Meeting Notes

**WRIA 15 Watershed Restoration and Enhancement**

**Technical Workgroup Meeting Notes**

September 26, 2019 | 12:30 p.m. - 2:30 p.m.

## **Location**

Webex

**Committee Chair**

Stacy Vynne McKinstry

Svyn461@ecy.wa.gov

(425) 649-7114

**Handouts**

Agenda

Consumptive Use Methods

Updated well projection data

Consumptive Use Calculator

# Participants

Alison O’Sullivan, Bob Montgomery, Brittany Gordon, David Nash, David Windom, John O’Leary, Nam Siu, Paul Pickett, Sam Phillips, Stacy Vynne McKinstry, Zack Holt, Paulina Levy

# Growth Projections

Documents with the updated well projection data were distributed for review. At the previous committee and workgroup meetings, the methods used for estimating 20 years of wells for each county were discussed. The workgroup also discussed each county’s preferred approaches to “scenarios” or ranges for wells. Currents values for well projections across the 4 counties includes:

1. Pierce County historical well decadal analysis includes a low, med and high growth rates based on different time periods. Based on the current well data, we estimate a low of 624 wells, high of 1416 wells and the number based on 20 years of historical data is 978.
2. For Mason County, there is a desire to stick with the OFM numbers and their analysis of potential wells, which leads to 1289 wells.
3. Kitsap County has been working to refine their data based on additional analysis and conversations with jurisdictions like Bainbridge Island. We currently have about 4622 wells projected, with the +/- 5% giving us a high of 4853 and a low of 4391. This is based on the parcel size of .2 acres and 200’ water line buffer.
4. For King County, the analysis was done by Eric Ferguson based on the method they are applying across the multiple WRIAs they participate in and he shared with us at the last meeting. King County’s estimate for Vashon and Maury Islands is 368.

Based on the methodologies used by the counties and the counties comfort with applying ranges or scenarios is **7257, with a higher range of 7702 and lower range of 6448.**

Counties believe their estimates are conservative based on past trends. For perspective, Stacy shared that based on the fees remitted to Ecology as part of the new law, there have been approximately 111 wells that have gone in WRIA 15 over the last 20 months. If we carry that number forward 20 years, it is about 2000 wells.

Stacy discussed potential for path forward recommendations to the committee. These numbers, including highs and lows, could be the starting point, with the understanding that Kitsap will make some refinements to their numbers (e.g. Bainbridge Island; looking at larger parcel sizes) and bring back refined numbers for discussion in the future. The Technical Workgroup can visit these projections again in the future.

The workgroup discussed options for growth and well projection scenarios. Some members would like to see a range for the Mason County projections. However, Mason County is not comfortable adding a range that is not based on past trends. This discussion will be brought up during the next committee meeting for future consideration and workgroup members were asked to bring forward proposals for ranges for the Mason County data. In addition, we may need to hold on the interim numbers for Mason Co until decision is made in WRIA 14.

It was agreed that the workgroup will move forward with a recommendation to the committee to use the interim numbers, acknowledging that recalculations and safety factors can retroactively be applied. Caveats: workgroup members may propose a range for Mason Co well projections; we may need to wait on Mason Co projections until further discussions take place in WRIA 14 to ensure some consistency in approaches; and Kitsap County is working on refinement based on additional data.

Stacy will share Dave Windom’s documents on growth projections.

# Consumptive Use Estimates

At the last workgroup meeting we talked about moving forward with 3 different methods to calculate consumptive use: the Ecology recommended method, data from metering by water purveyors, and data from the USGS Groundwater Model. These methodologies are summarized in the consumptive use method memo from HDR and the workgroup discussed in detail at the last meeting.

Bob walked through an updated consumptive use calculator.

* USGS has one number for water use.
* Metering data was combined and can still be refined. For example, would the workgroup want to average the data from different purveyors or use the highest number as a conservative calculation?
  + Some members expressed interest in reaching out to more water purveyors to gather more data. Bob shared that HDR has been reaching out and not finding good information for flat rate systems.
* At the moment, the metering estimates and those based on the USGS model are similar.
* For the Ecology method, the key assumptions are the indoor use in gpd per capita, the irrigation requirement and irrigation efficiency. The irrigated area shown in the spreadsheet is an assumption and a GIS analysis is ongoing, therefore it will change once we have local data.
* Stacy distributed initial outdoor irrigation analysis by Joel and will distribute John’s analysis to the workgroup.

Stacy emphasized that these numbers are very initial. There is no need to get approval yet.

Comments from the workgroup included interest in a further form of analysis based on percentiles (metering data) and also monthly/seasonal breakdown of consumption metering data. Bob said he can provide these numbers.

Suggested next steps include continuing discussions around the assumptions. These are preliminary estimates that can be altered. The workgroup should take time to explore the excel spreadsheet and see how manipulating the numbers results in different estimates.

Stacy requested that the workgroup start thinking about how they would want to adjust the assumptions, and what local data or justification we have to make adjustments. We will focus future workgroup meetings on this topic, along with reviewing the outdoor irrigation analysis.

Stacy requested that the workgroup start thinking about what kind of safety factor we might want to consider for consumptive use, if any, and what that number would be grounded in. The workgroup will continue this discussion later in the fall.

The workgroup was comfortable making a recommendation to the committee to continue moving forward with consideration for the 3 consumptive use methods, with recognition that the workgroup will come back with recommendations in the future for refinement to the assumptions as well as local data for the outdoor irrigation number.

# Action Items and Next Steps

* Stacy will share the results of the outdoor irrigation analysis by HDR once complete.
* Stacy will share John’s consumptive use analysis and the population growth information from Mason Co.
* Bob will provide some additional information on seasonal irrigation demands.
* Stacy will schedule a meeting to discuss: assumptions and outdoor irrigation analysis (possibly revisions to the Kitsap well projection data).
* Workgroup members should send concerns to Stacy about the outdoor irrigation analysis methods.
* Workgroup should start considering adjustments to assumptions – and data to support – as well as safety factors for consumptive use estimates.
* Stacy will share refinements of the Kitsap County data once developed.