Meeting Summary

Snohomish (WRIA 7)
Watershed Restoration and Enhancement Committee meeting
October 10, 2019 | 12:30 p.m. - 3:30 p.m. WRIA 7 Committee Webpage

Location	Committee Chair	Handouts
Gary Weikel Room, Willis Tucker Community Park, 6705 Puget Park Drive, Snohomish	Ingria Jones Ingria.Jones@ecy.wa.gov (425) 649-4210	Growth projections map Subbasin delineation proposal maps Projects one-pager Draft fatal flaw criteria Snohomish CD project description

Attendance

Committee Representatives and Alternates *

Brant Wood *(Snohomish PUD)*
Keith Binkley (alternate) *(Snohomish PUD)*
Mike Wolanek *(City of Arlington) (phone)*
Lindsey Desmul (alternate) *(WA Dept. of Fish & Wildlife)*
Jordan Ottow *(City of Monroe)*
Matt Baerwalde *(Snoqualmie Indian Tribe)*
Julie Lewis (alternate) *(Snoqualmie Indian Tribe)*
Souheil Nasr (alternate) *(City of Everett))*
Morgan Ruff *(Snohomish Basin Salmon Recovery Forum) (ex officio)*
Denise Di Santo *(King County)*
Dylan Sluder *(MBA of King & Snohomish Counties)*
Elissa Ostergaard *(Snoqualmie Watershed Forum) (ex officio)*
Jaime Burrell *(City of North Bend)*
Steve Nelson *(City of Snoqualmie)*
Paul Faulds *(City of Seattle)*
Amanda Smeller *(City of Carnation)*
Kurt Nelson (alternate) *(Tulalip Tribes)*
Anne Savery (alternate) *(Tulalip Tribes) (phone)*
Matthew Eyer *(City of Marysville)*
Leah Everett *(City of Lake Stevens)*
Michael Remington *(City of Duvall)*
Cynthia Krass *(Snoqualmie Valley WID)*
Emily Dick *(Washington Water Trust)*
Bobbi Lindemulder *(Snohomish CD)*
Ann Bylin (alternate) *(Snohomish County)*
Glen Pickus *(City of Snohomish)*
Stacy Vynne McKinstry (alternate) *(WA Dept. of Ecology)*
Ingria Jones *(WA Dept. of Ecology) (chair)*

Committee Representatives and Alternates in Not Attendance*

Town of Index
City of Gold Bar

Other Attendees

Susan O'Neil *(ESA, Facilitator)*
Angela Pietschmann *(Cascadia) (info manager)*
Bridget August *(GeoEngineers)*
Patty Dillon *(NHC)*
John Covert *(WA Dept. of Ecology) (phone)*
Paulina Levy (*WA Dept. of Ecology)*
Yorik Stevens-Wajda *(Snohomish County Council)*
Beth Liddell *(Snohomish County)*
Kevin Lee *(WA Dept. of Fish & Wildlife)*

*Attendees list is based on sign-in sheet.

Welcome, Introductions, and Standing Business

Susan welcomed the group and began introductions.

Susan reviewed the agenda.

No revisions to the agenda.

Ingria made one correction to the meeting attendance in the August meeting summary.

- Snohomish PUD commented that the value of the smaller system is often the system's water rights; when larger water systems take over service for a smaller system, the larger system usually adds the smaller system's water right to its portfolio.

The meeting summary was approved without further changes.

Ingria provided updates from Ecology.

- Beginning this month, Ecology and technical consultants will share large files and working documents with committee and workgroup members via BOX, a secure file sharing program. Ingria will send invitations.
- Ecology is holding a series of workshops to inform potential grant applicants about the process and purpose of the streamflow restoration grants. Ecology will begin accepting applications February 3, 2020. See Ecology's streamflow restoration grants webpage for more information.
- Ecology is beginning targeted water right application processing in WRIA 7. This does not affect WREC planning.
    - If you have questions, contact Chelsea Jefferson: Chelsea.jefferson@ecy.wa.gov; (425) 649-7202

No additional updates from committee members.

