

# WRIA 8 Salmon Recovery Council Meeting Notes

Department of Ecology Northwest Regional Office

September 17, 2015 3:05-5:23 p.m.

<b>Members/Jurisdictional Staff Alternates Present</b>		
<b>#</b>	<b>Name</b>	<b>Affiliation</b>
1.	Councilmember (CM) Larry Phillips, Chair	King County
2.	CM Eileen Barber	City of Issaquah
3.	Mayor Bruce Bassett	City of Mercer Island
4.	Don Davidson	Long Live the Kings
5.	Nancy Eklund	The Boeing Co.
6.	CM Ted Frantz	Town of Hunts Point
7.	Dave Garland	WA Dept. of Ecology (Ecology)
8.	Mike Grady	NOAA Fisheries
9.	Cyndy Holtz	City of Seattle
10.	Peggy Marcus	U.S. Army Corps of Engineers
11.	CM Hank Myers	City of Redmond
12.	CM Tom Odell	City of Sammamish
13.	CM Dana Parnello	City of Maple Valley
14.	CM Mark Phillips	City of Lake Forest Park
15.	Stewart Reinbold	WA Dept. of Fish & Wildlife
16.	CM Jesse Salomon	City of Shoreline
17.	CM Carl Scandella	Town of Yarrow Point
18.	Richard Sowa	Friends of the Issaquah Salmon Hatchery
19.	Frank Urabeck	Citizen
20.	Deputy Mayor Allan Van Ness	City of Kenmore
21.	CM Paula Waters	City of Woodinville
<b>Others Present</b>		
22.	Amanda Almgren	City of Woodinville
23.	Alison Bennett	City of Bellevue
24.	Hebe Bernardo	City of Renton
25.	Judy Blanco	Forterra
26.	Colleen Crotty	Citizen
27.	Roger Dane	City of Redmond
28.	Uki Dele	City of Shoreline
29.	Mark Ewbank	Herrera Consultants
30.	Jason Hatch	WA Water Trust
31.	Jacque Klug	King County
32.	Jerallyn Roetemeyer	City of Redmond
33.	Ralph Svrjcek	Ecology
34.	Jean White	King County
35.	Linda Grob	WRIA 8 Team
36.	Jason Mulvihill-Kuntz	WRIA 8 Team
37.	Scott Stolnack	WRIA 8 Team
38.	Jason Wilkinson	WRIA 8 Team

Chair Larry Phillips opened the meeting, inviting all attendees to introduce themselves.

## 1. Public Comment

Ralph Svrjcek, WA Department of Ecology, announced that Ecology is currently conducting a water quality survey and monitoring study on the Sammamish River that will continue through the fall. The

# WRIA 8 SRC Meeting Notes

September 17, 2015

---

survey will result in a Total Maximum Daily Load (TMDL) study and published clean-up plan. More information can be found at [www.ecy.wa.gov/programs/wq/303d/index.html](http://www.ecy.wa.gov/programs/wq/303d/index.html).

## 2. Approval of Meeting Notes for July 16, 2015

*The Salmon Recovery Council unanimously approved the meeting notes for the July 16, 2015 meeting.*

## 3. Updates & Announcements

### General Announcements:

Jason Mulvihill-Kuntz (Jason MK), Watershed Coordinator, requested folks review the Updates & Announcements handout, and highlighted the following topics:

