

**WRIA 8 Salmon Recovery Council**  
**Meeting Notes**  
**Bellevue City Hall**  
**March 21, 2013**  
**3:02 – 5:12 p.m.**

**Members Present**

Joan McBride, Vice-Chair (Mayor, Kirkland); Eileen Barber (Friends of the Issaquah Salmon Hatchery); Layne Barnes (Councilmember, Maple Valley); Susan Boundy-Sanders (Councilmember, Woodinville); Nancy Eklund (The Boeing Company); Don Fiene (Councilmember, Lake Forest Park); Ted Frantz (Councilmember, Hunts Point); Ava Frisinger (Mayor, Issaquah); Noel Gilbrough (Mid-Sound Fisheries Enhancement Group [MSFEG]); Kirk Lakey (WA Department of Fish & Wildlife); Terry Lavender (Citizen); Mike Mactutis (Kent); Bart Masterson (Councilmember, Mill Creek); Hank Myers (Councilmember, Redmond); Mike O'Brien (Councilmember, Seattle); Larry Phillips (Councilmember, King County); Andy Rheume (Councilmember, Bothell); Jesse Salomon (Councilmember, Shoreline); Cleve Steward (Sustainable Fisheries Foundation); Tom Vance (Councilmember, Sammamish).

**Others Present**

Danielle DeVoe (MSFEG); Jennifer Hawkins (Citizen); Kevin Maran (URS Corp); Kathy Minsch (Seattle); Jerallyn Roetemeyer (Redmond); Stacey Rush (Kirkland); Ron Straka (Renton); Jean White (King County); Linda Grob (WRIA 8 Team); Jason Mulvihill-Kuntz (WRIA 8 Team); Scott Stolnack (WRIA 8 Team); Jason Wilkinson (WRIA 8 Team).

**1. Public Comment**

Terry Lavender announced that WaterTenders sent a letter in support of the Hooven Bog Acquisition project. WaterTenders is celebrating its 25<sup>th</sup> anniversary this year.

**2. Approval of Meeting Notes for January 17, 2013**

***The Salmon Recovery Council unanimously approved the meeting notes as edited for the January 17, 2013 meeting.***

**3. Updates & Announcements**

**General Announcements:**

Jason Mulvihill-Kuntz, Acting Watershed Coordinator, made several announcements:

- **Puget Sound Salmon Regional Update:**
  - At its last meeting on January 24, the **Puget Sound Salmon Recovery Council (PSSRC)** discussed the structure of the PSSRC and its relationship to the Puget Sound Watershed Leads and the Recovery Implementation Technical Team (RITT), and creating subcommittees for funding, outreach, and monitoring and adaptive management.
  - On March 18 the **South Central Action Area Caucus** met, discussing efforts to reorganize Action Area priorities according to the Action Agenda Strategic Initiatives, and to refine local priority actions into projects for the 2014 Action Agenda update.
- **Legislative Priorities Update:**
  - **Puget Sound Acquisition and Restoration (PSAR):** Jason thanked Salmon Recovery Council (SRC) members who communicated about PSAR with state legislators. State budget proposals may not come out until April, which provides more opportunity to contact legislators about PSAR.
  - **Watershed Investment District (WID):** The Sound Cities Association sent a letter to Representative Dave Upthegrove requesting his support in convening a stakeholder group to develop consensus WID study bill language as part of the legislature's 2013 work plan. WRIA 8 staff is tracking this and will look for opportunities for WRIA 8 participation.

