

## Draft Meeting Summary

### Puyallup-White Watershed (WRIA 10)/Chambers-Clover (WRIA 12) Joint Meeting Watershed Restoration and Enhancement Committees

#### Meeting Information:

Wednesday, March 6, 2019  
9 am – 12:30 pm

Administrative Center & Library  
3005 112th St. E., Tacoma, WA  
ACL Room B/C

#### Committee Chair:

Rebecca Brown, Washington State Department of Ecology  
360-407-6666, [Rebecca.Brown@ecy.wa.gov](mailto:Rebecca.Brown@ecy.wa.gov)

Topic	Time	Action	Handouts	Lead
Welcome and Introductions	9:00	None		Facilitator
Approval of February summary and review of agenda	9:15	Vote	- Agenda	Chair
Public Comment	9:20			Facilitator
Presentation: USGS Groundwater Model	9:35			Wendy Welch and Andy Long, USGS
Break	10:35			
Presentation: Pierce County Planning Topics	10:45			Dan Cardwell, Pierce County
Presentation: King County Study	11:45			Steve Hirschey, King County
Action Items and Next steps	12:15			Chair

Next WRIA 10 Meeting: April 3, 2019, 9 am - 12:30 pm  
Puyallup Public Library

#### WRIA 10 Committee Representatives and Alternates in Attendance

Name	Representing	Name	Representing
Lisa Tobin	Auburn	Robby Wright (alternate)	Sumner
Dan Cardwell	Pierce County	Paul Marrinan	Puyallup
Elizabeth Bockstiegel	WA Department of Fish and Wildlife	Stan French	Lakehaven Water and Sewer District
Ken Gill	Fife	Jeremy Bush (ex officio)	TPCHD
Greg Reed	Orting	Ryan Johnstone	Bonney Lake
Scott Woodbury	Enumclaw	Russ Ladley	Puyallup Tribe
Allan Warren	Pierce CD	Char Naylor (Alternate)	Puyallup Tribe
Jim Morgan	Pacific	Carla Carlson (Alternate)	Muckleshoot Tribe
Lisa Spurrier (ex officio)	10/12 Salmon Recovery LE	Merita Trohimovich	Tacoma
Rebecca Brown	Ecology	Tom Kantz (alternate)	Pierce County

Committee members not in attendance: Pierce MBA, Edgewood, and Puyallup River Watershed Council.

## Other Attendees

Name	Representing	Name	Representing
Angela Johnson (Interim Facilitator)	WA Department of Ecology	Stacy Vynne	WA Department of Ecology
Kelly Still (WRIA 12)	WA Department of Fish and Wildlife	Don Stanley (WRIA 12)	Lakewood Water
Jeff Dickison (WRIA 12)	Squaxin Island Tribe	Paul Pickett (alternate) (WRIA 12)	Squaxin Island Tribe
Paul Bucich (WRIA 12)	Lakewood	Greg Volkhardt (alternate) (WRIA 12)	Tacoma
Austin Jennings	Pierce County	Steve Hirschey (presenter)	King County
Alex Headman (presenter)	USGS	Wendy Welch (presenter)	USGS
Andy Long (presenter)	USGS	Burt Clothier	Pacific Groundwater Group
Suzanne Skinner	Washington Water Trust		

**Approval of February Summary:** Rebecca received one correction on the February agenda, which identified the wrong water purveyor. The summary was approved with that one correction.

**USGS Model:** Wendy Welch, Andy Long, and Alex Headman presented information on the Puyallup-White/Chambers-Clover Groundwater Model.

The presentation is not available on the committee website, but the main takeaways and questions/answers from the presentation are summarized below:

