# Ecology logo. A state of Washington shape separated into three bands of color; light blue, green, and dark blue. a sun sits in the middle of the light blue band.MEETING SUMMARY

**WRIA 13 Watershed Restoration and Enhancement Committee**

December 18, 2019 | 9:00 a.m.- 12:30 p.m. |[committee website](https://www.ezview.wa.gov/site/alias__1962/37325/watershed_restoration_and_enhancement_-_wria_13.aspx)

## Location

Tumwater City Hall
555 Israel Rd. SW
Tumwater, WA 98501

**Committee Chair**

Angela Johnson
angela.johnson@ecy.wa.gov**Handouts**

1. Workgroup Meeting Draft Summary
2. Policy and Regulatory Actions Discussion Guide
3. Safety Factor Discussion Guide

## Attendance

### Committee Representatives and Alternates \*

Angela Johnson (*Ecology – Committee Chair)*

Theresa Nation *(WDFW)*

Donna Buxton *(City of Olympia)*

John Kliem *(Lewis County)*

Paul Pickett *(Squaxin Island Tribe)*

Cynthia Pratt (*City of Lacey)*

Julie Rector (*City of Lacey)*

Sue Patnude (*Deschutes Estuary Restoration Team, environmental interests)*

Dave Monthie (*Deschutes Estuary Restoration Team, environmental interests)*

Adam Peterson (*Thurston Conservation District, agricultural interests)*

Erin Hall (*Olympia Master Builders, residential construction industry)*

Kaitlynn Nelson (*Thurston County*)

Wendy Steffensen (*LOTT, ex-officio*)

Amy Hatch-Winecka (*WRIA 13 Salmon Habitat Recovery Lead Entity*, *ex-officio)*

### Committee Representatives Not in Attendance

City of Tumwater

Thurston PUD

Nisqually Tribe (*ex-officio)*

City of Yelm *(ex-officio)*

City of Tenino (*ex-officio)*

### Other Attendees\*

Gretchen Muller *(Cascadia Consulting)*

Jimmy Kralj (*ESA*)

Rebecca Brown (*Ecology*)

Mark Mazeski (*DOH*)

Paula Holroyde (*League of Women Voters Thurston County*)

\*Attendees list is based on sign-in sheet.

## Welcome

Angela and Gretchen kicked off the meeting with meeting location logistics. Committee members and other meeting attendees introduced themselves around the room. The group reviewed the meeting agenda.

## Approval of November Meeting Summary

Angela received comments from Committee members on the November meeting summary, including:

* Workgroup Report – clarification on consumptive use and project discussion
* Adaptive Management Considerations
* Streamflow Restoration Grant Guidance Presentation – clarification on committee discussion

*All of the proposed changes were made. The Committee approved the November meeting summary.*

## Updates and Announcements

Angela provided updates from Ecology:

* Reminder that the Committee agreed at the November meeting to shorten monthly meetings in 2020, and add time at the end of the meetings for technical workgroup or technical discussions.
	+ The Committee discussed whether or not technical discussions should be at the beginning or end of the regular meeting time
* Ecology Streamflow Restoration staff met with Squaxin Island Tribe staff for a standing quarterly meeting to discuss general progress all Committees the tribe is participating on, address questions and concerns regarding process or work products, and to discuss opportunities for improved communication.

Update from Committee members:

* Committee member noted that there are several conferences over the next several months that may overlap with the standing committee meeting and may affect participation. Committee members should review their calendars for upcoming events.
* The most recent AWRA Washington State Section Newsletter provides an overview of presentations in from the 2019 AWRA Washington State conference, including some mention to the RCW 90.94 planning process.

## Workgroup Report –Consumptive Use Update and Project Subgroup

Angela and the workgroup members provided a summary of the previous technical workgroup meeting, and received an update on recommendations for moving forward with consumptive use. The group also discussed progress of the project subgroup.

Reference material: December 16, 2019 Workgroup Draft Summary

The workgroup summary was presented. Committee member discussion followed:

Data needs:

* Angela is working with HDR to update the data acquisition spreadsheet to create a document that the group can use as supporting documentation and justification for analysis and decisions being made for the plan. This is a result of a request from the workgroup to create a data “synthesis”.
* Angela is working to move forward with water right analysis for WRIA 13, which will be done by Pacific Groundwater Group (PGG). PGG will attend the January 22 WRIA 13 meeting to discuss the SOW and to go over expectations and deliverables.
* The Committee discussed holding a hydrogeology workshop at a future meeting - the technical workgroup will work to develop a clear objective for the workshop should it occur.

