

**Snoqualmie Watershed Forum**  
**MEETING SUMMARY**  
**September 19, 2018, 6:30-8:30 p.m.**  
**Duvall Visitor Center, Duvall**

**MEMBERS PRESENT:**

|                                 |   |
|---------------------------------|---|
| Henry Sladek, Vice Chair        | Town of Skykomish Councilmember         |
| Matt Baerwalde, for Cindy Spiry | Snoqualmie Tribe Representative         |
| Brian Bodenbach                 | SVGA Citizen Representative             |
| Becky Chaney                    | Citizen Representative                  |
| Charles Kellogg                 | Citizen Representative                  |
| Trevor Kostanich                | City of North Bend Councilmember        |
| Chris LaPointe                  | Non-profit Representative               |
| Ryan Miller                     | Tulalip Tribes Representative           |
| Mike Remington                  | City of Duvall Councilmember, Alternate |
| Peggy Shepard                   | City of Snoqualmie Councilmember        |
| Jason Walker                    | City of Duvall Councilmember            |

**Other Attendees:** Kirk Lakey, Washington Department of Fish and Wildlife; John Velimesis; Lara Thomas, City of Duvall; Jessica Olmstead and Amy Ramsey, Washington Department of Natural Resources; Josh Kubo, Dylan Brown, and Janne Kaje, King County; Perry Falcone, Elissa Ostergaard, Beth leDoux, Wadii Boughdir, and Laura West, Forum staff

## MEETING PROCEEDINGS

### I. Introductions, Updates and Announcements

Henry Sladek, Forum Vice Chair, called the meeting to order at 6:30 p.m. and led introductions.

Elissa Ostergaard, Salmon Recovery Manager, introduced Wadii Boughdir, a Communications Intern for the Snoqualmie Watershed Forum. Wadii will be creating a communications plan for the Snoqualmie Watershed. Elissa mentioned that a survey will be sent around soon to collect input on 2019 Forum meeting topics and communications needs.

**ACTION:** The Forum unanimously approved the meeting minutes from the July 18, 2018 Forum meeting.

Snoqualmie Forum staff highlighted the following updates:

- **Salmon SEEs**- An annual salmon viewing program to promote awareness of salmon in King County has launched for fall 2018, and it includes three new sites in the Snoqualmie Watershed. The new sites are along the Snoqualmie and Tolt Rivers, located at Chinook Bend, Tolt-MacDonald Park, and the Snoqualmie Valley Trail over the Tolt River. Laura West, Administrative Coordinator for the Forum, is coordinating the program. If you would like to help promote the program with printed or digital materials, please contact Laura at [lwest@kingcounty.gov](mailto:lwest@kingcounty.gov).
- **Streamflow restoration planning and grant program-** Stacy Vynne provided a summary of the Streamflow Restoration Act, RCW 90.94 (also known as ESSB 6091) in response to the Hirst

decision, including a nomination process for three representatives on their new streamflow planning committee. Elissa asked the Forum if they wanted to submit a nomination for the environmental interest or if members wanted to submit their own nomination. Ryan Miller stated that the Tulalips nominated the Center for Environmental Law and Policy (CELP). Matt Baerwalde expressed support for that nomination and asked if the county is planning to implement code to address limits. Elissa has reached out to the Forum's partner non-profits to gauge interest.

***ACTION:*** The Forum agreed to nominate CELP and any of the Forum's non-profit partners if they are interested.

- **Cooperative Watershed Management grants-** Beth leDoux, Forum Technical Coordinator, reported that the King County Flood Control District approved making 16 awards totaling \$898,790 in 2018 Cooperative Watershed Management grants with no changes.
- **Smith Island-** Perry Falcone, Forum Project Coordinator, showed a time lapse video of one of the breaches at Smith Island, an estuary project that is significant in helping reach the Snohomish basin's estuary goals. The project connects 378 acres of tidal marsh for the first time in 85 years. There will be a celebration for the project on October 2. Charlie Kellogg asked about the strategy for flooding and replanting.
- **Lower Tolt River Restoration and Adaptive Management-** King County Water and Land Resources Division (WLRD) and the City of Seattle completed the Lower Tolt River Floodplain Restoration project in 2009. As the river migrated into the project area over the last several years, more rock was exposed, which King County is now removing with funds from the Surface Water Management fee. This type of work can create funding challenges since grant funds do not typically cover the cost of action nearly 10 years after the initial construction.
- **Tolt San Souci Levee Removal Phase I Construction-** King County WLRD completed the first phase of the Tolt San Souci Floodplain Restoration project, which involved removing an illegal revetment and reconnecting floodplain and side channels. This project began in the 1990s with purchasing flood prone properties.
- **Comment letters-** Elissa overviewed the four project letters recently submitted by the Forum. Henry Sladek suggested circulating these types of letters to the whole Forum instead of just the Chair and Vice Chair. Elissa agreed to circulate them in the future.

