

**Snoqualmie Fish, Farm, Flood 2.0  
Implementation Oversight Committee  
DRAFT MEETING NOTES**

**Tuesday, August 25, 2020  
9:00 am – 10:30 am (scheduled)  
Video Conference Call via King County Zoom Account**

Committee Members Present (Y/N) <i>* = denotes caucus co-chair</i>					
Fish Caucus		Farm Caucus		Flood Caucus	
Cindy Spiry, Snoqualmie Tribe* (proxy: Matt Baerwalde - N)	Y	Josh Monaghan, King Conservation District*	Y	Angela Donaldson, Fall City Community Association*	Y
Denise Krownbell, Snohomish Forum	Y	Cynthia Krass, Snoqualmie Valley Preservation Alliance	Y	Stuart Lisk, City of Carnation	N
Mike Remington, Snoqualmie Forum	Y	Bobbi Lindemulder, farmer	Y	Lara Thomas, City of Duvall	Y
Micah Wait, Wild Fish Conservancy	Y	Meredith Molli, Agriculture Commission	Y		
Daryl Williams, Tulalip Tribes (proxy: Kurt Nelson - Y)	Y	Libby Reed, Sno Valley Tilth	Y		
Ex Officio Members Present (Y/N)					
Gary Bahr, WSDA	N	Brendan Brokes, WDFW (proxy: Stewart Reinbold - N)	N		
Josh Baldi, KC DNRP	N	Tom Buroker, WDOE (proxy: Joe Burcar - N)	Y		

**1) Introductions/Welcome by Co-Chair (Tamie Kellogg, Cindy Spiry)**

Ms. Kellogg called the meeting to order at 9:02 am. Ms. Spiry briefly welcomed all. Several updates were noted:

- A letter in support of Floodplains by Design (FBD) funding for the Fall City Floodplain Restoration Project has been submitted by caucus co-chairs to the County Executive’s office.
- Funding is secured to pursue blue/green LiDAR and 2D modeling as tools to address drainage concerns.
- Beth leDoux asked FFF partners to provide a short update for FFF’s GovDelivery newsletter by September 10.
- The buffer task force recommendations transmittal letter has also gone to the Executive’s office.
- Elissa Ostergaard reported the Snoqualmie Forum received a \$655K grant to investigate if polluted road runoff is impacting coho salmon mortality. This is in partnership with tribes and others, with fieldwork to begin in winter. Landowner permission requests are being sent. Questions can be directed to Ms. Ostergaard.
- Kurt Nelson reported the Tulalip Tribes and USGS have completed a thermal imaging study in the Snoqualmie and Skykomish rivers. The contractor is processing data now, to be available by end of the year. Questions can be fielded to Mr. Nelson.

**2) Fall City Floodplain Restoration Project Presentation (Fauna Nopp, Jo Wilhelm, Chris Ewing – DNRP)**

This is the first major salmon recovery project since inception of FFF. It puts into action requests of FFF 1.0 and represents three recommendations: increasing floodplain restoration; enhanced public engagement; and incorporating third-party review of the work, by consultant Vaughn Collins. King County Councilmember Kathy Lambert also praised inter-jurisdictional collaboration efforts on the project.

It was noted while drainage was a concern attached to the FBD grant application, this does not address all drainage issues in the Valley or raised by FFF. The IOC awaits a reply from the Executive to the support letter to his office on this matter. Cynthia Krass added the Snoqualmie Valley Watershed Improvement District (WID) had divided the watershed into sub-basins, which were prioritized in terms of severity of wetness impacting farmland. Projects for top-prioritized sub-basins were identified, and are now being teed up and designed, and funding sought.

Fauna Nopp is the Fall City project manager. The site footprint is 145 acres, downstream of the Fall City bridge. Preliminary design is complete, with final design to begin soon and construction expected spring 2022. The project combines the once-separate Haffner and Barfuse projects, two of four priority projects identified in the basin. This

project is currently ranked #1 with Puget Sound Acquisition and Restoration (PSAR) fund. Ms. Nopp noted the preliminary design phase delivers on multiple promises to FFF, including: on-schedule completion of 30% design; expanded community engagement; and incorporation of third-party review.