- **Grant Funding Update:** Combined Salmon Recovery Funding Board (SRFB) and PSAR funding for this grant cycle is projected to be about \$2.092 million (pending legislative budget approval), and Cooperative Watershed Management (CWM) funding is \$1.2 million. Based on notifications of intent from project sponsors, CWM grant requests will probably exceed available funding, while SRFB/PSAR intents are in line with projected funding.
- **Trees for Streams Update:** The Cedar River Stewardship in Action grant was awarded a National Estuary Program Watershed Protection and Restoration grant by the Department of Ecology. Friends of the Cedar River Watershed, Seattle Public Utilities, King County Noxious Weeds, and Forterra are the successful applicants. WRIA 8 is supporting this effort, and will continue to pursue funding opportunities to do similar riparian restoration and stewardship efforts in Bear and Issaquah Creeks.
- **Monitoring & Adaptive Management:** The Puget Sound Partnership (PSP) is allocating \$40,000 each to the 14 Puget Sound WRIsAs to help them deliver a monitoring and adaptive management framework consistent with regional efforts. This will provide the groundwork for the ten-year update of the WRIA 8's 2005 Chinook Conservation Plan.
- **Lake Washington Ship Canal:** The Army Corps of Engineers "expert panel" report on ways to improve salinity, temperature and dissolved oxygen conditions for salmon at the Ballard Locks and Ship Canal was recently released. The report outlines nine actions, one of which is to improve the physical infrastructure at the Locks (the valves and control system), which WRIA 8 supports.
- **Beach Nourishment Feasibility Project:** King County held a workshop on January 31 for nearshore experts on beach nourishment treatment concepts and sites along the WRIA 8 marine shoreline. A second workshop will be held the week of April 22 at Edmonds City Hall for stakeholders and landowners that may be interested in and willing to pilot beach nourishment alternatives.
- **Sammamish River Integrated Aquatic Vegetation Management Plan:** Partners worked together to apply for an Aquatic Weeds Management Fund grant through the Washington Department of Ecology to develop an Integrated Aquatic Vegetation Management Plan (IAVMP) for the Sammamish River. The draft IAVMP addresses management and control of the following four invasive noxious weeds. A public meeting on the IAVMP will be held May 9.
- **Lake Sammamish Kokanee Fry Release:** The Kokanee Work Group is planning the 4<sup>th</sup> Annual Lake Sammamish Kokanee Fry Release on the April 26. Because the event will be held at a private residence in Sammamish, please contact David St. John, King County, if you are interested in attending.
- **King County Parks Levy:** A proposed King County Parks Levy to provide \$360 million over six years will be on the August ballot. The Parks Levy has been a significant source of matching funds for several WRIA 8 habitat projects, particularly habitat acquisition efforts.

#### **Committee Reports:**

Jason Mulvihill-Kuntz referred attendees to the WRIA 8 Update handout for committee information.

#### **4. Three-Year Work Plan Project List Update**

Jason Wilkinson, Acting Actions and Funding Coordinator, provided information on the relationship of the WRIA 8 Comprehensive List, Ten-Year Start List (Start List), and Three-Year Work Plan (Work Plan). In order to be considered for SRFB or CWM funding, projects and programs must be on the Work Plan. The Puget Sound Partnership (PSP) and RITT require an annual update to the Work Plan as a way to track salmon recovery activities. WRIA 8 revisits the Start List and Work Plan every year after proposed additions and updates are vetted by WRIA 8 Technical Committee. Additions to the Three-Year Work Plan are identified when project/programs are elevated in priority, and/or when sponsors seek funding for projects.

Jason reported that four projects are proposed for addition to the Work Plan this year, with two also to be added to the Start List, and one to the Comprehensive List. He said other items are housekeeping updates.

The four projects are:

Plan #/Name	Likely Project Sponsor	Location	Technical Committee Recommendation
N272/Continue Bear Creek Waterways Program	King County	Bear Creek Headwaters (Tier 1)	Add to Three-Year Work Plan
N342/Enhance tributary confluences of Derby, Gold & Wooden Creeks	King County Parks	Sammamish River (Tier 1)	Add to Three-Year Work Plan
N395/McCollum Park Restoration	Adopt A Stream	North Creek (Tier 2)	Add to Ten-Year List & Three-Year Work Plan
Hooven Bog Acquisition	Sno-King Watershed Council	Cottage Lake Headwaters (Tier 1)	Add to Comprehensive List, Ten-Year List & Three-Year Work Plan

Discussion:

- Hank Myers asked what causes projects to be removed from the Work Plan. Jason Wilkinson explained that inactive projects get removed from the Work Plan, but remain on the Start List.

***The Salmon Recovery Council unanimously approved the Three-Year Work Project List updates.***

**5. Cooperative Watershed Management Grant Program Funding Guidance**

Jason Wilkinson presented background information on the CWM grant program, which was authorized by the King County Flood Control District (FCD) in 2012 to provide \$1.2 million in funding for salmon recovery projects, monitoring, and outreach/education activities—the same types of activities formerly funded by King Conservation District (KCD) grants.

