

WRIA 9 Implementation Technical Committee
Meeting Summary – December 19th, 2018, 9:00 am –12:00 am
King Street Center, 6th Floor- King/Chinook Rooms

Attendees: David Casey, City of Maple Valley; Katie Beaver, King County; Dave Beedle, Seattle City Light; Sophie Chiang, King County; Bea Covington, KCD; Peter Donaldson, Sustainability Ambassadors; Jeanette Dorner, Midsound Fisheries; Annika Fain, Fain Environmental; Larry Fisher, WDFW; Chris Gregersen, King County; Kollin Higgins, King County; Antonia Jindrich, Midsound Fisheries; Josh Kahan, King County; Debbie Meisinger, KCD; Kathy Minsch, City of Seattle; Mike Perfetti, City of Tukwila; Jen Rice, King County; Dennis Robertson, City of Tukwila; Cory Zyla, PSP.

King Conservation District – Debbie Meisinger & Bea Covington

Debbie presented a summary of current KCD programs that align with salmon recovery efforts, which also highlight specific activities in WRIA 9 that support salmon recovery and WRIA goals. Debbie began with an overview of KCD programs and the salmon recovery strategies they address:

- Member jurisdiction grant program- This provides funding for projects in partnership with WRIA 9 jurisdictions and non-profits. Since 2015, KCD has worked with 29 cities and groups, providing over 2 million in funding for a variety of projects. An example is the post construction monitoring at Seahurst Park, where the City of Burien partnered with UW and Anchor to study eelgrass and macroinvertebrates (~\$100k). Now they are working on feasibility for McSorely Creek and to this point have contributed around \$400k. This program also provides fact sheets to jurisdictions to give them updates on project funding and progress.
- Urban Forestry program- This is a pool of money set aside for jurisdictions to do urban forestry related projects. Since 2015, they have 13 partners with ~\$194k invested. An example of this is the South King County tree canopy assessment. The purpose of this is for assessment/mapping of cover classes, impervious surface, water area, and vegetated cover area. It's designed to provide baseline levels of information, and KCD is currently exploring new options for what they can do with the data. This is a project being done with about 25 partners and a technical advisory committee. They are providing stewardship and training for citizens to be involved in urban forestry. Examples include Lakeridge Park/Deadhorse Canyon and East Valley Heights in Redmond.
- Landowner Incentive Program- This is a cost share program that empowers landowners to be better stewards to implement conservation practices on private property. This is mostly related to agricultural and livestock practices, and also aquatic. Since 2015, worked with 99 landowners for a total of 134 practices 770k. Within this there are a few types of programs:
 - Rural Forestry- This provides technical assistants, forest stewardship plans, forest health assessments, and forest restoration projects. To date this has worked with 14 landowners on 121 acres for ~250k. A question was asked as to whether these are these tailored to the historic plant communities? Each has a specific plan, currently under planting maple and alder with conifers. Historical information is included in the plans.

- Shorelines- 3 shorelines related programs. The rural shorelines program for unincorporated KC citizens when implementing farm plans for buffer areas, rural shorelines program working with streamside landowners within cities, and urban programs as well. Since 2015, 30 landowners, 16 acres and over 35k plants planted. An example of this is Miller Creek in Burien, featuring over an acre of planting along Miller Creek. Also, Miller Creek- Normandy Park (removing ivy from stream and replanting) Walker and Sequoia Creeks in Normandy Park (removing ivy and blackberry and replanting 700 trees and shrubs). Examples of rural shorelines program include: Soos Creek in Kent (2 acre buffer enhancement on 650 feet of Soos creek), Crisp Creek in Auburn (3 landowners to remove invasives and replant 330 feet of stream), Stonequarry Creek in Enumclaw (An ag ditch featuring livestock exclusion and replanting), Puget Sound bluff restoration in Normandy Park (restore a site that's topped trees and blackberries along the shoreline of Puget sound, planted 700 trees and shrubs, treated with 6 to 8 inches of compost with wood chips on top), and also beach plantings and knotweed removal on adjacent properties.

AS stakeholders, KCD relies on the WRIA for technical guidance and moving forward with actions, for example, implementing projects within the 5 year plan over a wide geographic area vs targeted areas. They will be having a stakeholder workshop on January 12th and February 9th to help develop the 5 year work plan, bringing together individuals and jurisdictions with the idea of partnering and leveraging funding (Example, incorporating NTA and USFS resources). To date, ~4.1 million dollars spent in WRIA 9 since 2015.

Question- do these projects include funding for maintenance? Yes, 3 years of maintenance is built into project budgets for yearling maintenance and adaptive management. They do not do easements, but do 15 year contracts so landowner is required to maintain the project for the 15 year lifetime of the project.

Question- is there a demand to focus on priority areas? Currently we have a backlog of projects and sites, but currently the mission is to spread out efforts throughout the county. Unique in that they can take on projects that most others won't or can't.

