

WRIA 9 Implementation Technical Committee

December 13, 2017 – 9:00 am to 12:00 pm
Tukwila Community Center – Banquet Room C

Attendees: Bryan Anderson, Boeing; Kerry Bauman, King County; Katie Beaver, King County; Karen Bergeron, WRIA 9; David Casey, City of Maple Valley; Sophie Chiang, King County; Jenee Colton, King County; Jeanette Dorner, Midsound Fisheries; Larry Fisher, WDFW; Matt Goering, King County; Chris Gregersen, King County; Kollin Higgins, King County; Abby Hook, Hook Environmental; Leah Kintner, PSP; Matt Knox, City of Kent; Katherine Lynch, City of Seattle; Kathy Minsch, City of Seattle; Amber Moore, PSP; Joan Nolan, Ecology; Jessica Olmstead, DNR; Tyler Patterson, City of Tacoma; Mike Perfetti, City of Tukwila; Scott Powell, Seattle City Light; Kaitlin Schnell, USACE

Jenee Colton- Green Duwamish Contaminants White Paper

Jenee has completed the full draft of the contaminants white paper, and presented the additions to the paper as well as responses to the comments that she received on the contaminants paper. This is the first full draft that has been provided; the last didn't have conclusions and recommendations section. We would like to get comments on this by **January 10th**, which will allow us to take the comments and incorporate them into the paper so that we can get forum approval in February. At the forum meeting, this will be proposed for adoption as an addendum to the strategic assessment.

Jenee presented the following edits and additions:

Minor comments:

- Added info on east waterway cleanup
- Editorial changes for clarity
- Updated and edited prespawn mortality and toxicity research
- Footnotes to explain terms and concepts, such as why we're not using B-IBI.

Major comments:

- Added text on emerging contaminants as a data gap
- Added additional data sources for fish tissue and water data
- Added a comparison of PCB Chinook thresholds from the Superfund risk assessment and NOAA
- Revised the "uncertainty" section and added assessment methods

Additional Changes:

- Refined the food ingestion part of the ingestion pathway graphic

- Change “Chinook” to “Chinook salmon”. ITC agreed to capitalize Chinook, and incorporate “salmon” occasionally for reference
- News for the Our Green Duwamish program
- Adding a few more citations to text (no new data though)

Conclusion section added, in which the following main points are covered:

- Generally, water and sediment contaminant concentrations increase with distance downstream
- Generally, tributaries with evidence of highest sediment contamination are the most urbanized (Springbrook and Mill in Kent)
- Duwamish Estuary Chinook are more contaminated than other Puget Sound watersheds
- Duwamish Estuary juvenile Chinook may experience adverse effects from contaminants
- No information on potential impacts of CECs on salmon are available for WRIA 9
- SAR rates are substantially lower in contaminated estuaries compared to non-contaminated ones
- Biomarkers, demonstrating contaminant exposure, have been observed in LDW Chinook
- Benthic invertebrates in some areas of LDR experience adverse effects, which in turn could affect Chinook diet

Adding recommendations for future work:

- Focus work on Duwamish River as it has the highest level of contamination, which would increase ability to detect if there is in fact an adverse effect
- Conduct studies to measure contaminants in juvenile Chinook tissues and stomach contents.
- Conduct studies of Chinook and other salmon effects at different life stages or residence times
- Specific contaminants- focus on those known to be elevated (PCBs and PAHs), and opportunistically explore CECs such as pharmaceuticals
- Conduct desktop analysis of tissue effect thresholds for PCBs to develop Chinook-specific values
- Purpose for these recommendations is because there’s a high amount of uncertainty in Chinook specific effects as well as data gaps for specific areas in the LDW. Necessary to gather this information to be able to formulate a solution
- Support studies that examine other effects evidence (e.g. WDFW) such as juvenile Chinook Duwamish sediment bioassays, biomarkers
- Work to tease out causes of lower SAR in the Duwamish. There was some concern around how we choose which contaminants, especially emerging contaminants. Jenee acknowledged this and explained that there are an overwhelming amount of emerging contaminants so selecting them is a difficult process and based on findings from tissue sampling and recent research. Focusing on known contaminants is important to add to the data that we have, but we want to still be aware of emerging contaminants.

Karen Bergeron- Salmon Recovery 4 Year Work Plan

Karen gave an update on her current work with the 4 year work plan. Currently, she's meeting with project sponsors to get updates on any issues with projects. In the past the deadline has been in the spring, but now the hard deadline is end of January. Karen is seeking early feedback on additions to the work plan. Some projects Karen is proposing to add are:

- Lower Green River environmental ed/stewardship program, perhaps adding to work by the environmental science center
- The junk yards in the lower Green in/adjacent to Kent- ID this for potential feasibility work
- Gilliam creek
- Duwamish acquisition project- it will have a big price tag, but the point is to identify needs so we can develop funding strategies
- Hamm creek project with Seattle City light
- Implementing the revegetation strategy-possibly by breaking up the plan into subwatershed

Looking at a ~\$100 million price tag by the time this list is done including acquisition, but good for the purpose of accounting and keeping track of all that needs to be done. Karen is hoping to include monitoring studies as well. Currently, the CWM funding has increased from \$1.2 to \$1.6 million, but the monitoring proportion hasn't. Monitoring funding, however, hasn't increased and has stayed at \$120k

Karen would like to refine this 4 year work plan and have this sent out before the Jan 17th ITC meeting so we can submit it by the deadline.

