

GREEN/DUWAMISH AND CENTRAL PUGET SOUND (WRIA 9) IMPLEMENTATION TECHNICAL COMMITTEE



WRIA 9 Implementation Technical Committee Meeting

March 20, 2024 | 9:30 am – 11:30 am

[Click here to join the meeting](#) or call in (Teams audio only) [+1 425-653-6586](tel:+14256536586), [185643467#](tel:+14256536586)

Meeting ID: 212 285 313 251

Passcode: t9wk6N

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|-------|---|--------------------------|
| 9:30 | Welcome, Introductions, and Round Robin Updates
<i>Round-table activity</i>

We will try a twist on our typical introductions and round-robin activity. Please bring any updates you'd like to share with the group. | All |
| 10:20 | Juvenile Chinook Salmon Effectiveness Monitoring of Duwamish Shallow Water Restoration Sites
<i>Presentation followed by Q&A</i>

Kerry will present the UW Wetland Ecosystem Team's effectiveness monitoring study of Duwamish restoration projects (Chinook Wind, Riverton Flapgate Removal, and Duwamish River People's Park). They monitored fish assemblages and distributions at each site across shallow water, newly restored interior pocket habitat and adjacent mainstem channel from February through June 2023 using net and acoustic sampling. This study was funded through a WRIA 9 Cooperative Watershed Management (CWM) Monitoring and Research grant. | Kerry Accola, UW |
| 11:10 | Grant Round Update and April Meeting Prep
<i>Informal updates and Q&A</i>

Suzanna will review grant round status and expected timeline for ITC review of the draft 2024 funding package. | Suzanna Smith,
WRIA 9 |
| 11:30 | Adjourn | |

WRIA 9 ITC web page: <http://www.govlink.org/watersheds/9/committees/ImpleTechCmte.aspx>

Participant list:

Alicia Kellogg, Chapin Pier, Chester Bennett, Chris Gregersen, Cleo Neculae, Erik Rigaux, Halley Kimball, Iris Kemp, Jenn Stebbings, Josh Kahan, Joshua Hopkins, Julian Douglas, Kerry Accola, Maggie Glowacki, Matt Goehring, Matt Knox, Mike Perfetti, Monica Walker, Rowena Valencia-Gica, Suzanna Smith

Round-table Updates and Reminders

ITC members co-created a community map of updates, projects, and favorite sites in the watershed as well as non-geolocated updates on funding opportunities, new research and planning efforts, and upcoming programs/workshops. [Whiteboard content is copied below.](#)

Also please welcome Maggie Glowacki, Sr Land Use Planner/Fish Bio for Seattle Dept of Construction and Inspections (SDCI), to the ITC!

Juvenile Chinook Salmon Effectiveness Monitoring of Duwamish Shallow Water Restoration Sites ([link to slides](#))

This study sampled restored off-channel (“pocket”) habitats and adjacent channel at Duwamish River People’s Park (DRPP), Riverton Flapgate Removal, Chinook Wind, and opportunistically at the boat launch at Duwamish Gardens. The objectives were to characterize the fish assemblage at each site and assess salmon usage of restored sites and large wood. Both net sampling and acoustics sampling were performed from February-June targeting twice monthly sampling events at each site. Most fish caught in the study were chum. Wild Chinook were captured throughout the season and in all restored habitats. For detailed results, please refer to [Kerry’s slides](#). The team is finalizing a written report which will be provided to the ITC when available.

This project supported a UW undergraduate’s first research experience. She was featured on UW Wetland Ecosystem Team social media if you’d like to hear about it in her own words: <https://www.instagram.com/reel/CrhMwRROfnY/?igsh=MTB2OHJqbTUzZjNzdA==>

Discussion:

- Goose exclusion fencing may limit fish access to sites. At DRPP, Port of Seattle removed portions of fencing for the team to access and sample. Jenn updated the group that a lot of the DRPP fencing has been removed now that vegetation is more well-established but fencing currently remains at the marsh basin mouth. Hoping to replace that fence by installing the PIT barge this year. Also discussing different types of exclusion material to keep out geese but let fish access.
 - The DRPP fencing had fairly wide holes, but fish seem to avoid it. Detritus build-up against the fence appeared to limit access.
- Particularly with pole sampling at DRPP, did goose fencing play a role in capture efficacy? Chinook are much faster than chum, have more potential to escape.
 - There was likely some net avoidance in general. DRPP was particularly tricky. The team tried different tactics and had an overhead observer to see whether they were pushing/chasing fish away without capture. Would be interested in trying a