## II. Public Comment

No public comment.

## III. Forum Business

Elissa introduced the 2019 Snoqualmie staff team work program, comprised of 2.7 FTEs, not including Wadii Boughdir as an intern. Elissa highlighted changes from the 2018 work program.

Henry Sladek asked for more details on the grant tracking tool. Beth leDoux, Forum Technical Coordinator, explained that the goal is to track and map where partners are doing plantings for the purpose of finding links between projects. Beth is also looking to create a tool to track project milestones in between the original grant award and final report.

Trevor Kostanich asked whether a mechanism exists to evaluate which work program items provide the best bang for the buck and track what things worked well. Elissa replied that the only existing mechanism is the annual client satisfaction survey. Perry Falcone added that the team does track accomplishments and projects, but doesn't currently evaluate the accomplishments. Perry thinks this would be a worthwhile

exercise. Elissa noted that as part of the communications plan, we can look at how to evaluate the success of actions.

**ACTION:** The Forum unanimously approved the 2019 Staff Work Program.

#### **IV. Snoqualmie River Habitat Conditions in 2017**

Beth introduced Josh Kubo, Fish Biologist at King County, who received CWM funding from the Forum to do a habitat study on the main stem Snoqualmie, Raging, and Tolt Rivers in 2017.

Josh explained that habitat surveys were conducted on those river reaches in 2000-2001 for the creation of the Salmon Plan, and hadn't been done again until summer 2017, when Josh and his team went back to survey them again, with the purpose of seeing whether salmon habitat conditions have improved. This type of analysis can evaluate how effective the restoration strategies laid out in the plan are. Josh thanked the Forum for their support, King County Flood Control District for the funding, and the Snoqualmie Tribe, especially Matt Baerwalde, and King County staff for help conducting the surveys. Josh's team surveyed the main stem reaches as designated in the 2005 Salmon Plan, including the Snoqualmie River from River Mile 5.3-37.8, the Tolt River from River Mile 0-6 and the Raging River from River Mile 0-6. The metrics they were looking for in the field included bank conditions (armored or natural), large woody debris (location, amount), instream and floodplain features, and channel and floodplain modifications. They also conducted evaluation of riparian conditions using digital data. They chose these metrics to align with those collected in the Snohomish County portion of the watershed, for comparison of the 2000-2001 surveys and the goals in the Plan.

**Stream bank conditions:** Josh explained that armored bank can impact sediment processes, large wood recruitment, flow, channel migration, and connectivity. In the 2017 surveys, Josh's team found that the Snoqualmie River was 40% armored, the Tolt River was 30% armored, and the Raging River was 40% armored. Josh noted that anything above 20% is considered a degraded system. The 10 year goal in the Salmon Plan is to have 5.2 miles restored, and the 50 year goal is to have 26 miles restored. So far, we have restored 1.9 miles. Armor has been removed at a number of sites, but armor was also added in other locations. The 1.9 miles restored doesn't take the new armoring into account. Josh highlighted the need to increase the rate at which we're removing armoring and increase restoration to reach our goals.

**Large woody debris:** Large woody debris is critical for salmon habitat: it helps create diversity, protects from predators, and provides refuge from flow and temperature extremes. There is a history of removing wood from rivers around Puget Sound, resulting in a relative dearth in the entire system. The 2017 survey found abundances (pieces per mile) of 41.4 in the Snoqualmie, 159.7 in the Tolt, and 76.8 in the Raging. The wood was also relatively small in size, which isn't as useful for habitat. The standard for coastal rivers is 80 pieces per mile and that number is higher for unmanaged forested basins. Compared to those standards, the percentages in our watershed are very low. Since the 2005 salmon plan, we've installed 18 jams, almost hitting our 10 year target of 20 jams, and we are on our way to the 50 year target of 100 jams. Trevor asked how long wood jams are designed to last. Josh isn't sure on the lifespan, but noted that the constructed log jams help capture more natural logs as they float downstream. Riparian forests are needed so there is a constant new supply of wood.

**Instream habitats-** In the 2017 survey, Josh's team found mostly pools and glides in the Snoqualmie River, and riffles and pools in the Tolt and Raging Rivers. In the main stem Snoqualmie, rip rap was the main cause of pools, which didn't have any fish cover, and was not the condition they hoped for. In the

Tolt and Raging River, most of the pools were caused by wood, bedrock, and boulders, which provides higher quality habitat for salmon.