David Graves- Lowman Beach Park

David presented a background on the Lowman Beach Park Seawall Removal project and the current status. The southern half of the park features a natural beach, which historically had a seawall that was installed in the 30's failed 1994 and then removed to create a natural beach. It appears that sediment additions to the beach at Lincoln Park may have aggraded throughout this southern part of the park – sediment moves back and forth in this area but beyond beach renoursihments projects, there is little source of material. The northern half of the park currently has a seawall which a remnant of the original 1930's seawall plus repair work done in the 50's. The park has a small playground and tennis court as well.

In Nov 2015, the seawall on the northern portion of the beach began to fail. The seawall has both started to tip outwards, as well as move towards the beach. Aside from the failing wall, a small tributary which has been piped through the seawall has become disconnected from the flow through at the wall.

The project looks to find a solution to this failing wall. Currently, they have completed the feasibility study report as of Dec 2017. David presented the following 3 concepts/alternatives that they are proposing:

- First concept- Save the tennis court, and move the beach back to the edge of the tennis court with a remnant of the seawall to protect private property to the north.
- Second concept- Remove tennis court and seawall with a full functioning shore, though with some seawall to protect the private property to the north.
- Third concept- Rebuild the seawall in its current location. This is mostly included for transparency and cost perspective, as time has shown that seawalls fail here.

The grant that they have been using to complete the feasibility study has been extended to September 2018 with unspent funds, so they will proceed with additional investigative work limited design work on the preferred alternative. The ITC commented on potentially expanding the project north by working with some of the landowners, which would maximize the habitat potential at the site. The ITC also expressed interest in daylighting the portion of the piped creek flowing through the park currently. The feasibility study is on the website: <http://www.seattle.gov/parks/find/parks/lowman-beach-park> . Any questions related to the project can be sent to David Graves.

Matt Goehring- Salmon Habitat Plan Goals Update

Matt gave an outline of the current goal update document, the creation of the document, and presented the indicators proposed. The master habitat indicator document from September 2017 (33 pages) was based on the 2005 Habitat Plan, 2006 Implementation Guidance, 2014 Duwamish Blueprint, and the 2016 Re-green the Green. Since then, we took that master habitat indicator list and broke it down into several categories. We took out those targets that are not proposed to be tracked. Then we identified indicators that are important to monitor and consider as part of adaptive management, but that will not have forum-approved targets. Finally, we identified implementation targets, which are the important indicators that we can use to track implementation of the habitat plan. This will be the focus of our goal update for the habitat plan. Additionally, the white papers/gap identification were used to inform these implementation targets. If you think that there were any that were missed or dropped that shouldn't have please send your feedback to Matt.

Matt presented the following examples of habitat indicators that are being proposed:

- **Implementation Targets**
 - Shoreline armor extent
 - Duwamish shallow water habitat
 - Riparian forest coverage
- **Monitor, but no formal target**
 - Duwamish LWD jams
 - B-IBI
 - Days above the 7-day water temperature standard
- **Not Tracked**
 - Overwater structures

- Nearshore and Duwamish tributary riparian coverage

Matt handed out the latest 4 page habitat indicators document and went through each of the habitat indicators with the ITC. The following key points were discussed:

- Potentially move pocket estuaries to the monitor group and not have a target, but keep it relevant for future work.
- Currently we don't have a recommended 10 year target for lower Green off-channel habitat. Our proposed strategy is to look at projects that are coming up, see what is feasible, and then base our 10 year target on a realistic goal. The importance of mainstem rearing habitat was discussed as potentially a separate goal. It was acknowledged as an important habitat component that will be included in the plan, but there is not currently a relative easy method to quantitative to establish a baseline and track it moving forward.
- The middle Green floodplain connectivity/lateral channel migration 10 year target needs to be developed. PSP is currently consulting a group to develop a metric for floodplain habitat in Puget Sound, which will help define floodplain connectivity and how it can be tracked relative to fish habitat. We're proposing to use a metric based off area of the floodplain open to channel migration, or we could wait to see what PSP comes with.

Round Robin Updates- all

Leah Kintner- Leah has the latest State of the Sound reports, if you'd like one Leah and Amber are passing them out. NTA solicitation went out in mid-November. Pre-registration is due December 22nd, after that deadline they are not accepting anything new. Draft NTAs need to be completed March 30th. The RFP for Floodplains by Design is out, and these are due February 16th. The PSAR RFP will be coming out in the early part of next year. We are still stalled for the current PSAR and Floodplains by Design, and the outcome is still unknown-hopefully the capital budget will be passed in February or March.

Kollin Higgins- The draft EIS out from NOAA on 10 potential hatchery programs on the Green. Comment deadline was extended from December to January to allow time for comments. Also, King County has implemented a moratorium on net pens. There will be a meeting in early January, contact Kollin for details. The intent for this is to work to get a permanent ban on net pens. At the state level, there are currently at least 3 bills going to state legislature that would have the same effect for all of Puget Sound.