Meeting Notes

**Snohomish (WRIA 7)**

**WREC Technical Workgroup meeting**

August 26, 2019 | 1:00 p.m.- 3:00 p.m. [WRIA 7 Committee Webpage](https://www.ezview.wa.gov/site/alias__1962/37310/watershed_restoration_and_enhancement_-_wria_7.aspxhttps:/www.ezview.wa.gov/site/alias__1962/37310/watershed_restoration_and_enhancement_-_wria_7.aspx)

## **Location**

WebEx

+1-415-655-0001 US Toll

Access code: 807 471 125

Password: WRIA7Streamflow

[Link](https://watech.webex.com/watech/j.php?MTID=m3b3e9e713fe8eecd9246d8ab2174625f)

**Committee Chair**

Ingria Jones

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**Handouts** (electronic)

Agenda

WWT Project Inventory

WRIA 15 Draft acquisition work plan

Preliminary Growth Projection Summary

# Attendance

Committee Representatives and Workgroup Members in Attendance\*

*Ingria Jones (WA Dept. of Ecology)*

*Alexa Ramos-Cummings (Snohomish County)*

*Emily Dick (Washington Water Trust)*

*Joe Hovenkotter (King County)*

*Denise DiSanto (King County)*

*Janne Kaje (King County)*

*Julie Lewis (Snoqualmie Tribe)*

*Matt Baerwalde (Snoqualmie Tribe)*

*Kirk Lakey (WA Dept. of Fish and Wildlife)*

*Liz Ablow (City of Seattle)*

*Paul Faulds (City of Seattle)*

*Souheil Nasr (City of Everett)*

*Terri Strandberg (Snohomish County)*

*Mike Wolanek (City of Arlington)*

*Anne Savery (Tulalip Tribes)*

*Daryl Williams (Tulalip Tribes)  
Colin Wahl (Tulalip Tribes)*

Other Attendees

*John Covert (WA Dept. of Ecology)*

*Cynthia Carlstad (NHC, technical consultant sub)*

*Kelsey Collins (WA Dept. of Ecology)*

*Stephanie Potts (WA Dept. of Ecology)*

*Alora McGavin (WA Dept. of Ecology)*

\*Attendees list is based on WebEx participant list.

# Welcome and introductions

Ingria welcomed the Workgroup and reviewed the agenda and meeting objectives.

# Project subgroup update

The project subgroup met on August 20. Emily Dick provided an update on the meeting and the project inventory Washington Water Trust (WWT) developed.

* WWT developed a searchable project inventory database that identified a total of 269 projects from existing project lists.
* The inventory generally did not include projects relating to shoreline and estuaries.
* Many projects in the inventory will not fit the goals of the WREC. The subgroup will continue to discuss recommendations around how to filter unrelated projects.
* Very few projects were water offset projects that were sorted into the category labeled “direct water benefit.” The subgroup will continue to discuss how to fill this gap.
* The subgroup discussed focusing first on projects that provide a direct water benefit, considering project resiliency to climate change.

Ingria is developing a draft overview document that reviews the project subgroup approach and timeline. Ingria will send this document to the subgroup for feedback.

# Water right acquisitions

Kelsey Collins introduced the WRIA 15 draft acquisitions work plan, which approaches water right acquisition opportunities by identifying priority streams for acquisition opportunity assessment, and discussed options for a WRIA 7 acquisitions work plan.

* Ecology has an existing contract with WWT for water right acquisitions work that could be extended to include identifying water right acquisition opportunities in WRIA 7 to support the WREC planning. Ecology could include WRIA 7 work under this contract relatively quickly.
* The technical consultants, GeoEngineers and NHC, could also assist with water right acquisitions. This would involve an amendment to their existing contract.
* Groundwater acquisitions often require additional hydrogeology expertise.

Resources:

* WWT Project Inventory
* WRIA 15 Draft acquisitions work plan

The workgroup discussed approaches to identifying water right acquisition opportunities.

