

Water Priority Extension Theme: Improving community water-resiliency in Idaho

AT A GLANCE

The Water PET engaged more than 18,000 Idahoans in 2025, delivered water-resource education to thousands of youths and adults, and supported statewide research and wise use of Idaho's water.

The Situation

Water scarcity and increased pressure on Idaho's aquifers and waterbodies continue to challenge our communities, producers and policymakers. Idaho's water systems are increasingly stressed by warmer temperatures and declining snowpack, higher seasonal evaporative demand, competition among agricultural, municipal, and ecological water users, urban growth and stormwater impacts, and water-quality concerns and nuisance aquatic species.

To respond to these issues, University of Idaho Extension's Water Priority Extension Theme (PET) coordinates statewide efforts to improve Idahoans' ability to understand, manage and conserve water. The PET integrates programming across water education, irrigation optimization, watershed science, soil health, climate-smart agriculture and urban water management, ensuring that Idaho's residents receive research-based information tailored to evolving challenges in water use.

Our Response

The Water PET led a dramatic expansion of statewide water outreach in 2025. Extension educators and



Water PET members teach snow-water equivalent to Lake City High School students near Lookout Pass.

specialists from multiple disciplines delivered programs in three major focus areas:

1. Basin water supply information systems with tools for modeling current and future conditions, water forecast accuracy, snowpack conditions and large-scale adaptive water use.
2. Effective water-management practices for improving agricultural water, soil and air quality, reducing resource demand, managing nuisance aquatic species, and reducing cyanobacterial blooms and stormwater pollution.
3. Climate-smart production practices to mitigate effects on water availability, to reduce water and nutrient losses from agricultural systems, and to enhance soil moisture.

The Water PET was integrated into multiple programs statewide in 2025, including Adult Water Conservation Education, Boise School District Environmental Field Experience, The Confluence Project, Cover Crop Demo Field Day, Cropping Systems Agronomy, Idaho Soil Health 5 for 5 Roundtable, Magic Valley Soil Health Forum, Idaho Youth Water Summit, source water and drinking water education, teach/professional development workshops and youth water resource education.

Program Outcomes

The Water PET achieved measurable statewide impact:

- 18,003 total participants in 2025 — a substantial increase from 13,500 the previous year
- 4,480 program participants in water-education programs, representing a 179% increase from 2024
- 2,379 youth engaged in watershed, soil-health, and water-resource education
- 1,801 adults received water-management training
- 128,339 indirect contacts through online media, plus more than 12 million national observers reached through web platforms like the Great Basin Weather and Climate Dashboard and the U.S. Drought Monitor, which provide precipitation and drought-monitoring tools

Participants reported increased knowledge in crop water use, deficit irrigation and history and future of water availability in the Treasure Valley. Pre/post testing across programs documented substantial gains in understanding of watershed science, water-system complexity and climate-smart strategies. Case studies, surveys, and artifact-based evaluations verified improvements in scientific literacy and skills.

The Future

The Water PET will continue strengthening water resilience by enhancing water-supply modeling and

snowpack education, scaling irrigation-efficiency and deficit-irrigation demonstration, expanding youth water-literacy programs, developing more Spanish-language and culturally relevant materials, and integrating PET research with Idaho agriculture, municipalities, tribes and conservation partners. The Water PET demonstrates a central role in ensuring Idaho's communities can meet emerging water challenges with science-based tools, informed decision-making and a resilient vision for the future.

Meet the Water Priority Extension Team:

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67-25-xliang-water-pet • 12/25