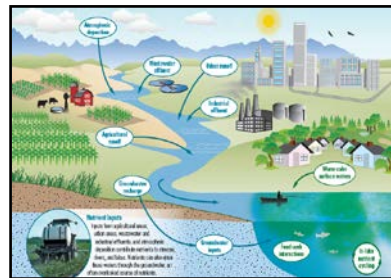


Freshwater HABs Newsletter



Key Factors Related to CyanoHABs Occurrence, USGS

[Ohio EPA Updates Findings on Sources of Nutrients Impacting Ohio Waters](#)

Ohio EPA has completed its [second statewide study](#) identifying sources and estimating the annual amount of phosphorus and other nutrients flowing from the state's watersheds into Lake Erie and the Ohio River. Overall, the results of this study show no clear trend of an overall decrease in loading in most watersheds, especially in nonpoint source dominated watersheds like the Maumee where the loading in 2017 was the highest of the years reported.

WRF Request for Proposal

[Utility Responses to Cyanobacterial/Cyanotoxin Events: Case Studies and Lessons Learned \(RFP #4914\)](#)

To gather and present case studies that illustrate drinking water utility experiences and associated responses to cyanobacterial and cyanotoxin events, in their source and/or finished waters. The project will develop guidelines that would help utilities develop and implement successful programs for managing cyanobacteria and cyanotoxins. Proposals may request WRF funds in the range of \$135,000-\$150,000.

[Developing Guidance for Assessment and Evaluation of Harmful Algal Blooms, and Implementation of Control Strategies in Source Water \(RFP #4912\)](#)

To develop authoritative guidance for managers to evaluate and manage the occurrence and risk associated with HABs in source waters and select control techniques that are appropriate to their needs and capabilities, and to implement a decision tree to support this evaluation as a web-based resource linked to critically reviewed and validated information, guidelines, and regulations. Proposals may request WRF funds in the range of \$185,000-\$200,000.

Proposals are now being accepted exclusively online in PDF only format and must be fully submitted before June 27, 2018. Questions to clarify the intent of this Request for Proposals and WRF's administrative, cost and financial requirements may be addressed to the Research Manager, Djanette Khiari, at 303.734.3478 or by e-mail at dkhiari@waterrf.org.

[2018 HABs Collaboratory Request for Proposals](#)

The Great Lakes HABs Collaboratory is offering funding to facilitate the creation of outreach products on Great Lakes HABs science through collaborative efforts. There is \$10,000 available for funding and it is anticipated that 2 to 10 proposals will be funded. The minimum request for each proposal is \$1,000 and maximum request is \$5,000. To apply, send proposals (1 page or less) to gl.habs.collaboratory@gmail.com by 5:00 P.M. (eastern) on Friday May 4th. For questions regarding the proposal and eligibility, please contact Victoria Pebbles (vpebbles@glc.org).

UPCOMING EVENTS

[SETAC Europe HABs Special Session](#)

May 13-17, 2018
Rome, Italy

[ASLO 2018 HABs Special Session](#)

June 10-15, 2018
Victoria, BC, Canada

[IAGLR 2018 Conference HABs Special Session](#)

June 18-22, 2018
Toronto, Canada

[UCOWR & NIWR 2018 Annual Water Resources Conference](#)

June 26-28, 2018
Pittsburgh, PA

[18th ICHA](#)

October 21-26, 2018
Nantes, France

[NALMS 2018](#)

October 30 – Nov. 2, 2018
Cincinnati, OH



To sign up please
send an email to:

epacyanohabs@epa.gov



For more information,
please visit [EPA's
CyanoHABs Website](#)

RECENTLY PUBLISHED ARTICLES

[Rapid detection and quantification of the potentially toxic cyanobacterium *Planktothrix rubescens* by in-vivo fluorometry and flow cytometry](#)

Weisse T, Bergkemper V. Water Res. Jul 1st, 2018. 138. pp. 234-240.

[Analysis of cyanobacterial metabolites in surface and raw drinking waters reveals more than microcystin](#)

Beversdorf, L.J., Rude, K., Weirich, C., Bartlett, S.L., Seaman, M., Kozik, C., Biese, P., Gosz, T., Suha, M., Stempa, C., Shaw, C., Hedman, C., Piatt, J., Miller, T.R., Water Research. 2018.

