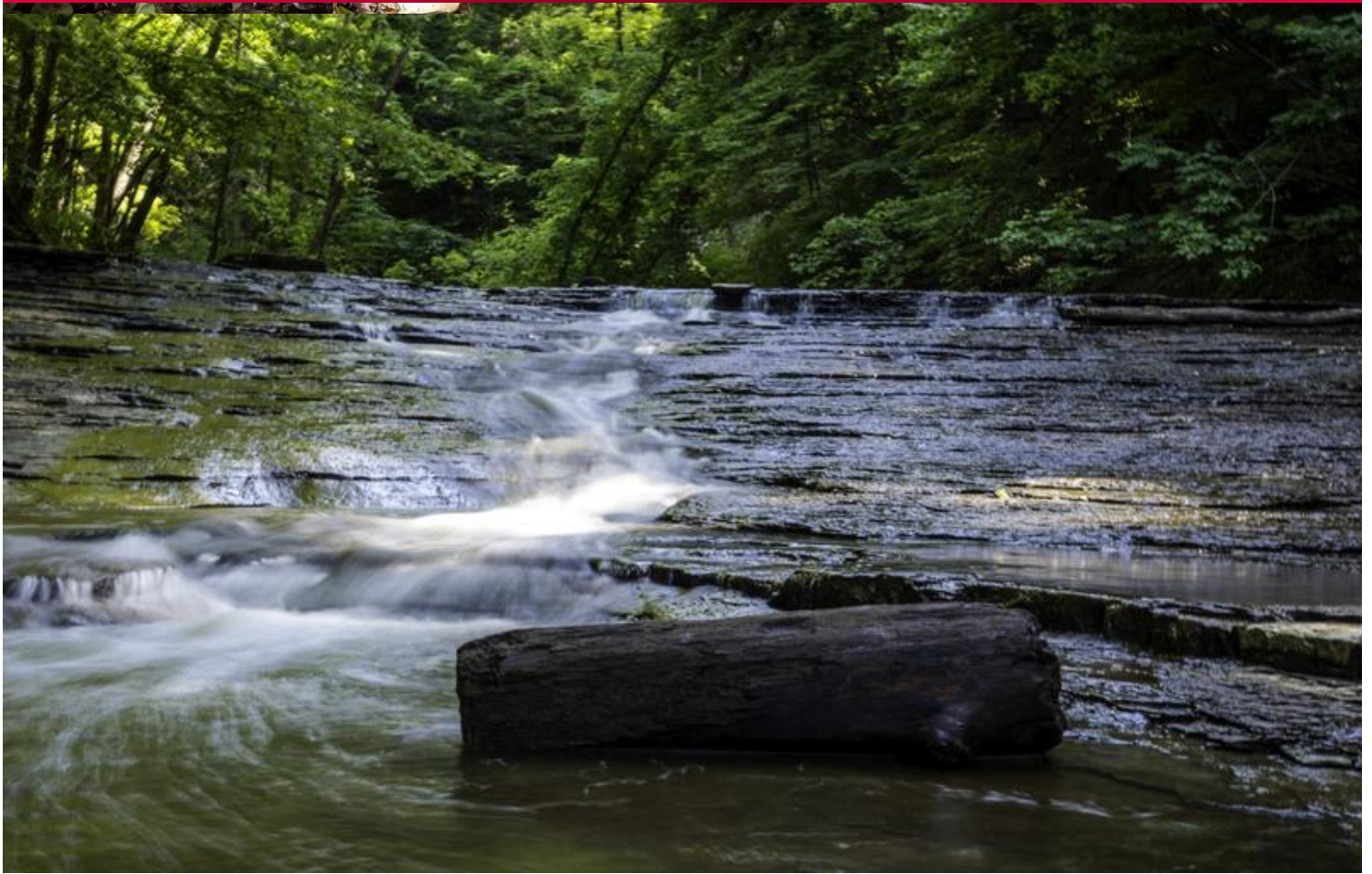




OHIO WATER RESOURCES CENTER

2018-2022 Strategic Plan



About the Ohio Water Resources Center



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Vision

To become the primary Ohio academic research center for the development, exchange, and dissemination of scientific knowledge and tools relevant to water resources in the State, region, and nation.

Mission

The Ohio Water Resources Center (WRC) enables and conducts state-relevant water-related research; fosters collaboration among academic investigators, governmental bodies, and water professionals; trains the next generation of water scientists; and educates the public on water resources issues in Ohio.