The project site is a single-thread mainstem channel, which acts as a “firehose” washing fish downstream, due to lack of a connective channel habitat or floodplain. Goals are to restore river and floodplain processes; improve salmonid habitat; reduce flood erosion risk; accommodate public river use; and balance benefits with costs.

Jo Wilhelm of DNRP’s capital projects team reviewed project elements. These should open up space and create a 0.55 mile side-channel with engineered log jams (ELJs), and floodplain swales to bring flood flows into the side-channel and lower flood levels quicker. Floodplain connection should mitigate flows over banks onto nearby farmland. 1,300 feet of the left-bank Barfuse levee will be removed, with a new side-channel punched in. A 1,600 foot soil berm will be placed on now-unused farmland, to meet 100-year flood event zero-rise standards and mitigate nearby landowner impacts. Revegetation is also key, as large trees drive habitat processes, microclimate protection, and pollutant removal. The project should create 13 acres of off-channel fish habitat.

Chris Ewing, also of the capital projects team, reviewed impacts modeling. While there were noted water level differences observed in 10-year and 100-year flood event models, smaller “2-year” events are also important and can result in water rises of 2-4 inches. More work is needed to mitigate these impacts. Mr. Ewing noted this consideration of smaller events is beyond the minimum requirements of the project process. He said velocity is also a stakeholder concern. In velocity maps for 100-year flood events, models show significant energy would shift to the floodplain and side-channel, and lessen mainstem velocity. This may also catch more gravel in this part of the river instead of more problematic downstream areas.

Impacts to agriculture were reviewed. The main such impact is conversion of 42.5 acres of agricultural land into riparian forest. Flood levels will be reduced on 300+ upstream acres and 1.5 miles of roadway. Neal Road is being set back to improve local access, including several farms. Reduction of erosion at Fall City Farms is also expected.

Ms. Nopp said final design will involve: detailed engineering design; permitting; refining models and geomorphic analysis; establishing a new right-of-way for Neal Road; response to the third-party review; and further community engagement. A virtual public meeting is planned in the next few months. She reviewed the community engagement timeline; monitoring and landowner check-in are expected through 2033. She broke down the basic budget for the project. Of a budgeted total \$19M, \$15.8M is needed. Open funding applications total \$15.5M.

The presentation raised several questions from IOC members:

- **Q:** How will larger shade trees impact agricultural growing areas?  
**A:** Trees will be planted on land the County acquired for salmon restoration, with no agricultural areas. There will be space between planting areas and nearby farmland, so shading should not occur.
- **Q:** What is the size of the wood and impact to recreation?  
**A:** This reach of the river is designated as separate from the reach for recreational activity. The ELJ along Neal Road is designed to push the river away from the road. Recreational safety is being considered in all steps.
- **Q:** Are you calculating zero-rise for the project?  
**A:** Yes; the County is applying for a flood hazard certificate, and analyzing to show compliance with FEMA.
- **Q:** Can the County provide updates on project alternatives?  
**A:** Yes.
- **Q:** Will a Conditional Letter of Map Revision (CLOMR) from FEMA be required?  
**A:** Hopefully not, but zero-rise analysis needs to be done.
- **Q:** How were the estimates for large wood made?  
**A:** Projections from the project team geologist. The team is working with a firm, Herrera, on wood recruitment through the Snoqualmie, engaging them more in final design. Some salmon recovery interests also asked for more wood. *(This question was flagged for follow-up.)*
- **Q:** Have flood variances changed in response to the recent FEMA update/memo?  
**A:** More 1D analysis is needed to understand the implications. *(This question was flagged for follow-up.)*

### 3) Caucus Break-Out Discussions on Fall City Project

Attendees were sent into break-out rooms by caucus to discuss their impressions on the Fall City project:

- **Fish Caucus:**
  - Recreation: There is concern from many groups of recreational users, like floaters and jet skis, influencing the project and habitat benefits. Outreach was done to ensure the upstream reach is used for recreation.

There is hesitancy to put large ELJs mid-channel, but discussion will occur if needed. It was suggested the project use signage, similar to the Upper Carlson project, to communicate with the public.

