SEA Prod ESX Refresh	U	600	-	-	-	-	600
Police Axon Program ICT	N	575	-	-	-	-	575
Fire Alarm Monitoring System	U	250	250	-	-	-	500
Accounts Payable Automation	U	250	250	-	-	-	500
Nexus Improvements	U	250	200	-	-	-	450
HCM Upgrade 2027	U	450	-	-	-	-	450
Total		7,228	9,804	7,700	3,000	3,000	30,732

* N = New System or Function U = System Upgrades or Replacements

Small Capital Projects

Five Year Capital Plan (\$000's)	2027	2028	2029	2030	2031	2027-2031 Total
Small Capital						
Technology Infrastructure	1,500	1,500	1,500	1,500	1,500	7,500
Technology Business Applications	1,500	1,433	1,500	1,500	1,500	7,433
Corporate Fleet Replacement *	2,144	761	1,190	1,290	1,800	7,185
Engineering/PCS Fleet Replacement	600	240	165	290	885	2,180
Enterprise GIS Small Capital	250	250	320	250	250	1,320
Corporate Police Small Capital	75	250	100	600	100	1,125
Engineering Small Capital	210	85	230	130	310	965
Corporate Small Capital	100	100	100	100	100	500
Total	6,379	4,619	5,105	5,660	6,445	28,208

CIP Cashflow Management Reserve						
CIP Reserve - Central Services	(6,500)	(3,000)	500	5,000	4,000	-

* Mainly Police fleet purchases

Remaining 2027 Budget Schedule

- Operating division proposed budget briefings (10/13)
- 2027 Tax Levy & Draft Plan of Finance Commission Briefing (10/27)
- 2027 proposed Budget Document Available to the Commission (10/20)
- 2027 proposed Budget Document Available to the Public (10/22)
- NWSA Budget Adoption by Managing Members (11/3)
- Introduction and Public Hearing of the 2027 Budget (11/17)
- Commission Approval of the 2027 ILA between POS and the NWSA (11/17)
- Adoption of the 2027 Budget (11/23)
- Filing of 2027 Statutory Budget with King County Council & Assessor (11/30)
- Release of 2027 Budget to the Public (12/4)