Question- are you incorporating ESJ? Currently we are working on outreach on how we can take different approaches for outreach in different areas like south king county.

Downey Farmstead – Matt Goehring

Matt briefly went through the status of the Downy Farmstead Side Channel Project by City of Kent in the absence of Matt Knox. The project will relocate Frager road, remove fill, and create a side channel in the project area. This was historically a farmstead, which was then used as a tree nursery and was eventually purchased by Kent. The conceptual design includes 4 new inlets for the side channel. Currently, they have cleared the ornamental trees and removed 55 million yards, looking at removing 210 million more yards. They have also relocated utilities.

Originally they planned on removing the road and installing a trail, but one farmer did not agree, so the road needed to be rebuilt to KC road standards which is more stringent than the road that currently

exists. Question- Does this tie into Mullen slough? No, the side channel actually comes back in before Mullen slough so that the bridge over Mullen is unaffected because of cost issues. Currently, the road relocation will go out for bid this spring, while the habitat construction is tied to PSAR large cap funds. So, next steps for the project include Frager road relocation in 2019, and hopefully construction in 2020.

Lower Green River Corridor Plan Update – Matt Goehring, Katie Beaver, Kollin Higgins

Matt gave an update on the KC flood control district's Lower Green corridor plan and PEIS. Public comment launched Nov 28th and extends through Jan 29th. The Lower Green Corridor plan covers 20 miles of the lower river. This is a critical piece of advancing salmon recovery in the watershed. In the next 15-20 years, we're looking at 2 billion in investment through Duwamish cleanup, fish passage at HDD, and a billion invested in flood control. Given that we are currently limited by rearing habitat, in order to actually see recovery, we need to increase rearing habitat in the lower green as well as shade since we know temperatures are exceeding limits.

Salmon have been in continual decline with a low in 2009. Lower Green is highly degraded, with an 80% plus loss of floodplain. Rearing habitat is a bottleneck for the system. The lower Green is an economic engine of the region, with about \$7.3 billion in floodplain structures and contents along the shores of the lower Green (100 million square feet of warehouse and an annual taxable revenue of 8 billion dollars).

When the original SWIF process was unveiled by the corps, one was done by King County flood control district for the lower Green, and one was done for Whatcom County. Whatcom's was a bare minimum, and KC flood control district incorporated corridor planning. The lower Green had an advisory and technical committee, which both adopted these goals and moved them on to the flood control district. A variety of protection goals were established, with a fair amount of agreement that we don't want key areas to fail.

There were level of protection goals set and mapped, with habitat opportunities incorporated. There were 3 alternatives that were proposed that incorporate various amount of habitat. Some of this were things that the WRIA had contributed, as well as habitat opportunity areas that would achieve multi objective projects. The last AC meeting of the SWIF in May of 2015 ended with environmental interest saying that they could not support the SWIF as proposed, too flood focused, not enough other interest represented. FCD regrouped and decided instead to do a bare bones SWIF like Whatcom County and would get back to the corridor plan later. They pulled the policy, and alternatives/habitat opportunities were removed. The interim SWIF was submitted in 2016 and approved by USACE which included deficiency action plan, capital plan, and vegetation management plan. After this, they would revisit the creation of a multi benefit plan.

The new version is the Lower Green River Corridor Flood Hazard Management Plan and PEIS (programmatic environmental impact statement). We expect this to be a 2 year plan to provide a long term approach to reduce flood risk and improve fish habitat while supporting the economic prosperity of the region. Increase level of protection to 500 year flood by constructing new or improved flood protection. The plan describes four facility types:

- Type A- Footprint of 100 feet or less with a levee or floodwall. This type of facility would require offsite mitigation, not much opportunity for on-site mitigation.
- Type B- Larger footprint 100 to 150 feet, small amount of opportunity for veg and LWD, FCD hoping this is self-mitigating.
- Type C- Setback levee, this has the most opportunity to incorporate habitat. This still has rock in the toe. Type C would only be constructed in locations where a levee setback would not impact existing ag land, buildings, parking, or traveled roadways.
- Type D- Physical, non-structural. The only place for this is in Auburn, to raise clubhouse in golf course.

Currently, there are 3 alternatives the FCD has proposed. Alternative 1 would be no action, Alternative 2 would be a moderate increase in level of protection, and Alternative 3 would be greater increase in level of protection and integrated habitat, recreation, and agricultural. Katie presented an alternative comparison, showing the types of levee facilities for the 3 alternatives.

WRIA 9 and King County approach- the proposed alternatives do not meet the needs of multi-benefit floodplain management for salmon rearing habitat, riparian veg, and instream temperatures. Moving forward, WRIA 9 met with local jurisdictions to have preliminary discussions around habitat opportunities and convened a mayors meeting. From this meeting, there is support for a 4th alternative, though they did not want to have a repeat of the SWIF process.

