



ACCOUNTABLE AND TRUSTED PARTNERSHIPS

At State and Federal Levels

From droughts in the West, to floods on the Mississippi, to quality concerns on the East Coast, water issues affect every state in unique and important ways. The National Institutes for Water Resources (NIWR) plays a major role in addressing water-related concerns by providing a national platform for research, training, and collaboration at the state level. Housed in the nation's land-grant universities, the 54 NIWR member institutes leverage university expertise in research, education, and outreach toward solutions to the challenges of our finite water supply.

Water Resources Research Act, USGS, and NIWR

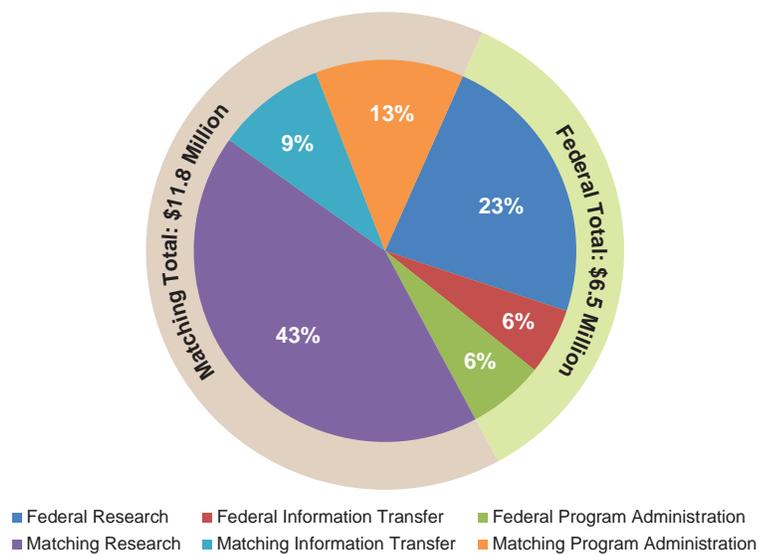
Historic Connection, Future Collaboration

The 1964 Water Resources Research Act (WRRRA) established the nation's Water Resources Research Institutes. Pursuant to the WRRRA of 1984 as amended, the United States Geological Survey (USGS) within the U.S. Department of the Interior assumed responsibility for administering WRRRA funding, which targets local, regional, and national water priorities, helps train and recruit researchers, and aids in the transfer of technology and best practices.

Coordination and interaction between the Institutes and USGS is facilitated by NIWR. A volunteer-led organization, the NIWR network represents the only authorized federal-state program that focuses on applied water resource research, education, training, and outreach.

In Fiscal Year 2014, Congress appropriated \$6.5 million dollars in WRRRA grant funding, enabling cutting-edge research on the nation's most pressing water issues. This \$6.5 million requires matching funds from recipients, significantly leveraging the impact of federal dollars for water research.

Federal and Matching WRRRA Funding
FY 2014

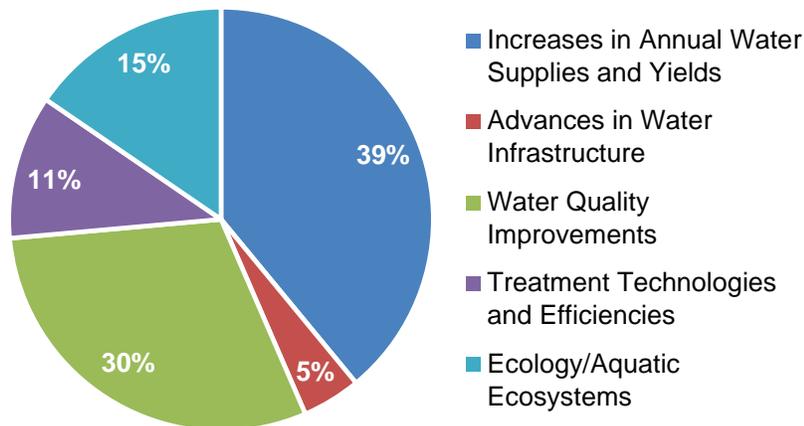


EFFECTIVE

Securing a Better Water Future

NIWR and USGS collaborate on four efforts, two of which are supported by WRRRA funding. The WRRRA funding is distributed via two grant programs, a base funding grant program for each institute and a nationally competitive grant program. Additionally, NIWR and USGS work together to educate the next generation of water professionals and involve other federal agencies in water-related research and outreach.

