

Virginia Water Resources Research Center
Strategic Plan 2017-2021
15 February 2017

Background

The Virginia Water Resources Research Center (VWRRC) was established at Virginia Tech in 1965 under the federal Water Resources Research Act of 1964 and established in 1982 by the Virginia General Assembly under the *Code of Virginia* (§23.1-2628). All colleges and universities in the Commonwealth are served by the VWRRC. At the time of its establishment in 1965, the VWRRC had an oversight committee comprising the Dean of Engineering, the Dean of Agriculture, and a University Vice President. In 1969, administrative oversight of the VWRRC was transferred to the newly formed Research Division. In 2005, administrative oversight was transferred to the College of Natural Resources. The Water Center carries authorization from the U.S. Geological Survey (USGS), the Commonwealth of Virginia, and Virginia Tech.

Mission Background

The *Code of Virginia* establishes the VWRRC's **purpose**:

"to develop, implement, and coordinate water and related land research programs in the Commonwealth and transfer the results of research and new technology to potential users. The Water Center shall be located at [Virginia Tech]."

The *Code of Virginia* also establishes the VWRRC's **functions, powers, and duties**:

- Consult with the General Assembly; federal, state, and local agencies; water user groups; nonprofit organizations; private industry; and other potential users of research;
- Establish and administer agreements with other public institutions of higher education and private institutions of higher education to conduct research projects;
- Disseminate new information and facilitate the transfer and application of new technology;
- Be a liaison between the Commonwealth and the federal research funding agencies and advocate for the Commonwealth's water research needs;
- Encourage the development of academic programs in water resources management in conjunction with the State Council on Higher Education for Virginia.

In addition, the *Code of Virginia* states that the Water Center shall facilitate and stimulate research that:

- Deals with policy issues facing the General Assembly;
- Supports the state water resources agencies;
- Provides water planning and management organizations with tools to increase efficiency and effectiveness of water planning and management.

Mission Statement

The VWRRC provides research and educational opportunities to future water scientists, promotes research on practical solutions to water resources problems, and facilitates timely transfer of water resources information to policy- and decision makers and the general public.

Current Programs

Discovery/Research

- Supports student research on water issues and challenges in Virginia and the region through the VWRRC Competitive Seed Grant Program;
- Facilitates interdisciplinary, multi-institute, collaborative research proposals;
- Conducts in-house research with the help of VWRRC faculty and staff;
- Coordinates water resources research efforts as requested by government agencies.

Learning

- Awards William R. Walker Endowed Graduate Research Fellow to:
 - Individuals pursuing graduate work in a field other than their area of emphasis as an undergraduate, or
 - Individuals with work experience returning to graduate school and who want to enter a water-related profession;
- Awards one semester-long VWRRC undergraduate internship to work with VWRRC faculty and staff;

- Offers undergraduate support and graduate research assistantships to students participating in sponsored research under supervision of VWRRC faculty and staff;
- Facilitates U.S. Geological Survey (USGS) Water Resources Research Institutes (WRRI) Student Internship program in Virginia when USGS funds and appropriate research projects are available;
- Coordinates Virginia Tech B.S. degree program entitled “Water: Resources, Policy, and Management;” Watershed Management Minor Program for undergraduates; and Watershed Management Certificate Program for graduate students;
- Advises the Virginia Tech student chapter of American Water Resources Association (AWRA).

Outreach/Engagement

- Functions as clearinghouse for water resources activities at Virginia Tech;
- Functions as administrative home for the Virginia Water Monitoring Council (VWMC), which promotes and facilitates communication among water-monitoring programs throughout Virginia;
- Leads the multi-institute Academic Advisory Committee to the Virginia Department of Environmental Quality (DEQ);
- Connects stakeholders with water resources expertise;
- Provides timely water resources information through *Virginia Water Radio*; the VWRRC newsletter, website, and News Grouper; and the VWMC weekly email updates of water news, events, and career opportunities;
- Hosts and maintains Virginia Stormwater Best Management Practice (BMP) Clearinghouse in partnership with the DEQ; The Clearinghouse website serves as the reference site for stormwater BMPs for use in complying with Virginia stormwater management law and regulations;
- Organizes state and regional water conferences;
- Coordinates and sponsors water seminars.

A Vision for the Next Five Years – 2017-2021

- Be widely recognized as a resource for credible water resources information and a widely recognized center in areas of discovery, learning, and engagement in the U.S.;
 - Increase visibility of the VWRRC throughout the Commonwealth, the region, and the nation;
 - Strengthen and expand collaboration with state and federal agencies.
- Facilitate innovative approaches to solving water resources challenges;
 - Strengthen and expand existing programs in discovery, learning, and engagement;
 - Facilitate communication to and coordination of people interested in water resources;
 - Assure that communication media are current;
 - Focus and expand multidisciplinary, multi-institutional water resources faculty collaborations for optimal response to state, regional, national, and global water issues;
 - Expand role as coordinating center for water curricular activities at Virginia Tech
- Develop a reliable, stable, long-term funding source that allows the VWRRC to achieve its goals;
 - Access increased external funding to support expansion of VWRRC activities;
 - Improve base funding from Virginia Tech and the state legislature to expand research granting program and expand VWRRC staff to more effectively meet our mission.

Key Performance Indicators

- Number of discovery/research, learning, outreach/engagement collaborations;
- Number of research and outreach publications;
- Records or other indicators of access and use of new water information by policy makers, water managers, and the general public;
- Amount of funding for water resources research, learning; and outreach/engagement brought into the VWRRC from public and private sources.

Essential Elements to Achieve the Vision

- Enhanced support for providing our competitive grants program (currently \$20,000-30,000/yr; increase to \$200,000-300,000/yr);

- Enhanced support to expand VWRRC staffing (currently 2.0 faculty FTE and 1.0 staff FTE from state; increase to 4.0 faculty FTE and 2.0 staff FTE from Virginia Tech or state);
- Support from development efforts to establish and expand endowment funding.

Guiding Principles and Values to Fulfill Our Mission and to Realize Our Vision

- Excellence;
- Statewide, multi-institutional, multidisciplinary;
- Collaborative – seeking and welcoming partnerships with government, industry, nongovernment organizations, and other appropriate partners;
- Integrated and focused;
- Science-based, objective information for policy development and for public and private decision making;
- Global context;
- Support a work environment that values the benefits of diverse ideas, peoples, and cultures;
- Respect and sensitivity for people without regard to age, color, disability, gender, gender identity, gender expression, genetic information, national origin, political affiliation, race, religion, sexual orientation, veteran status, or any other basis protected by law.

Virginia Water Resources Research Center
Organizational Chart
15 February 2017