Consumptive use analysis:

* Angela presented an overview of consumptive use analysis methods being considered by the Committee, and the workgroup recommendation – based on the workgroup draft summary from 12/16/19.
* The technical workgroup recommended that the Committee consider using the following methods as “working numbers”
	+ Irrigated area Method; Average multiplied by “correction factor” from HDR comparability study(0.09 acres)
	+ Irrigated area Method; Average with 0.05 acres substituted for zero values (0.10 acres)
	+ Irrigated Area Method; 95% Upper Confidence Limit (UCL) (0.12 acres)

Additionally, the Committee would like to continue to include the following methods in the narrative of the plan, but will not continue to use them for analysis.

* Irrigated Area Method; Statutory Limit (0.5 acres)
* Water System Method (Prairie Ridge flat rate)
* Maximum Legal Limit (950 gpd)
* Ecology representatives mentioned that their preferred working number is the irrigated area method replacing 0 values
* Thurston County representative mentioned that they believe the irrigated area method with the correction factor (derived from QA/QC exercise) is a defensible calculation and would like to retain it as a working number.
	+ Committee members agreed to review the memo from HDR which describes the irrigated area analysis QA/QC exercise with GeoEngineers before making a decision on how to use that information.
* Committee members agreed to the working numbers proposed by the technical workgroup. See Table 1 below for the preliminary analysis, which has been calculated as an example using Permit Exempt Well/Connection Projection #2 (includes water system boundaries).

**Table 1** – Consumptive Use Analysis based on Permit-Exempt Well/Connection Projection 2 (assumes growth in water system boundaries).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Method and Input Data** | **Per Connection (gallons per day)** | **All Connections****(AFY)** | **All Connections (cfs)** | **Workgroup Recommendation** |
| Irrigated Area Method\*; Average (0.06 acres) | 95 | 290 | 0.40 |  |
| Irrigated area Method\*; Average multiplied by “correction factor” (0.09 acres) | 135 | 413 | 0.57 | Working number |
| Irrigated area Method\*; Average with 0.05 acres substituted for zero values (0.10 acres) | 149 | 454 | 0.63 | Working number |
| Irrigated Area Method\*; 95% UCL (0.12 acres) | 175 | 536 | 0.74 | Working number |
| Irrigated Area Method\*; Statutory Limit (0.5 acres) | 683 | 2,086 | 2.89 | Include in plan narrative |
| Water System Method (Fir Tree #4) | 118 | 362 | 0.50 |  |
| Water System Method (Prairie Ridge tiered rate) | 132 | 405 | 0.56 |  |
| Water System Method (Prairie Ridge flat rate) | 159 | 485 | 0.67 | Include in plan narrative |
| Maximum Legal Limit (950 gpd) | 950 | 2,910 | 4.02 | Include in plan narrative |

\* Irrigated Area Method accounts for both indoor and outdoor consumptive water use

* Suggestion to show CU analysis in million gallons per day (MGD) – Angela will include this on future tables and will include this information on the consumptive use “calculator” on Box.
* Suggestion to add a note to the table to clarify that the irrigated area analysis accounts for indoor consumptive water use

Projects:

* Project tracking sheet and other project information is available on Box – Committee members are encouraged to review the list and add any details that they are able to. Angela will send out a link to the project sheet as a reminder.
	+ A suggestion was made to add “Pro” and “Con” columns for first-cut assessment of projects.
* The project subcommittee will continue to develop the project screening criteria at the next meeting.

## Safety Factor Considerations

The Committee discussed options for considering the use of safety factors in the analysis for elements of the plan as a possible way to address uncertainty. This was an initial brain-storm and the group will revisit some of these ideas at a later date.

Reference materials: Safety Factor Discussion Guide

Committee discussion included:

* Possible areas of uncertainty in the planning process:
	+ Project offset benefits
	+ How to predict future uses of water
	+ Effectiveness of plan over 20 year planning horizon
	+ Funding of projects
	+ Assumptions for estimates related to irrigation
	+ Lifestyle changes of homeowners (lawn size, amount of water, etc.)
	+ Plan implementation
	+ Success of planning process meeting its intended goals
* Possible ways to address uncertainty:
	+ Adaptive management
	+ Inter-local agreements
	+ Request funding that Ecology receives from counties that collect building permit fees be used for WRIA-specific projects
	+ Economic report for the cost comparison between offsets and development
	+ More specific regulations and strategies on priority areas
	+ “In-lieu of” program
	+ “Block grants” to allocate funding of WRIA-specific projects every funding year
* While safety factors are not a required element of the plan, they may help provide justification from the committee for some of the plan contents.
* Suggestion that the Committee should make an effort to identify additional offset projects as a means to address uncertainty rather than change the analyses to determine the offset target.
* Suggestion to keep the analyses in the plan consistent with initial estimates, and only consider a safety factor to apply to the offset target, not the individual analyses.
* Other ways to address uncertainty may include.
* There was general agreement that the Committee will not add safety factors to individual plan calculations, and instead there was more interest in adding a safety factor to the offset target.
* Paul Pickett (Squaxin Island Tribe) noted that uncertainty means we don’t have a full knowledge of future impacts, so we need to err on the side of over-mitigation.
	+ His sensitivity analysis shows perhaps 3x higher than expected, which admittedly is extreme.
	+ It’s important to have a safety factor as a working number until we determine adaptive management, which is also uncertain.
	+ He proposed a “working number” for the offset target that includes a safety factor calculated from a sensitivity analysis, and includes considering variables such as climate change and population growth.
	+ Angela will work with Paul to have a proposal developed for review by the Committee at the following meeting.

