



**COMMISSION
AGENDA MEMORANDUM**

Item No. 10c

ACTION ITEM

Date of Meeting February 13, 2024

DATE : January 18, 2024

TO: Stephen P. Metruck, Executive Director

FROM: Sarah Ogier, Director, Maritime Environment & Sustainability
Jenn Stebbings, Environmental Program Manager

SUBJECT: Interlocal Agreement with Puget Sound Partnership

Amount of this request: N/A
Total estimated project cost: \$115,000

ACTION REQUESTED

Request Commission authorization to execute an Interlocal Agreement with the Puget Sound Partnership (PSP) enabling the Port to receive state funding to support the purchase of equipment to monitor juvenile salmonid utilization of Duwamish River People’s Park and Shoreline Habitat.

EXECUTIVE SUMMARY

The design and construction of the Duwamish River People’s Park and Shoreline Habitat (DRPP) is in support of Century Agenda Objective 12: Restore, create, and enhance 40 additional acres of habitat in the Green/Duwamish. Part of the 10-year performance monitoring period for DRPP is to observe fish use within the habitat site. The Puget Sound Partnership (PSP) awarded \$115,000 from their Watershed Habitat Assessment program to the Port of Seattle to purchase a passive integrated transponder (PIT) tag antenna array to monitor juvenile salmon use during the outmigration season at DRPP. PSP requires an Interlocal Agreement (ILA) to transfer the funds which will fully reimburse the Port for purchase of the PIT array.

JUSTIFICATION

Over 98 percent of the Duwamish estuary was lost to development over the last 100 years. DRPP is the largest habitat restoration project in a generation within the Duwamish subbasin and offers migrating salmonids off-channel estuarine refugia in the transition zone between freshwater and saltwater that hasn’t been available for almost 100 years. During the Year 1 monitoring for DRPP, natural-origin Chinook salmon (a species listed as Threatened under the Endangered Species Act) were documented utilizing the DRPP marsh basin, but little is known about how these fish are using the site over time (e.g., residence time, repeated entry, etc.). This represents a significant data gap within this part of the watershed. Installing a PIT array is a passive sampling technique

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that allows researchers to observe fish behavior that direct sampling methods cannot do. PIT equipment works without any disturbance to the fish and operates at all hours. Understanding how out-migrating juvenile salmon utilize newly restored habitat sites will help to better inform future habitat restoration designs to maximize the potential benefit to salmon. This better understanding will ensure future habitat restoration designs for Port projects will optimize Objective 12 of the Century Agenda.

Diversity in Contracting

Due to the highly specialized nature of the equipment being purchased, no Diversity in Contracting goals have been established.

DETAILS

The PSP issued an announcement for available funding under their Puget Sound Watershed Habitat Assessment program. At the recommendation of Water Resource Inventory Area (WRIA) 9 Salmon Recovery Lead Entity, the Port submitted an application to purchase and install a PIT array at the mouth of the marsh basin at DRPP. A PIT array works similar to a radio frequency identification (RFID) system. A fish is tagged with a small device that has a unique tracking number. When the fish swims close enough to the PIT array, the antennas receive the information from the fish's tag and it is then recorded into a database.

This was the only project recommended for the PSP funding in WRIA 9. This is a complementary project to King County's current research on juvenile salmonid migration in the Lower Green River. Several thousand fish will be tagged in the Lower Green during spring 2024, and the PIT array at DRPP will be able to detect if/how tagged fish are utilizing the estuarine marsh basin. Tagged fish could include fish tagged directly at DRPP, tagged further upstream as part of King County's project, or even tagged elsewhere in Puget Sound that have entered the Duwamish estuary. This will provide invaluable information on juvenile salmonid migratory patterns in a comprehensive, watershed-scale way. Data collected at DRPP will be shared with regional salmon habitat and fishery management groups, tribal partners, PSP, and others (e.g., WRIA 9, etc.).

DRPP is considered a high priority project identified in WRIA 9's Salmon Habitat Plan. Installation of the PIT array will address existing knowledge gaps in juvenile Chinook salmon use in the Duwamish during outmigration, and pairing net captures of tagged fish with the PIT array data could also address data gaps in juvenile Chinook size and growth during residence in restored Duwamish estuarine habitats. Research has shown that long-term rearing in the estuary is key to producing Chinook salmon that will survive into adulthood.