**Channel and floodplain modifications-** The study found culverts/outfalls, piling arrays, flap gates, and water irrigation pumps, all of which can influence the quality of salmon habitat. Due to different methodology from the 2000-2001 surveys, Josh wasn't able to directly compare results, although there were notably more irrigation pumps in 2017 than 2000-2001. The Forum discussed possible reasons for this. Matt Baerwalde suggested a shift in crop types over the years. There is a 2018 CWM grant to retrofit some of these pumps with fish screens that meet WDFW criteria. Josh mentioned the idea of consolidating some pumps where there are multiple close together. Ecology is responsible for managing withdrawals, but they don't monitor them. John Velimesis asked if that differs from Eastern Washington practices. Janne replied that in Eastern Washington, neighbors regulate each other. Each farm along the main stem Snoqualmie River is a member of the Snoqualmie Valley Watershed Improvement District (SVWID). It was suggested it would be beneficial to share this data with the SVWID so they could make sure none of the many withdrawals is illegal. Trevor Kostanich asked if the survey was comprehensive and if the stretch shown in the slides is representative of the whole survey area. Josh replied that the survey methods were pretty comprehensive, and while this 10 mile reach and another 10 mile reach were similar in this amount, the rest of the system didn't have as many pumps.

**Riparian conditions-** Riparian condition within 150 feet of either side of the river was evaluated on a computer to provide the aerial view. By the 20<sup>th</sup> century, riparian areas had mostly been cleared and only made up 16% of what was mapped in 1870. Josh's team compared 2002 aerial imagery with 2015 aerial imagery and evaluated land cover within a 150 foot riparian corridor. The survey differentiated between trees, shrubs, agriculture, impervious surfaces, bare ground, and other. The 2017 survey using 2015 aerial imagery found 40.4% tree coverage along the Snoqualmie, 85.7% along the Tolt, and 70.6% along the Raging River. Since adoption of 2005 plan, there has been a 4.1% increase in tree coverage along the Snoqualmie, an 11.8% increase along the Tolt, and no increase along the Raging. Another factor in coverage is river migration. So far, we've restored 164 acres, surpassing the goal of 128 acres, and on the way to the 50 year goal of 640 acres. Brian Bodenbach asked how many river miles are covered by the 164 acres of restoration. Josh is unsure, but agreed that connectivity is an important issue.

Brian Bodenbach commented that different types of salmon use different types of instream habitats and asked what types of habitat Chinook prefer. Josh said Chinook spawn in the tail ends of pools, before the pools turn into riffles. Chinook also like alluvial reaches downstream of tributaries in big gravel areas. Juvenile Chinook rearing takes place all throughout the system. Matt Baerwalde commented about timing issues for repairs and levee setbacks and hopes we can take advantage of funding to move up a habitat project when there is an opportunity due to levee damage. Matt has noticed an increased rate of repair this summer and thinks the rate will increase. Jason Walker asked if the survey looked at complexities of spawning habitat aspects. Josh pointed Jason to the actual report, which explains how different types of habitat support different life stages. Jason asked if there have been any changes in spawning habitat locations. Josh replied that Tokul, the Raging River, and the Tolt River are still primary spawning locations. Janne Kaje suggested future goals reflect wood per mile instead of log jams by the number. Janne also replied to Matt's earlier comment, and agreed that when there isn't critical damage to a structure, it makes sense to redirect the funding for a better multi-benefit project that meets habitat needs. Janne noted that the direction on repairs comes from the King County Flood Control District as opposed to the Rivers and Floodplain Management Section at King County, who is the service provider to the District and any concerns should go to the District. Henry Sladek commented that he sits on the Advisory

Committee for the District and acknowledged that there have been discussions on how to better integrate information and take advantage of those opportunities, but the logistics remain challenging.

The report is undergoing final approval and Josh will circulate it to the Forum once it is finalized.

## **V. Forest Condition and Forest Management in Snoqualmie Basin**

Elissa introduced Amy Ramsey, Forest Pathologist with Washington State Department of Natural Resources (DNR). Amy works on forest health across the state and focuses on tree diseases, including where and why trees are dying and what we can do about it. DNR monitors forest health by conducting aerial surveys in the summer, which allows them to map dead and dying trees based on color, and note trends of forest mortality and damage. Amy explained that most damage in this area is from Douglas fir bark beetles and there has been an uptick in that type of damage. Trees are most susceptible to a bark beetle infestation when they are stressed, due to drought, root disease, or overcrowding. Other sources of stress and damage can come from parch blight or storm events. All of these disturbance agents work in concert with each other to impose stress on the tree and make them more susceptible to other agents. Amy walked through climate graphs from a recent DNR report, highlighting a trend of increased temperature and dryness. Amy explained her process for diagnosing damage and walked through specific tree species that are experiencing dieback and decline. Amy explained that the current pace and scale of decline is happening much more quickly than forest pathologists could have imagined and they are learning a lot every year. Options to manage these conditions include thinning and planting smartly during restoration. Amy also noted that stand replacing fires happen in a cycle and conversations on wild fire management in Western Washington have just started to take place in the last few years.