Funding allocation and guidance used for past KCD and CWM grant rounds:

Activity	% of Total	Amount
Site-specific projects and acquisitions	67%	\$804,000
Monitoring	25%	300,000
Studies, education, and outreach	8%	96,000
<b>Total</b>	<b>100%</b>	<b>\$1,200,000</b>

Jason explained that the WRIA 8 staff proposal is to continue this same funding approach for 2013 CWM funds.

Discussion:

- Hank Myers asked about the possibility of combining the FCD and the ferry district. Larry Phillips replied that the flood district was stripped out by the legislature. Councilmember Myers explained that he is concerned about long-term funding for our projects, and if CWM funding will be still be around. Councilmember Phillips reported that the FCD governance might change, but the funding won't change. He said consolidation for our purposes makes senses, and folding it into the King County general fund would not happen.
- Don Fiene inquired if the CWM program was authorized for three years, making it good through 2015. Jason Mulvihill-Kuntz responded that the FCD Board of Directors approved funding for the program for three years, but that the CWM program will have to be approved at the end of three years.
- Andy Rheume asked what the amount of the KCD allocation was in the past. Jason Mulvihill-Kuntz said it varied based on the assessment, but was roughly the same amount as the current Cooperative Watershed Management amount, \$1.2 million.

- Cleve Steward asked if we are expecting more projects to be submitted than the amount available because we are opening up potential projects to beyond those currently on the Three-Year and Ten-Year lists. Jason Wilkinson explained that projects still have to be on both lists, and vetted by the Technical Committee before getting on the lists. PSAR funding should also be available.
- Don Fiene reported that he has been on the Project Subcommittee that last couple of years, and we have always had more requests than available funds for both sources of funding.
- Hank Myers asked if we might get funding from KCD again in the future, instead of from the FCD. Larry Phillips replied that receiving future funding through KCD is possible, but would require significant discussion and policy work.

***The Salmon Recovery Council unanimously approved the Cooperative Watershed Management Grant Program funding guidance for 2013.***

## **6. Role of Science in WRIA 8 Plan Implementation**

### **Overview & WRIA 8 Plan Context:**

Scott Stolnack, Technical Coordinator, provided a high level overview of the role of science in plan implementation. WRIA 8 salmon recovery involves drafting the Chinook Conservation Plan (adopted in 2005), and then implementing, monitoring, assessing, and adjusting it. He said when we created the Plan it was based on the Limiting Factors Report, the best available science at the time. The Plan identifies our priorities and directs our efforts and funding. The Plan is due for an update in 2015, which the Technical Committee is already discussing.

Scott explained that in science-based recovery implementation, we use metrics (number of acres, percent of change, number of juvenile migrants, etc.). Science-based criteria inform project funding decisions, H-Integration melds harvest, habitat and hatchery, and we link WRIA 8 recovery with regional implementation. He said monitoring and assessment ask three questions:

- Are we doing what we said we'd do? (Implementation Monitoring);
- Is what we're doing, doing what we said it would? (Project/Program Effectiveness Monitoring); and
- Are overall actions leading towards recovery? (Cumulative Effectiveness, aka Status and Trends Monitoring).

Scott used forest cover protection in priority areas as an example. He reported that there were places along our streams where we said we needed a forest buffer, but lost forest cover and gained impervious surface. This led to development of the 'Trees for Streams' riparian stewardship strategy. We looked into what caused the loss, and concluded a large portion was because of grandfathered development permits. We then looked further at that, and it doesn't look like there are more grandfathered property rights coming up. We can and should, however, improve our messages to streamside property owners about protecting forested riparian areas. He said we need to do a little bit of course correction. This same process can be used for other dimensions in the Plan, such as habitat protections, habitat restoration, and salmon viability. This leads to adaptive management, which will hopefully help us to make better decisions in the future.

### **Fish In/Fish Out Monitoring & Status of Viable Salmonid Population (VSP) Parameters:**

Hans Berge reported that the science-based WRIA 8 Conservation Plan strongly endorses the Viable Salmonid Population (VSP) parameters:

- Abundance: number of fish at various life stages;
- Productivity: whether population is growing;
- Distribution: don't put all fish in one stream; and
- Diversity: number of life history strategies present.

