

From Limbo to Leading Edge: Benton County, Oregon, Groundwater Policy and Planning

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In Benton County, Oregon, a significant number of households are located outside of the service areas of municipal water systems. These rural residents rely upon groundwater supplied through exempt use or community wells to meet their household and irrigation requirements. As rural residential growth continued, competing demands for available groundwater increased. In some areas of the county, it was apparent that the designated land use or zoning was not compatible with the groundwater availability. These critical water and land use issues drove the need for a comprehensive evaluation of groundwater use and water resources issues in Benton County.

In Oregon, state law and rules do not fully consider rural groundwater supply, land use policy, and planning, placing the responsibility for this management at the county level. Benton County has begun to proactively manage for future impacts to groundwater resources by forming a local ordinance that requires would-be rural land developments, subdivisions, and partitions to complete a "Groundwater Supply Requirement" (Ordinance No. 2001-0224; BCC 95.005-99.840). These groundwater "prove it" rules require a range of hydrologic data to be compiled by developers and residents, depending on site specific hydrogeology, prior to building approval by Community Development staff. The new Benton County groundwater rules are intended to produce planning information that informs land use decisions. Many western counties are watching the water-land use approach developed by Benton County as a template for management of water resources in Oregon and other states.

Since 2007 Benton County has continued to move forward on complex groundwater, surface water, and land use interconnection through the **Phase 1**: Benton County Water Analysis and Demand Forecast (<http://www.co.benton.or.us/boc/water>). During the past year this comprehensive assessment of well density and growth potential, including an innovative groundwater use estimate for private "exempt" wells, was completed within principal hydrogeologic units in Benton County. The **Phase 1** Benton County Water Project was highly collaborative, gaining a wide range of support from the State Water Resources Department/Oregon Water Supply and Conservation initiative community grant program, a local consulting firm, local elected officials, and diverse outreach and technical volunteer committee members. This multi-stakeholder water project produced and synthesized a wide array of technical data on groundwater and major surface water resource issues: water use, water rights, estimated water demands to year 2050, and the social issues of groundwater use (i.e., well to well interference). Six countywide meetings gathered residents' concerns and values to plan for the supply and quality of groundwater within Benton County, providing a "road map" for other counties.

Adam Stebbins

Adam Stebbins has worked for Benton County for the past 2 years, developing and managing the Benton County Water Project, a phased approach for local and regional water quantity and quality data collection, planning, policy and outreach/education. As Water Project Coordinator, he has led an interdepartmental effort to assess both groundwater and surface water resources through the leveraging of grant funding from state and federal sources. He has helped to develop and inform the groundwater supply policy requirements and studies in Benton County. He often presents water and environmental planning, policy, and science to local and regional governments, non-profits, businesses, and community residents. Adam has 8 years of experience working on hydroelectric re-licensing projects throughout California, along with diverse environmental and water resources projects in California and the Northwest for public and private organizations. He received a B.A. in Environmental Science and a B.S. in Biology from Sonoma State University and an M.S. Professional Science Masters-Water Resources from Oregon State University

Dave Livesay

Dave Livesay is a registered geologist with more 25 years of experience conducting groundwater, surface water, and geologic investigations in Oregon, Washington, and other western states. His work focuses on development and implementation of technical and regulatory approaches related to water resources and environmental matters for public and private-sector clients. His experience includes permitting and water supply development in Washington and Oregon. Dave has specific expertise in the groundwater conditions in Oregon's coastal aquifers, the Willamette Valley, Columbia Basin, and Puget Sound area. He is a recognized expert in technical matters related to groundwater supply and contamination, and throughout his career he has applied his skills to develop technical solutions that meet business, legal, and policy objectives. His work frequently requires presenting technical concepts to regulatory and public audiences as well as supporting permitting and litigation. Dave is a Principal Hydrogeologist and currently serves as President of GSI Water Solutions, Inc. He received a B.S. in Geology from Ft. Lewis College, and a M.S. in Geological Engineering from Washington State University. Dave is a Registered Geologist in Oregon.