Subbasin delineation

Objective: Consider subbasin delineation proposal from workgroup, determine best path forward

Ingria provided an update on the technical workgroup's October 2 meeting.

- The technical workgroup developed a subbasin delineation proposal for the committee that includes 16 subbasins.

Elissa Ostergaard (Snoqualmie Watershed Forum) and Matt Baerwalde (Snoqualmie Tribe) provided an overview of the King County portion of the technical workgroup's subbasin delineation proposal.

- The proposal includes 7 subbasins in the King County portion of the watershed:
    - Snoqualmie North
    - Cherry-Harris
    - Snoqualmie South
    - Patterson
    - Raging
    - Upper Snoqualmie
    - Upper Skykomish (spans both counties)
- The workgroup considered the following guiding principles: PE well projections, potential project locations, and aligning with Protection Planning Units in the Snohomish Basin Protection Plan (the WRIA 7 Watershed Characterization Model developed for the SBPP describes flow importance for the subbasins and the SBPP outlines strategies for protecting hydrological processes).
- The workgroup also considered characteristics unique to specific watersheds, including low streamflow in the Raging River, development pressure near Patterson Creek, Tolt Reservoir regulating flows on the Tolt River, and a marshy plateau area separating Cherry Creek and Harris Creek (not a strict hydrological boundary).

Morgan Ruff (Snohomish Basin Salmon Recovery Forum) provided an overview of the Snohomish County portion of the workgroup's subbasin delineation proposal.

- The proposal includes 10 subbasins in the Snohomish County portion of the watershed:
  - Tulalip
  - Quilceda-Allen
  - Little Pilchuck
  - Estuary/Snohomish Mainstem
  - Pilchuck
  - Woods
  - Sultan
  - Lower Mid-Skykomish
  - Skykomish Mainstem
  - Upper Skykomish (spans both counties)
- The workgroup considered the same guiding principles for the Snohomish County portion of the watershed. The workgroup kept Tulalip, Quilceda, and Little Pilchuck as separate subbasins due to projected growth. Allen Creek was included in the Quilceda watershed to align with existing planning in the estuary.

Reference Materials
- Subbasin delineation proposal maps (see meeting packet)
- Technical Workgroup Meeting Notes

Discussion
- The committee agreed to use the technical workgroup's subbasin delineation proposal for the consumptive use estimates.
- The committee discussed the process for approving the subbasin delineation proposal and other elements of the WRE Plan referred to as interim decisions in the committee's operating principles.
  - Committee members would like to understand specific upcoming decision points.
  - When formal agreement is needed, Ingria will provide materials describing the decision point, the context for the decision, and supporting documents that committee members can share with their entities.
  - Ingria will be sharing a form for committee members to take back to their entities to describe their process for approval of the Plan. This will be accompanied by an overview brochure outlining the committee's task, status, and timeline.
- The committee discussed the process for raising concerns or identifying further discussions or analysis needed on elements of the WRE Plan.
  - Ingria responded that committee members are encouraged to voice their ideas and concerns during committee meetings. Depending on the topic and timing, further discussion may be needed at a future technical workgroup or committee meeting. Some technical or policy matters may be best suited to separate meetings with specific relevant entities.
- Some committee members would like to revisit elements of the growth projections to understand the number of PE wells projected in Tulalip and Quilceda as well as how nonconforming parcels were considered in the projections. The technical workgroup will discuss this at a future meeting.

Bridget August (GeoEngineers) provided an overview of next steps for growth projections.
- GeoEngineers will compile the growth projections by subbasin and identify any areas where additional analysis may be needed.

Consumptive Use approach

Objective: Provide update on consumptive use and determine path forward

Patty Dillon (NHC) presented on the refined consumptive use work plan for WRIA 7.

