

Conceptual Process for Permit-Exempt Well Growth Projections for Pierce County DRAFT

June 19, 2019

Intro

HDR began working with the Counties through in-person meetings on May 13, 2019 and May 16, 2019. Since then, regular weekly contact has been maintained with each County to identify main points of contact, complete data transfers and connect the County's GIS specialists with HDR's GIS specialists.

On May 19, 2019, HDR had a meeting with Pierce County to gain joint understanding between Pierce County (the County) and HDR on how the County would like to conduct the growth projections task and to identify the data and nuances that the County has to inform the analysis. The meeting focused on amending the Decision Tree Flow Chart to be specific to Pierce County needs and projection methodology. HDR and Pierce County will continue to communicate regularly as data is received and growth projections are developed.

For WRIA 10 to date, HDR is anticipating receiving County growth projections for PE domestic well connections by subbasin and full WRIA from King County in approximately early July 2019; Need TPCHD's historical well database(Item 3-1); Need Group A and Group B water system service areas from King County, we have only received VMI to date (Item 3-4). Need salt water intrusion areas, indicating unlikely PE well installation from King and Pierce County and TPCHD (Item 3-6).

Conceptual Process for Pierce County*

- 1. Map parcels that are unlikely to have a new permit-exempt well
 - a. Parcels inside Urban Growth Area
 - b. Parcels currently within Water & Sewer System boundaries
 - c. Parcels already built upon
 - d. Where land use or zoning categories are likely to prohibit residential dwelling units
- 2. Result is a map of parcels that are potentially developable
 - a. Summarize by sub-basin
- 3. Permit-exempt well forecast methodology
 - a. Obtain Tacoma-Pierce County Health well database (by June 28)
 - b. Apply growth forecasts based on historical rates of permit exempt well installations projected forward 20 years for domestic single family connections.
 - c. Analyze trends in permit-exempt wells by time and location (by sub-basin)
 - d. Estimate growth of permit-exempt well connections for 20-year period
 - e. Distribute growth by sub-basin

^{*} King County intends to conduct growth projections in-house since they are already working on similar projections in other WRIAs and will provide methodology and results to HDR when complete.