

The Source for NC Water Information

North Carolina Water Resources Research Institute

Strategic Plan 2016-2020

VISION

The North Carolina Water Resources Research Institute serves as a leader in the state, region, and nation by addressing immediate and long-term needs in water resource management through the facilitation and dissemination of sound science, educational programs, and professional training opportunities.

MISSION

Through integrated research and outreach efforts, the North Carolina Water Resources Research Institute promotes understanding of critical water issues and supports the sustainable use and conservation of water resources to benefit communities, ecosystems, and economies.

NATIONAL NETWORK, STATE IMPLEMENTATION

The North Carolina Water Resources Research Institute (NC WRRI) is an inter-institutional program of the University of North Carolina system and is administered at NC State University. This federal-state partnership between the U.S. Geological Survey and the state of North Carolina is one of 54 institutes across the nation federally authorized by the Water Resources Research Act of 1964. The institutes focus on research to support the resolution of state and regional water challenges, development and transfer of technologies and applications resulting from research, and training and educational programs for a variety of stakeholders including academics, industries, and the public. These institutes align strongly with the mission of the U.S. Geological Survey. This national network of state-based programs brings an impressive capacity to the nation by leveraging research and outreach products that have impact at the state, regional, and national levels.

For 50 years, NC WRRI has supported research, education and training needs to address the water resource priorities of the state of North Carolina. NC WRRI has provided leadership in focusing the research capabilities of North Carolina's public and private universities to address relevant water resource management issues and has been successful in communicating science and policy information to a range of stakeholders. These efforts resulted in significant economic and educational benefits across the state. Recent census figures place North Carolina among the fastest-growing states in the nation, and the current and projected growth comes with additional environmental stresses and hazards across the state's watersheds. NC WRRI is uniquely positioned to facilitate research, transfer technology advances in the sciences, and deliver education and training opportunities that are critical to the state's ability to address growing water-related challenges in North Carolina and the nation.

NC WRI'S STRATEGIC INVESTMENTS

This WRI strategic plan will guide the institute's investments to respond effectively to North Carolina's immediate and long-term needs in water resource management to benefit communities, ecosystems and economies across the state. WRI is committed to executing the program's mission based on core values including: supporting sound science through merit-based peer review; developing a pipeline of cross-trained students across multiple disciplines to develop the next generation of water resource experts; embracing interdisciplinary and collaborative approaches that incorporate research, outreach and education to address complex challenges; transferring information in an unbiased and transparent manner to a range of stakeholders; and collaborating with a range of partners and communities that represent the diverse needs across North Carolina.

NC WRI's program direction and research and outreach priorities are regularly updated through multiple avenues including input from, but not limited to, state and federal resource management agencies, the WRI Advisory Committee, academic institutions within North Carolina, local government and community leaders, industry partners, and non-governmental entities.

In support of meeting WRI's mission and to continue to expand the institute's impact in supporting the water resource needs of North Carolina, WRI will concentrate effort in the following four strategic areas:

Strategic Goal 1: Increase WRI investments in relevant water resource and policy research that address current and anticipated future water issues and priorities for North Carolina and the region.

Strategies:

- Increase internal and external research funding.
- Prioritize funding of multi-disciplinary proposals that incorporate a diversity of expertise.
- Ensure WRI resources are provided across the state.
- Support early career faculty members as they begin their research career.
- Increase collaborative external research funding partnerships, including but not limited to other state WRIs, U.S. Geological Survey, private industries, non-profits, and the NC Sea Grant program.

Strategic Goal 2: Expand WRI impact at a watershed scale across North Carolina, from the mountains to the sea.

Strategies:

- Support a robust and long-term sustainable NC Watershed Stewardship Network, in partnership with university and community support across the state.
- Collaborate to conduct place-based watershed research and outreach programs.
- Leverage the WRI-hosted Center of Excellence for Watershed Management to increase partnership opportunities with state and federal partners such as the U.S. Geological Survey and the Environmental Protection Agency.
- Optimize outreach opportunities in partnership with NC Sea Grant and other partners to leverage appropriate coastal watershed science, restoration activities, and watershed management approaches.

Strategic Goal 3: Expand WRRI's capacity to provide training, relevant skills, and knowledge transfer in support of the development of the next generation of water professionals and an informed public.

Strategies:

- Expand collaborations with partners that have expertise and capacity in delivering educational opportunities both in the classroom and field for students of all ages.
- Increase WRRI's annual conference attendance and programming breadth, including greater engagement with relevant decision-makers at the state and local levels.
- Increase student research opportunities and exposure to the breadth of water-related career opportunities through fellowships and internships with industry, state and local governmental partners.
- Increase distributed research and training support across the state.

Strategic Goal 4: Increase WRRI's role and recognition as a source for, and neutral broker of, timely information about North Carolina's water resources and associated resource management solutions.

Strategies:

- Develop and facilitate regular discussion forums with appropriate partners in support of addressing difficult water issues for North Carolina.
- Increase contribution of WRRI-funded faculty and WRRI staff technical expertise to relevant state and local decision making committees.
- Expand collaborations and WRRI's facilitation role to address priority issues of the North Carolina Urban Water Consortium and the North Carolina Stormwater Group.
- Identify and develop additional consortia across state and local governments that have specific research and development needs that WRRI can support through facilitated access to academic expertise in specific water resource management arenas and program capacity to support technology transfer applications.
- Increase WRRI's annual conference attendance and programming breadth, including greater engagement with relevant decision-makers at the state and local levels.
- Enhance WRRI's communications platform (e.g. web, social media, press) to increase dissemination of research results, tools, technology and advertisement of associated training efforts for relevant stakeholders and provide a two-way communication avenue for greater program responsiveness to stakeholders' needs.

NORTH CAROLINA RESULTS

WRRI is committed to supporting timely water resource and policy research and the dissemination of research products, tools, and technologies to state and local decision-makers, industry practitioners and the public to address their water resources informational needs and actions. The overarching objective for WRRI's investments is to work collaboratively with partners across the state to deliver effective water resource management information for a triple-bottom-line accomplishment, where North Carolina's communities, ecosystems and economies can thrive, both now and into the future.