



Success and dedication to quality research have established the Division of Hydrologic Sciences (DHS) at DRI as the Nevada Water Resources Research Institute (NWRRI) under the Water Resources Research Act of 1984 (as amended). The continuing goals of NWRRI are to develop the water sciences knowledge and expertise that support Nevada's water needs, encourage our nation to manage water more responsibly, and train students to become productive professionals.

NWRRI is granted approximately \$150,000 annually to distribute through its 104(b) grants among research projects that address important water resource problems in Nevada, disseminate sound science to support informed decision-making, and train the next generation of scientists in relevant water resources fields. To ensure collaboration and coordination among water-related entities throughout the state, NWRRI maintains a Statewide Advisory Council on Water Resources Research composed of leading water officials who may be called upon to identify appropriate research topics.

The work conducted through the NWRRI program is funded through the National Institutes for Water Resources (NIWR), which is supported by the U.S. Geological Survey under Grant/Cooperative Agreement No. G21AP10578. DRI administratively houses and logistically supports the operations of NWRRI.

## RESEARCH AREAS:

- Water Quality and Supply
- Efficient Water Management and Use
- Drought and Increased Aridity
- National-scale Water Budget Evaluation
- Socioeconomic and Ecological Vulnerability to Extreme Events
- Hydrologic Model Advancement
- Water-related Hazards and Public Health
- Aquatic Invasive Species
- Per- and Polyfluoroalkyl Substances (PFAS)





**LEFT:** Palistha Shrestha (behind the orange bucket) with student interns running experiments for a NWRRI project to reduce fluoride concentrations in rural groundwater.

**RIGHT:** Dan Saftner (in the baseball cap) with student interns sorting through litter collected from Lake Tahoe beaches for a project supported by the NWRRI Undergrad Student Immersion Internship Program.



## AVAILABLE GRANTS AND RESEARCH PRIORITIES

### NEVADA WATER RESOURCES RESEARCH GRANTS [104(b)]

— The objectives of the program are to conduct competent research related to the important water resource problems of the state of Nevada. Projects must be of significant scientific merit (as determined by the review process) and relevant to Nevada's total water program to be considered worthy of funding. A 1:1 (non-federal to federal) match is required for these grants and proposers are encouraged to engage with local stakeholders, utilities, communities, and/or industries to obtain matching funds. Research Priorities: The impacts of drought and increased aridity, with a focus on water resources within the state.

**NATIONAL COMPETITIVE GRANTS [104(g)]** — Competitive grants under Section 104(g) are required to focus on water problems and issues of a regional or interstate nature beyond those of concern only to a single state. Research Priorities: National-scale evaluation of water budget, socioeconomic and ecological vulnerability to compounding extreme events, and hydrologic model advancement.

**PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) COMPETITIVE GRANTS [104(g)]** — The objectives of this program are to promote PFAS research related to the nation's water quality. Research Priorities: The fate, persistence, and transport of PFAS in water resources and their impacts on changes to water quality/ecosystem dynamics, including surface water and groundwater; and social/economic assessments of the spread, detection, impacts, solutions, and management of PFAS in surface and/or groundwater.

### AQUATIC INVASIVE SPECIES COMPETITIVE GRANTS (UPPER MISSISSIPPI RIVER BASIN) [104(g)]

— The objectives of this program are to improve our understanding of the impacts of aquatic invasive species on lakes and rivers in the Upper Mississippi River basin. Research Priorities: Identification of lake and river characteristics that infer resistance and resilience to the impacts of aquatic invasive species; and social/economic assessments of the spread, detection, impacts, solutions, and management of aquatic invasive species.

## RESEARCH TOPICS ADDRESSED BY NWRRI PROJECTS

- Water availability, security, and quality
- Watershed and ecosystem function
- Water policy, planning, and management
- Drought, flooding, and other climatological processes
- Water-related hazards and climate variability
- Hydrologic, geochemical, and geomorphological processes
- Solute transport in groundwater
- Per- and polyfluoroalkyl substances (PFAS)
- Microplastics and other emerging contaminants
- Wastewater treatment methods

## NWRRI ACHIEVEMENTS

- Projects funded: 22
- Students trained: 62
- Institutes that received funding: DRI, UNLV



[www.dri.edu](http://www.dri.edu)

We are Nevada's non-profit research institute, founded in 1959 to empower experts to focus on science that matters. We work with communities across the state — and the world — to address their most pressing scientific questions. We're proud that our scientists continuously produce solutions that better human and environmental health. At DRI, science isn't merely academic — it's the key to future-proofing our communities and building a better world. For more information, please visit [www.dri.edu](http://www.dri.edu).

**Science that matters now.™**