Appendix



2027 Baseline Budget by Account

	2023	2024	2025	2026	2026	2027	Inc/(Dec) from 2026		
DESCRIPTION (in \$000's)	Actuals	Actuals	Actuals	Budget	Revsd_Bud	Proposed Budget	Revsd_Bud	% Change	Notes
							\$ Change	% Change	
Other Service Revenues	(216)	403	14	259	259	366	107	41.4%	
GASB 87_96_103 Revenues	839	281	1,435	594	0	0	0	0.0%	
Total Operating Rev GASB Comparable Basis	623	684	1,449	853	259	366	107	41.4%	
OPERATING EXPENSE									
Salaries & Benefits	91,659	107,752	117,722	116,781	116,781	122,516	5,735	4.9%	Pay & benefits increase, partially offset by eliminating FTEs
Wages & Benefits	21,401	30,017	29,476	41,452	41,452	42,887	1,436	3.5%	Elimated 10 represent FTEs in PCS (another 2 are non-rep)
Payroll to Cap/Govt/Envrs Proj	19,886	20,441	22,296	29,160	29,160	25,276	(3,885)	(13.3%)	Less charges to capital
TOTAL SALARIES & BENEFITS	132,947	158,211	169,494	187,393	187,393	190,679	3,286	1.8%	
Equipment Expense	2,386	3,021	2,343	3,051	3,051	3,071	20	0.7%	Due to decreases mainly in ENG, PCS, ICT, IS, OSI, & POL
Utilities	58	98	70	88	88	89	1	1.0%	
Supplies & Stock	1,543	1,106	1,535	1,129	1,129	1,243	114	10.1%	
Outside Services	35,897	39,721	41,884	48,998	47,463	39,339	(8,124)	(17.1%)	Mainly due to reduction in ENG
Travel & Other Employee Exps	2,575	2,758	3,324	3,848	3,848	3,524	(324)	(8.4%)	Reduction of travel & training in some depts
Promotional Expenses	1,721	6,372	1,295	1,347	3,947	2,380	(1,568)	(39.7%)	Mainly due to Friends of the Waterfront & Aquarium
Telecommunications	777	776	759	748	748	603	(145)	(19.4%)	
Property Rentals	598	828	315	127	127	120	(8)	(6.1%)	
Worker's Compensation Expense	663	761	1,010	944	944	750	(193)	(20.5%)	Based on estimate from AFR
General Expenses	7,817	32,214	(11,667)	8,607	10,525	10,384	(142)	(1.3%)	
TOTAL NON-PAYROLL EXPENSES	53,966	87,678	40,843	68,886	71,870	61,500	(10,369)	(14.4%)	
TOTAL COSTS BEFORE CAPITAL CHARGES	186,914	245,889	210,337	256,279	259,263	252,179	(7,083)	(2.7%)	
59900-Sal/Wage-Cap/Govt/Envrs Proj	(19,886)	(20,441)	(22,296)	(29,160)	(29,160)	(25,276)	3,885	(13.3%)	
68750-Cap/Govt/Envrs Projects OH	(8,731)	(10,438)	(10,124)	(9,470)	(9,470)	(8,538)	931	(9.8%)	
68760-OnsiteConsult-Cap/Gov/Env Proj	(10,409)	(13,563)	(14,893)	(17,925)	(17,925)	(10,967)	6,958	(38.8%)	
Charges to Cap/Govt/Envrs Projects	(39,025)	(44,296)	(47,312)	(56,555)	(56,555)	(44,781)	11,774	(20.8%)	
Operating Expenses	147,888	201,593	163,025	199,724	202,708	207,398	4,691	2.3%	
GASB 87_96_103 Expenses	3,003	3,227	1,131	4,983	443	611	169	38.1%	
Total Operating Exp GASB Comparable Basis	150,892	204,820	164,156	204,707	203,151	208,010	4,859	2.4%	

