Idaho Water Resources Research Institute

Water Resources Research in Idaho

The Idaho Water Resources Research Institute (IWRRI) conducts and directs water research to support the water resource needs of the state of Idaho. IWRRI research addresses vital topics such as water supply, quality and management, leading to a greater understanding of the critical role water resources play in shaping Idaho’s economy, communities, watersheds, aquifers and ecosystems.

IWRRI is eligible for a $92,335 annual federal base grant administered by the U.S. Geological Survey 104(b) program to support Idaho water resource research. Over the past 50 years, USGS 104(b) funding has allowed IWRRI to conduct or support more than 950 water resource research projects. Development of critical pieces of Idaho’s water resource planning tools — such as the East Snake Plain Aquifer Model and future municipal water demand projections for the fast growing cities on the Rathdrum Prairie — were supported by IWRRI directed application of 104(b) funding.

In FY2016, IWRRI staff and IWRRI-affiliated faculty conducted $474,104 of research ranging from developing integrated water resource management plans to studying the relationship of agriculturally applied nutrients to stream water quality. IWRRI sponsored and led development of $2.05 million in research proposals, including a proposal to NSF’s Dynamics of Coupled Natural and Human Systems program, the annual USGS 104(b) application, a contract with the Idaho Department of Water Resources (IDWR) for groundwater level monitoring and analysis, and a contract with the Natural Resources Conservation Service for snow hydrology research.

Background

IWRRI was created in 1963 by an act of the Idaho Legislature to be housed at the University of Idaho (UI). IWRRI is one of the nation’s 54 institutes authorized by the federal Water Resources Research Act.

Recent Accomplishments

- IWRRI and IDWR researchers are establishing groundwater elevation trends for the East Snake Plain Aquifer, providing valuable water management information to farmers, food processors and municipalities.
- IWRRI opened its Lake Social Ecological Systems laboratory (LaSES) at UI Coeur d’Alene in October 2016. This world-class research facility is designed to conduct research into lake systems and how they affect — and are affected by — the human communities around them.
- IWRRI researchers developed the Rathdrum Prairie Integrated Water Resource Management Plan: an in-depth study of current and future water demand and the effects of water use on the Rathdrum Prairie Aquifer. The data developed will allow municipal water providers to apply for water rights that will secure the future of this region’s economy.

Upcoming Goals

- IWRRI is collaborating with IDWR and USGS to build a hydrogeological model of the Treasure Valley.
• IWRRI, IDRW, the Idaho Bureau of Homeland Security and numerous stakeholders have started a multiyear project to develop a long-term drought response plan for Idaho.
• At LaSES, IWRRI researchers are studying the environmental fate of the 75 million metric tons of lead, cadmium, arsenic and zinc that line the bottom of Coeur d’Alene Lake, a legacy of mining in the lake’s tributaries.

Projected Impact of Continued and Increased Funding

Continued and increased funding allows IWRRI and the University of Idaho to respond to the water resources research needs of Idaho’s citizens, municipal water providers, and core industries such as agriculture, aquaculture and food processing.

FY17 Funding: House $6.5 million; Senate $6.5 million

For more information, please contact:
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