

Ohio Water Resources Center Newsletter

From Our Directors

Welcome! This is the inaugural newsletter of the Ohio Water Resources Center. With this newsletter, we aim to efficiently provide information on center activities, water research, funding, news, and events. Please let us know what you think!



One important center activity we just completed was a strategic plan. The process 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. Therefore, we will strive to:

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".**

Our complete 2018-2022 Strategic Plan can be found by visiting [our website](#).

Spotlight

Join Us for the Ohio WRC/WMAO January Luncheon Seminar

USGS Super Gages Monitor Continuous Water-Quality at Streamflow Gages
Featuring: Tim Lathrop, USGS Hydrologist

A continuous water-quality gage (known as a super or sentry gage) uses in-stream instruments to measure streamflow, water-quality characteristics, nitrate, and phosphate many times a day and throughout the year. Traditional, intermittent water samples can miss changes in water quality that happen at night, during storms, and when it is not practical or affordable for a sample team to operate. A statistical model can be used to combine continuous and intermittent water-sample data at super gages so that constituent concentrations and loads (such as pounds per day) can be continuously computed. Tim Lathrop will be presenting his experience with USGS super gages monitoring around the Midwest.



The event will be held on **January 30th**, from **11:30AM-1:00PM** at **The Wilma H. Schiermeier Olentangy River Wetland Research Park**, 352 West Dodridge Street, Columbus, Ohio 43202.

News Updates

[Kent State Ecologist Part of Global Collaboration to Answer Pressing Question About Global Climate Change on River-based Ecosystems](#)

Via KSU News, January 10th, 2019

Featuring: Dave Costello, Assistant Professor in the KSU Department of Biological Sciences

[State to Invest Nearly \\$10 Million to Help Protect Lake Erie: ODNR and Ohio EPA partner with Ohio communities on projects that create beneficial use options for dredge material](#)

Via Ohio EPA, January 8th, 2019

[Dewine says he'll make Lake Erie a priority as governor](#)

Via Sandusky Register, January 7th, 2019

[New Farm Bill Includes Provisions for Drinking Water, Conservation Practices](#)

Via ideastream, December 21st, 2018

[Building a better weapon against harmful algal blooms](#)

Via OSU News, December 14th, 2018

Featuring: Jay Martin, Professor of Ecological Engineering at Ohio State and Margaret Kalcic, Assistant Professor in Ohio State's Food, Agricultural and Biological Engineering Department

[EPA restores Great Lakes Advisory Board](#)

Via Sandusky Register, December 14th, 2018

[Ohio EPA Announces 2019 Water Pollution Control Loan Fund Program Management Plan](#)

Via Ohio EPA, December 7th, 2018

[2018 Report for Ohio's Harmful Algal Bloom Research Initiative Highlights UT Water Quality Research](#)

Via UT News, October 31st, 2018

Featuring: Tom Bridgeman, Professor of Ecology and Director of the UT Lake Erie Center, and Jason Huntly, Associate Professor in the UT Department of Medical Microbiology and Immunology

[Congress signs off on water bill with projects to help Lake Erie](#)

Via Cleveland.com, October 10th, 2018

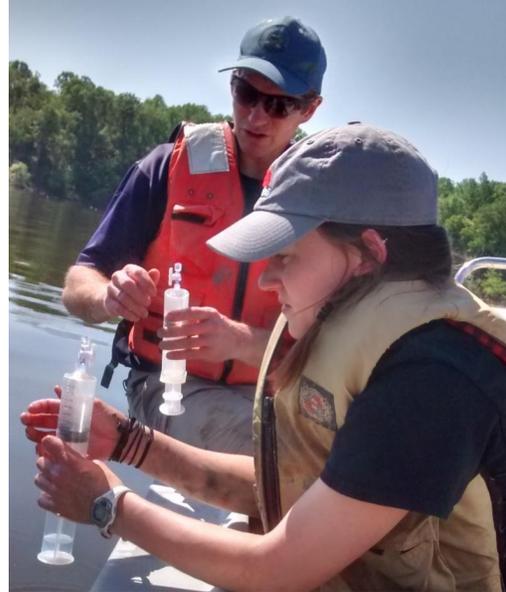
Have a news article you'd like us to feature in our Newsletter? Email us at OhioWRC@osu.edu!