- **WRIA 8 Salmon Recovery Council Leadership for 2016 and Beyond:** With Larry Phillips retirement at the end of 2015, the Salmon Recovery Council (SRC) is in need of a new chair and vice chair for 2016 and beyond. Jason MK asked members to let him know if they are interested in either leadership position.
- **WRIA 8 Salmon Recovery Tour:** Invitations have gone out for the annual tour, which is Friday, October 9, 9:00 a.m. to 2:00 p.m. The tour will start at the Ballard Locks, travel to the Riverbend project site on the Cedar River, where a mobile home park was purchased, the residents relocated, and floodplain habitat restoration is planned, and Issaquah's Confluence Parks restoration project. The tour is focusing on engaging legislators and staff, Congressional delegation and staff, and SRC members and other local elected officials.
- **Raising Awareness about Effects of High Temperatures/Low Flows on Salmon:** WRIA 8 has responded to this summer's high temperatures/low flows conditions in the following ways:
  - WRIA 8 Management Committee (MC) reviewed and approved a letter to Seattle Mayor Ed Murray, commending Seattle Public Utilities (SPU) for initiating a voluntary reduction of water use. Cyndy Holtz explained that the result equaled a 10% voluntary reduction, and SPU is now targeting outreach to the Seattle Parks Department and the University of Washington (UW), the two largest users, and is conducting continuous monitoring. Each month SPU convenes the instream flow committee, which makes real-time decisions on flows.
    - Tom Odell said he attended an event at the Issaquah Salmon Hatchery where he heard a presentation from Laura Binder, who said we are going to see this summer's weather conditions over and over. He suggested she come present to the SRC.
    - Larry Phillips asked if Seattle is providing temperature information. Cyndy Holtz responded that Scott Stolnack, Technical Coordinator, is sending out regular information. Scott said he has been sending King County (KC) Water and Land Resource's temperature information out weekly. He said the Cedar River is doing pretty well temperature-wise at this time.
    - Frank Urabeck said he sits on the SPU monitoring committee for the sockeye hatchery, and he commended Seattle for doing what it can. He said we took a real hit on sockeye last year and thinks we will this year as well.
  - Larry Phillips co-authored an Op-Ed, "Our Salmon are in Hot Water", with the chairs of the Snoqualmie and WRIA 9 Watershed Forums. The Op-Ed ran in the Seattle Times on September 5 and in other local newspapers.
  - The MC approved up to \$20,000 as local match to support a Sammamish River pre-spawn mortality study to better understand how low flow and high temperature conditions impact Chinook migrating to spawning grounds.
  - Drafted a letter to Colonel John Buck, Army Corps of Engineers (Corps) District Commander, commending the Corps for looking at whether false lockings help to reduce water temperature

# WRIA 8 SRC Meeting Notes

September 17, 2015

---

upstream of the Locks, and emphasizing the importance of further studying how to reduce temperatures in the Ship Canal to improve water quality conditions for salmon and ensure they pass through to the rest of the watershed. Jason MK requested SRC approval to send the draft letter.

- Carl Scandella said sending the letter is a good discussion, adding that we are also hearing about temperature in saltwater and how it is affecting pH. He said he thinks we want to keep an eye on this landscape and learn as much as we can.
  - Mark Phillips said it's a great letter and he thinks we should send it. He asked if we are also thinking about introducing cold water into the creeks from wells or other places, like for the Sammamish River and the Bothell side channel. Jason MK explained that is a strategy in our WRIA 8 Salmon Conservation Plan, as is restoring streamside vegetation as shade.
  - Larry Phillips commented that there is another more controversial option of using reclaimed water from Brightwater, which we will be hearing about later.
  - Tom Odell said the City of Sammamish is working on its comp plan review, and a goal is to add more trees and shade via a tree ordinance, which will require reforestation, and another is protecting water that enters Ebright Creek.
  - Frank Urabeck said if we hope to not lose our sockeye run we need to start now on the temperature reduction feasibility study in the Ship Canal. We can't wait 10 or 15 years to keep the run alive. He said we need more emphasis on elevated temperature in the Ship Canal, which is the big elephant in the room.
  - Mike Grady agreed that the Ship Canal is deadly, but there are some ways to help. A study that was done at Sand Point showed there is a cool water source 150 feet down in Lake Washington. He said University of Washington (UW) is looking at the possibility of drawing that water up.
  - Ted Frantz asked if there is any research showing that salmon can stay another year in the ocean when temperatures are high. Stewart Reinbold said we don't have any evidence they go back to the ocean. Even worse they will stay in the Ship Canal waiting for conditions to improve, and then parasites and stormwater runoff come into play. Councilmember (CM) Frantz said it seems the focus needs to be in Lake Washington on the Locks and Ship Canal. Frank Urabeck said there has been some conceptual study done by UW, and he wants to see it go to feasibility.
  - Larry Phillips proposed Jason MK strengthen the letter with Frank Urabeck's input and send it out to the Corps. He commented that the Seattle Times used to say they weren't interested in Op-Eds on climate change, and now the Times says they want stronger language on climate change.
- **Fish Counts at the Locks:** Scott Stolnack said the handout shows that this year's counts were bad for Chinook and worse for sockeye.