104b Research Areas FY 2014



Annual Base Grants (104b)

The largest of the USGS-NIWR research grant programs is the 104b Annual Base Funding grant program. 104b grants are awarded annually to NIWR member institutes and help each institute plan and conduct applied and peer-reviewed research, education, and outreach activities on water resource issues. In FY 2014, 54 104b grants, supporting 246 projects, were issued, with study areas spanning the spectrum of water supply, water quality, and public policy issues of water management. Institutes also use their base grants to help train new scientists, disseminate research results to water managers and the public, and promote intrastate and regional collaboration. In addition to their direct impact, these base grants are often used as seed funding for larger projects. Federal 104b grants are required to be matched at a rate of 2:1, substantially leveraging the impact of federal expenditures.



PROGRAMS



Nationally Competitive Grants (104g)

The 104g National Competitive Grants program, which is open to researchers throughout the nation, focuses on water problems and issues that are of a regional or interstate nature or relate to a specific program priority identified by the Secretary of the Interior and the Institutes. The goals of the National Competitive Grants Program are to promote collaboration between the USGS and university scientists, promote the dissemination of results of the research funded under this program, and assist in the training of scientists in water resources.

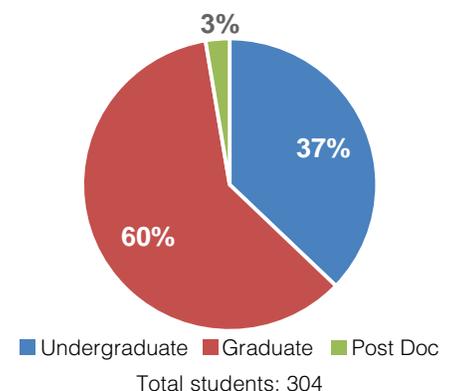
Typical funding for this program is around \$1 million dollars a year, and requires a 1:1 match from the recipient. In 2015, 104g funding was awarded to four research projects studying important national priority issues, such as:

- Modeling trace organic contaminants in urban stormwater,
- Using bioavailability to assess insecticide toxicity in urban sediments,
- Human and ecological health impacts associated with water reuse, and
- Assessing the impact of the mountain pine beetle on drinking water supplies.

Educating the Next Generation

Support for education of the next generation of water leaders permeates all four of NIWR's programs. In FY 2014, 104b and 104g grants provided funds for 304 undergraduate, graduate, and post-doctoral students around the country. Students learn about water resources in a real-world, hands-on setting through cutting-edge research, education, and outreach programs. In addition to the matched WRRRA funding, USGS provides funding to select institutes to support a small student internship program. Typically numbering around five a year, interns gain career enhancing field, laboratory, and research experience through participation in USGS activities.

Student Support
FY 2014



Coordination Grants

Coordination grants allow other Federal agencies to utilize the expertise and capabilities that are available through the network of NIWR Institutes. The USGS may accept funds from other Federal departments or agencies to establish a grant with an institute in order to conduct research, host workshops, or meet engagement goals.



Active Collaborations

A strong spirit of collaboration exists among NIWR Institutes and between the NIWR network and USGS. In 2013, a NIWR-USGS Partnership Committee was formed to foster increased coordination and communication between NIWR and USGS at both the federal and state levels. The Committee is actively synthesizing work being done by the Institutes on national priority water issues, including harmful algal blooms, hydraulic fracturing, drought, nutrient runoff, and educating the next generation of water scientists.

The Network of Water Resources Research Institutes



NATIONAL INSTITUTES FOR WATER RESOURCES

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