OCTOBER 2019 MEETING SUMMARY

Cedar-Sammamish (WRIA 8)
Watershed Restoration and Enhancement Committee

October 24, 2019 | 9:30 a.m. - 12:30 p.m. | Committee website

Location	Committee Chair	Next Meeting
Room 1AB, WA Dept. of Ecology Northwest Regional Office 3190 160th Ave SE, Bellevue	Stephanie Potts Stephanie.Potts@ecy.wa.gov 425-649-7138	December 10, 2019 9:30 a.m. – 12:30 p.m. Ecology NW Regional Office

Attendance

Committee Representatives and Alternates*

John McClellan, *Alderwood Water & Wastewater District*
Evan Swanson (alternate), *Kent*
Michele Koehler, *Seattle*
Denise Di Santo, *King County*
Rick Reinlasoder, *King County Agriculture Program*
Carla Carlson, *Muckleshoot Indian Tribe (phone)*
Terri Strandberg, *Snohomish County*
Julie Lewis (alternate), *Snoqualmie Indian Tribe*
Ann Savery (alternate), *Tulalip Tribes (phone)*
Stewart Reinbold, *Washington Department of Fish and Wildlife*
Stephanie Potts (chair), *Washington State Department of Ecology*
Stacy Vynne McKinstry (alternate), *Washington State Department of Ecology*
Trish Rolfe, *Center for Environmental Law and Policy*
Gina Clark, *Master Builders Association of King and Snohomish Counties*
Jason Wilkinson (cities caucus rep), *WRIA 8 Salmon Recovery Council, ex officio*

Cities caucus members: Bellevue, Bothell, Issaquah, Kenmore, Mukilteo, Redmond, and Sammamish

Committee Members Not in Attendance*

Other Attendees

Elisa Dawson, *Snohomish County*
Joe Hovenkotter, *King County*
Eric Ferguson, *King County*
Paulina Levy, *Department of Ecology*
Gretchen Muller (facilitator), *Cascadia Consulting Group*
Caroline Burney (information manager), *Cascadia Consulting Group*
Cynthia Carlstad (technical consultant), *NHC*

*Attendees list is based on sign-in sheet.

Standing Business

Facilitator reviewed the agenda. *No revisions to the agenda.*

Chair did not receive comments on the meeting summary. The Committee voted to approve the September WRIA 8 WREC meeting summary, with the cities caucus rep abstaining. The final version will be posted on the Committee website.

Updates and Announcements

Chair provided updates from Ecology.

- Box: Committee representatives and alternates received an invitation to the WRIA 8 WREC folder on box.com. Box is a new tool that Ecology and the technical consultant team will use to share files. Everyone currently has the ability to view and download. Stephanie can set up folders for uploading materials and allow editing for specific files as well. Let Stephanie know if you have problems accessing the box folder.
- Streamflow Restoration Competitive Grant guidance: The guidance for the 2020 grant round was released on October 23 and is posted on the Ecology Streamflow Restoration Competitive Grants webpage. Ecology is holding applicant workshops across the state. The closest workshop for WRIA 8 is in Bellevue on November 13. Ecology will have an online applicant workshop in January.
- Technical Workgroup: The workgroup met October 21 and discussed the consumptive use estimate, consumptive use calculator, and project selection criteria. Julie Lewis provided a summary of the discussion during the WREC meeting. Workgroup meetings notes are posted in the technical workgroup folder on box.com. Contact Stephanie if you would like to receive information on upcoming technical workgroup meetings.
- Technical Memos: Distributed draft technical memos for growth projections and consumptive use. These will be included in the appendix to the watershed restoration and enhancement plan. Please review them and send Stephanie comments by 11/12.
- 2020 Meeting Schedule: The WRIA 8 WREC will start meeting every other month in 2020. The technical workgroup will meet the fourth Thursday of the month between WREC meetings. Stephanie will distribute a schedule at the December WREC meeting.

Committee member updates

- Gina Clark, MBAKS: MBAKS members can come talk to the Committee about development in rural areas at an upcoming meeting. The Committee expressed interest in hearing from developers. Stephanie will coordinate with Gina to schedule a presentation.

Public Comment

No comments.