2027 Baseline Budget by Department

	2023	2024	2025	2026	2026	2027	Inc/(Dec) from 2026		Notes
Departments (in \$000's)	Actuals	Actuals	Actuals	Budget	Revsd_Bud	Proposed Budget	Revsd_Bud	\$ Change % Change	
O1100-Executive	3,147	6,025	2,771	3,407	3,407	2,903	(504)	(14.8%)	Final Aquarium payment (\$400K); Strategic software transfer to OSI (\$50K)
O1200-Commission Office	2,448	3,042	3,137	3,671	5,516	5,430	(86)	(1.6%)	Delay hiring for 1 FTE
O1310-Legal	10,315	10,312	8,395	6,863	7,328	7,628	300	4.1%	Increase in payroll (\$254K)
O1330-Risk Services	5,756	7,395	7,144	8,642	8,642	8,714	73	0.8%	
O1400-External Relations	10,154	14,379	14,365	15,858	15,858	13,565	(2,293)	(14.5%)	Move EOC grants (\$1.32M) to OEDI; Friends of W/F reduced by (\$1.25M)
O1460-Equity, Diversity and Inclusion	1,210	1,922	1,975	2,540	2,540	4,404	1,864	73.4%	Move EOC grants from ER budget (\$1.32M); plus the 6 new NGOs for 2027
O1500-Business Intelligence	1,609	1,888	2,235	2,633	2,633	2,590	(43)	(1.6%)	
O1600-Engineering	6,263	8,581	9,407	13,764	13,764	11,904	(1,860)	(13.5%)	21 FTEs eliminated & less On-site consultants offset by less charge to capital
O1700-Port Construction Services	5,644	7,063	8,849	8,123	8,123	6,980	(1,143)	(14.1%)	12 FTEs eliminated, decrease in Worker's Comp (\$89K)
O1800-Human Resources	13,543	16,099	16,506	19,160	19,160	19,746	586	3.1%	Increase in payroll (\$683K) offset by non-payroll (\$117K)
O1810-Labor Relations	1,292	1,541	1,598	1,923	1,923	1,825	(98)	(5.1%)	1 FTE eliminated
O1900-Information & Comm. Technology	25,914	30,410	31,476	34,080	34,080	34,413	333	1.0%	Increase in payroll and outside services contracts, offset by SBITA
O1980-Information Security	2,040	2,613	3,633	4,612	4,612	5,772	1,160	25.1%	Increase in contractual increase (\$729K) and payroll (\$572K)
O2110-Finance & Budget	2,602	3,075	3,076	3,371	3,527	3,586	59	1.7%	Increase in payroll (\$149K) offset by reduction in Non-Payroll (\$45K)
O2200-Accounting/Financial Reporting	9,032	10,003	11,173	12,807	12,807	13,482	675	5.3%	Increase in payroll (\$793K) offset by reduction in Non-Payroll (\$111K)
O2280-Internal Audit	1,944	1,935	2,066	2,448	2,448	2,593	145	5.9%	Mainly due to increase in payroll (\$150K)
O2400-Office of Strategic Initiatives	1,291	1,125	1,353	1,731	1,731	1,706	(26)	(1.5%)	
O2700-Environment & Sustainability	1,137	1,479	1,968	2,306	2,306	1,974	(332)	(14.4%)	Reduced Aquarium Kelp; Removed Fuels Summit
O2900-Corporate Contingencies	(251)	21,534	(22,019)	(6,184)	(5,666)	(2,428)	3,239	(57.2%)	Change vacancy factor from 4% to 2%
O4300-Police Department	36,422	43,591	46,327	48,213	48,213	51,647	3,434	7.1%	SeaTac Court & SCORE, labor agreements, COLA
O9200-Central Procurement Office	6,376	7,079	7,588	9,756	9,756	8,962	(794)	(8.1%)	5 FTEs eliminated and reduction in non-payroll (\$79K)
Operating Expenses	147,888	201,593	163,025	199,724	202,708	207,398	4,691	2.3%	
GASB 87_96_103 Expenses	3,003	3,227	1,131	4,983	443	611	169	38.1%	
Total Operating Exp GASB Comparable Basis	150,892	204,820	164,156	204,707	203,151	208,010	4,859	2.4%	