Hans went over three monitoring programs, and the VSP parameters each monitors:

- Spawner Surveys: escapement, redd counts (abundance); estimates of total eggs, prespawning mortality (productivity); relative use of streams/rivers in core/satellite/episodic areas (distribution); age structure, hatchery or natural origin (diversity).
- Fry/smolt trapping: juvenile abundance (abundance); egg to smolt survival % (productivity); Bear vs. Cedar relative comparison (distribution); fry to smolt number, migration timing (diversity).
- PIT-tag monitoring: migration survival estimates (productivity); relative use and importance of migration areas (distribution); migration timing to ocean (diversity).

Hans said for timing and abundance live counts are done once per week in all Chinook-bearing streams. WRIA 8 also does dead counts and carcass sampling, and redd identification and location two to three times per week. Redds look like halos in the water. The female excavates a redd by turning on her side, forcing down into the gravel and moving rocks to create depressions where she plants her eggs. The male comes by and fertilizes the eggs, and the female layers gravel on top of the redd, making it pretty stable. He explained that we keep track of the number, depth, and width of redds, put markers down, and try to make sure they don't get left high and dry.

Hans said we look at the presence of hatchery fish on the spawning ground. Issaquah marks 20% of their fish by clipping the adipose fin. Hatchery fish are given a PIT-tag in the snout, and by scanning the snout we can see the hatchery of origin. We check for length, age and pre-spawn mortality (egg retention). For productivity, the number of redds and number of eggs per female (fecundity) are counted. Scoop and rotary screw traps at the mouths of the Cedar River and Bear Creek count migrants. He explained that PIT-tagging at the screw traps and interrogation at the Locks helps to figure out survival, and we figure out the number of returning adults by looking for the unmarked component of the appropriate age.

Timing results indicate an earlier peak count in Bear Creek than the Cedar, with Issaquah Creek even earlier. Hans reported that abundance numbers looked good before 1992, but harvest was huge back then. Since then numbers in the Cedar are far greater than in Bear Creek. The percentage of marked females on the spawning grounds equals 100% of the fish that swim back to Issaquah, 80% of the fish that swim up Bear Creek, and 20% on the Cedar. A lot of the female hatchery strays on the Cedar have high pre-spawn mortality: 7.7% of wild females versus 22.2% of marked females. He noted that hatchery fish haven't had to dig redds, find mates, protect redds, etc., like the wild fish.

Hans defined productivity as survival from life stage to life stage, full life cycle survival (redd to redd), and population replacement (redd to redd ratio >1.0). Comparing Cedar River fry and parr survival percentages by brood year generally show a much lower survival rate for parr, whereas on Bear Creek the situation is reversed due to the presence of hatchery fish. He discussed the carrying capacity of Cedar River redds versus parr production, and said there is some density dependence. When parr migrants survive better, it's a way to get more fish out, and more fish in. During high floods greater than 5,000 cfs the relationship between redds and parrs break down. In the Cedar there is high scour with floods. In Bear Creek predation might be an issue.

Hans reported that Cedar River redd to redd productivity you have to have five years past the brood year. The recovery plan goal is three future redds for every one current redd (productivity of 3:1, population is growing) and replacement is one future redd for every current one (productivity of 1:1, population neither growing or shrinking).

Hans listed the benefits of this monitoring work: learning more about the species; monitoring data focuses actions in the Plan; auditing of restoration projects; pooling resources across jurisdictions; collaborating and training with volunteer groups like Cedar River Naturalists; observing in-season problems for salmon; and interactions/education opportunities with private property owners. He also went over the importance of monitoring for stakeholders: Chinook life history requires consistent long-term monitoring to understand trends in population dynamics in order to compare to recovery goals; predictive relationship between fish in and fish out data; and understanding how projects relate to productivity, which is essential to de-listing the species.