About us

In 1958 the Ohio WRC was established at the Ohio State University, College of Engineering, to conduct research on water and wastewater treatment processes. Several years later, in 1964, the Ohio WRC became one of the first state designated Water Resources Research Institutes to be approved through the federally authorized Water Resources Research Act.

Since then, we have provided research funding for over 200 water resources projects. The reach of the Ohio WRC spans the entire State, as we fund and manage research projects conducted at many Ohio universities. Impacts of this research come in the form of student training, publications, conference presentations, and professional development. Furthermore, the experience gained by researchers helps them better compete for larger funding opportunities. Thus, within the State of Ohio, the Ohio WRC has a unique and important role to foster the development of expertise in the field of water resources.

Advisory Board

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Ohio Water Resources Center Strategic Plan

2018-2022

About our Strategic Plan:

The Ohio WRC's directors and associate director actively participate in many local and national organizations that deal with water-related research, education, and policy decisions. Currently, the Ohio WRC research activities focus on surface water quality, water technologies, and water and energy. Our funding opportunities produce the support needed to seed innovative research ideas and provide educational opportunities for undergraduate, M.S., and Ph.D. student researchers. The Ohio WRC continually supports undergraduate and graduate students, with the majority of these students continuing in water-related fields after graduation. In addition to supporting students and research, the Ohio WRC helps organize and host a variety of water-related seminars, conferences, and outreach programs. These events allow water experts to earn professional development hours and continuing education units while improving their understanding of contemporary water-related issues. The Ohio WRC's community outreach efforts to younger generations include sponsoring the Ohio Water Education Program and Project WET, and participating in the Central Ohio Children's Water Festival.

This strategic planning effort was an opportunity to step back and assess our center and its activities. Specifically, we looked at our national organization, the National Institutes for Water Resources (NIWR), the Water Resources Research Act, and other water centers and initiatives in Ohio to determine strategic directions and opportunities for the Ohio WRC. The outcome is a set of six strategic goals and objectives to advance the Ohio WRC's mission, along with metrics to measure our progress on these goals.

Strategic Goals (SG):

1. Improve the visibility of the Ohio WRC at the state and national level
2. Enable Ohio WRC investigators to better compete for larger proposals
3. Foster development of Ohio WRC investigators' research activities toward state-relevant water issues
4. Support innovative water technologies
5. Train future water professionals
6. Engage the public to be "water smart"



SG1: Improve the visibility of the Ohio WRC at the state and national level



The Ohio WRC is the federally-authorized and state-designated Water Resources Research Institute for the State of Ohio. Over the past decade, we have provided research funding for over fifty water-related projects. The reach of the Ohio WRC spans the entire State, funding and managing research projects at many Ohio universities. The Ohio WRC's directors and associate director actively participate in many local and national organizations that deal with water-related research, education, and policy decisions.

Increasing Ohio WRC investigators' visibility will lead to efficient implementation of research deliverables, increased collaboration among state stakeholders, and greater public engagement in research and scientific discovery.

Objectives

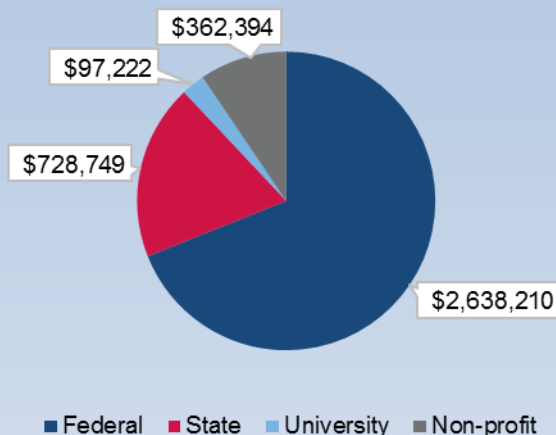
1. Create an Ohio WRC fellow program
2. Disseminate Ohio WRC investigator results with stakeholders
3. Increase Ohio WRC communication with state agency representatives and stakeholders
4. Increase communication with congressional and state representatives

Metrics

1. Implementation of an Ohio WRC fellow program
2. The number of research highlights shared with stakeholders across various platforms
3. The number of meetings and other forms of communication with "new" agency representatives.
4. Increased contact with congressional representative offices

SG2: Enable Ohio WRC investigators to better compete for larger proposals

Follow-up Funding (\$3,826,575)
2013-2017



The Ohio WRC leverages federal dollars to extend the amount of research we are able to conduct. In 2017, every federal dollar invested was leveraged with six dollars from other sources. Eighty-five percent of these funds were used for research and to provide research experience opportunities to nineteen students in water-related disciplines.