2027 Non-Payroll Budget by Department

DESCRIPTION (in \$000's)	2023	2024	2025	2026	2026	2027	Inc/(Dec) from 2026		Notes
	Actuals	Actuals	Actuals	Budget	Revsd_Bud	Proposed Budget	Change \$	Change %	
O1100-Executive	1,726	4,130	668	1,188	1,188	561	(627)	(52.8%)	Final Aquarium payment (\$400K). Strategic software transferred to OSI
O1200-Commission Office	285	534	522	572	2,417	2,427	10	0.4%	
O1310-Legal	7,129	5,827	3,912	2,158	2,158	2,213	56	2.6%	
O1330-Risk Services	4,921	6,379	6,075	7,337	7,337	7,352	15	0.2%	EOC (\$1.32M) grants transfer to OEDI; Friends of W/F reduced by (\$1.25M)
O1400-External Relations	4,057	7,105	6,232	7,125	7,125	4,356	(2,769)	(38.9%)	
O1460-Equity, Diversity and Inclusion	243	427	496	790	790	2,542	1,752	221.8%	
O1500-Business Intelligence	264	306	364	500	500	396	(104)	(20.8%)	Move EOC grants to OEDI (\$1.32M) and add 6 new 2027 NGOs
O1600-Engineering	12,977	16,427	18,117	24,127	24,127	14,104	(10,022)	(41.5%)	Removed JD Power Survey (\$57K). Reduced contracted survey support (\$40K)
O1700-Port Construction Services	2,669	2,374	3,131	1,934	1,934	1,917	(17)	(0.9%)	Reduction in On-site Consultants
O1800-Human Resources	2,518	2,930	1,479	2,032	2,032	1,915	(117)	(5.8%)	Decrease in Worker's Comp (\$89K)
O1810-Labor Relations	44	45	43	71	71	67	(4)	(5.6%)	
O1900-Information & Comm. Technology	8,694	9,610	9,360	11,274	11,274	10,660	(613)	(5.4%)	
O1980-Information Security	391	579	1,323	1,288	1,288	2,028	739	57.4%	Mainly due to \$610K reduction in Outside Services
O2110-Finance & Budget	156	222	295	247	403	320	(83)	(20.6%)	Mainly due to \$510K increase in Personal Services
O2200-Accounting/Financial Reporting	851	782	994	965	965	853	(111)	(11.5%)	\$116K reduction in Outside Services (due to higher SBITA offset)
O2280-Internal Audit	356	81	(23)	73	73	73	0	0.1%	
O2400-Offic of Strategic Initiatives	151	88	127	191	191	222	31	16.3%	
O2700-Environment & Sustainability	457	582	806	1,101	1,101	701	(400)	(36.3%)	Mainly due to \$155K reduction in Outside Services
O2900-Corporate Contingencies	(251)	21,534	(22,019)	450	968	950	(18)	(1.8%)	SeaTac Court Fees, SCOR, Public Defender, and other cost increases
O4300-Police Department	6,154	6,940	8,758	5,258	5,258	7,247	1,989	37.8%	
O9200-Central Procurement Office	486	408	390	671	671	596	(76)	(11.3%)	
TOTAL BASELINE EXPENSE	56,701	89,827	41,195	73,427	71,870	61,500	(10,369)	(14.4%)	

Approved 2027 New Budget Request Items

- ✓ **Data Modernization \$50K-** to establish a unified and secure data environment that strengthens compliance controls
- ✓ **Group Policy Management (GPO) Tool \$45K-** replacement tool that strengthens security compliance, and improves operational efficiency
- ✓ **Public Defenders Office and King County Jail Contract \$185K-** To cover the public defender contract rate increase from 750 to 900 dollars per and increase for housing felony arrestees
- ✓ **Computer Replacement \$100K-** supports the transition from individually assigned patrol laptops to a shared model consisting of desktop workstations and vehicle-mounted laptops, reducing the total number of deployed devices while lowering replacement and lifecycle costs

Approved 2027 New Budget Request Items

- ✓ **Police Portable Radios \$90K-** Portable radios are essential daily equipment for all Port of Seattle Police officers, enabling critical communication and coordination during routine and emergency incidents
- ✓ **Mental Health and Wellness Program \$71K-** To establish a comprehensive behavioral health and wellness program through The Counseling Team International (TCTI)
- ✓ **BLEA Annual Cost Sharing Increase \$20K and VIIT Annual Budget \$8K:** To fund an increase in Basic Law Enforcement Academy (BLEA) training costs due to an increase in the number recruits; to fund annual contribution to the Valley Independent Investigative Team (VIIT)

Approved 2027 New Budget Request Items

- ✓ **Marine Patrol Unit Dive Equipment and Harbor Maintenance \$26K-** Funding to replace critical dive equipment that has reached the end of its service life; to purchase complete dive equipment packages for new members; and to support routine vessel maintenance
- ✓ **Police Specialist - Public Disclosure \$0 (Repurpose existing vacant position)-** New position will support public disclosure requests which have risen sharply in both volume and complexity
- ✓ **Video Technology Manager \$0 (Repurpose existing vacant position)-** New position would serve as the department's technology program manager and primary business owner for law enforcement technology systems (i.e., body worn cameras, in car cameras, TASER, FUSUS)