- General Model information--The model is a simplified computer representation of a complex groundwater system.
  - The model cannot exactly replicate real life.
  - The model is made up of a grid of 3-D cells. Parts of the grid are inactive (such as areas outside of the study area), and the thickness of each cell depends on available data and the depth to bedrock.
  - Geologic mapping is not perfect—the model contains assumptions and a level of uncertainty.
  - The model uses the 2011 National Land Cover data set to account for impervious surfaces, and soil-water balance model to estimate recharge.
  - Model assumes that septic system return flow enters the shallow aquifer. It does not necessarily go back into the same area or aquifer it was pumped from.
  - The USGS will conduct a sensitivity analysis of the model to identify which parameters are the most sensitive. Recharge and hydraulic conductivity tend to be the most sensitive.
    - The USGS can do an uncertainty analysis, but it is beyond the scope of the project. Any uncertainty analysis would be applied to a particular scenario.
- Permit Exempt wells and the model:
  - The model uses land value as a proxy for Permit Exempt well existence.
  - They do not have information on parcels served by wells within water system boundaries.
  - USGS does not have information on metered permit-exempt wells.
  - Model assumes that areas with in water service boundaries are connected to Group A or B wells.

- Model assumes that PE water use is the same as Group A systems, which may be inaccurate because Group A systems have pricing mechanisms that affect water use.
- After the model is finished and available, users can make changes to the assumptions.
- The model will be testing a number of scenarios using both a steady-state and transient specifications.
  - Some of these scenarios may be looking at the impacts of increased PE well pumping. The team is still refining the scenarios.
  - One scenario will probably look at how they system responds to increased pumping as part of the Sumner Foster Pilot.
  - Steady-state is when the system is in equilibrium.
  - Transient is when the system changes over time (dynamic).
- The model is very complex and would require expertise to run it.
- It is important to understand the uncertainty in the model.
- The project's Technical Advisory Group meets bi-monthly and is open for the public to attend. The workgroup includes active committee members and regular meeting attendees. Contact Wendy to find out when the meetings are.
- Expected completion date is February 2020.
- USGS Contacts: Wendy Welch: [wwelch@usgs.gov](mailto:wwelch@usgs.gov); Andy Long: [ajlong@usgs.gov](mailto:ajlong@usgs.gov); Alex Headman: [aheadman@usgs.gov](mailto:aheadman@usgs.gov).

The Committees should consider how we can use the model, and if the model will be complete in time to be useful for our needs. We might be able to use the model to identify projects if the projects are at a large enough scale to have a measureable impact on the model. The committee might have resources (technical consultant, Ecology's Technical team) to make changes to the model and run it after the model is complete.

**Pierce County Planning Presentation:** Dan Cardwell presented Pierce County's planning information as it applies to the Committees' work on Permit Exempt wells. The full presentation can be found on both the [WRIA 10](#) and [WRIA 12](#) webpages. Below is a summary of the questions and discussion following the presentation:

- Does Tacoma-Pierce County Health Department (TPCHD) regulate drilling of irrigation wells for landscaping/gardening? How does the water service provider find out about irrigation wells?
  - Well drillers still need to file a notice of intent to drill with Ecology.
  - TPCHD coordinates closely with the water purveyors.
  - Fife has a program to not let irrigation water get into their system.
- Population densities: are urban areas typically on sewer and rural areas on septic?
  - Yes, typically, but there are some exceptions. Failing septic systems might hook up to sewer. Most urban areas (city limits and urban growth areas) are sewer.
- If an area is on sewer, than there is no septic return flow. The wastewater is conveyed to another area. How extensive is water reuse? Is recharge going back anywhere?
  - Pierce County is not doing much reuse currently but looking at potentially doing it in the future.

**King County Water Study Presentation:** Steve Hirschey from King County presented on a water use estimation study they published at the end of 2018 as a result of RCW 90.94. The presentation and links to the study can be found on both the both the [WRIA 10](#) and [WRIA 12](#) webpages. Below is a brief summary of the questions and discussion following the presentation:

- The study did not count "production districts" in their review of areas where PE wells could be drilled in the future. These areas can be taken out of production after a certain amount of time.
  - They might make different assumptions in future projects.
- It is challenging to test historical data to see if it matches what King County mapped because they lack data on whether wells are private, Group A or Group B wells.

- King County requires well drilling applicants to hook up to the water utility if it is available. There are provisions for other options if the utility denies the hookup.

**Parking Lot:**

- Does Ecology have the resources to run the USGS model with changes to permit-exempt water use?
- Is there information (metering?) on permit-exempt water usage?

**Action Items:**

- Presentations and materials are available on the [WRIA 10](#) and [WRIA 12](#) webpages.
- Please watch this 6-minute [Instream Flow Video](#) before the next meeting.