

WRIA 9 Implementation Technical Committee
Meeting Summary – February 20, 2019, 9:00am – 12:00pm
King Street Center, 6th Floor- King/Chinook Rooms

Attendees: Kerry Bauman, King County; Katie Beaver, King County; David Beedle, Seattle City Light; Elizabeth Butler, RCO; David Casey, City of Maple Valley; Sophie Chiang, King County; Peter Donaldson, Sustainability Ambassadors; Laura Ferguson, PSP; Larry Fisher, WDFW; Chris Gregersen, King County; Kollin Higgins, King County; Kathy Minsch, City of Seattle; Cleo Neculae, Ecology; Jessica Olmstead, WADNR; Brandon Parsons, American Rivers; Tyler Patterson, Tacoma Water; Dennis Robertson, City of Tukwila

Introductions:

The ITC welcomed Suzanna Smith. She comes to us from PSP where she spent 5 years as an ecosystem restoration coordinator. Suzanna started in January, and will be the new WRIA 9 habitat project coordinator replacing Karen Bergeron.

WRIA 9 Salmon Habitat Plan Update- Matt Goehring

Matt gave a recap of the key products and milestones for the salmon habitat plan update. From this work, we know that fry type chinook represent about 60% of the outmigrating Chinook but are only contributing about 3% to the adult return. We know we have a lack of habitat, contamination issues, temperature issues, and limited habitat in middle Green and lower Green. We are in need of more off channel habitat. This was wrapped up in the strategic assessment addendum.

Next, we updated the habitat goals and 10 year targets for each of the subwatersheds. Since then, we've been sidelined to work on comment letters on hatcheries, harvest, and lower green corridor plan. We did a brief call for projects but haven't received many new ones. We've gone through many of the watershed wide programs and policies, but we put the subwatershed workgroups on hold.

Moving forward, there's 4 main groups of work:

1. Policies and programs: subwatershed work groups (late mar-may 2019) and watershed wide review (Mar-Aug 2019)
2. Update Project List- Project sponsor meetings (summer/fall 2019) and sub-basin ranking
3. Adaptive Management & Monitoring plan- revise the draft framework and integrate new goals/targets (fall/winter 2019)
4. Document Production: Jan-Feb 2020 and Forum adoption (May 2020), followed by ratification by cities (currently no timeline but after forum adoption)

Suzanna added that PSP is not playing a strong role in the habitat plan update. They are providing some tools and incorporating the finished plans into regional efforts, but not acting in the plan update process. We have re-appropriated funding for the habitat plan update process and bringing on consultants.

WRIA 9 Marine Shoreline Monitoring and Compliance- Phase 2 Results

Kollin presented on his work for phase II of the marine shoreline monitoring and compliance project, which added to previous work he has done for this topic.

The project area encompasses 92 miles of shoreline: 52 miles rural, 40 miles urban. Shoreline armoring consists of anything we use to prevent erosion: riprap, bulkheads, pilings, etc. Why do this project? The salmon plan calls for no new shoreline armor, and to monitor condition and find ways to improve land use regulations. This was a struggle in the last habitat plan. During the 2012-2013 work, they noticed new armor that wasn't permitted. This was mostly repairs to existing armor with a low compliance level.

The purpose of phase II: has the amount of shoreline armor increased or decreased, follow up on pilot project outreach on Vashon, and observe any changes in behavior/compliance rate. This project had the same approach as last time, using a boat/gps with an I-pad to map the shoreline and observe historic condition. This was a 2 day effort, doing Vashon in one day, and the mainland another. The survey would take photos and identify changes to shoreline in the office. Kollin presented several examples from the field work.

Overall, the most changes occurred in King County's jurisdiction. When normalized by shoreline length, Burien had the most changes per mile in 2013-2016. Dennis added that it is unlikely that many of these individuals are aware of shoreline master plans or updates, though Kollin clarified that the outreach component for an update must be robust- though this may or may not be successful and is dependent on the jurisdiction.