2027 Proposed Community Programs

Program (in \$000)	2024 Budget	2025 Budget	2026 Revised Budget	2027 Proposed Budget	2027 Funded by the levy	% of the 2027 Budget Funded by the levy
1) South King and Port Communities Fund ¹	2,214	2,205	2,195	2,648	2,648	100.0%
2) Duwamish Valley Community Equity Program	471	619	617	627	627	100.0%
3) EDD Partnership Grants	950	950	950	950	950	100.0%
4) Tourism Marketing Support Program	1,875	2,154	2,134	2,124	870	41.0%
5) Airport Spotlight Ad Program*	466	518	518	-	-	0.0%
6) City of SeaTac ILA*	1,400	1,400	1,400	1,400	1,400	100.0%
7) Maritime Blue (formerly Maritime Innovation Center)	175	175	180	100	100	100.0%
8) Workforce Development	5,077	4,976	4,972	5,018	3,873	77.2%
9) High School Internship Program	486	520	523	550	299	54.4%
10) Diversity in Contracting ²	2,304	2,356	2,463	2,438	300	12.3%
11) Equity, Diversity & Inclusion ³	2,065	2,459	2,540	4,404	2,127	48.3%
12) Friends of the waterfront		750	2,000	750	750	100.0%
Sub Total	18,803	19,591	20,642	18,861	11,796	63%
Payroll charged to the Levy ⁴	589	781	848	776	776	100.0%
Grand Total	19,392	20,372	21,491	19,637	12,572	64.0%

Notes:

1) SKPC budgeted under Ext Rel, EDI, and DIC

2) \$250K Small Business Accelerator under DIC is part of item 1 SKPC

3) \$1.9M for Economic Opportunities for Communities (EOC) under EDI is part of item 1 SKPC

4) 2027 Payroll only for CPO & Ext. Rel. Other payroll from HS Interns, WFD, EDI are included in the individual items above

* Non-Operating Accounts

Community Programs Funded by Tax Levy

Program (in \$000)	2024	2025	2026	2027	Inc/(Dec) from 2026	
	Funded by the levy	Funded by the levy	Funded by the levy	Funded by the levy	Revised Budget \$ Change	% Change
1) South King and Port Communities Fund ¹	2,214	2,205	2,195	2,648	453	17.1%
2) Duwamish Valley Community Equity Program	471	619	617	627	10	1.6%
3) EDD Partnership Grants	950	950	950	950	-	0.0%
4) City of SeaTac ILA*	1,400	1,400	1,400	1,400	-	0.0%
5) Maritime Blue (formerly Maritime Innovation Center)	175	175	180	100	(80)	-80.0%
6) Workforce Development	3,863	3,762	3,827	3,873	46	1.2%
7) High School Internship Program	259	280	290	299	9	3.0%
8) Diversity in Contracting ²	300	310	300	300	-	0.0%
9) Equity, Diversity & Inclusion ³	203	226	230	2,127	1,897	89.2%
10) Friends of the waterfront		750	2,000	750	(1,250)	-166.7%
11) Other	806	1,608	1,438	870	(568)	-65.3%
Total	11,772	12,404	13,577	11,796	(1,781)	-15.1%
Payroll charged to the Levy ⁴	580	781	848	776	(72)	-9.3%
Grand Total	12,352	13,185	14,426	12,572	(1,854)	-14.7%

Notes:

1) SKPC budgeted under Ext Rel, EDI, and DIC

2) \$250K Small Business Accelerator under DIC is part of item 1 SKPC

3) \$1.9M for Economic Opportunities for Communities (EOC) is part of item 1 SKPC

4) 2027 Payroll only for CPO & Ext. Rel. Other payroll from HS Interns, WFD, EDI are included in the individual items above

