COMMISSION
AGENDA MEMORANDUM **Item No.** 8h

ACTION ITEM **Date of Meeting** April 28, 2026

DATE : March 26, 2026

TO: Stephen P. Metruck, Executive Director

FROM: Sarah Ogier, Director, Maritime Environment & Sustainability
Jon Sloan, Sr. Manager, Environmental Programs
Kathleen Hurley, Sr.Env.Program Manager, Maritime Environment & Sustainability

SUBJECT: **Commission Exemption for Seattle Aquarium Urban Kelp Project**

Amount of this request:	$325,000
Total estimated project cost:	$325,000

ACTION REQUESTED

Request Commission to 1) determine a competitive process is not appropriate or cost effective in accordance with RCW 53.19.020(5); and 2) authorize the Executive Director to execute a contract with Seattle Aquarium Society, in the amount of $325,000.

EXECUTIVE SUMMARY

As entities located along the shores of Elliott Bay, the Port of Seattle (Port) and the Seattle Aquarium (Aquarium) share common interests in promoting healthy coastal ecosystems, resilience, habitat restoration, carbon sequestration, habitat improvement, and public engagement. This contracting request would continue the Port's partnership with the Seattle Aquarium on coastal ecosystems research for an additional 5 years for a total cost of $325,000. It will apply innovative methods to monitor and understand the bull kelp ecosystem along the Seattle shoreline. The information generated by the research will inform bull kelp status and future restoration opportunities. Approval of this request would allow the Port to continue support for this vitally important work for a healthy Puget Sound.

JUSTIFICATION

In accordance with RCW 53.19.020(5), competing this service is not reasonable or cost effective due to the following:

The Seattle Aquarium Society, a non-profit organization, operates the Seattle Aquarium under a long-term operating agreement with the City of Seattle. The Seattle Aquarium is a conservation organization working to regenerate the health of Earth's one ocean. The Aquarium works among

global leaders to advance animal wellbeing, marine and ecosystem science, public policy, field conservation, education and species recovery programs that benefit the ocean. They are uniquely positioned to continue to lead and grow the kelp monitoring program which is aligned with Port of Seattle Century Agenda goals related to support of a healthy and resilient Puget Sound.

Staff have confirmed Seattle Aquarium to be the only organization with the capability to provide this specific combination of services to the Port. These services include remotely operated underwater surveys via boat; access and training of volunteer citizen scientists, training artificial intelligence programs to process high volume of imagery; development of a habitat suitability model to support planning of future kelp restoration; ground-truthing imagery via scuba; investigating and statistically analyzing the relationship between species-habitat associations. Finally, the Seattle Aquarium has an unmatched capability to engage with the public via its exhibits and education programs. A visual exhibit highlighting this partnership is currently installed in the Aquarium's original building.

Because of the Seattle Aquarium's unique expertise, skills and knowledge, a competitive process is not appropriate or cost effective, and a competitive exemption is appropriate in accordance with RCW 53.19.020(5).

Diversity in Contracting

Based on consultation with the Diversity in Contract team, and based on their review of subcontracting opportunities, this contract doesn't appear to be viable for WMBE goal considering its scope and intent.

The Seattle Aquarium Society has a robust engagement program to expose youth and the public to marine world. Additionally, the Aquarium has a commitment to continued diversity, equity and inclusion learning and practices seeking careers in the maritime industry.

DETAILS

Kelp is key to a healthy marine ecosystem as it provides habitat, contributes to marine food chain and offers beneficial physical and chemical processes. The Port and Aquarium researchers are looking into how we can help it thrive throughout Seattle's Elliott Bay. The Port of Seattle and the Seattle Aquarium have teamed up on the Urban Kelp Research Project to study the health, habitat and population trends of bull kelp in Elliott Bay. The water column trends (temperature, dissolved oxygen, pH, salinity, etc.) are being monitored via a scientific buoy run by Puget Sound Restoration Fund. What is learned about the conditions in which bull kelp thrive will help achieve the ultimate objective—to help guide successful bull kelp restoration throughout Elliott Bay and the broader Puget Sound. Funding for this program was included in the 2026 annual budget and will be requested annually for the duration of the contract (five years total).

Scope of Work

The objective of this work is to better understand the conditions in which bull kelp thrives in urban environments to enable effective restoration efforts via:

- Strategic monitoring of canopy forming and understory kelps, along with the surrounding benthic invertebrates and fishes using an underwater remotely operated vessel (ROV).
- Expand ongoing efforts to build collaboration between organizations undertaking kelp research.
- Continued research into priority stressors negatively affecting kelp forests on the sub-regional scale and promoting awareness.
- Engagement, education, and action from the public, youth, and other stakeholders.
- Development of a habitat suitability model for bull kelp.

It will apply innovative research methods to monitor and understand the bull kelp ecosystem along the Seattle shoreline. These innovative research methods include use of an Remotely Operated Vessel (ROV) to collect data, customization of the ROV for this purpose, use of AI to process collected imagery, development of a habitat suitability model, among others. The information generated by the research will inform status of bull kelp and future restoration opportunities.
Key tasks within the scope of work are proposed to include:

(1) Annual ROV kelp surveys during both summer and winter at existing survey locations.
(2) Consider additional survey locations and/or revisions in methodology, as needed.
(3) Analysis of imagery using open-source Artificial Intelligence (AI) algorithm, which will be publicly available.
(4) Outreach, engagement, and education

Schedule

Anticipated annual schedule and milestones, which will be reviewed at the start of each program cycle.