Conceptual progress on Alternative 4 includes approaches look at opportunities by identifying land use, building condition, as well as geomorphic constraints to help identify these opportunities. Going a step further, we could provide the same facility type and providing a broad overview of left and right bank potential, along with multi benefit potential. Going further than a reach scale analysis, the version 3 breaks it down into specific geographical areas which highlights general areas with habitat action and multi benefits that are possible. General discomfort observed with the more detailed approach by jurisdictions. Draft SEPA themes that will be incorporated into the comment letter includes salmon recovery goals, treaty rights, juvenile fish passage, orca task force recommendations, temperature TMDL implementation, climate change resiliency, facility life cycle costs, floodplain storage capacity and inundation modeling, environmental and social justice, economic development, recreational opportunity.

The comment period runs through 29th, with the public meeting on January 9th. The website for this is www.lowergreensepa.org. At this point, most consensus is around alternative version 2 that would break opportunities into right bank, left bank, and bullet points. First step right now is getting a consensus on an alternative 4 map from jurisdictions before we move forward. Currently unsure of whether it would be more effective to comment that the FCD needs to develop a 4th alternative that considers the multi benefit objectives discussed, or whether it should propose a 4th alternative to the FCD (that would need jurisdictional buy in). We will keep everyone updated on the process, and we will have something to present for comment before the comment period closes.

Porter Levee Removal – Josh Latterell

Josh presented an update on the Porter Levee Removal that was completed in 2017. In 1999 there was an early action project by the county and the corps to notch the levee and increase access. Design features for the project include boundary protection against SE Green Valley rd. with the goal of maximizing room for the river. This protection includes a buried launchable toe with soil on the top. They would like to minimize that type of feature, so a deflection jam was installed so that if the river comes into contact with the road it will hopefully be deflected back to the river. Downstream of that is bank roughening structure which is logs chained to rock partially buried, these are intended to keep flood flows from undercutting the road. Then, rather than build a levee, the road was raised up 2 feet higher to function as a levee.

A 1000' backwater channel was constructed in order to meet zero rise goals, but also to provide fish habitat. Three floodplain jams were installed by threading logs into trees, which are not chained, in order to provide habitat and be distributed by the river. They also built 3 buried logjams that were buried to be exposed as the channel migrates.

The major part of this was removal of 900' of levee. All the rock and 5 feet of fill were removed. By 2018, the banks had come back, channel reshaped, mid channel bar and logjam forming mid channel, and increasing floodplain connectivity. As of 2018, 6 feet of material has aggraded in the middle of the channel. The project has created "sticky bars", or shallow areas that capture large wood at flood flows. Large wood has increased, adding cover for fish. There is also a high level of cottonwood recruitment. We can estimate fish habitat by measuring edge habitat. Large increase in edge habitat post project, and high fish use in many of the habitats. By measuring change in habitat area and measure parr per unit area, we can get a rough idea of parr production from the project. Right now, there is about a 50% increase in habitat at the project site, meaning a possible 2% increase in parr production.

Key takeaways are that removing levees actually can restore processes, and that these processes do increase habitat for juvenile Chinook, process restoration may happen quickly even in a river with regulated flows, and to keep going and constantly improve our restoration.

Policy Revisions- Matt Goehring

Matt discussed the water quality portion of the salmon habitat plan update. How in depth should the plan update go into water quality? We don't need to go in depth but need to call out the policies that need to be supported in WRIA 9. Matt distributed some edits that he made to the present water quality policies.

Policies in the 2005 plan: Policies on impervious surface and attempting to keep this below a 10% threshold in rural areas as well as 65% natural forest cover as well as a general statement in UGA's for a reduction in impervious and increase in forest if possible. Policy 2- on the integration of low impact development techniques. Policy 3- managing groundwater in conjunction with surface water to provide adequate flows as well as water temperatures for salmonids. We're now seeing movement in terms of ecology permitting exempt well development. Policy 4- implement water quality standards and strengthen them when necessary, necessary moving forward? Policy 5- develop recycled water policies and uses.

Matt made a first round of edits to update and clean up the policies. Matt would like to distribute this to get feedback on his edits. Kollin- we had talked about setting goals around keeping flows at a certain level after 2015 issues, so may want to include water quantity in here as well. Matt- this was touched on in the groundwater/surface water portion, matt included developing drought management plans to minimize impacts to salmonids during drought. In terms of addressing flow quantity, we could put more in (example, acquiring water rights when they come available to retire and dedicate to the river, or working with replacing river water with reclaimed water). The purpose of including this is because it becomes difficult to do these actions when they aren't called out as a policy. Also for areas that have more than the stated forest cover, should there be different wording or policies to ensure that those areas maintain higher cover or make it seem like we are not ok with reducing those levels even though the levels might be above our goals? Maybe incorporate KCD urban forestry targets/goals.

If there are any more thoughts or directions please send your comments and input to Matt. Moving forward Matt will be looking for feedback from member jurisdictions.

Round Robin- All

David Casey- Maple Valley now has a new NPDES program manager.