Consumptive Use

Objectives:

- Report out from Oct 21 Technical Workgroup Meeting.
- Presentation and demonstration of consumptive use calculator and estimate.
- Discuss factors to consider for the offset target.

Reference Materials

- Draft consumptive use memo
- Consumptive use calculator (excel spreadsheet)

Consumptive Use and Offset Targets

- Stephanie provided a recap of previous conversations on growth projections and consumptive use at the Committee and workgroup level.

    - At the September WREC meeting, the Committee reviewed the 20-year WRIA 8 growth projections and had general agreement to move forward using the subbasin and WRIA totals.
    - GeoEngineers produced a technical memo on growth projections methods and results. GeoEngineers will add the Snohomish County and King County methods write-ups as attachments. The technical memo will be included in the appendix of the WRE plan.
    - At the May WRIA 8 & 9 WREC meeting, John Covert presented on Ecology recommended methods for estimating consumptive use and estimates from other watershed groups. The Committees discussed considerations for the consumptive use estimate.
    - The technical consultant team produced a detailed consumptive use workplan. The workgroup reviewed the workplan over the summer.
    - The detailed workplan included methods for coming up with an average lawn size. The consultants completed the irrigated footprint analysis and presented the results to the workgroup on October 21.
    - The technical consultants presented the consumptive use calculator and WRIA 8 consumptive use estimate at the October 21 technical workgroup meeting.
- The Committee can decide on an offset target that is higher than the consumptive use estimate.
- The Committee discussed some of the factors to consider in developing the offset target.

Consumptive Use Estimate and Calculator

- Cynthia Carlstad provided a review of the methods used to estimate consumptive use (see consumptive use memo, presentation and consumptive use calculator on the Committee website and in the October meeting materials folder on box.com).
    - Indoor water use based on:
        - 60 gpd per person
        - 2.73 people per home based on rural household size from King County; 2.9 people per home based on rural household size in Snohomish County
        - 10% consumptive
    - Outdoor water use based on:
        - Average lawn size per subbasin based on irrigated footprint analysis
        - Crop irrigation requirement per subbasin; using Washington Irrigation Guide estimates for grass
        - 75% application efficiency
        - 80% consumptive
- The consumptive use calculator is an excel tool that will develop a consumptive use estimate based on user input and assumptions. It includes estimates of annual average use and summer use (June, July, August).
    - Information tab provides the data and sources used for the calculations.
    - Summary Annual tab includes the annual consumptive use from the following scenarios:
        - Scenario 1: assumes 60 gpd indoor use per person and an average lawn size, based on irrigated footprint analysis
        - Scenario 2: assumes 60 gpd indoor use per person and ½ acre irrigated lawn area
        - Scenario 3: assume homes use 950 gpd annual average, with indoor use of 60 gpd per person and the rest for outdoor use
        - Scenario 4: provides the average household water use from data provided by Snohomish Public Utility District (numbers are total use, not consumptive use)
        - Active scenario: populates from user data entered in the "CALC" tabs.
    - Summary Summer tab includes the summer (June, July, August) consumptive use for scenarios 1 through 4 and the active scenario.

- CALC tabs allow users to input your own data and assumptions.
- Using the Ecology recommended methods, the draft consumptive use estimate for WRIA 8 is:
    - 438.9 acre feet per year
    - 0.61 cfs
    - 405 gallons per day per home

Annual Consumptive Use Summary for One Home with Subbasin Average Yard

Subbasin ID	# PE Wells Anticipated in Subbasin	Irrigated Area per Well (ac)	Per Well Consumptive Use (gpd)			Total Consumptive Use (af/yr)
			Indoor	Outdoor	Total	
Puget Sound Shorelines	2	0.28†	17.4	334.4	351.8	0.8
Swamp/North	5	0.28†	17.4	314.6	332.0	1.9
Little Bear	118	0.28	17.4	305.5	322.9	42.7
Sammamish River Valley	8	0.28‡	16.4	349.0	365.4	3.3
Bear/Evans	234	0.31	16.8	355.0	371.8	97.4
Greater Lake Washington	4	0.28†	16.4	377.0	393.4	1.8
May/Coal	15	0.33‡	16.4	426.8	443.2	7.4
Lake Sammamish Creeks	6	0.31‡	16.4	382.0	398.4	2.7
Issaquah	235	0.37	16.4	435.1	451.5	118.9
Lower Cedar	340	0.33	16.4	409.3	425.7	162.1
WRIA 8	**967**					**438.9**

