

WRIA 14 Technical Workgroup
April 1, 2019 1 pm – 3 pm
Draft Meeting Summary

Attendees:

Barbara Adkins (Mason CD), Shelley Spalding (WA Sierra Club), Cindy Wilson (Thurston County), Kevin Hansen (Thurston County), Dave Windom (Mason County), Paul Pickett (Squaxin Island Tribe)

Meeting Objectives:

- a) Set the stage for the workgroup.
- b) Input and preparation for technical consultants.

Meeting Discussion:

- Determining consumptive use
 - Indoor use
 - Outdoor use – Look into getting PUD data and a method for determining outdoor use (counter on well, cross reference with PUD data)
 - Angela will get clarification on why WRIA 11 used the ECY methodology instead of other methods.
- Data collaboration:
 - Salmon Recovery Lead Entity
 - Mason PUD – Get information on tiered rate systems – is there data from before tiered rate systems for a comparison?
 - All entities on Committee – if data is available, schedule presentations to share
- Growth projections:
 - Thurston Regional Planning Council – population projections for Thurston County through 2040
 - Mason County Planning Commission – use OFM mediation estimates through 2040
- Subbasins:
 - What GIS data is available to examine this – think about how to overlay them
 - Salmon habitat
 - USGS subsurface geology?
 - Thurston County lidar
 - Consider what level to use for delineation – what would make them too large or too small? What kinds of projects could you have in subbasins?
 - Too small – could be difficult to determine a project for every subbasin
 - Too large – offsets for one stream neglects the needs of another
 - Consider how to treat shoreline subbasins that flow to Puget Sound
 - Need to use consistent criteria
- Reference Documents:
 - Eventual and Cumulative Domestic Use Water Model for Central Mason County
 - WRIA 14 planning documents from previous planning effort in early 2000's
 - Golder Report for WRIA 14
 - NorWest USFS – resources for water temperature data

- Other considerations for technical workgroup:
 - Climate change
 - Water temperature
 - Project prioritization – how will we use the consultant to decide which projects to dig into more? Use a tiered systems of ranking, etc. We will need to allocate time to look at project feasibility.
- Action items:
 - Create list on WRIA 14 website of useful reference materials
 - Clarify process/structure for how workgroup presents information to the main Committee
 - Develop inventory of GIS data and maps available
 - Schedule next meeting –keep in mind other WRIA meetings to plan around
 - Angela will work with group to refine draft subbasin maps
 - Work with consultant on growth projection scenarios and develop recommendation(s) for committee.
 - Report out to WRIA 14 Committee at April 11, 2019 meeting
 - Angela will refine timeline for work products that will come out of the technical workgroup.

Agenda (notes from meeting discussion in red):

1. Role of the workgroup (below).
2. Review scope of work for technical consultant
 - a. Refresher on committee products and decisions as relates to scope of work.
 - b. What data is available to support delivery of the products and inform committee decisions?
 - i. Growth projections for WRIA 14 from Mason Co. and Thurston Co.
 - c. Are there any critical data gaps/needs that will impact our ability to make decisions and/or develop the plan?
 - i. Outdoor irrigation data to inform consumptive use
 - ii. Subbasin delineation
 - iii. Typical depth of wells – peninsula wells can be very deep, different hydrogeologic regime
 - iv. Need an inventory of what we have already – refine data needs document from committee
 - v. Water rights
 - vi. What are Committee resources for streamflow data?
 - vii. Precipitation data to overlay streamflow data
3. Discussion on sub-basin delineation and recommendations.
 - a. Why we need to identify sub-basins.
 - b. Considerations for sub-basin delineation.
 - i. HUC 10 and 12 maps provided to start discussion
 - ii. USGS subsurface geology mapping – is this available?
 - c. What additional information / maps are needed to inform sub-basin delineation.
 - d. Are there existing sub-basin definitions that we can/should use?

- i. Mason County watershed boundary map (1994)
 - ii. WRIA 14 draft plan – is there a map from this document that could be useful?
 - iii. Thurston Co lidar
 - e. Draft list of potential sub-basin options for draft maps.
 - f. Mason CD – Salmon Recovery LE would like to coordinate efforts. Delineate basins for salmon bearing streams.
- 4. Review and refine timeline for work products.
 - a. April –
 - i. Subbasins
 - ii. data availability gaps
 - b. May –
 - i. subbasins
 - ii. data availability gaps
 - iii. growth projections
 - c. June –
 - i. finalize subbasins (if not already done)
 - ii. finalize data availability gaps
 - iii. growth projections (ongoing)
 - iv. consumptive use projections and impacts (ongoing)
 - d. July –
 - i. growth projections (ongoing)
 - ii. consumptive use projections and impacts (ongoing)
- 5. Action items and next steps.
 - a. Schedule next meeting – doodle poll, keep in mind other WRIA meetings
 - b. Review draft subbasin maps
 - c. Work with consultant on growth projection scenarios and develop recommendation(s) for committee.
 - d. Report out to WRIA 14 Committee at April 11, 2019 meeting

Role of the Technical Workgroup (notes from meeting discussion in red):

The technical work group will review methods for projecting future permit exempt wells. They will identify data gaps and needs for accomplishing each method. They will present these methods and underlying assumptions, and data gaps/needs to the committee. The committee as a whole will decide which methods to carry out. These decisions will build the foundation of the plan, and determine the amount of water required to offset by projects and actions included in the plan.

1. Method for projecting future permit exempt wells:
 - a. Using OFM population projections
 - b. Using Building Permit data
 - c. Using available development potential in the Watershed.
 - d. Census block data
 - e. Thurston County buildable lands data from TRPC
 - f. Mason County buildable lands data not complete, population projections from comp plan update using OFM median.
 - g. PUD info?
 - h. Other?
2. Method for determining consumptive use:

- a. Indoor:
 - i. Use Ecology's [Recommendations for Water Use Estimates](#).
 - 1. *Get info on why ECY used this methodology in WRIA 11*
 - b. Outdoor:
 - i. Use remote sensing to understand general patterns of outdoor watering.
 - ii. Assume water use for ½ acre of turf grass.
 - 1. Use aerial imagery to come up with more realistic assumption if possible
 - iii. Use data from small water systems within the WRIA for comparison.
 - c. *Mason PUD water use data?*
 - d. *Document – Eventual and Cumulative Domestic Use Water Model for Central Mason County*
 - e. *Consider environmental factors (i.e. soil types)*
3. Identify data gaps and information needed for Method 1 and Method 2.
 4. Apply selected Method 1 and Method 2 by sub-basin throughout the watershed.
 5. Provide projected consumptive use range, totals, or options to committee by sub-basin.
 6. Use this projected consumptive use as the target water to offset as the committee identifies, sorts, and ranks potential projects.