Funding new investigators in Ohio and fostering collaborative and resource sharing opportunities will enable investigators to be more competitive in obtaining larger research grants.

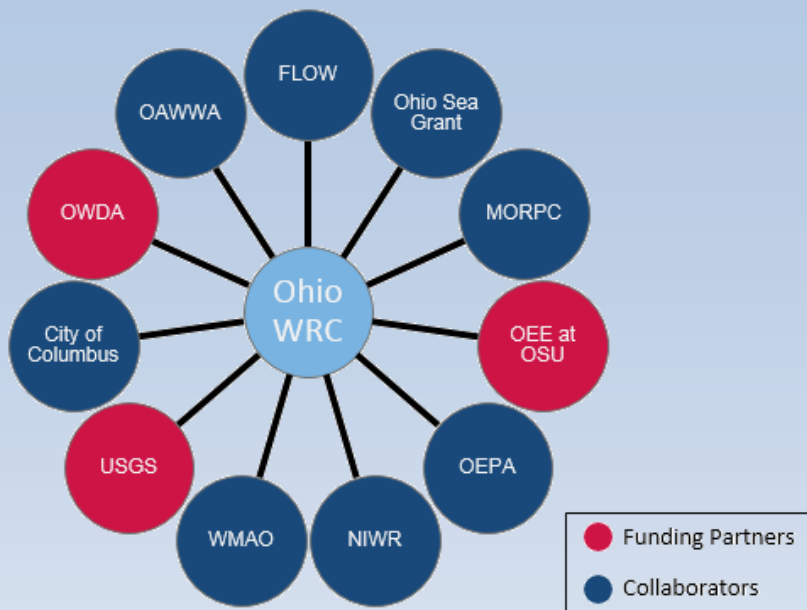
Objectives

1. Investigators are able to leverage our funding to better compete for follow-on grants
2. Create a website of analytical laboratory resources for water investigators
3. Collaborate with Lake Erie Area Research Network (LEARN) to assist in increasing availability of resources to water investigators

Metrics

1. The total number of follow-on grants received and dollar amount awarded to Ohio WRC investigators
2. Developed website and collaboration network with researchers to create a comprehensive analytical laboratory resources database
3. Increased interaction with LEARN to develop best practices for increasing the availability of resources

SG3: Foster development of Ohio WRC investigators' research activities toward state-relevant water issues



The Ohio WRC works with water professionals, state and federal agencies, Ohio academic institutions, and NGOs to create a powerful alliance of research and educational capabilities. The Ohio WRC provides valuable resources for researchers, policy-makers, students, and the public to promote a deeper connection within Ohio.

Fostering the development of Ohio WRC investigators' research activities will help create a shared information network that will build expertise and allow researchers to more readily address state-relevant water issues.

Objectives

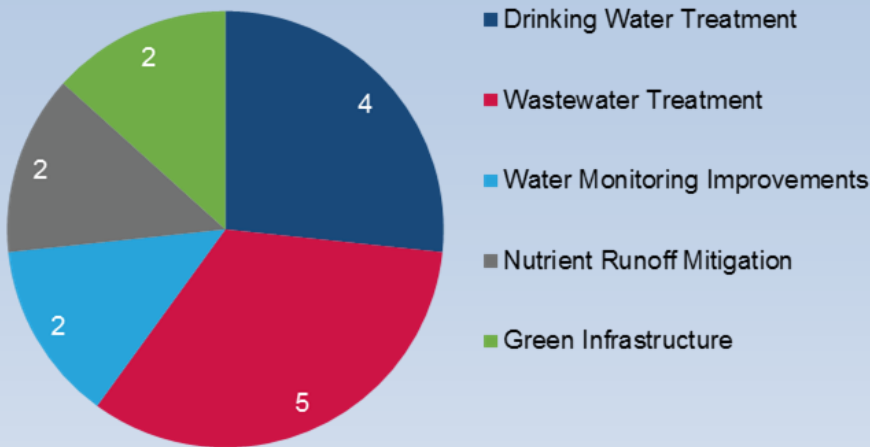
1. Incentivize Ohio WRC investigators to collaborate and interact with state and local stakeholders
2. Encourage Ohio WRC investigators to present their research at state and regional conferences
3. Promote interaction with the Ohio-Kentucky-Indiana Water Science Center

Metrics

1. The number of stakeholders participating in our grants
2. The number of Ohio WRC investigators presenting at Water Management Association of Ohio (WMAO) and other relevant conferences
3. Increased number of 104(g) applications received in the state

SG4: Support innovative water technologies

Number of Technology Proposals by Type
2013-2017



By promoting innovative technologies to combat water issues in Ohio, our researchers are developing repeatable methods and implementable solutions that can serve as a standard for future water research. Our funded researchers are creating novel solutions to manage issues such as HABs, improving water treatment technologies, and educating the youth.