[Mitigating the Expansion of Harmful Algal Blooms Across the Freshwater-to-Marine Continuum](#)

Hans W. Paerl, Timothy G. Otten, and Raphael Kudela. Environ. Sci. Technol. April 16, 2018

[Microbial community characterization of ozone-biofiltration systems in drinking water and potable reuse applications](#)

Daniel Gerrity, Mayara Arnold, Eric Dickenson, Duane Moser, Joshua D. Sackett, Eric C. Wert. Water Research, Volume 135, May 2018. pp. 207-219.

[Possible impacts of sea level rise on disease transmission and potential adaptation strategies, a review](#)

Ana C. Dvorak, Helena M. Solo-Gabriele, Andrea Galletti, Bernardo Benzecry, Hannah Malone, Vicki Boguszewski, Jason Bird. Journal of Environmental Management 217, 2018.

[A report of *Cylindrospermopsis raciborskii* and other cyanobacteria in the water reservoirs of power plants in Ukraine](#)

Rzymiski, P., Horyn, O., Budzynska, A., Jurczak T., Kokocinski M., Niedzielski P., Klimaszuk P. and Falfushynska H. Environ Sci Pollut Res Int. Apr 21, 2018.

[Cell Lysis and Detoxification of Cyanotoxins Using a Novel Combination of Microbubble Generation and Plasma Microreactor Technology for Ozonation](#)

Pandhal J., Siswanto A., Kuvshinov D., Zimmerman WB., Lawton L., Edwards C. Front Microbiol. Apr 5, 2018. 9: p. 678.

[Microcystin-leucine arginine \(MC-LR\) induces bone loss and impairs bone micro-architecture by modulating host immunity in mice: Implications for bone health](#)

Dar HY., Lone Y., Koiri RK., Mishra PK. And Srivastava RK. Enviro Pollution. Vol. 238, July 2018. pp. 792-802.

[Glycogen Synthesis and Metabolite Overflow Contribute to Energy Balancing in Cyanobacteria](#)

Melissa Cano, Steven C. Holland, Juliana Artier, Rob L. Burnap, Maria Ghirardi, John A. Morgan, Jianping Yu. Cell Reports, Volume 23, Issue 3, 2018, Pages 667-672.

[Factors controlling the three-decade long rise in cyanobacteria biomass in a eutrophic shallow lake](#)

Fabien Cremona, Lea Tuvikene, Jutta Haberman, Peeter Nõges, Tiina Nõges. Science of The Total Environment, Volume 621, 2018, Pages 352-359.

[Evaluation of the Destruction of the Harmful Cyanobacteria, *Microcystis aeruginosa*, with a Cavitation and Superoxide Generating Water Treatment Reactor](#)

Victor F. Medina, Chris S. Griggs, Catherine Thomas. Bull Environ Contam Toxicol. 2016. 96. pp.791-796.

BIOOMS, BEACH CLOSURES and HEALTH ADVISORIES*, APRIL 2018

The following map includes blooms, cautions, warnings, public health advisories, closings and detections over the State's threshold, due to the presence of algae, toxins or both. This is not a comprehensive list, and many blooms may have not been reported.



- **California (6):** Lake Cunnigham, Quarry Lakes, Lake Chabot, Lake Barryessa, Huichica Pond, Confluence of Sacramento River and American River (under bridge)
- **Florida (4):** Peace River, Lake Lochloosa, Bloomans Lake, [Cocoa Beach](#) canal along the Indian River Lagoon
- **Maryland (3):** Magothy River, Choptank River, Assawoman Bay, Isle of Wight Bay, Turville Creek, Manklin Creek
- **Massachusetts (1):** Winona Pond Water Treatment Plant, City of Peabody
- **Ohio (1):** Grand Lake St. Marys
- **Oregon (1):** South Umpqua River
- **Washington (1):** Summit Lake

Important Links

- ✓ [EPA's Fish and Shellfish Program Newsletter - March Issues](#)
- ✓ [NOAA's National Water Model](#)
- ✓ [WRF's Cyanobacterial Blooms and Cyanotoxins: Research Priorities for Drinking Water Protection](#)
- ✓ [WRF's Four Steps to Effective Cyanotoxin Communications: A Risk Communications Toolkit](#)
- ✓ [USGS 's National Water Quality Program's National Water Quality Assessment Project](#)

This newsletter was created by [Dr. Lesley V. D'Anglada](#), Office of Science and Technology, Office of Water, EPA. Mention of trade names, products, or services does not convey and should not be interpreted as conveying official EPA endorsement, approval or recommendation for use.

For previous newsletters, go to [Freshwater HABs Newsletter](#).