## 4. 2016 Legislative Priorities for Puget Sound Watershed Health and Salmon Habitat Recovery

Jason MK said our Legislative Priorities are approved every year as a working document. Federal priorities include supporting: at least a \$65 million appropriations request for the Pacific Coastal Salmon Recovery Fund; getting Puget Sound approved as a "Great Waterbody"; and funding for the Corps' critical infrastructure repairs and updates to the Locks. State priorities include communicating support during the 2016 Supplemental Legislative Session for salmon recovery capital funding priorities, including Puget Sound Acquisition and Restoration (PSAR) grant program, Salmon Recovery Funding Board (SRFB) grant program, and Floodplains by Design. No specific operating budget priorities were identified. The policy legislation priority is to support continued efforts to explore new

# WRIA 8 SRC Meeting Notes

September 17, 2015

---

watershed-based funding authorities to support multiple-benefit projects. Jason MK made note of two letters in the meeting packet sent to all WRIA 8 state legislators to thank them for supporting salmon recovery priorities in the state budget, and to members of the Congressional delegation thanking them for supporting the Pacific Coastal Salmon Recovery Fund.

Discussion:

- Jesse Salomon suggested that instead of just a basic thank you letter, maybe putting in bullets explaining how we spent the money. Jason MK said that is a good idea and is what we try to emphasize on the Salmon Tour.

***The Salmon Recovery Council unanimously approved the 2016 Legislative Priorities.***

## 5. WRIA 8 Habitat Status and Trends Project

Scott Stolnack said the purposes of King County's habitat status and trends project were to characterize stream habitat for salmon recovery, investigate relationships between development and stream conditions, communicate findings to local and regional forums, and inform adaptive management. Surveys were conducted at 52 spatially random sites in WRIA 8 over a five year sampling window, and at five EPA "sentinel" sites. Funding came first from WRIA 8 (2009-2010) and then from an EPA grant (2010-2013), with in-kind from KC, Ecology, EPA and WRIA 8. Scott said efforts of this magnitude at this scale are very rare, and we used a "gold standard" study design. Our information nests at the watershed scale into larger monitoring studies. It sets the bar for watershed-scale monitoring in the region, and provides a clear, quantifiable baseline for comparison to future states. Information collected included: pool area, wood volume, sediment, tree cover, hydrology, fish and benthic macroinvertebrates (B-IBI). He said we couldn't do water quality because it would have doubled the expense, but Ecology does survey water quality.

Scott went over study findings:

- We identified a short list of metrics that are relevant, repeatable and precise.
- Tier 1 (core areas) are the last best places as well as migratory and rearing areas.
- Tier 1 areas are usually higher quality than Tier 2 and 3 areas for B-IBI.
- Wood volume is poor across all tiers, which we speculate is because the entire watershed has been logged at one time or another, and so there is not a normal amount of source wood. Also, for decades in many of our streams wood was taken out of the water.
- Summer stream temperature is poor across all tiers. 16°C supports salmon (there are coho in the streams during summer but not Chinook), but over 16°C conditions begin to be poorer.
- Everything in Tier 3 is within the Urban Growth Area (UGA). Outside the UGA, Tier 2 scores better than Tier 1, because a lot of Tier 2 is in the upper Cedar watershed. Within the UGA, Tier 2 areas are not doing as well.
- Even with a long term monitoring program, it will still take a decade or more to detect with statistical certainty a significant change in even the most reliable indicators.
- Only a few habitat indicators had quantifiable standards established. We can tell if things are improving, but do not have standards to say when things are "good enough".

Scott summarized the adaptive management recommendations:

- Re-run the Tier classification framework from the WRIA 8 Plan with this new information for the Plan update. The goal in the Plan is to keep Tier 1 at Tier 1, and raise Tier 2 to Tier 1, or at least not drop it down to Tier 3. The Technical Committee has agreed to re-run the tier classification.

# WRIA 8 SRC Meeting Notes

September 17, 2015

---

- The Plan update should consider additional actions for Tier 2 areas inside the UGA that are in danger of falling to Tier 3.
- Puget Sound Partnership (PSP) should help develop condition thresholds for biologically relevant metrics that are specific to Puget Sound lowland streams
- WRIA 8 should work with PSP and partners to implement a monitoring strategy for the future.