Activity

Commission authorization of competitive exemption.	2026 Quarter 2
Contract execution	2026 Quarter 2
Workplan development	2026 Quarter 2
Summer surveys	2026 Quarter 3
Winter surveys	2026 Quarter 4

Annual Reports	Annually
Project ends	2031 Quarter 4

Cost Breakdown

	2026	Total Project
Year 1	60,000	$300,000
Contingency	0	$25,000
Total	$0	$325,000

Years 2-5 budget is anticipated to be $60,000/year for a total of $300,000 over five years. Based on input from Contracting and Procurement, we have included a contingency of $25,000 for unanticipated program needs. This will be used at the direction of the Port program manager. The $60,000 for 2026 is included in the Port adopted 2026 budget.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Given the Seattle Aquarium's unique position to develop and implement a bull kelp monitoring program in Elliott Bay utilizing underwater ROVs, artificial intelligence, citizen scientist volunteers, development of a habitat suitability model, and extensive outreach and engagement opportunities, there is not a comparable program in Washington State to easily evaluate alternatives.

Alternative 1 – Decide against continued funding of the Urban Kelp Project implemented by the Seattle Aquarium

Cost Implications: Reduces expense budget by approximately $60,000 annually for 5 years.

Pros:

(1) Reduces the Maritime Environment and Sustainability's Center of Excellence's expense budget by approximately $60,000 annually

Cons:

(1) Negatively impacts the Port's Green Marine certification level related to aquatic indicator performance.
(2) Forego an opportunity to contribute to the scientific body of knowledge on a key ecosystem in Puget Sound that is important for salmon recovery.
(3) Forego the opportunity to partner with an entity with specific resources and skills to undertake both scientific research and public awareness/engagement.
(4) Forego the opportunity to increase understanding of the conditions under which bull kelp thrives in urban areas to better inform effective conservation and restoration efforts in Puget Sound, which includes the Port's habitat mitigation bank.

This is not the recommended alternative.

Alternative 2 – Pursue a competitive contract to implement this scope of work

Cost Implications: It is highly unlikely the Port would be able to contract this scope of a program including the public engagement and educational component along with scientific research without resulting in a higher cost to the Port.

Pros:

(1) This option could provide the opportunity to competitively procure services for similar work.

Cons:

(1) Pursuing a competitive contract for similar work would likely incur a much higher cost for this scope of work. For example, a single survey of submerged aquatic vegetation (albeit via other means), at one site is estimated at $20,000 for a single survey. This program included surveys at eight sites, twice per year.
(2) There are no known entities that undertake the specific combination of work encompassed in the current program – provision of continuity in a scientific dataset; implementation of scientific kelp surveys using an ROV; use of AI algorithms to process data; abundant opportunities for public engagement and education.

This is not the recommended alternative.

Alternative 3 – Fund the Seattle Aquarium Urban Kelp Project at the requested level of $325,000 over 5 years

Cost Implications: Requires annual funding of $60,000 from the expense budget.

Pros:

(1) Supports continuity in progress related to kelp conservation and research already established by the Urban Kelp project;
(2) Cost efficient method to achieve goals around healthy shorelines, including Green Marine certification, alignment with state goals related to kelp forest conservation and research, support Port capital project permitting, and further the Port's mitigation banking objectives.

Cons:

(1) None

This is the recommended alternative.

FINANCIAL IMPLICATIONS

This phase of the project is anticipated to run from Q2 2025 through Q4 2030; $60,000 is the Port's cost to support the program of work annually. We anticipate an annual budget request of $60,000 for a total of $300,000 over five years. For unanticipated contingency, CPO recommended including an additional $25,000 that may be authorized for contingency purposes by the project manager.

Cost Estimate/Authorization Summary	Capital	Expense	Total
COST ESTIMATE			
Original estimate	$0	$325,000	$325,000
AUTHORIZATION			
Previous authorizations	0	$120,000	$120,000
Current request for authorization	0	$325,000	$325,000
Total authorizations, including this request	0	$445,000	$445,000
Remaining amount to be authorized	$0	$325,000	$325,000

Annual Budget Status and Source of Funds

To date, the budget for this work has been included in the Environment and Sustainability's Center of Excellence annual budget.

Financial Analysis and Summary

Project cost for analysis	$325,000 over 5 years
Business Unit (BU)	Maritime Environment & Sustainability/Center of Excellence
Effect on business performance (NOI after depreciation)	NA
IRR/NPV (if relevant)	NA
CPE Impact	NA

Future Revenues and Expenses (Total cost of ownership)

There will be annual budget requests of approximately $60,000/year through 2030. Total anticipated budget over the five years is $325,000.

ADDITIONAL BACKGROUND

The Port initially engaged with the Aquarium to research existing kelp beds along the Seattle shoreline starting in 2022. This originated from a kelp enhancement project the Port initiated at Smith Cove in 2019 and 2021 in partnership with Puget Sound Restoration Fund. The kelp enhancement at Smith Cove failed, which led to questions about why kelp thrived in nearby locations. The first phase of the Aquarium Urban Kelp Project focused on fine-tuning the methods to collect data using an ROV, developing processes for image and data analysis, while beginning to better understand differences among the eight sites along the Elliott Bay shoreline. Understanding this urban ecosystem is on-going and has identified key differences among sites. The data are also being used to build a habitat suitability model to better inform future kelp restoration initiatives. The work has generated significant benefit for the kelp research community, in Washington State, and beyond.

ATTACHMENTS TO THIS REQUEST

(1) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

April 26, 2022, Item 10c – The Commission authorized a competitive exemption request for the first phase of this project.