# Policy and Regulatory Actions

The Committee participated in a discussion on including policy and regulatory actions in the planning process, and provided a brainstorm on possible items that could be included in the plan. The list developed by WRIA 13 will be compiled with that of other planning groups, and will be made available on Box. Ecology and the facilitation team will take note of common suggestions shared among planning groups, and can provide information for a unified recommendation as a result of the planning process. The Committee generated a list of ideas for policy and regulatory actions that *could* be included in the plan. The purpose of this list is for initial discussion only, and these ideas have not been evaluated for feasibility nor have they been agreed upon by the Committee.

Angela will create a tab in the project tracking sheet to include the policy and regulatory actions identified in this conversation for further consideration.

Committee discussion included:

* Inter-local agreement among Committee members for implementation
* Requesting the funding that Ecology receives from the construction of permit exempt wells ($350 for each well) goes back to the WRIA for projects.
* Economic report for the cost comparison between mitigation and development
* More specific regulations and strategies in priority areas
* “In-lieu of” program (Thurston County)
* Metering permit exempt wells.
* BMP: mandatory or voluntary. Rebate program to install more efficient irrigation.
* Fee structure for PE wells based on water use
* Conservation program and drought response
	+ Restrict watering days
	+ Ongoing education and addressing extreme events
* Water saving strategies included in building codes
* Increase distance to water main for mandatory hook ups
* When homes are sold, information is passed to new owners on reducing water use
* Fee for wells within the municipal service area, which could go to the County for offsets
* Realistic enforcement strategy – More water masters (specific to PE well enforcement)
* Mandatory satellite management agency (SMA) of new small systems
* Stream buffers with shallow well restrictions
* Designate sensitive recharge areas
* Adding compost to soil of new home developments to return natural soil function
* Lower the gallon per day withdraw limits
	+ Concerns from the committee about measuring and enforcing this
* Outlaw bottled water plants
* Mandatory reduction for any drought declaration - would be change from current language where Ecology “may” issue a reduction during a drought
* Reduce area allowed for irrigation
* Fees for any regulations are based on sliding scale – example to pay per square footage of house, etc.
* Growth in gardens and expanding watering education programs
* Update Ecology well log (report) database
* Revise instream flow rules
	+ Add permit exempt wells to the rules
	+ Update rules with new methodologies and set more restrictive limits
	+ Add streams that don’t have rules but may need one
	+ Open basins for exemptions from offsets
* Link this plan to the County’s Comprehensive Plan
* Rain water collection, more clarity around the rules for this.
* Washington Irrigation Guide is out of date, updating this would be helpful
* Remove 100-acre cap on planned rural residential developments (cluster developments) in Thurston county. Increasing this to 250, 400 would provide ecological benefit and housing benefits. Clustering houses together allows homes to cluster on water systems and minimize impervious surfaces, etc.
* When the city installs new water mains that come within the 200 feet buffer where permit-exempt wells already exist, require those individuals to hook up within a certain time frame. (No grandfathering of permit-exempt wells).
* Legislation to increase Ecology’s role in implementation of the plan and provide funding for implementation.

## Public Comment

Paul Holroyde (League of Women Voters) commented on the quality and quantity of good drinking water compared to that of groundwater. Additionally, consideration should be given to availability of reclaimed water, and the conditions of septic and sewer lines.

## Action Items for Committee Members

* Next meeting will be January 22, 2020 from 9:00 am – 12:30 pm, at the Tumwater Fire Dept. Training Room. This meeting will be focused on technical issues in lieu of a technical workgroup.
* Committee members should provide comments on the plan template outline to Angela by January 15 (edit on Box).
* Committee members should return the local plan approval process form to Angela before the February meeting.
* Committee members should continue to review and contribute to the project tracking sheet.

## Action Items for Ecology:

* Angela will send out information for Committee review of the plan outline template on Box.
* Angela will continue to work with HDR on technical work to provide the Committee.
* Angela will look into the availability of data from Ecology metering pilot projects.
* Angela will work with Paul Pickett to distribute a sensitivity analysis for a safety factor proposal consideration at the next meeting.