The majority of change types that occurred were major and minor armoring. Changes also included stairs, docks, clearing, houses, and retaining walls. Next, Kollin evaluated impacts to ecological and physical processes associated with these changes. This was a fairly simple desk process but informed the potential impact. The armoring had the greatest percent of change with no apparent effect- mostly because these replaced or repaired existing armoring.

WRIA wide, how are we doing with shoreline restoration? We had 2 shoreline armoring removals, but a variety of additions. Overall, we wound up with about 364 feet of new armoring (for a net loss). What about Seahurst phase II? Though this project was an improvement, it does not count as shoreline removal. This replaced armor with softer armoring, and is backed by a road and cut off from feeder bluffs. We should be tracking soft shoreline armoring separately, and while it's an improvement, it's not the best-case scenario. Also, after the 2018 survey, King County removed 4 additional bulkheads.

Kollin also looked at permit compliance for these, not evaluating if those who followed permits followed the permit conditions. About 60% compliance for major armoring repair, lower for minor repair. High compliance for houses, but low for clearing, stairs, and other additions. Burien and Seattle tended to have the highest compliance rate, while King County had the lowest.

Kollin further broke this down by actions that likely need an HPA (bulkheads docks boat ramps and stairs), versus others that did not need HPA's (like clearing). Overall, relatively low compliance, and when compared to local government, HPA's had lower compliance in both 2016 and 2018. Both have low compliance though.

In summary, most changes were associated with repairs. Many changes appear to not have much of a negative impact, but there was a net increase in shoreline armor mostly for unincorporated King County. Compliance was high in some cities, low on Vashon/Maury- which is 50% of WRIA. Outreach did not appear to change behavior. WDFW compliance rates were lower than local government, but compliance rates were also lower than seen in the few other similar studies of Puget Sound shorelines. Reasons for noncompliance: high costs, long processing time, confusion over permit being needed, confusion over which agency needs permits, individual has a right to do "x" action. Compliance for minor repairs much lower than major repairs, possibly because permit costs may be a strong factor when project costs are low.

Recommendations: Study why permit compliance rates are so low, add new requirements that the state and local permits cross reference, study larger portion of Puget Sound to see if WRIA 9's compliance is typical, study if "No net loss of ecological function" standard is being met, and research if there are other land use enforcement frameworks that are more successful than complaint based.

The report is available online, or you can request it from Kollin.

Questions: Dennis- Shoreline armoring wasn't mentioned in the Orca report. Also, getting permits is a nuisance and not a pleasant process (also easier in smaller jurisdictions)- and also social pressure. Kathy- incentives and programs available but lack of time to implement and for jurisdictions to make this better. Kollin mentioned NTA to help with this issue was submitted but not funded. Will you go after additional funding to do more of this work? There has been a request for science and permitting department to work together on some of these issues. Has there been any case of an unpermitted bulkhead having to be removed? In one case- a large bulkhead on multiple properties and dock. Is there pressure for people to do natural shorelines? Push for freshwater shorelines, but it's difficult to shift that vision of how your landscape should look is a difficult process- but there are multiple attempts. Larry- as you can see from the data, low priority of enforcement for shoreline armoring- and even though there are incentives, many people do what they want. At WDFW, problem is the county won't enforce many of the HPA violations. This project spent about \$92k, and for the future would recommend a 2 year interval for data collection and analysis, which would be about \$40k.

Chinook Wind Mitigation Project- Laird O'Rollins and Megan Webb

The Chinook Wind project is located on the right bank of the Duwamish at RM 6.7 in the city of Tukwila in the former riverside residences property. This project is funded through mitigation fees, which allows for developers who have unavoidable impacts to pay credits into a program which allows the county to in turn do larger and more meaningful restoration projects. This project is the result of impacts to various low quality wetlands. Example of projects in this program: replacement of failing BP bulkhead, impacts from sound transit third commuter rail line.