* Non-Operating Accounts

2026 One-Time Items

Org	Dept	Description	Amount
O1100	Executive	Seattle Aquarium Final MOU Payment	400,000
O1400	External Relations	Friends of the Waterfront	2,000,000
		Manufacturing Maritime Industrial Association (MMIA) Membership-Portwide/Corporate	25,000
		Stategic Communications and Outreach for Fishermen's Terminal Capital Programs	45,000
O1460	OEDI	Rapid Response Contract (Immigration Referral Line) - Comm Initiative	30,000
O1800	Human Resources	Leadership Conference	40,000
O1900	ICT	Call Center Software for Service Desk	28,000
		Conference Room Audio Improvements	18,000
		Computers & Phones Phone for Network/Server/Telecom Engineers	14,000
O1980	Information Security	Computer & Phone for OT/ICS Specialist	7,000
O2200	AFR	Computer for Capital Services Business System Analyst	2,500
O2900	Portwide Contingency	World Cup and Semi-Quincentennial Contingency Fund - 500K to Tax Levy	500,000
O4300	Police Department	21CP Review of Recommendations - Commission Approved	28,600
		3D Crime Scene Mapping	10,000
		CMU Bike Replacement/Upgrade	33,000
		Dialogue TrainingColumbus Police Department	10,000
		Dive Computers	11,900
		Explosive Odor Recognition K9s - Fully Trained	60,000
		HSD Armory and Equipment	7,000
O9200	CPO	CPO technology Solution - one-time set up fee	5,000
TOTAL			3,275,000
Core Services			3,114,500

2026 Mid-Year Approvals Summary

Item	Org	Description	Amount in 2026		Amount in 2027	
			Payroll	Non-Payroll	Payroll	Non-Payroll
1	4300 Police	Mental Health Professional	126,697	10,000	159,816	-
2	1400 Ext Rel	PT LTD 2YR Duwamish River Community Hub Coordinator	7,800	3,765	59,403	-
3	1400/ Ext Rel/EDI	SKPC	-	675,000	-	578,000
4	1980 Info Sec	OCR		250,000	-	590,000
TOTAL			134,497	938,765	219,219	1,168,000

2027 Contractual Increases/Budget Adjustments

					Amount in	Amount in	
Item	Org	Dept	Account	Description	2026	2027	Change
1	1900	ICT	64370	Software Lics & Maint. Agreemt	9,467,208	10,179,534	712,326
2	4300	Police	64370	City of SeaTac - Court & Jail Costs	2,070,000	3,800,000	1,730,000
3	1400	External Relations	66400	Friends of Waterfront	-	750,000	750,000
Total					11,537,208	14,729,534	3,192,326

2027 Budget Transfers

From Dept	To Dept	Description	Salary/ Benefits	Non-Pay Expenses	Total O&M Expense
O1400	O1460	Move the EOC grants ER to OEDI		1,320,000	1,320,000
O1100	O1400	Move the Japan-American Society of WA from Exe to ER		3,000	3,000
		Move the Greater Seattle Metropolitan Chamber - Community Development Roundtable & Annual			
O1100	O1400	Membership Dues from Exe to ER		52,300	52,300
O1100	O2400	Move the Strategice Software from Exe to OSI		50,000	50,000
Total			0	1,425,300	1,425,300

Central Services' Equity Spending Detail

Corporate Equity Spending Items	2026 Bud	2027 Bud
Affirmative Action Consultant	21,750	26,000
Anti-Human Trafficking (transferred from AV starting 2026)	88,000	83,000
Associated General Contractors of Washington	9,000	
Clean Fuel Policy Advocacy and Coalition Building	100,000	100,000
College/Graduate Internship	1,906,270	1,940,191
Duwamish Valley Community Equity Program - Community Capacity Building Contract and Green Jobs Program	545,000	545,500
Duwamish Valley Community Equity Program - Trade, Business, Community Development (Sponsorships)	100,000	100,000
Duwamish Valley Community Hub (total of two Depts - ER, Mar ENV)	71,175	80,674
EDI Non-Payroll (exclude staff costs)	358,221	336,718
Employee Resource Group support	20,000	32,000
Equity Focused Staff Costs	6,497,231	6,952,937
High School Internship Program	289,944	298,895
HR diversity outreach recruiting	12,515	3,500
Ongoing community engagement program	304,750	309,200
Policing Assessment/BWC	229,600	215,000
Rapid Response Contract (Immigration Questions)	30,000	
SKCCIF Community Capacity Building Contracts (Alma Villegas Consulting, Siliana Consulting, Tree planting event)	1,500	1,500
South King County Community Impact Fund	1,945,000	2,398,000
Veteran's Program	361,851	378,505
Grand Total	12,891,807	13,801,620

