



Oregon

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Water Resources Department

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April 24, 2013

Senator Chris Edwards, Co-Chair and
Representative Ben Unger, Co-Chair
Joint Ways and Means Natural Resources Subcommittee
900 Court Street NE
Salem, OR 97301

Dear Senator Edwards and Representative Unger,

During the Water Resources Department's April 23, 2013 budget hearing, members of the Natural Resources Subcommittee of Ways and Means asked the Department to provide more information about the Department's Groundwater Basin Studies: 1) What are the geographic priorities? 2) What are the funding needs? 3) What are the data needs? Below is the Department's response.

Groundwater Basin Studies. One of the most frequent requests that local communities make of Oregon's natural resource agencies is for better groundwater information, including: Where is groundwater located? How much is available for use? Is it hydraulically connected to surface water? And, is it safe for human consumption?

Oregon has a need for additional groundwater investigations to further understand the relationship between groundwater and surface water, and the availability of both. This broader understanding of the groundwater system will help inform state and local planning efforts for future economic development.

Geographic Priorities. A groundwater investigation begins with a "first pass" that develops a water budget for each basin, showing overall volumes of groundwater recharge, discharge, and available water. The Department has completed a "first pass" in three of Oregon's 18 basins: the Deschutes Basin, the sedimentary aquifers of the Willamette Basin, and the Upper Klamath Basin.

The State has prioritized additional basins for subsequent groundwater studies. These include the Umatilla and its Walla Walla sub-basin (both a high priority due to the significant water needs), and the Hood, Sandy, Grande Ronde, and Powder Basins.

As more questions arise and trends emerge, the Department plans to update studies and conduct a "second pass," asking and answering new sets of questions about groundwater in each basin.



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Funding Needs. Conducting groundwater basin investigations is a priority for the state, which typically evaluates groundwater resources at the basin scale through a cooperative, cost-share science program with the U.S. Geological Survey (USGS). Traditionally, this cost-share has been 50:50, but in recent years, the USGS contribution has drifted closer to 40 percent of the project cost.

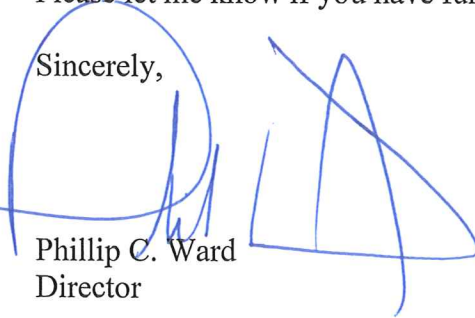
Basin studies can take six years to complete, at a cost of several million dollars per study. The Department needs to have stable funding as a cost-share match with the USGS. Funding levels between \$1 million and \$1.5 million per biennium would be consistent with the historic funding that allowed the Department to enter into cost-shared basin study with the USGS.

Data Needs. Accurate well location and long-term water-level data are critical to help assess groundwater resources. Prior to conducting groundwater studies in a basin, it is necessary to establish long-term water-level data sets to accurately evaluate climatic, seasonal, and groundwater development impacts on the aquifers.

In 2012, there were 363 state observation wells and 685 miscellaneous project wells active in Oregon, providing these data. Expanding this network with dedicated monitoring wells, to which staff have year-round access, would help immensely in basins where the State plans to work with the U.S. Geological Survey on cooperative groundwater studies.

Please let me know if you have further questions about this issue.

Sincerely,


Phillip C. Ward
Director