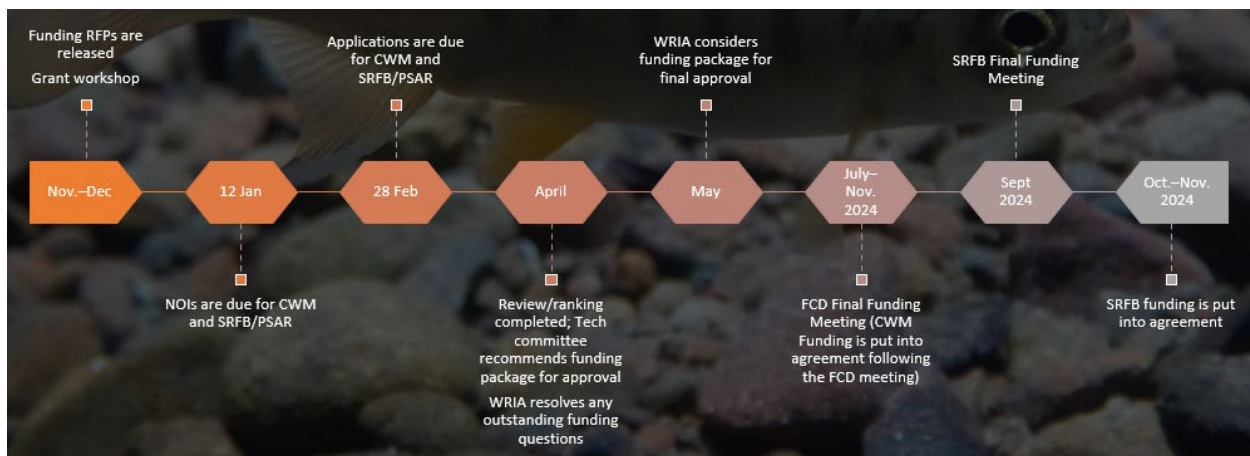
drone over the water at DRPP – couldn't identify fish to species, but maybe a first overhead pass followed with netting?

- This study compared “pocket” to “channel” habitat. It's important to note that all sites were restored/closely adjacent to restored habitat. There wasn't a statistical difference in pocket/channel in terms of Chinook. If unrestored shoreline sites not near restored habitat were included in the study, would we see a difference between restored/unrestored?
 - Note that Kerry was conservative statistically. There were differences between pocket/channel – but for Chinook specifically, the sample sizes were too low to detect statistically significant differences.
 - If fish are using pocket sites at high tide and exiting at low tide, it makes sense that they would be caught in the channel adjacent to pocket sites. Sampling for this study was done at high tide on the ebb.
- Surprised at 97% catch chum – where are the Chinook?
 - Chinook tend to stay on the edges of habitats. There are very few Chinook compared to chum in the system. Chinook get spooked easily; they take off quick and have higher escape ability.
 - Consider looking at smolt trap outmigrant numbers as an indication of the order of magnitude of fry that may be moving down the system in any given year. Some years when there aren't major high flows, more fry stay in-river longer so would see fewer in Duwamish until later season.
- Can a DIDSON be installed at a site for long durations? Passive monitoring capability?
 - The device itself would have to be underwater at all times (challenging in a tidal environment) and would require a really secure on-bank set-up for housing the accessories. Also wouldn't be able to identify passing fish to species.
- Acoustic sampling has limitations (cannot identify to species or natal origin) – are there opportunities where it is valuable?
 - Useful in places without much species diversity. The Wetland Ecosystem Team used it along the seawall and is beginning to use it in Lake Washington for projects that don't require speciation or natal origin. It is great for night sampling because lack of light doesn't affect function and it minimizes avoidance impacts – there is some kayak avoidance, but the DIDSON sees further out than the point at which fish engage in avoidance behavior.
- ITC members had an involved conversation about off-channel habitat and restored shoreline without off-channel components. The take-aways were that off-channel habitat is critical for rearing and flood refuge, but at sites where there is no room for off-channel habitat and no potential for acquisition to create room for off-channel habitat, shoreline restoration is sometimes the best we can do. In the Duwamish it is “pull out all the stops and do whatever you can” (thanks, Matt K!) – we have lost 97% of historic habitat and we cannot recover all of it.

Further questions? Contact Kerry Accola at kaccola@uw.edu.

Grant Round Update and April Meeting Prep

The WRIA 9 grant round is a year-long process. Timeline:



This year, projected 2024 funding totals \$6.19M - \$6.25M, a combination of Cooperative Watershed Management funding (King County Flood Control District) and state funding (SRFB, PSAR, new state riparian allocation).

WRIA 9 received

- 9 capital project applications requesting \$15.6M (more than available)
- 9 Regreen the Green applications requesting \$409k (less than available)
- 3 competitive Monitoring and Research applications requesting \$372k (slightly more than available). There are two additional non-compete monitoring projects already earmarked as part of status and trends monitoring (smolt trap and shoreline monitoring).
- 10 Stewardship, Education, and Learning applications requesting \$491k (more than available)

Currently, applications are in review by the Review Teams for each funding program. Review Team members individually evaluate and score each application according to the criteria recommended by the ITC in November 2023. Scores are summed and projects ranked highest to lowest. Review Teams can also develop feedback for project sponsors.