- Reference materials updated consumptive use work plan - presentation
- Updated WRIA 7 Consumptive Use Work Plan (BOX)

Discussion and Considerations:

- The Committee discussed the process for parcel selection.
  - Technical consultants will evaluate tax parcel areas associated with single-family residential construction permits in areas served by domestic permit-exempt wells (PE wells). They are excluding areas served by public water but are not excluding areas based on zoning.
  - Homes relying on PE wells in agricultural areas may have extensive irrigated areas. Areas outside of the vicinity of the home are assumed to have an associated water right.
  - Technical consultants anticipate reviewing a minimum of 250 parcels in WRIA 7 in order to capture the range of lawn sizes.
  - If there are too few past parcels to sample, technical consultants will identify a nearby subbasin with similar development patterns and apply that average irrigated footprint.
- The consumptive use estimates account for the average people per household.
  - Snohomish County's rural capacity analysis estimates an average housing unit size of 2.9 for occupied, single family residential units in unincorporated areas.
- Technical consultants will calculate the average irrigated footprint for each subbasin.
  - Preliminary results for WRIA 9 have a high standard deviation in lawn sizes, however the margin of error surrounding the mean is statistically defensible. Since there were so few rural parcels in WRIA 9, technical consultants analyzed all recent parcels in order to develop accurate averages.
  - Once results from other watersheds are reviewed by their committees, Ingria can share.
- Committee members requested that technical consultants note when a parcel has an associated outdoor pool. Consultants will note this during their analysis.
- The committee discussed the consumptive use calculator technical consultants are developing.
  - The calculator will include results in acre-feet (AF), gallons per day (gpd), and cubic feet per second (cfs).
  - The basic version of the calculator includes annual totals for consumptive use distributed over the year, but technical consultants can build a version of the calculator that incorporates irrigation demand during June, July, and August.
  - The calculator will include scenarios for 950 gpd and ½ acre irrigated area.
- The committee had questions about where similar methods had been used before and how ground-truthing could be incorporated.
  - RH2 used aerial photos to calculate average irrigated area for parcels as part of their technical support for the WRIA 1 watershed plan update.
  - The water use data provided by Snohomish PUD serves as a ground-truth.
  - Members of the WRIA 15 technical workgroup are ground truthing select properties to compare to their technical consultant's work.
  - While ground truthing data takes additional effort, assumptions and sensitivity analysis can be easily analyzed in the calculator.
- The committee discussed how water use may change year to year.
  - Snohomish Conservation District noted landowners converting portions of their lawns to small gardens. The consumptive use estimates use the crop irrigation requirements for commercial turf grass, which requires more water than a typical garden.
  - Snohomish PUD compared water use for 2015 (drought year) and 2017; the differences between the two years were relatively small.
  - Committee members expressed interest in using a conservative (high) estimate for consumptive use from outdoor irrigation and developing scenarios for drought years.
  - The committee may consider climate change in consumptive use estimates or other elements of the WRE Plan.

The committee agreed that technical consultants should begin the irrigated footprint analysis. The technical workgroup will review consumptive use results and discuss additional scenarios for the committee's consideration.

Project updates

Objective: Continue discussions of specific projects and project inventory process

Ingria introduced a projects and actions one-pager and encouraged committee members to share copies with their entities, partners working on capital projects, and other planning groups in the watershed.

Reference materials:

- Projects and Actions: Needs for WREC (On BOX and in meeting packet)

Morgan Ruff provided an overview on 4-year work plan coordination.

- The Snohomish Basin Salmon Recovery Forum will be sending guidance to project sponsors soon and requesting that projects be submitted by November 20.
  - Guidance included additional questions to identify potential water resource benefits of projects.
  - Sponsors can update existing projects or add new projects and describe potential streamflow benefits or water rights associated with their project.
- Coordination provides the Forum and the WREC a better understanding of the streamflow benefits of existing and new projects.
- Projects identified through the 4-year work plan can be added to the committee's project inventory, however projects on the committee's project list does not need to go through the 4-year work plan.

Committee members shared takeaways from the Moga back channel restoration project tour.

