WRIA 14 Technical Workgroup
5/1/19 DRAFT Meeting Summary

Attendees:
Erica Marbet (Squaxin Island Tribe), Seth Book (Skokomish Tribe), Dana Sarff (Skokomish Tribe), Marilyn Vogler (Sierra Club), Shelley Spalding (Sierra Club), Sheryl Howe (DOH), Cindy Wilson (Thurston County), Kevin Hansen (Thurston County), Dave Windom (Mason County), Angela Johnson (Ecology), Barbara Adkins (Mason CD), Darrin Masters (WDFW)

# Agenda:

1. Debrief from County/city planning presentations
2. Data gaps
	1. Continue conversation from previous list
3. Methods for projecting number and location of new domestic groundwater permit-exempt wells and consumptive water use
	1. Information that Counties/other entities already have
	2. If not using ECY guidance – what other methods options?
	3. Can coordinate with tech consultant for options
	4. Guidance for technical consultant on growth projections and permit exempt well estimates (discussion guide)
4. Subbasin delineations – new map handouts
5. Update on tech. consultant – review meeting timeline and determine which meetings would be useful for them to attend.
6. Things to keep in mind as we move forward with technical consultant:
	1. Existing Thurston County and Mason County growth projections – project out through 2040
		1. Thurston Co has population projections from TRPC
		2. Mason Co uses OFM medium estimates
	2. PUD data for determining outdoor consumptive use
	3. Compile inventory of data, GIS layers, etc.
	4. What else?
7. Action items and next steps.
	1. Schedule next meeting
	2. Work with consultant on growth projection scenarios and develop recommendation(s) for committee.
	3. Angela is working with ECY staff for the best way for the committee to share information among themselves.

# Meeting Summary:

Data Gaps Discussion – *new items in italics*

1. **Data available:**
	1. USGS Model – consider having a presentation.
	2. Thurston County – population growth, water quality, hydro model, patterns of development.
	3. Squaxin Island Tribe – various data. There have been coordinated efforts both with Ecology and Mason County.
	4. Mason County – currently working with Squaxin Island Tribe on flow and consumptive use.
	5. The Mason Conservation District, Salmon Recovery LE - available information relevant to this program, Committee review of the Salmon Recovery Plan (available when?)
	6. DNR data on fish bearing streams
	7. Source area water protection mapping from DOH
	8. Monitoring data from Hood Canal Salmon Enhancement Group
	9. *Olympia Master Builders – buildable lands information*
	10. *DOH – annual production data from municipal water systems – gallons per year , number of connections – not every well – same data on that is on Sentry*
	11. *Small group a/b’s and existing number of PE wells – Thurston and Mason County have this*
	12. *Mason PUD 1 data*
	13. *City of Shelton might have data to compare outdoor summer/winter use – need to confirm.*
	14. *Use empirical local data as much as possible!*
	15. *Skokomish tribe – water quality data (mostly WRIA 16), groundwater data from shallow groundwater wells (on reservation). Might be re-doing groundwater model on reservation to show groundwater divide*
	16. *Groundwater Model for Johns and Goldsborough creek – joint effort by Ecology and Squaxin Island Tribe. – can be calibrated with data. Could be used for this group and not need to wait for a large USGS model as it can answer subbasin scale questions.*
	17. *Mason county groundwater model – USGS, still in progress*
2. **Data needs:**
3. Try to identify sources that are data rich vs. data poor
4. Committee needs to ID data gaps, and identify funding available for data collection
5. Assessment of the current number of permit-exempt wells in each subbasin in WRIA 14
	1. Note that a pilot study is being initiated by the Ecology Wells division for a separate project. Angela will coordinate to schedule a report from the Ecology staff working on the project when it is available, and reevaluate after that.
6. Forecast of the number of permit-exempt domestic wells that could be drilled, and forecasted consumptive use from those wells – info for each subbasin in WRIA 14.
	1. Consider tying into buildable lands analysis
	2. DOH may need to look into service area policy
7. A thorough review of all certificated water rights with a source (ground or surface) in WRIA 14; and identification of water rights that may be candidates for either permanent protection in the trust water rights program or otherwise help mitigate for water use impacts.
	1. Identify water rights within Group A and Group B systems
	2. Look into WRIA 11 water rights project
	3. *ECY technical staff will present on this at the June 13, 2019 Committee meeting.*
8. Measurement of streamflow in all regulated streams under Chapter 173-514 WAC (WRIA 14 Instream Flow rule)
	1. Note that this data gap exists, although the Committee may not be able to complete this task with technical funding support. There is a potential for a long-term project, but it is being raised to express where the data gaps are and how big they are.
9. *Modeling useful for calculating retiming of water – may be better to use local tools*
10. *Information on aquifers that drain to saltwater*
	1. *How will we aggregate/disaggregate subbasins based on that?*
11. *More information on seasonal closures from Instream Flow Rule*
	1. *Follow-up with Jim Pacheco for options on getting new toe-width data*

## Growth Projections:

* + Mason County – uses mid-range OFM.
		- Dave Windom provided information on estimated growth: 1,315 new homes in the south and western portion of the county projected out for 20 years (does not consider economic down turns). 3,900 new homes county-wide, 2/3 of those projected to be north of the Shelton UGA
	+ Thurston County – uses population data from Thurston Regional Planning Council (TRPC). Coordinate with Cindy Wilson for data.
	+ The workgroup discussed the “Growth Projections Discussion Guide” provided by Ecology – discussed that while Mason and Thurston County have used population data methodology thus far, it may be beneficial to consider options.

## Subbasins:

* + WRIA 14 RCW 90.82 draft plan subbasins are too coarse – will need to revise these.
		- Specific concerns about size of Goldsborough creek, and
* Skokomish tribe is concerned about diversions to Skokomish River
* Need to consider how to manage the “north shore” subbains
* Winter Creek – ephemeral stream at NW corner of WRIA 14 – consider keeping separate because of how it drains to Skokomish.
* Identify all streams listed in the WRIA 14 Instream Flow Rule as another starting place to then group basins
* Consider creating a larger, contiguous Hood Canal subbains
* Data considerations such as gauges, control points, and surface water boundaries for fish
	+ - Squaxin Island Tribe and Thurston County have gauge data
* Need to acknowledge difference in groundwater divide and how subbasins area delineated

## Other considerations:

* “Start card” (construction notification submitted by drillers to Ecology) for permit-exempt well has lat/long or parcel data on it – suggested that ECY software should be updated so that this information is entered.
* What is water availability cap? Will we find that projected growth is too large for mitigation to offset?
* Managed aquifer recharge (MAR) projects – consider how stream closures affect this type of project
	+ This type of project could be good for stream temperature if cold water is stored in aquifer
* Forestry-related projects
	+ The group discussed how logging, forest stand age, timber rotation, etc. could affect streamflows
	+ Resources for this information include study on streamflow depletion caused by logging (Perry and Jones 2016) and VELMA model – Angela will follow-up with information on these.
	+ Needs further discussion
* Climate change – DOH participates on a water availability group that is actively considering climate change. May be valuable resource to keep in mind.
* Consumptive use data – what are ECY’s thoughts on using other methodology – if it has to be “approved”, what would need to be met?
	+ See Thurston County’s data for how they came up with methods for consumptive use

## Follow-up:

* Schedule next workgroup meeting
* Coordinate with technical consultant (HDR) to start work on data gathering, data gaps, growth projections, and subbasin delineation.
* Send out Perry and Jones 2016 paper on old growth forest benefits to streamflow, and VELMA model paper