Meeting Summary
King County FFF 2.0
Buffer Task Force Meeting #2
Wednesday, October 17th, 2018
1:00 PM – 4:00 PM
Carnation City Hall

Task Force Members in Attendance: Erin Ericson, Daryl Williams, Kurt Nelson, Chris laPointe, Elissa Ostergaard, Matt Baerwalde, Bruce Elliott, Preston Drew, and Lara Thomas

Snohomish Basin Salmon Status and Trends (Kurt Nelson)

- Kurt Nelson gave a presentation on status and trends of salmonids in the Snohomish basin. Species present in the area include coho, steelhead, pink, chum, and Chinook. Abundance data, collected via two screw traps on the Snoqualmie and Skykomish Rivers, indicate salmon stocks in these rivers have experienced a general decline. This decline can be attributed to multiple factors including both ocean and freshwater conditions. Habitat improvement actions to improve freshwater conditions, such as the creation of riparian buffers, would benefit these species.
- Preston - Does Canada maintain info for Fraser River salmon stocks?
    - Canada and WA coordinate on conditions. Canada manages their stocks and do escapement estimates for the Fraser
- Bruce - Given the variables for fish production, what increment of improvement is expected associated with buffers?
    - There are models that look at how buffers affect habitat. Buffers influence multiple different variables that benefit fish (shade, flows, detritus, etc.). Overall the benefit of buffers on aquatic habitats varies by year and in warmer years it would be more beneficial.
- Bruce - How does the differences in the two rivers factor into effects/benefits?
    - Each system will have production pockets, areas that are preferred. These occur in both systems even though there are geomorphic differences between the Snoqualmie and Skokomish. In both system juvenile rearing habitat is limited and the buffers will help improve this.
    - Buffers in ag production district – can science back smaller buffers? This question to be discussed during December meeting – guiding principles on how we can step away from larger buffers to areas that have smaller or no buffers.
- Laura - Is there a salmon forecast for the next 25 years or are we looking just at short-term population information?
    - Data is collected on yearly basis, we cannot look forward too far into the future, nor can we predict conditions.
    - Critical management status is a threshold that triggers co-managers to take the next step in the management of species. If a population falls below the critical level it will be difficult to maintain. When this happens actions need to be identified to help increase the population to get it above the escapement level. Often this can be addressed through harvest restriction.

- Matt– There is a lag time between the development of a buffer and seeing benefits (e.g., large wood requirement)
    - Kurt feels that colder winters benefit juvenile chinook production due to lower flows, so observed production was lower.
- Matt – Tribe got grant from BOR to model riparian buffer management models specific to Snoqualmie developed by UW climate group. This will allow to manipulate buffer widths, which affect temperature. Then can look at how this will impact fish production.

Agriculture Paper (Melissa Borsting)

- General conversation by the group on how riparian planting impacts agriculture and what is captured in the Agriculture Issues paper.
    - Ralph - Opportunities to reduce impacts to farmers, as opposed to land, which is how it is currently written. It isn't all about buffers, but the range of things that the community does to ensure agriculture is sustainable and profitable
        - Melissa would like to ensure that we recognize we are looking toward the future and farmers to come, not just meeting current farmer needs.
    - Identify all the incentives/programs farmers can participate in
    - Chris - Need to account for barriers (e.g., culverts) as they can affect the effectiveness of buffers (could be part of the other category – do you have a small undersized culvert, not as good)
    - Elissa – buffers can help cool air temperatures of fields, which would be good to mention given climate change.
    - Would be good to look at places for strategic planting of buffers – e.g., windbreaks, excessive flood debris, etc.
    - Laura - There are productive buffers that are harvestable, however, there are some restriction on what you can harvest based on critical areas ordinances. Generally, farmers are not so interested in this so Melissa didn't spend a lot of time on this.
        - Economic opportunity for farmers to plant a working buffer, Snohomish conservation district has information on this
    - Daryl – Need to look at the balance of the impacts of buffers to other actions under the FFF process.
- Feedback on Outline
    - Issue Statement
        - No Comments
    - Overview of buffer planting programs
        - No Comments
    - Buffer Effects on Ag Land
        - Land
            - No Comments
        - Water and Flooding
            - Is there any research to support planting on one side of the waterway?
                - Some forestry literature and information from Whatcom County to support this

        - Ultimately the width of the waterway would determine if one side planting would be effective.
    - Animals/Wildlife
        - No Comments
    - Shading and Physical Barrier
        - No Comment
    - Other
        - CREP-rental payments fits here
        - Add impacts on other people and economics.
            - Farmer impacts, farm economic impacts
- Send comments to Beth or Melissa as you review the paper

Waterway Classification Exercise (Beth Ledoux)

- Help build language and organize waterways within the Snoqualmie Valley Agriculture Production District. Set expectations for salmon based on classification of these waterways. This classification is adaptive.
- Options that were considered but not appropriate for this assessment
    - Stream Width
    - Soils
    - Gradient
- Classification Method with Potential
    - Salmon Plan – helps ID large vs. small streams (based on sq. mi. drained)
        - Elissa - The jump between 3 and 8 sq. mi. seems large, need to determine if this is appropriate.
            - Have flow data for larger streams, not for smaller
            - Matt - Would like a reminder about the discussion re: Tuck Creek. Seem to recall it is based on Tuck being a high use stream for fish
                - Janne - Yes, that is true. There is no magic rule and is open for discussion. Tuck has been discussed a lot and much of the work has been done there.
    - Stream Order – global classification of streams
        - Helps address the stream width question
    - Channel Origin
        - Waterways that originate outside the area of potential effect (APE)
    - Agriculture Draining Assistance Program (ADAP)
        - King County to help farmers with drainage on their land. Helps pull out artificial (unnatural hydrology – maintenance to help farms with drainage)
    - Question: Preston: Did you look at state river identification?
        - Yes - Snoqualmie is type S or F
    - Group Breakdown – get copy of packet from Beth
        - Erin Is it possible to include flow? To be added moving forward
            - Micah - Basin size is a good proxy for flow.
            - Kollin - Underlying geology affects the flow, which we don't necessarily have for each piece.