Trevor Kostanich commented on a situation where trees are taken down for development in a clearing manner and as a result, the trees left around the edges of the clearing experience mortality. Trevor asked for Amy's opinion on the hypothesis that a lack of shade from neighboring trees is the cause of the mortality and if that would be considered a mortality agent among the others Amy listed. Amy confirmed that a changing landscape will have impacts on other trees, and windstorms cause a similar phenomenon where the trees left standing aren't protected by neighbors. Beth leDoux mentioned a study in the Andrews forest in Oregon, which showed younger stands take up more water while they're establishing themselves whereas older stands don't use as much water. Beth asked Amy if it's true that new plantings cause more water stress. While age of stands is not Amy's specialty, she has heard a similar theory, and added that because new trees/plantings are exposed to more sun, they might need more water for that reason as well. Charlie Kellogg commented he'd heard May through August 2018 was the driest ever on record for Washington State, which means we'll likely see effects in a few years. Charlie asked at what point do we stop planting Douglas firs and instead plant pines? Amy does her recommendations on a site by site basis, warns about success rates, and provides growing tips. Models do show that Douglas firs won't last in Puget Sound basin, which has been received with skepticism by some, but there are clues that point to it being true. This is a big conversation happening now among land managers about a new landscape-scale strategy.

Amy can be reached at [amy.ramsey@dnr.wa.gov](mailto:amy.ramsey@dnr.wa.gov) with any further questions.

## **VI. Orca Recovery and Endangered Species Act**

Elissa outlined the timeline for commenting on the Southern Resident Killer Whale Task Force (SRKWTF) draft report and asked if the Forum wanted the staff team to draft a comment letter on the

draft report. The Forum then discussed hydraulic permit approvals (HPAs) and WDFW's authority. Matt Baerwalde commented that to be more specific, WDFW has criminal authority for HPAs, and they need civil authority so they can write tickets and enforce them. Kirk Lakey, with WDFW, confirmed that under current criminal authority, WDFW can't stop violators in the field when they see them. Civil authority would allow them to stop work orders, impose fines, and seize illegal equipment. Elissa said she would look to see if that is included in the Task Force's draft recommendations when they are issued. Elissa proposed to draft a comment letter, send it around to Forum, and then finalize it before the November 1<sup>st</sup> deadline.

Brian Bodenbach proposed dedicating an entire meeting to orcas and commented that urbanization and climate change effects are the cause of the orcas declining. Brian doesn't see anything about urbanization in these recommendations and thinks it needs to be addressed. Becky Chaney asked if the Forum's comments should be limited to things that are relevant to the Forum. Becky's understanding is that a number of the scientists believe removing Lower Snake River dams is a necessity and asked why that wasn't included on the draft Forum comment topic list. Elissa replied that she did limit the topics to the Forum's purview. Elissa acknowledged that habitat funding limits the amount we can accomplish and wants to hammer those points. Henry Sladek noted that individually, Forum members could still pursue those bigger questions and factors that are outside of the Forum's scope. Brian commented that there was a consensus among scientists 25-30 years ago that 300 foot setbacks were needed, but despite this, they are rare. Brian emphasized the need to take politics out of regulations and focus on the best available science. Jason Walker commented we need to think strategically about what we can do in the current political environment. Jason hopes that these types of policy changes are based on thorough scientific review with real ramifications identified. Henry suggested carving out time in a future meeting to discuss some of these bigger issues.

**ACTION:** The Forum unanimously agreed to have the Forum staff draft a letter for review by the Forum in response to the SRKWTF's draft recommendations. The Forum will have one week to review the draft letter.

Perry Falcone outlined attempts to change the Endangered Species Act (ESA). One is a legislative bill from Senator Barrasso of Wyoming in regards to states' control over the ESA. The other is a current open comment period from U.S. Fish and Wildlife Service and NOAA, in which the majority of changes are negative. Perry highlighted three main concerns outlined in the draft Forum comments: 1) changes de-emphasizing science, allowing economics to come in, which contradicts the act itself; 2) reducing designations for critical habitat; and 3) weakening protections for species. Perry stated there is no mention of tribal treaty rights and the changes open up opportunities to weaken the ESA. The draft Forum recommendation is to keep the act as it is. Comments on the proposed ESA changes are due on September 24 and Elissa will send around the draft letter again.

**ACTION:** The Forum unanimously approved sending the draft letter on the proposed ESA changes and Forum members will send any further comments ASAP. Elissa will circulate the letter for one last review.

## **VII. Closing**

Henry Sladek thanked everyone for coming.

**Next Meeting:** Wednesday, November 14, 2018, Snoqualmie City Hall, 6:30-9:00p.m.