The ITC will engage with Review Team recommendations at our April meeting. This is our most important meeting of the year, where the ITC considers recommending for approval the draft 2024 WRIA 9 funding package for Flood Control District Cooperative Watershed Management (CWM) and Salmon Recovery Funding Board (SRFB and PSAR) grant funding.

Further questions? Contact Suzanna Smith at susmith@kingcounty.gov.

Whiteboard Community Map

Watershed-wide/no specific location

On April 8, the King County Flood Control District will open its call for \$12M in grant funding for projects that reduce the impact of flooding.

<https://kingcountyfloodcontrol.org/grant-programs-funding/flood-reduction-grants-open/>

The Habitat and Stormwater Strategic Initiative Leads (SIL) grant rounds are open.

<https://pugetsoundestuary.wa.gov/rfp/>

America the Beautiful Challenge 2024 Request for Proposals is now open.

<https://register.gotowebinar.com/recording/7296703746625197654>

The Washington State legislature has wrapped up. PSP's latest update:

<https://pspwa.app.box.com/s/bgokpjbwzylks3z44xgagcx4f3jpno2>

New research: shoreline restoration including armor removal and log placement affect ecosystem recovery through time:
<https://onlinelibrary.wiley.com/doi/epdf/10.1111/rec.14097>

Tukwila will be finishing its surface water comp plan this summer, which identifies habitat goals and CIPs

Early stages of planning for the 2024 Green-Duwamish Workshop.

Alicia Kellogg

KC working to expand flood control warning program to Duwamish River

Alicia Kellogg

Clickable links:

- <https://kingcountyfloodcontrol.org/grant-programs-funding/flood-reduction-grants-open/>
- <https://pugetsoundestuary.wa.gov/rfp/>
- <https://register.gotowebinar.com/recording/7296703746625197654>
- <https://pspwa.app.box.com/s/bgokpjbwzylks3z44xgagcx4f3jpno2>
- <https://onlinelibrary.wiley.com/doi/epdf/10.1111/rec.14097>

In the watershed

Port of Seattle found New Zealand mudsnails at DRPP.

Jenn Stebbings via Alicia Kellogg

1 star: 2 sites
Chinook Wind Extension (30% design); closing on purchase of additional properties at Duwamish Hill preserve (re: WRIA 9 project S 115th st road setback) - Mike Perfetti

Duwamish Alive! volunteer events on April 20th 10-2 at multiple locations!

<https://www.duwamishalive.org/>

Fish monitoring at Riverton and Southgate begins next week

City applied for a grant to do fish passage, habitat, floodplain connection improvements at Southgate - Josh Hopkins, Tukwila

Three revetment fixes - Geico, Desimone, McCoy - repairing flood control features & habitat - Matt Knox (KC)

President's 2025 request budget includes \$500M for the downstream fish passage facility at Howard Hanson Dam! ❤️ 🇺🇸

Chapin - moving along with Fautleroy culverts (Chapin expects to present to ITC this fall). Longfellow project. Mitigation site in lower Duwamish under Spokane St bridge that has been with Bluefields - their 10 year period is up so now transfers to City of Seattle. Figuring out handoff currently. Likely needs some addl restoration.

DRPP/T117 site first sampling - caught one chinook!

Jenn Stebbings (Port of Seattle)

O'Connel Acquisition

Monica Walker

Feasibility study for Boeing enhancement - Rowena

Downey signage design finalized, working on installation. Will serve as design for rest of Green - Rowena (Kent)

Habitat Area A - funded for habitat (side channel) creation feasibility study - Rowena

Finalizing monitoring for temp/DO/bacteria TMDL in Soos. Also finalizing allocations for Soos fine sed TMDL. Getting close :) ❤️
~Cleo

Pollutant Loading Assessment (PLA) - working on watershed modeling. Then sediment transport module, then toxics. Hopefully by end of year will have third-party reviewed watershed model. - Cleo (ECY)

Jenkins Creek Culvert Replacement and three driveway culvert replacements. Early stages of developing behavior-change program for private landowners encouraging buffer plantings - Halley Kimball (Maple Valley)

Erik - 5k willow stakes at Auburn

Wingfield/Little Soos Cr - scheduling community meeting with HOA and interested landowners at end of April

Lones/Cakwab - really neat to see this site evolve into a beautiful habitat! ❤️
-Suzanna

Chris and crew have PIT tagged 860 juvenile Chinook in the past couple days 🙌

Also working with PNNL - installed acoustic capacity on barge to track fish down from dam.

Lower Russel PIT tagging starts tomorrow

WDFW trap is up and running 5 days per week. Chinook outmigrant numbers are low so far. Chums and pinks pushing thru heavy 🙌

Flaming Geyser - CR is complete for planting; costs were very high

- Josh Kahan

Cumberland proposal for aggregate mine and asphalt plant - many people reached out to Julian Douglas (WDFW) and submitted comment