The existing site is currently cleared except for concrete pilings. The project goal is to restore shallow, off-channel habitats. The design team has looked at a variety of natural and created restoration sites. The conceptual design is a fishhook shape of aquatic habitat surround by mudflat, emergent, and riparian vegetation with a foot path around the project.

Laird went through the project actions that will be required, including excavation (80k CF), disposal of spoils, and cultural resources. The project schedule will be to submit permits in Feb 2019, have all permits by Jan 2020, begin construction in April 2020, complete excavation by summer/fall 2020, and plant in the fall/winter/spring of 2020/2021.

Questions:

How much habitat at low tide? During the time Chinook will be in there, there will be water most of the time. The graphic in the presentation showed a large tide event. The entire site is just shy of 6 acres, with close to 5 acres of wetland.

Social interactions of the site- will the site be fenced off? They will install a split rail fence and grade it to discourage campers. Encourage proper access. What about viewpoints? Technical review team does not want view points and access, but the site will be connected with Duwamish gardens which has more interactive areas.

Will the planting eventually provide shade to the area? Yes, alder and cottonwood

Site contamination? Never been an industrial location

WRIA 9 Project Updates- Suzanna Smith

Katie Beaver discussed taking on a Green river revegetation program, and requested a small scope change. In the beginning, they proposed revegetating 13 acres along 1.3 miles of shoreline. Why is this important? Historic removal of tall trees, excessive sunlight reaching river, and TMDL for high water. In the re-green the green riparian strategy (2016) the focus was on shorelines with the greatest need.

Site #1: Lower Green West

Site #2: Midway Creek (SPU)

Site #3: Flaming Geysers State Park

We are proposing a scope change because of the WA prevailing wage change. Landscape laborer rate went from \$17.56 to \$37.40/ hour. As a result, the daily crew rate went from \$1,800 a day to \$2,900 per day. This has increased construction labor cost to %75 of the budget. Because of this, need to decrease planted acres from 13 to 9, decrease linear revegetation miles from 1.3 to 1.1, and keep tree planting density the same.

Mike Perfetti discussed design changes and cost increases for Riverton flapgate removal. There is a pair of twin flapgates, which will daylight areas of the stream, remove culverts, and restore/replant the stream channel. This project has SRFB funding, but is conditioned project due to stormwater runoff and water quality issues that could be detrimental to fish.

To address this, they mapped out where stormwater inputs are contributing to the project area (Mike presented a map). Tukwila is working with WSDOT to treat the runoff at the site using a media filter where stormwater drains. Also discussing the use of a guardrail, so you could plant trees up to 6' behind it, otherwise you need a much larger cleared area. Tukwila has asked them to fund this portion of the project or build it themselves.

For habitat features, SRFB comments included adding more LWD and finer gravels to cover the riprap placed in the channel to protect from scour. Additionally, the city had some comments: the mouth is still higher than flows could be later in the year so possibly use a step down structure to get it to grade. Also, use a log weir structure to retain water in the backwater area upstream in the project area.

The cost increase is largely associated with construction, some additional design, WSDOT review, admin and staff cost for a total of \$421,189 of which they are requesting \$358,010 (get from presentation).

Comments: Larry suggested clustering wood, and allowing single pieces to interact more with the channel. Kerry- suggest more spanning wood/jams.

Suzanna lead a brief discussion of the two prior topics: Riverton- design enhancements in response to SRFB, put in request to CWM and PSAR. For Katie- the scope reduction is largely due to the cost request. We have a cost increase request with CWM and PSAR, as well as a cost increase through CWM reduced to support the reveg grant round. We'll be trying to get back to the full 13 acres. We will need to work more with SRFB on if some of the additional wood portions are needed.

The group OK'd Suzanna to proceed with the cost increase requests and tentative scope adjustments.