Discussion

- The Committee recommended the following changes/corrections to the Consumptive Use memo and calculator:
    - Update the Snohomish County average household size
    - Add additional language regarding using the Little Bear average lawn size for Puget Sound Shorelines, Greater Lake Washington and Swamp-North subbasins (Little Bear is outside the UGA and PS Shorelines, Greater Lake Washington and Swamp-North are inside the UGA, etc.)
    - Revise the description for the 950 gallons per day scenario
    - Correct the subbasin names in the calculator
- The 950 gpd scenario in the consumptive use calculator assumes that homes use 60 gpd per person for indoor use and the rest as outdoor use, and applies the 10% consumptive use proportion to the indoor use and 80% consumptive use proportion to the outdoor use.
- The Committee discussed the comparison data from Snohomish Public Utility District. Snohomish PUD serves rural areas. Many of their customers are on lots 1-10 acres. The SnoPUD average indoor use was similar to the consumptive use estimate, but the outdoor use from the SnoPUD data was much lower. There are a number of factors that could contribute to that difference that are described in the memo:
    - SnoPUD charges its customers a flat rate by amount of water used, which may influence conservation behavior compared to unmetered users.
    - The assumptions regarding crop irrigation requirements and application efficiency used in the consumptive use estimate are likely conservative. For example, residential lawn watering is likely more often at a deficit level (to maintain some growth and green color) whereas the WAIG crop irrigation requirements used in the consumptive use estimate assume watering at a level to produce commercial crops (like a sod farm for turf grass). The

WAIG crop irrigation requirements are based on data from the 1970s and 1980s and likely high.

- Water purveyors use an estimate of gallons per day (gpd) per equivalent residential unit (ERU) to project future water use. Water purveyors in WRIAs 7 and 8 use an average of 241 gpd per ERU for planning purposes. Cross Valley Water District, which provides water in the Little Bear subbasin, uses 234 gpd/ERU for planning.
- The Committee discussed water purveyor conservation programs, which include education and offering free water conservation kits.

Next Steps

- The GeoEngineers team contacted the Snohomish County demographer about the average rural household size. The GeoEngineers team will revised the assumption in the consumptive use estimate and calculator to 2.75 people per home.
- Committee members should review the consumptive use technical memo and send Stephanie feedback by 11/12.
- Committee members should explore the consumptive use calculator and contact Stephanie with questions or comments.
- Stephanie will distribute the revised technical memo and consumptive use calculator before the December 10 WREC meeting.
- The December WREC meeting agenda will include time to discuss the consumptive use estimate and readiness for a vote in January/February.

Climate Change

Objective: Discuss potential climate change impacts and if/how to address them in WRE plan.

Reference Materials

- Climate change discussion guide

Discussion

- The climate change discussion guide includes links to resources, including Climate Impacts Group reports and a chapter on climate impacts on salmon in the WRIA 8 Chinook Salmon Conservation Plan.
- Committee members expressed interest in addressing climate change in the watershed restoration and enhancement plan through a safety factor and an adaptive management process. The Committee will talk about the safety factor/offset target and adaptive management in more depth in the coming meetings.
- Committee members wanted to learn more about specific impacts projected for the Cedar-Sammamish Watershed.
- The Committee is also interested in more information on how water system plans address climate change. Suggestion to look at resources from the Puget Sound Water Supply Forum.
- Suggestions to look at how other plans address climate change and water resources: King County Strategic Climate Action Plan, Orca task force recommendations, Snohomish Basin Protection Plan, etc.
- Committee members expressed interest in including examples of local codes, ordinances, and policies that local jurisdictions could adopt to improve streamflow.

Next Steps

- Stephanie will contact the University of Washington Climate Impacts Group to find out if they have data and projections specific to the Cedar-Sammamish watershed.

Identifying Potential Projects

Objectives:

- Discuss approach for developing the project list.
- Review and discuss draft project screening criteria.