- Preston – use bank width and classify based on state system as this is a static measure that can be used, whereas flows are variable
  - Kollin – State system is missing much of the streams in the Snoqualmie. King County does use the State system as well. Portions of the river are Type S or F, but most of the artificial channels are wider than two feet. Not a lot of really small things that would fall under Type F.
  - Preston – have had numerous streams classified F that he didn't think would be.
  - Kollin – if fish can use a stream it makes it type F. If you cannot look for fish it only uses physical criteria. Due to this most everything in the Snoqualmie will show up as F.
  - Daryle – in agricultural lands the use of bank width isn't a good measure as the channel widths get altered from natural conditions. Therefore, this isn't a good matrix for the agricultural plans
- **The first four classifications (River, Large Streams, Oxbows, Artificial) Agreement?** **Kind of. Want the following**
  - Group isn't sold on large streams, may be too broad and not include the correct things
    - Alissa – which of the smaller streams do fish spawn in. Should more streams be included in this category?
  - Relate to state classification
  - Document Flows
- **Small and Medium Outside Floodplain**
  - Preston: likely more modification that we've accounted for. This could be controversial if it enters into future decisions.
  - Alissa: distinction between natural and modification
    - Beth: want to understand how farmers use the landscape
    - Kollin: Phase I agreement puts naturals to side and not asking for draining assistance on. Asking for it on all other stream types. So this makes management more practical to assess what buffers may need to be dredged (modified) vs. natural ones that will not.
    - Kurt: would like to see only the particular reaches of streams that have been modified, not the entire stream.

- Post Group Feedback – Can we live with this classification as a starting point? Bullet numbers below relate to group exercise that was completed.
  - Chris – Good starting point as classification system
    1. Yes, acceptable. Recognize there could be adaptive management and it will evolve as it is worked on
    2. Yes, appropriate. Tuck is a value judgement and agree they are comfortable with classification as presented. May need more work going forward
    3. Yes
    4. Agreement this was researched with best available information.

- Kurt – Generally agree with this moving forward
    1. Yes, acceptable.
    2. Generally ok. Couple caveats. Salmon Plan has a different purpose than this and the scale is different. Need to think about how they identified where to make breaks.
    3. Yes. May consider updates as evolves.
    4. Had hard time believing that all artificial channels were captured. Fish may be able to be used as a deciding factor on artificial channel vs. natural. 2002 limiting factors analysis should be reviewed for smaller streams
- Group 1 – going to do an email exchange to try and figure it out. Currently do not have agreement from this group (Preston Drew, Elissa Ostergaard, Micah Wait, Erin Andrews)
    - Natural vs. modified – group has heartburn for different reasons. Erin thinks it muddles things to use modified and natural from ADAP, it can affect what a farmer wants to do with their land. Preston think distinguishing can be political and controversial, making this very difficult. Alissa, doesn't seem very clear between natural or modified. Why use something that is so difficult? Seems we could look at stream width, which is better aligned with width of buffer (As relates to shade). Make classification based on surrounding land use for farm (e.g., wetland, field, etc.). This has to do with utility of buffer, will it get dredged, is it in a working farm landscape, etc. Erin, areas of cold-water input are fish factories, get a potential to change over time. This is more important than if the channel has been modified or natural. POTENAL USE AS FISH HABITAT is more important than natural vs. modified.
    - Preston - issue with classification is when you assign words that don't absolutely reflect what it is. Almost all watercourses in the agricultural district have been modified over the past 100-150 years. Classification has to be absolutely accurate. Say what was modified and for what, don't say it is artificial.
        - Beth: this will not be Codified, they are voluntary buffer plantings
    - Need absolute understanding
    - Group one shouldn't focus on the fish use part.
    - Group one to have continued conversations and send Beth their decision by second week of November.
- Matt – generally agree moving forward
    - 1) Yes, acceptable.
    - 2) The basin size was a natural break and it is good to work with. Approved
    - 3) Yes, clear

- 4) Can generally agree with and dial to adjust. Good to do some ground truthing: persistence of flow, BFW, and stream width for a subset of streams. Though the group does understand how this might be challenging.
    - Options for looking at flows in different seasons – infrared imagery looking for water or use of thermistors or temperatures sensors as a proxy for when water is present.

Next Steps

- Next Meeting December 12, 2018 at Carination Library 1-4pm
- Documents (best available science and ag paper) will be distributed for review prior to December meeting.
- Group 1 to make decision by second week of November
  - Next agenda to include some time for group discussion
  - Beth to send full taskforce email re: this as opposed to keeping it group specific.