## Discussion:

- Don Davidson said PSP is worried about watersheds going off in their own directions with monitoring. PSP is working on a plan to fund four watersheds to update their salmon recovery plans and do monitoring.
- Hank Myers reported that in Redmond we are trying to improve B-IBI, reforest and put trees along streams, add more wood in the streams, while also working on stormwater.
- Jesse Salomon said maybe wood debris is the easier thing to put in. Scott Stolnack explained that some jurisdictions are doing that, but there are some challenges. You need to make sure when you install wood you're not flooding your neighbor's basement. Jason MK said most of our restoration projects involve placing wood.
- Dave Galvin said it looks like B-IBI is improving, but we can't say for sure. Scott reported that in 2010-2013 scores were improving, but we can't explain why. It's not necessarily because of something we did in the watershed. Dave explained that we can't specifically say what will improve it, but more wood, plants, etc., help. It is hard to write a prescription for making B-IBI better, and we can't set up a concrete target until we know what the natural system is capable of.
- Mark Phillips said we have been B-IBI monitoring in Lyon and McAleer Creeks, and my understanding is sediment is the big problem. He asked what hope is there for our smaller creeks, and what should we be doing with Tier 3 streams. Scott replied that you should continue to reforest, protect, and restore what's there, protect the streams from stormwater, and push LID. Forested stream edges are important. He said people connect to the streams in their backyards.
- Tom Odell reported that in Sammamish we've had low bugs and low redds, and he suggested that the elected officials around the table take a good hard look at your comp plans. Scott added that we need to carefully consider permitting exceptions in critical streamside areas.
- Allen Van Ness asked if monitoring continued in 2014 and 2015. Scott explained that the grant funding ran out in 2014, but KC is doing B-IBI monitoring.
- Mike Grady recommended that to help improve creeks, jurisdictions remove shoreline armoring, plant more plants, and find all outfalls into your streams. He said if we don't find and address outfalls, we are spending millions of dollars for nothing.
- Don Davidson said even if you have Tier 3 streams, you can still educate folks in your areas.
- Larry Phillips said it seems to me we need to break down silos in our monitoring, especially when you have a temperature problem, which is a water quality parameter, but has a clear habitat nexus.

## 6. Sammamish River Recycled Water Project

Jacque Klug, KC Wastewater Treatment Division (WTD), said recycled water is produced at KC's Brightwater treatment plant. It is highly treated, disinfected, monitored, tested, crystal clear and odor free, and cleaner than Lake Washington water. She said we recycle water to reduce reliance on Puget Sound for discharge, keep more water in streams and aquifers, recycle nutrients and reduce fertilizer use, and support community conservation values.

Jacque said KC has been recycling water safely for 20 years, and produces it at three of five treatment plants. The water is used for irrigation, industrial processes, and toilet flushing, and it's a water

# WRIA 8 SRC Meeting Notes

September 17, 2015

---

resource with the same nutrients as what people use to fertilize their lawns. Recycled water keeps the Sounders practice field green, and is used at Chinook Bend and sports fields in Woodinville. She said we can measure small amounts of medicine and personal care products in our recycled water after treatment, but an agriculture worker would have to work in the field 28,000 years to get the exposure equivalent of one ibuprofen.

Jacque explained that we recycle water at Brightwater because it is a requirement of our outfall lease. The infrastructure is cost effective, there is a demand for water in the Sammamish Valley, and it is a great way to get water back into streams. There are a lot of water rights in the Sammamish, and it is an important valley for our community. Sammamish challenges include channelization and dredging, loss of riparian habitat and species, water withdrawals and low stream flows, high water temperatures, and non-point pollution. She said switching to recycled water in the Sammamish offers new water solutions for the river, and is recommended in the WRIA 8 Plan, Sammamish River Corridor Plan, and the Bear-Evans Water Quality Implementation Plan.

Jacques said KC saves 419 million gallons of water per year by using recycled water at Brightwater. Willows Run Golf Course use of recycled water keeps about 40 million gallons in the Sammamish basin each summer and Sixty Acres Park switched to recycled water in 2015. Future benefits include keeping more water in the Sammamish by switching irrigators to recycled water, expanding local agriculture by providing water to farms with no access to water, and supplementing regional water supplies to Kirkland and other cities. She reported we will do a study in 2016 on how we can swap water rights with farmers. KC coordinates closely with the Muckleshoot Tribe, Ecology, and the Washington Water Trust to support water resource management goals and protect stream flows for the Sammamish, and support WRIA 8 water resource goals related to salmon.