Discussion and Considerations

* Identify opportunities on closed streams, where other water offset projects will be difficult to permit (storage that re-times winter flows requires a permit.)
* Consider overlaying salmon distribution and closed streams to identify specific priority reaches.
* Overlay growth projections to identify where areas with more anticipated growth overlap with priority areas for restoring streamflow.
* Instead of identifying priority streams, priority subbasins could be identified, once delineated.
* Consider areas of hydrologic importance identified in the [Snohomish Basin Protection Plan](https://www.govlink.org/watersheds/7/pdf/SBPP/SBPP%20December%202015_reduced%20size.pdf).
* Consider current status of habitat conditions, including areas with degraded habitat conditions, such as streams with known low flow issues (e.g. Raging River).
* The workgroup discussed entities that hold large municipal water rights and potential water offset opportunities associated with those water rights, including release of stored water.
  + City of Seattle and Snohomish PUD discussed releasing water from Tolt and Spada reservoirs, respectively.
  + Spada Reservoir is jointly managed between City of Everett and Snohomish PUD and is typically operated so that flows are above minimum instream flows on the Sultan River. Snohomish PUD mentioned potential opportunities for seasonal pulse flows.
  + The workgroup discussed significant effort needed to implement this type of project, how to measure small quantities of water released from a large reservoir.
  + Some workgroup members expressed concerns regarding using municipal water rights for non-municipal supply and concerns about using reservoir water to offset permit-exempt uses outside of the subbasin where that offset project is located.
  + City of Everett discussed the idea of releasing water into the Sultan River or other discharge point intersecting with Everett’s transmission lines north corridor to offset PE wells in Everett’s UGA and its wholesale customers’ UGAs, until those homes are connected to a public water system.
* The workgroup expressed interest in pursuing creative water right acquisition opportunities, including surface water to groundwater source switches, streamflow augmentation, and using reclaimed water to replace an existing water right.
  + Surface to groundwater source switches need to consider the season of use for the water right and the timeframe of impacts to surface water bodies.
* The workgroup needs to consider concerns regarding direct purchase of irrigation water rights or municipal water rights.

Ingria will develop a draft scope of work for water right acquisitions support for WRIA 7 that includes identifying creative water right acquisition opportunities and prioritizing putting water where it’s most needed.

# Recommendation for rural growth projection

Cynthia Carlstad reviewed the results of the technical consultant’s well log spot check and recommended growth projection summary.

* Geoengineers spot-checked 61% of wells in UGAs between 1998-2008. Using the past number of well logs that reported domestic use as the purpose of the well, they calculated a total 40 potential domestic permit-exempt uses (PE wells) in UGA over the 20-year planning horizon.
* GeoEngineers recommended growth projection uses King County’s 20-year estimate for potential new PE well connections and Snohomish County’s estimate for potential new PE wells using their past trends scenario. This estimate assumes:
  + 983 potential PE wells in the King County portion of WRIA 7.
  + 2,334 PE wells in the Snohomish County portion of WRIA 7.
  + 40 new PE wells in UGAs.
* They made the following changes and additions to the counties’ estimates:
  + Added a 6% error (49 PE well connections) to King County’s growth projections to account for parcel information with “unknown” listed for the water source.
  + Added a total of 40 potential new PE wells in UGAs.
  + Adjusted the new PE well connections for Quilceda Creek and Tulalip Creek-Frontal Procession Sound to account for the fact that Seven Lakes Water Association does not have capacity to serve new customers.
  + Assumed half (26 PE wells) of the Quilceda HUC-12 growth will use PE wells and the other half has water provided by the Cities of Marysville and Everett.
  + Assumed all (249 PE wells) of the water service area growth forecast in the Tulalip Creek-Frontal Procession Sound HUC-12 will use PE wells.
* GeoEngineers’ recommended growth projection estimates a total of 3,357 new PE well connections in WRIA 7.
  + This estimate does not include PE wells on the Tulalip Reservation’s tribal owned and tribal member lands. Tulalip Tribes is still developing their estimate and is using methods similar to Snohomish and King County, looking at past trends.
  + This summary uses similar methods (past trends) across the two counties.
  + Using the past trends scenario is more conservative (protective of the resource) than Snohomish County’s comprehensive plan scenario (based on the OFM medium projection), which estimates 1,463 new PE wells in the Snohomish County portion of WRIA 7.
  + The OFM high projection was not considered; it is not supported by Snohomish County and surpasses capacity in several HUC-12 subwatersheds.