PSP issued a notice of award to the Port of Seattle on October 31, 2023. The ILA between PSP and the Port of Seattle is required to formalize the agreement to transfer funds from PSP's Puget Sound Watershed Habitat Assessment program to the Port of Seattle. The ILA will include the following provisions:

- The total award amount is for \$115,000.

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- The Port will purchase the PIT array and have it installed by the successful vendor. The cost to purchase and install the PIT array is estimated to be approximately \$80,000.
- The Port will invoice PSP for the cost of the purchase and installation of the PIT array and PSP will fully reimburse the Port for the costs incurred.
- PSP will reimburse the Port for any additional costs due to theft, vandalism, damage, or other maintenance needs of the PIT array up to the \$115,000 award amount prior to the expiration of the ILA.
- The Port will retain ownership of the PIT array after the expiration of the ILA with PSP (estimated to be June 30, 2025).
- The Port will share the data collected by the PIT array with agencies, tribes, PSP and other watershed partners upon request.

Scope of Work

A PIT array will be installed at the mouth of the DRPP marsh basin. If a tagged fish enters the DRPP marsh basin, the PIT array will record its data. Port staff, with support from King County staff, will then analyze the data to help determine how the tagged fish are utilizing the DRPP marsh basin, including residence time, multiple re-entries, and overall migration patterns.

Schedule

Once the approved ILA is signed by both parties, Port staff will award a contract to the qualified vendor with the lowest bid. The vendor will then procure the materials and install the PIT array during Spring 2024. The PIT array will collect data during the juvenile salmon outmigration (generally, March – June). The collected data will then be analyzed to inform juvenile salmon use of the DRPP. The analyzed data will be incorporated into the annual monitoring report for the project and shared with other project partners (e.g., PSP, King County, WRIA 9, etc.).

Activity

Commission request – PSP ILA	February 13, 2024
Vendor award*	March 2024
PIT array installation*	March 2024
Data collection*	March – June 2024
Report*	December 2024
ILA end date*	June 30, 2025

* All subsequent dates contingent upon Commission authorization

Cost Breakdown	This Request	Total Project
ILA with PSP	\$0	\$0
PIT array procurement and reimbursement	\$115,000*	\$115,000*
Total	\$115,000*	\$115,000*

* Cost is to purchase the PIT array and any initial repair/maintenance costs which will then be fully reimbursed by PSP.

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ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Do not enter into ILA with PSP; do not purchase PIT array.

Cost Implications: \$0

Pros:

- (1) No change from current data collection methods.

Cons:

- (1) Money awarded to Port by PSP is not used.
- (2) Valuable data on fish utilization of Port-constructed habitat are not collected.
- (3) Port has only limited fish utilization info for DRPP.

This is not the recommended alternative.

Alternative 2 – Do not enter into ILA with PSP; purchase and install PIT array with Port funds.

Cost Implications: >\$80,000

Pros:

- (1) Valuable data on fish utilization of Port-constructed habitat are collected.
- (2) Improved strength of monitoring program for DRPP.

Cons:

- (1) Money awarded to Port by PSP is not used.
- (2) Was not included as part of the 2024 budget.
- (3) Requires long-term maintenance of the PIT array.

This is not the recommended alternative.

Alternative 3 – Execute ILA with PSP to purchase and install PIT array.

Cost Implications: \$0

Pros:

- (1) Valuable data on fish utilization of Port-constructed habitat are collected at no net cost to the Port.
- (2) Improved strength of monitoring program for DRPP.
- (3) Initial installation and equipment adaptation costs are covered by PSP award.
- (4) Reinforces partnerships with other watershed stakeholders.

Cons:

- (1) Requires long-term maintenance of the PIT array.

This is the recommended alternative.

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FINANCIAL IMPLICATIONS

PSP awarded a total of \$115,000 to the Port for the purchase of the PIT array. The Port will be fully reimbursed for the purchase, resulting in no cost to the Port. No additional funding is being requested.

Annual Budget Status and Source of Funds

No funds are being requested as part of this authorization.

Financial Analysis and Summary

Project cost for analysis	N/A
Business Unit (BU)	N/A
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)

N/A

ADDITIONAL BACKGROUND

N/A

ATTACHMENTS TO THIS REQUEST

- (1) Final Draft Interagency Agreement with Puget Sound Partnership
- (2) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

None.