Central Services FTEs by Department

STAFFING (Full-Time Equivalent Positions)							# Change 2026 Revds_Bud- 2027 Bud	% Change 2026 Revds_Bud- 2027 Bud
BY DEPARTMENT	Notes	2024 Budget	2025 Budget	2026 Budget	2026 Revised Budget	2027 Budget		
Commission	1	18.0	18.0	18.0	17.0	17.0	0.0	0.0%
Executive Office		7.0	7.0	7.0	7.0	7.0	0.0	0.0%
Legal		19.0	19.0	20.0	20.0	20.0	0.0	0.0%
External Relations	2	38.8	40.8	41.0	41.5	41.5	0.0	0.0%
Human Resources		111.4	113.4	114.4	114.4	114.4	0.0	0.0%
Labor Relations	3	7.0	8.0	8.0	7.0	7.0	0.0	0.0%
Internal Audit		11.0	11.0	11.0	11.0	11.0	0.0	0.0%
Accounting & Financial Reporting (AFR)		63.0	63.0	66.0	66.0	66.0	0.0	0.0%
Information & Communication Technology (ICT)		130.0	133.0	137.0	137.0	137.0	0.0	0.0%
Finance & Budget		13.0	13.0	13.0	13.0	13.0	0.0	0.0%
Business Intelligence		10.0	11.0	11.0	11.0	11.0	0.0	0.0%
Risk Services		6.0	7.0	7.0	7.0	7.0	0.0	0.0%
Office of Strategic Initiatives		7.0	7.0	7.0	7.0	7.0	0.0	0.0%
Central Procurement Office	4	63.0	66.0	67.0	66.0	62.0	-4.0	-6.5%
Information Security		10.0	12.0	16.0	16.0	16.0	0.0	0.0%
Office of Equity, Diversity and Inclusion (OEDI)	5	16.6	13.6	13.6	8.0	8.0	0.0	0.0%
Police	6	184.0	196.0	195.0	196.0	196.0	0.0	0.0%
Engineering	7	152.0	159.0	159.0	159.0	136.0	-23.0	-16.9%
Port Construction Services (PCS)	8	74.0	74.0	69.0	69.0	57.0	-12.0	-21.1%
Environment & Sustainability		5.0	5.0	5.0	5.0	5.0	0.0	0.0%
TOTAL CENTRAL SERVICES		945.8	976.8	985.0	977.9	938.9	-39.0	-4.2%

Notes:

- 1) Commission will not fill 1.0 vacant FTE in 2026
- 2) A part-time 0.5 mid-year FTE was added in External Relations
- 3) Labor Relations will not fill 1.0 vacant FTE in 2026
- 4) CPO eliminated 1.0 vacant FTE earlier this year and will eliminate 4.0 FTEs in 2027
- 5) OEDI eliminated a Limited Duration 0.55 FTE earlier this year
- 6) 1.0 FTE mid-year FTE was added in Police. Police will repurpose 2.0 vacant FTEs in 2027
- 7) Engineering will eliminate 23.0 positions (vacant & HR-10)
- 8) PCS will eliminate 10.0 seasonal represented and 2.0 non-represented in 2027

Central Services Vacant FTEs

(from Adaptive Budget System with 2027 Budget)