Revegetation Grants- Suzanna Smith

Currently two requests for proposals active:

- 1 Million Trees grants
 - Restricted uses; \$175,000 available; Minimum \$25,000; no max
 - King County Initiative (insert link)
 - All funds must be expended by December 31, 2020
 - King County not eligible for these funds, will rely on partner jurisdictions and non-profits.
 - **Grant Applications are due by 5pm on Monday, March 25, 2019.**

- Revegetation Grant Round
 - \$250,000 available, Min \$7,500; max \$60,000
 - New criteria and requirements; de-emphasize stewardship, outreach, volunteer engagement
 - Emphasis on implementing "Green the green" and priority shading habitat
 - **Grant Applications are due by 5pm on Monday, March 25, 2019.**

Reveg and 1 million trees will also need review team. Setting up a review team, limit to <10 people. If you would like to participate please contact Suzanna.

Suzanna also shared the status of projects for 2019:

- Reduction of cost increase for Green River reveg to support the reveg grant round; cost increase request to PSP for PSAR
- Some CWM funding to support a small cost increase for Riverton Flaggate; cost increase request to PSP for PSAR
- Priority projects for 2019

- Point Heyer salt marsh property and upland
- Lowman Beach (**Public meeting on Feb 28th- please attend**)
- Lones Levee
- Environmental Stewardship Funding (~\$300,000)

Monitoring/Assessments/Studies- Future discussion

- Represents \$120,000 of the funding (currently 6.8% of CWM)
- Middle Green River smolt trap (\$40,000)
- Monitoring work- TBD (\$80,000)
- **Accepting recommendations and how to solicit and fund work! Will be discussed at the March ITC meeting**

March 20th meeting priorities

- More in depth overview of projects teed up for 2019
- Discussion of monitoring and assessments funding
- Finalize review team for reveg and 1 Million Trees projects
- Also, SRFB review panel site visits will be either March 25th or April 1st, let Suzanna know if you would like to attend

Problem based learning for watershed systems – Peter Donaldson

What if problem based learning (PBL) in the classroom could help meet Watershed Management Goals? This is the overlap in between classroom teachers and academic standards that must be met, with resource managers and the watershed system challenges in the community that must be met.

The approach: Immerse students in systems approach to watershed management. This includes both natural systems (climate, water cycle, watershed integrity) and human infrastructure (water supply, wastewater treatment, and storm water management).

Key program elements:

- 1) Focus on middle and high school
- 2) Support ongoing professional development for teachers
- 3) Integrate extended units of instruction
- 4) Design district-wide dissemination strategies
- 5) Achieve economies of scale across WRIA's

Program goals:

- 1) Establish annual rhythm of PBL curriculum design labs
- 2) Collaborate on curating and posting a living textbook
- 3) Produce short videos on technical subjects for classroom inquiry
- 4) Student design, track and report solutions to stakeholders
- 5) Map impact online

Living textbook- this idea incorporates local policy, plans, and performance data into curriculum for students. Students need the opportunity to read, interpret, and act on real issues. Rather than standard textbook, use our information that we produce to teach students.

How does this align with the WRIA 9 Salmon Habitat Plan?

- Chapter 3- Impacts on salmonid habitat in WRIA 9: History, factors of decline, and policy recommendations.
- This is included in Policy ES1, ES3, and ES4

Current program development- 16 teachers from Kent, Auburn, Highline, Seattle and Tukwila, as well as curriculum coordinators in Kent, Auburn, Highline, and Enumclaw. Peter wrote a NTA for the 2018-2022 Puget Sound Action Agenda.

How do we build a shared cost model to support a program like this?

- \$2,000 for a 12-month stipend for one teacher fellow
- \$5,000 for professional development
- Total \$7,000
- Mature program would be 20 teacher fellows plus 100 peers from 5 districts, \$189,600

Additional Comments/Round Robin

Kollin Higgins- The BIOP from NOAA to the Corps for Howard Hanson dam has been released, requiring fish passage by 2031. Also, the public comment for the Green River hatchery program has been reopened.