- The Snohomish Conservation District (Snohomish CD) sponsored a project on private land to remove fish passage barriers, install log jams, increase off-channel habitat, and plant native vegetation.
  - The project was a priority for salmon recovery.
  - Feasibility studies were developed several years ago, enabling the project to come together quickly once there was a willing landowner.
- Ingria explained that this is an example of a project that has clear habitat benefits, but the water offset benefits (volume and timing) are difficult to calculate with certainty.
  - The Final NEB Guidance does not prescribe methods for calculating the water offset benefits of floodplain reconnection projects.
  - The committee needs to demonstrate how a project has water offset benefits and the certainty of the benefit. Technical consultants can assist in evaluating project benefits for a subset projects identified by the committee for further analysis.
- Committee members were interested in understanding how other committees are estimating water offset benefits from habitat projects and learning how Snohomish CD is evaluating streamflow benefits under their project grant.

Cynthia Krass provided an overview of the Snoqualmie Valley WID's Natural Storage Enhancement and Comprehensive Storage Study funded by a streamflow restoration grant.

- Anchor QEA is under contract to develop conceptual design for one or more natural storage enhancement project and to develop assess storage opportunities in the Snoqualmie watershed.
  - The natural storage enhancement project will build off of SVWID's previous study that identified potential storage sites on specific tributaries in the lower Snoqualmie watershed and near the SVWID service area.
  - The new storage study will include the whole Snoqualmie watershed and a broad assessment of potential storage opportunities.
- SVWID is planning to coordinate with the project subgroup and committee to identify a priority natural storage site, to develop study priorities, and to identify potential sites that benefit instream resources. Anchor QEA will develop a GIS weighted analysis model for the potential sites that committee members can use.

Bobbi Lindemulder provided an overview of the Snohomish CD's Community-Based Water Storage Restoration project funded by a streamflow restoration grant.

- The project takes course over 5 years in the Pilchuck, French, and Lower Skykomish watersheds, which are high priority areas for restoration, surface storage, and discharge.
- The project includes three components: wetland restoration, developing a *living with beavers* program, and developing a small farm water storage pilot program.
- Snohomish CD is planning to coordinate with the project subgroup and committee on development of the project, including presenting to the committee.

Emily Dick provided a report out from the project subgroup on the project inventory and initial project screening criteria.

- GeoEngineers updated the project inventory to align with the project categories in the Final NEB Guidance. They will manage the inventory on BOX.
- Technical consultants developed draft fatal flaw screening criteria that includes 5 yes/no questions.
    - Additional projects identified through the 4-year work plan will be screened for fatal flaws.
    - Projects that pass the fatal flaw criteria can be considered by the committee.

Resources

- Draft fatal flaw screening criteria (see meeting packet)

Discussion and Considerations:

- Committee members want to track monitoring projects that don't have a direct benefit to streamflow or habitat, but are important for planning and adaptive management.
- The draft prioritization screening criteria includes criteria for cost/benefit ratio that the committee can use or customize.
    - Some but not all projects in the inventory have cost estimates.
    - Technical consultants will develop cost estimates for a subset of projects identified by the committee for further analysis.
- Committee members are interested in what types of projects are included in the "habitat and other" category and wants to have input on how water offset benefits of habitat projects are developed and how habitat projects are screened.

Technical consultants will begin initial project screening. The project subgroup will discuss subsequent screening criteria and brainstorm existing methods for calculating water offset benefits.

Next Steps and Action Items

- Committee members share projects one-pager with partners and discuss project ideas.
- Ingria will invite committee members to BOX.
- Ingria will work with technical consultants to develop a draft subbasin delineation memo and refine maps.
- Next WRIA 7 Committee meeting: Thursday, November 14, Brightwater Facility, Woodinville
    - The committee will meet in November and December. The committee will not meet in January.
- Next Technical Workgroup meeting: TBD
- Next Project Subgroup meeting: November 4, 12:00-2:00 pm, Duvall Community Center