October 2019 MEETING SUMMARY

Duwamish-Green (WRIA 9)
Watershed Restoration and Enhancement Committee

October, 22, 2019 | 12:30 p.m. - 3:30 p.m. | Committee website

Location	Committee Chair	Next Meeting
Meeting Room A Tukwila Community Center 12424 42nd Ave S, Tukwila	Stephanie Potts Stephanie.Potts@ecy.wa.gov 425-649-7138	November 19, 2019 12:30 p.m. – 3:30 p.m. King County South Treatment Plant

Attendance

Committee Representatives and Alternates*

Lisa Tobin, *Auburn*
Trish Rolfe, *Center for Environmental Law and Policy*
Steve Lee (alternate), *Covington Water District*
Scott Woodbury, *Enumclaw*
Matt Coy (alternate), *Kent*
Josh Kahan, *King County*
Rick Reinlasoder, *King County Agriculture Program*
Jennifer Anderson, *Master Builders Association of King and Snohomish Counties*
Carla Carlson, *Muckleshoot* Indian Tribe
Kathy Minsch, *Seattle*
Stephanie Potts (chair), *Washington State Department of Ecology*
Ingria Jones (alternate), *Washington State Department of Ecology*
Greg Volkhardt, *Tacoma Water, ex officio*
Matt Goehring (cities caucus rep), *WRIA 9 Watershed Ecosystem Forum, ex officio*

Cities caucus members: Black Diamond, Normandy Park, and Tukwila

Committee Members Not in Attendance*

Washington Department of Fish and Wildlife

Other Attendees

Eric Ferguson, *King County*
Joe Hovenkotter, *King County*
Tristan Weiss, *Washington Department of Fish and Wildlife*
John Covert, *Washington State Department of Ecology*
Ruth Bell (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 9 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 9 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 staff will provide a brief overview of the guidance at the November WREC meeting. Ecology is holding applicant workshops across the state. The closest workshop for WRIA 9 is in Bellevue on November 13. Ecology will have an online applicant workshop in January.
- Technical Workgroup: The workgroup met October 8 and discussed the consumptive use estimate, consumptive use calculator, and project selection criteria. Carla Carlson 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 11/5.
- 2020 Meeting Schedule: The WRIA 9 WREC will start meeting every other month in 2020. The technical workgroup will meet the fourth Tuesday of the month between WREC meetings. Stephanie will distribute a schedule at the November meeting.

Consumptive Use

Objectives:

- Report out from Oct 8 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 results presentation

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 9 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. When King County provides the methods write-up, GeoEngineers will add that as an attachment. 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 8.
    - The technical consultants presented the consumptive use calculator and WRIA 9 consumptive use estimate at the October 8 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
        - 10% consumptive
    - Outdoor water use based on:
        - Irrigated footprint analysis average per subbasin
        - 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 Covington Water 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 consumptive use estimate for WRIA 9 is:
    - 264.6 acre feet per year
    - 0.37 cfs
    - 374 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	
Coal/Deep Creek	62	0.17	16.4	191.5	207.9	14.4
Covington Creek	41	0.40	16.4	487.8	504.2	23.2
Jenkins Creek	45	0.34	16.4	432.2	448.6	22.6
Lower Green	4	0.34	16.4	454.9	471.2	2.1
Lower Middle Green River	84	0.44	16.4	541.5	557.9	52.5
Mid Middle Green River	100	0.25	16.4	289.4	305.8	34.3
Newaukum Creek	103	0.31	16.4	336.5	352.9	40.7
Soos Creek	83	0.34	16.4	446.8	463.1	43.1
Upper Middle Green River	110	0.21	16.4	241.5	257.8	31.8
WRIA 9	**632**					**264.6**

Discussion

- Some Committee members are interested in looking at 100% consumptive use of 950 gallons per day per home as a maximum water use scenario (annual use = 950 gpd X 365 days x 632 homes). 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 Covington Water District. The CWD average indoor use was similar to the consumptive use estimate, but the outdoor use from the CWD data was much lower. There are a number of factors that could contribute to that difference that are described in the memo:
    - CWD charges its customers on a tiered rate structure, depending on season and level of water use, which may influence summer watering behavior compared to unmetered users.
    - The CWD service area includes more heavily developed areas in Covington and Maple Valley that would be likely to have smaller lot sizes than the fringe areas where more permit-exempt well connections are anticipated.
    - The CWD data is from 2015 and 2017, and 2015 was a drought year. CWD did not curtail use but there were public education programs related to water use and the drought.
    - 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.

Next Steps

- Committee members should review the consumptive use technical memo and send Stephanie feedback by 11/5.
- Committee members should explore the consumptive use calculator and contact Stephanie with questions or comments.
- Stephanie will distribute any updates to the technical memo or consumptive use calculator before the November 19 WREC meeting.
- The November 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 paper on climate impacts on salmon from the WRIA 9 Salmon Recovery Lead Entity.
- Committee members expressed interest in addressing climate change in the watershed restoration and enhancement plan.
- Committee members wanted to learn more about specific impacts projected for Duwamish-Green watershed.
- The Committee is also interested in more information on how water system plans address climate change.
- The Committee expressed general support for addressing climate change impacts to the watershed through an adaptive management process. The Committee will talk about adaptive management in more depth in the coming meetings.

Next Steps

- Stephanie will contact the University of Washington Climate Impacts Group about presenting to the Committee. The presentation will likely be over WebEx. Depending on the geographic scale of climate models and projections, the presentation might be joint with other WRIAs.

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 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 9 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.
- 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 discussed the need to find water offset projects because most of the projects in other watershed plans are focused on habitat benefits.
- The Committee will need to talk more about a process for bringing projects forward for Committee consideration.

Next Steps

- Remove projects in Vashon from the project inventory because they fall under WRIA 15.
- 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.
- The technical consultants will put together a presentation on methods to estimate water offset benefits from habitat restoration projects.

Public Comment

No comments.

Action Items for Chair:

- Distribute any updates to the technical memo or consumptive use calculator before the November 19 WREC meeting.
- Contact the University of Washington Climate Impacts Group about presenting to the Committee. The presentation will likely be over WebEx. Depending on the geographic scale of climate models and projections, the presentation might be joint with other WRIAs.
- Remove projects in Vashon from the project inventory because they fall under WRIA 15.
- Look into water right acquisition opportunities, including temporary donations to the Ecology Trust Water Rights Program.
- 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 11/5.
- 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 11/14/2019.

Next Meeting: Tuesday, November 19

Next meeting—Tuesday, November 19 from 12:30 p.m. – 3:30 p.m., King County South Treatment Plant