#### Discussion:

- Ted Frantz inquired if productivity is related to environmental factors like climate change. Hans Berge replied that in winter, warming is not an issue. Councilmember Frantz mentioned the big fish kills in the south end of Lake Washington due to warm water. Hans reported that most 'kills' of this sort are often just natural events when mass-spawning fish that live in the lake spawn and then die. Temperature in the lake is not the issue for juvenile Chinook that it is for sockeye. Chinook are sturdier than sockeye, and can tolerate higher temperatures.
- Mike O'Brien asked if all fish or just natural fish are measured, per the red productivity graph. Hans explained that just the wild fish. We assume fish that are leaving Bear Creek are wild fish, and don't know their parentage.
- Terry Lavender inquired about marked fish with pre-spawned mortality. Hans said we don't know if hatchery fish that don't pre-spawn pass that on to another generation. Terry asked what Bear Creek would need to look like to be better for salmon. Hans explained there would need to be multiple channels, like at Keller Farms, to protect them from predators.
- Scott Stolnack clarified that redd to redd productivity includes fish going out to the sea and making it back, and therefore incorporates ocean survival as well as freshwater survival.
- Jesse Salomon asked how WRIA 8 productivity compares to the other WRIs. Hans replied that the other WRIs don't do redd to redd productivity, so it's hard to compare.
- Larry Phillips commented that we started doing this work a few decades ago, and when we submitted the WRIA 8 Plan we didn't consider climate change. We have put a lot of money and time into recovery so far, and he asked how we are going to move forward on climate change. Hans said we will focus on the Plan, reduce effects on high flows by doing big projects, especially floodplain reconnection, in the Plan, which will improve resilience of the system and help Chinook salmon.
- Larry Phillips remarked that a lot of projects were habitat acquisition projects, and now we need to move to floodplain restoration. Which one is more important? Scott Stolnack said we still need to continue preservation as well as do projects. Councilmember Phillips said he's not sure he fully understands where that's going on the Cedar. Hans Berge said we retooled how we look at projects in the Technical Committee. Now big-scaled projects go right to the top of the list, because only big projects have the ability to significantly help address climate change. We have protected much of the headwaters of Issaquah Creek and elsewhere, and Bellevue is also looking at big property acquisitions. He remarked that the emphasis on acquisition and habitat protection was a good strategy to enable future restoration.
- Hank Myers asked how we improve the parr to fry ratio, which is important. Hans explained that in Bear Creek there are very few fry, mostly parr. In the Cedar, due to the mechanical direction of flows, in big floods the fry get washed out. WRIA 8 needs high quality pools and riffles, natural banks instead of riprap, and capacity improvements like side channels, braids, etc. The giant floodplain side-channel that Seattle bought last year is great. He said capacity is everything, and any way we can get more habitat is important. Flood plain reconnection projects are best. Redmond has also done a lot of good work in the Sammamish River.

- Jean White echoed Scott Stolnack's comment that in that redd to redd relationship, we are recapturing the full life cycle. Hans explained that for the Cedar River fry, lots go out but don't produce adults coming back. We need higher parr survival, which is now only 9%. In the WRIA 8 Plan we wanted to get more parr because they produce more. The 9% we get in a good year doesn't do it. We also only had 53 redds, which means extinction, because we want 700-800 redds.
- Ted Frantz noted that we're collecting all this data about setbacks and buffers losing ground, and he asked if this information is getting fed back to the planning departments of WRIA 8 cities. Scott Stolnack reported that where we took the biggest hit with forest cover, we did go back to the city, which is how we found the parcel with grandfathered development rights. We didn't do more follow-up feedback beyond that. Councilmember Frantz said it seems like a shame to put this data on a shelf and not get it back to the cities. Scott Stolnack said that's a good idea, and we will work on getting it out to a wider audience. He mentioned that if we took out the grandfathered area, the loss wasn't terrible. Councilmember Frantz said shoreline master plans should help with additional riparian area protection.

### **7. Success Story: Mid-Sound Fisheries Enhancement Group**

Danielle DeVoe, Mid-Sound Fisheries Enhancement Group (MSFEG), explained there are 14 fisheries enhancement groups that were created in 1990 by Washington State legislation to enhance salmon and steelhead resources, and maximize volunteer efforts and private donations. Partial funding comes from a portion of commercial and recreational fishing licenses, administered by WDFW. MSFEG is Region 4, covering the area of WRIAs 8, 9, and part of 15. MSFEG focuses on habitat restoration, creation, and protection to help increase salmon populations.

Danielle said projects must be salmon projects, fit within our mission, have landowner cooperation, and have the likelihood of funding. She went over two MSFEG projects in WRIA 8:

- Littlebrook Creek: installed a new box culvert on this tributary of Thornton Creek; and
- Kelsey Creek: removed invasives, widened banks, installed wood, created riffles and streams, and planted 450 native plants on a 4-foot wide channel.

Other MSFEG services include streamlined local permitting, surveys and assessments, planting plans and implementation, and construction support.

### **8. Next Meeting**

The next meeting is May 16, 2013, 3:00 to 5:15 p.m., Bellevue City Hall, room 1E-112.