Resources:

* Preliminary growth projection summary (spreadsheet)
* [Draft Growth Forecasts –Snohomish County](https://www.ezview.wa.gov/Portals/_1962/images/WREC/WRIA07/201907/WRIA07-DRAFTGrowthForecastsSnohomishCounty-20190711.pdf) (spreadsheet)
* [Rural Capacity –Snohomish County](https://www.ezview.wa.gov/Portals/_1962/images/WREC/WRIA07/201908/WRIA07-RuralCapacitySnohomishCounty.pdf) (map)
* [Historical Residential Dwellings –Snohomish County](https://www.ezview.wa.gov/Portals/_1962/images/WREC/WRIA07/201908/WRIA07-HistoricalResidentialDwellingsSnohomishCounty.pdf) (map)
* [Draft Growth Forecasts –King County](https://www.ezview.wa.gov/Portals/_1962/images/WREC/WRIA07/201907/WRIA07-DRAFTGrowthForecastsKingCounty-20190711.pdf) (spreadsheet)
* [Historic building permits –King County](https://www.ezview.wa.gov/Portals/_1962/images/WREC/WRIA07/201907/WRIA7-buildingPermits-20190711(1).pdf) (map)
* [Historic growth –King County](https://www.ezview.wa.gov/Portals/_1962/images/WREC/WRIA07/201907/WRIA07-HistoricGrowthPercent-20190711.pdf) (map)

The workgroup discussed the technical consultant’s recommended growth projection summary.

* The workgroup discussed the 20-year timeframe for the growth projection.
  + The streamflow restoration law requires estimating the consumptive use fron new permit-exempt domestic withdrawals over the planning horizon (the 20-year period beginning on January 19, 2018 and ending on January 18, 2038).
  + A 40-year growth projection scenario was not developed, since there is increasing uncertainty going beyond the 20-year time frame for growth projections.
  + The Committee can consider the Snohomish County’s rural capacity and King County’s developable lands/rural capacity analysis (forthcoming) as offset targets that consider the total estimated potential number of PE wells.
  + King County is finishing its developable lands/rural capacity analysis and expects to have something to share with the workgroup in September.

The workgroup agreed to recommend the technical consultant’s 20-year growth projection to the Committee, with the understanding that Tulalip’s growth estimates will be added to the Quilceda and Tulalip-Frontal Procession Sound HUC-12s, and the numbers by HUC-12 and King County stream basin will be reconfigured once the Committee identifies subbasins.

# Consumptive use approach and next steps

Ingria provided an update on the approach to consumptive use estimates.

* HDR and GeoEngineers investigated an opportunity to use a remote sensing technique to assess outdoor watering, but decided to continue with the original approach (hand delineation of irrigated area using aerial photos) due to feasibility and accuracy limitations associated with remote sensing.
* Ingria requested feedback on specific assumptions for the indoor and outdoor consumptive use calculations outlined in Appendix A of the [Final NEB Guidance](https://fortress.wa.gov/ecy/publications/documents/1911079.pdf) and did not receive any feedback on Ecology’s recommended methods.
* The workgroup would like to consider the 950 gpd annual average and the ½ acre lawn irrigation as offset targets.
  + Technical consultants will develop consumptive use scenarios for 1) Ecology’s recommended methods, 2) water use data provided by Snohomish PUD, 3) 950 gpd annual average, and 3) ½ acre non-commercial lawn or garden.
  + Once the technical consultants develop a consumptive use calculator spreadsheet, it will be shared with technical workgroup members for their own analysis and sensitivity testing.

# Next steps and action items

Next Committee Meeting:

* WRIA 7: Thursday, September 12 from 12:30-3:30 at Brightwater Facility, Woodinville
  + Before the Committee’s October 10th meeting, there will be an opportunity to tour the Snohomish Conservation District’s [Moga Back-Channel Restoration Project](https://secure.rco.wa.gov/prism/search/projectsnapshot.aspx?ProjectNumber=14-1404). Ingria will send additional details in September.

Next Technical Workgroup Meeting:

* Date and location TBD; this will be an in person meeting.
  + Focus of the meeting is subbasin delineations.