- Wood recruitment: More mainstem large woody debris is needed, as relying on natural recruitment may be inadequate. This includes key pieces and ELJs, with adaptive management. Side-channels may help wood retention. Planting more cottonwoods was suggested due to their fast growth; outreach was advised to clarify they aren't an allergen. Current left/right bank floodplain areas also have good-sized hardwoods.
- Barfuse berm: It was asked why this location was chosen for the berm, and its portrayal as a berm vs. a levee. There was also concern about maintaining the oxbow's hydrology. It was answered: the location was determined by presence of adjacent private property and property owner needs; a levee uses placed rock while the berm uses soil and plantings; and the berm won't block connection to the oxbow, which may not be optimal habitat and may be used for disposal of non-riprap levee materials.
- Aldair Levee: Land acquisition is still in progress, with a project timeline to be determined.
- There was a desire expressed to for the caucus to review the alluvial fan report.
- **Farm Caucus:**
  - Impressions of the project team and presentation were generally favorable.
  - The agriculture community's confidence in the project can be helped by measuring the historical accuracy of modeling in past projects.
  - It was noted that stakeholders/landowners are in an uncertain emotional place; the project team should be ready to address their concerns. It was asked if landowners and farmers being communicated with.
  - Several caucus members agreed even a 1-inch rise from a "small" flood can have major impacts on some lands; they want to know what improvements can be made for these landowners.
  - Fauna Nopp replied that modeling is an imperfect tool, and her team may back off some habitat benefits, such as adjusting a proposed side-channel, to mitigate landowner impacts. She said reaching 60% design phase, by next May, will bring more answers to risk questions.
  - The view was voiced that mitigated impacts don't equal agriculture benefits. The agriculture community wants long-term impacts to be as beneficial as possible to agriculture.
  - It was asked if there are compensatory storage benefits from these projects.
  - It was stated a reduction in velocity should be recognized if it will lead to major erosion reduction.
  - A caucus member said impacts to future farmers, as well as current, should be considered.
  - There will be a presentation on the project at SVPA in September.
  - A caucus member said their view of the soil berm has improved; they now see the need to protect downstream properties.
- **Flood Caucus:**
  - It was generally agreed that this project can provide many gains, to infrastructure as well as habitat.
  - Continued coordination between jurisdictions is encouraged.
  - It was advised to reach out to WSDOT, as flooding on SR 203 is a concern. Bart Treece at WSDOT and state representative Bill Ramos were named as possible contacts.
  - It was asked at what point the County should be concerned in regards to flooding and CLOMR.
  - It was agreed that impacts to agriculture/adjacent farms from smaller flood events should be minimized.
  - Other sentiments included:
    - It should be asked if culverts are on the state's fish-passage list;
    - A conversation on blue-green LiDAR would be interesting to have;
    - The project should have contingencies and adaptive management in place; and
    - The dam alarm issue raised by Councilmember Lambert does impact Carnation, but should be addressed by the Flood Control District, not FFF.

#### 4) Full Group Discussion on Fall City Project

Each caucus chair reported highlights of their break-out room discussions:

- **Fish Caucus:**
  - The top concern is large wood recruitment. More of this, possibly cottonwoods, is needed in the mainstem.
  - There was a question about the Barfuse berm and its connection to an oxbow.
  - The caucus asked to review the alluvial fan report before transmitting to the Executive, which did not occur, so they would now like to review it after the Executive.
  - There are concerns about recreational users on the river impacting the project, and their safety.
- **Farm Caucus:**
  - It is an ongoing process for the agriculture community to build trust in an imperfect model.

- A key concern is recognizing importance of the many smaller flood events now coming earlier in the year.
- Another concern is how to help the project team reach out to downstream landowners.
- **Flood Caucus:**
  - There are many positives to the project, especially the collaboration between agencies.
  - It was advised to reach out to WSDOT; the project has benefits to safety on SR 203 and Neal Road.
  - It is pleasing to hear that nearby farmers support the project.
  - The news about 2D modeling/blue-green LiDAR use is welcome.

**5) Wrap-Up/Adjourn**

Future meetings may be extended to two hours to allow time for break-out sessions and discussion. Next steps are to document any concerns, issues, or questions; IOC members should contact their co-chairs for anything urgent.

Tamie Kellogg adjourned the meeting at 10:53 am.

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*Next IOC Meeting: October 7, 2020 from 3:00 – 5:00 pm (Zoom video conference call)*