Our location in the College of Engineering at the Ohio State University and long-term relationship with the Ohio Water Development Authority (OWDA) enables us to align our research toward water technology development.

Objectives

1. Increase our involvement with professionals and utilities
2. Continue funding water-related technology development proposals
3. Foster information sharing and support of smaller utilities
4. Promote innovation in water treatment technologies

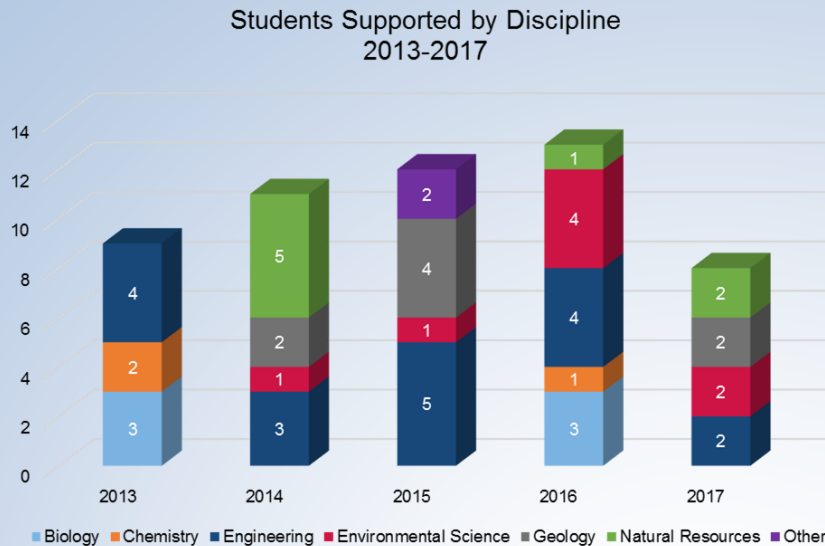
Metrics

1. The number of professional conferences and meetings supported, and the number of Ohio conferences and events attended
2. The number of water-related technology proposals funded
3. Develop an information sharing network and implement best practices for information sharing and supporting smaller utilities
4. Acquire funding and develop a plan to promote innovations in water treatment technologies

SG5: Train future water professionals



Our funding opportunities produce critical support needed to seed innovative research ideas and provide crucial education for undergraduate, M.S., and Ph.D. student researchers. The Ohio WRC continually supports undergraduate and graduate students, with the majority of these students continuing in a water-related field after graduation. We also provide students with resources such as scholarship, volunteer, and internship opportunities.



Solving the increasingly complex water issues in the State will require professionals skilled in STEM and other disciplines. Together with our researchers, we aim to continue support training of graduate and undergraduate students.

Objectives

1. Incentivize investigators to train students in water-related fields
2. Develop a program enabling students to participate in USGS summer internships and other internships
3. Create a plan to support students via Shumate Memorial Fund

Metrics

1. The number of students supported from grants, and number of students placed in a water-related professional career
2. Increase the number of USGS summer interns and other internships directly resulting from Ohio WRC
3. Number of students supported through Shumate Memorial Fund

SG6: Engage public to be “water smart”



Every year, Ohio WRC personnel lecture at universities, seminars, and conferences; function on professional and NGO advisory boards; and co-sponsor, co-organize, and chair conferences and workshops. Through these efforts, we transfer technical research information to the public and state stakeholders to help inform regulations, policy, and management.

The Ohio WRC teaches water professionals, educators, citizens, and the next generation to be water smart. We strive to share relevant information with the community in easily accessible formats through our involvement in local activities, email communications, and our webpage.

Objectives

1. Secure funding to continue developing and implementing outreach programs
2. Engage in water outreach opportunities

Metrics

1. Increase the number of outreach and training programs
2. Increase the number of participants who attend our outreach events