## Discussion:

- Ted Frantz asked if the recycled water is free to Willows Run. Jacque Klug said they pay, but it's cheaper than regular water.
- Hank Myers said one of the concerns when we first heard about this at Sound Cities Association three years ago was the cost of laying the pipes. He asked if there is some percolation from Willows Run Golf Course and Sixty Acres into the river. Jacque responded that we are actively working with turf farms and can put the water directly into the river, but the extent of our purple pipes is Willows Run.
- Allen Van Ness said if we could lay the purple pipe in Puget Sound, maybe we could pump the cooler water up from the lake, and pump it back where we really need it. Jacque explained that our recycled water is actually pretty cold. We invested a lot of money in purple pipes.
- Carl Scandella asked if we have considered making drinking water this way, like in Las Vegas. Jacque said no, it's so expensive at this point. CM Scandella asked if there are purity limits of recycled water. Jacque said yes.
- Larry Phillips commented that this is an incredibly difficult area in breaking down silos, and very complex.

## 7. Lower Cedar River Chinook Habitat Restoration Assessment

Mark Ewbank, Herrera Consultants, reported that this project is funded by a \$150,000 grant from the PSAR program awarded through WRIA 8. They evaluated six Chinook habitat restoration sites on the Cedar River in Renton, excluding the lower mile of the river which is dredged, and has its own habitat mitigation going on. The project focused on approximately 3.5 miles from Logan Avenue N. to Maplewood Golf Course. The project team consulted with WRIA 8 staff, KC, Renton, Muckleshoot

# WRIA 8 SRC Meeting Notes

September 17, 2015

---

Tribe, and others, and extensive field reconnaissance. Mark said a lot of the land along the river in the project area is owned by Renton. It became apparent juvenile Chinook is where the focus needed to be, and they came up with 14 candidate sites. He said they subjected the sites to multi-objective evaluation criteria, putting more weight on habitat gains, and using a size multiplier. The education value was a key evaluator.

The six selected sites include four downstream of I-405, and two sites further downstream:

- Site 1, Senior Activity Center: creates an alcove in the lawn area.
- Site 2, Cedar River Trail from Bronson Way N. to Senior Activity Center: creates a habitat bench in the trail footprint, and would require converting to one lane of traffic.
- Site 3, Major bank/riparian area modification from Bronson Way N. to Senior Activity Center with a redevelopment plan: offers a lot more riparian enhancement/benefit to the fish here.
- Site 4, Riparian planting on South River bank from Houser Way N. to Logan Avenue N.: selectively plants native shrubs and trees, and is a good opportunity at a low cost.
- Site 7, River bank modification in the planned Cedar River Park expansion area: cuts back the bank, and make a lush shallow riparian edge. Puts in wood and different types of riparian vegetation on this quarter mile project.
- Site 10, Side channel improvements in forested area just downstream of sockeye spawning channel outlet: connects side channel upstream and makes a flow through system self-sustaining. The project is low cost because the site is city-owned.

Mark said next steps include finalizing conceptual designs and cost estimates, incorporating recommendations in KC's Cedar River Corridor Plan, adding restoration sites to the WRIA 8 Four-Year Work Plan, and further evaluating blending of habitat improvements with Renton's redevelopment plans at Sites 3 and 7. Jason MK said the SRC will see these projects in future grant rounds.

Discussion:

- Nancy Eklund noted that the revetments are downstream of Logan Avenue N., and FEMA made the city cut down the trees along the dike..

## **8. Success Story: Lower Bear Creek Restoration Project**

Roger Dane, City of Redmond, said the Lower Bear Creek project is just downstream of Lake Sammamish, between State Route 520 and Redmond Town Center. The old channel was straightened and armored by the Corps 30 years ago. He said this was a great big project, covered by 12 acres of blackberries when construction started. Redmond used lots of machinery, moved tons of logs and boulders, and without dewatering they would have been five feet deep in groundwater. The project moved over 85,000 yards of material off site, put in thousands of logs, and the main goal was stabilizing the channel.

Roger said the project involved ten years of permitting and three years of construction, and this May the City had a ribbon cutting. Projects aren't really finished when construction is finished, and they have a minimum of ten years remaining to maintain vegetation and monitor the habitat. Another unique issue that arose was uncovering pre-historic stone tools at the site. He said Redmond can now claim to be the oldest continuously occupied community in Western Washington. People were on this site 12,000 years ago, eating salmon. The Lower Bear Creek project is intended to enhance the migratory corridor for Chinook, and we have already seen Chinook spawning in the creek. Mike Grady noted that this was a mitigation project NOAA identified with WSDOT for the 520 Bridge replacement.

# WRIA 8 SRC Meeting Notes

September 17, 2015

---

## **Next Meeting:**

The next SRC meeting is Thursday, November 19, 2015, 3:00-5:15 p.m., at Ecology's Northwest Regional Office in Bellevue.