Reference Materials

- Project screening criteria memo
- Project solicitation handout

Discussion

- The Committee discussed the need to find water offset projects because most of the projects in other watershed plans are focused on habitat benefits. Suggestions included water rights acquisitions, and getting water right holders hooked up to reclaimed water.
- King County Ag Program (the representative for agricultural interests) would have concerns about projects that involve permanent removal of agricultural water rights, without a reasonable alternative water source.
- The Committee will talk more about project types at upcoming meetings.
- The Committee wants more information on methods to quantify water benefits from habitat projects.
- The Committee reviewed the Project Screening Criteria memo. The GeoEngineers and HDR consultant teams collaborated to develop proposed screening criteria for initial evaluation of proposed water offset and habitat projects. The WRIA 8 WREC will provide feedback on the proposed criteria and tailor it to meet our needs.
- The purpose of the fatal flaw screening criteria (Section 2 of the Proposed Screening Criteria memo) is to quickly and easily remove projects that are ineligible or do not meet the minimum requirements of the streamflow restoration law and NEB guidance. Projects that are screened out can still be reconsidered later, if the Committee receives additional information.
    - The workgroup recommended removing “reliable” from the criteria “no reliable benefits to streamflow or habitat”
- Sections 3 and 4 of the Proposed Screening Criteria memo includes criteria the workgroup and Committee can use to further refine the project list and prioritize projects. The workgroup will discuss these sections in more detail at the next meeting.
- The Committee briefly reviewed the project inventory prepared by GeoEngineers. The project inventory is a working document that compiles project ideas, including projects in existing plans (e.g. the Salmon Recovery plans).
- The Committee will need to talk more about the roles of the Committee, workgroup, and consultant team in project identification and selection and a process for bringing projects forward for Committee consideration.

Next Steps

- Committee members should start talking with colleagues and partners about potential water rights acquisition, water offset, and habitat projects to include in the plan. Ecology produced the project solicitation handout for that purpose.

- Stephanie will share a draft water rights acquisition assessment scope of work at the next technical workgroup meeting.
- The technical consultants will put together a presentation on methods to estimate water offset benefits from habitat restoration projects.
- Committee members think about whether your organization/government has concerns with certain project types and plan to talk about that at the next meeting.

Streamflow Restoration Competitive Grants Update

Reference Materials

- Streamflow Restoration Competitive Grants Guidance

Discussion

- Paulina provided an overview of the grant guidance. This round allocated $22 million for eligible projects statewide. Projects include: water rights acquisitions; altered water management or infrastructure; watershed function, riparian, and fish habitat improvements; environmental monitoring, feasibility studies, and water storage. Scoring criteria is outlined in the grant guidance.
- For more information, review the grant guidance and attend an applicant workshop. Details are on the Streamflow Restoration Competitive Grants webpage.

Action Items for Chair:

- Coordinate with MBAKS to schedule a presentation on rural development from some of their members.
- Ask the technical consultants to revise the Snohomish County household size assumption used in the consumptive use estimate and calculator to 2.75 people per home, based on information provided by the Snohomish County demographer.
- Distribute revised technical memo and consumptive use calculator before the December 10 WREC meeting.
- Contact the University of Washington Climate Impacts Group to find out if they have data and projections specific to the Cedar-Sammamish watershed.
- Share a draft water rights acquisition assessment scope of work at the next technical workgroup meeting.
- Ask the technical consultants to put together a presentation on methods to estimate water offset benefits from habitat restoration projects.

Action Items for Committee Members

- Review the growth projections and consumptive use technical memo and send Stephanie feedback by 11/12.
- Explore the consumptive use calculator and contact Stephanie with questions or comments.
- Think about whether your organization/government has concerns with certain project types and plan to talk about that at the next meeting.
- Start talking with colleagues and partners about potential water rights acquisition, water offset, and habitat projects to include in the plan. Ecology produced the project solicitation handout for that purpose.
- Send Stephanie corrections to draft October meeting summary by 11/26/2019.

Next Meeting: Tuesday, December 10

Next meeting—Tuesday, December 10 from 9:30 a.m. - 12:30 p.m., Ecology Northwest Regional Office

- The Committee will not meet in November
- The December meeting is rescheduled for December 10