Ohio WRC Research Highlight

[Characterizing the Link between Algal Bloom Biomass and Methane Production in Ohio Reservoirs](#)

With Ohio WRC funding, **Dr. Ishi Buffam** and his team study the relationship between algal growth and methane production in Southwest Ohio Reservoirs. To do this, Dr. Buffam's team are looking at co-variation in algae and methane

production spatially within a single reservoir, and also among reservoirs ranging from low-nutrient to high-nutrient watersheds. Nutrient pollution produces problematic algae blooms in surface waters. One of the negative consequences of these blooms is that when these algae die off and decompose, they provide food for methane-producing microbes in reservoir bottom sediments. This process increases in-lake production and emissions of methane, a potent greenhouse gas (GHG). This link between algal decomposition and methane production occurs in the lab, but its importance in reservoirs is unknown. This research will provide needed information on GHG-related co-benefits of nutrient reduction, and will help determine factors controlling methane production and emissions from reservoirs, so that methane



emissions can be efficiently reduced, without negatively impacting the Ohio economy. The information generated will be communicated directly to the Army Corps of Engineers who manage reservoirs in the region. The research also has a broader relevance since reservoirs are estimated to be responsible for 5-20% of annual human-derived emissions of methane. Find out more about Dr. Buffam's research by visiting his [website](#). If you'd like to find out more about other Ohio WRC research projects, visit: <https://wrc.osu.edu/past>.

Opportunities

USGS 104(g) Grant Announcement

The Water Resources Research National Competitive Grants Program is announcing pre-proposal instructions for 104(g) grants. The goals of the 104(g) grant is to promote collaboration between the USGS and university scientists in research on significant national and regional water resources issues; promote the dissemination of results from research funded under this program; and to assist in the training of scientists in water resources. Specific pre-proposal submission instruction for FY2019 can be found [here](#). The pre-proposal can be submitted via email to ohiowrc@osu.edu. **Due to the current government shutdown, we expect the original deadline of February 15th, 2019 to be extended.** Check our [website](#) for more updates.

Ohio EPA Offering \$3 Million in Grants for Nonpoint Source Reduction

Ohio EPA is requesting proposals for implementation projects to reduce nonpoint source pollutants, such as nutrients, sediment and bacteria; improve stream and riparian habitat; or reverse the impacts of stream hydromodification. Proposals should be linked to critical areas identified in Ohio's watersheds such as projects that improve water quality in Ohio streams from nonpoint sources of pollution. Projects that measurably reduce nutrients, eliminate impairments, or restore impaired stream segments are more of a priority than general nonpoint source pollution prevention projects. **Proposals are due to Ohio EPA by February 15th, 2019.** Find more information online at: <https://www.epa.ohio.gov/dsw/nps/index.aspx>.

To find more resources offered by Ohio WRC, please visit: <https://wrc.osu.edu/resources>

Upcoming Events

2019 Community Engagement Conference

PARTNERING FOR A RESILIENT AND SUSTAINABLE FUTURE

[Register](#)

On January 23rd and 24th, Ohio State University will be hosting its second annual Community Engagement Conference, featuring a keynote address from Mary Robinson, former president of Ireland. The conference will bring together faculty, staff, students, and community partners to focus on professional development and making connections, while exploring new potential engagement partnerships. The theme of this year's conference is *Partnering for a Resilient and Sustainable Future*. For information, visit: <https://cec.osu.edu/>

Have an event you'd like us to feature in our Newsletter? Email us at OhioWRC@osu.edu!

[About Us](#)

[Research](#)

[Outreach](#)

[Publications](#)

[Resources](#)

Email: OhioWRC@osu.edu

Phone: 614-292-2807

Website: <https://wrc.osu.edu/>

Address: 311 Hitchcock Hall

2070 Neil Avenue

Columbus, OH 43210



THE OHIO STATE UNIVERSITY