

Harmful Algal Blooms (HABs) Newsletter



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Mention of trade names, products, or services in this newsletter does not convey and should not be interpreted as conveying official EPA endorsement, approval, or recommendation for use.

'Looking for even more HABs information? Visit EPA's [CyanoHABs in Water Bodies website](#)

EPA Updates!

HAB's Research, Resources, and Tools

Managing Harmful Algal Blooms in Tribal Waters Webinar Series

In collaboration with NOAA and the Sitka Tribe of Alaska, EPA is hosting a three-part webinar series on the impacts of marine and freshwater HABs and their toxins. Registration is free!

March 16th - Monitoring for HABs and Creating Partnerships

March 18th - Funding HABs Management and Communicating Risks

Webinars are from 10:00am-12:30pm PST/1:00-3:30 pm EST

Attendees will have the opportunity to:

- Listen to and talk with Tribes from across the country about their experiences addressing the impacts of HABs and their toxins in fresh and marine waters.
- Learn about strategies to build tribal capacity for effectively collecting baseline data on HABs.
- Ask national experts about data collection, funding, outreach, and other HABs management needs.

REGISTER NOW!

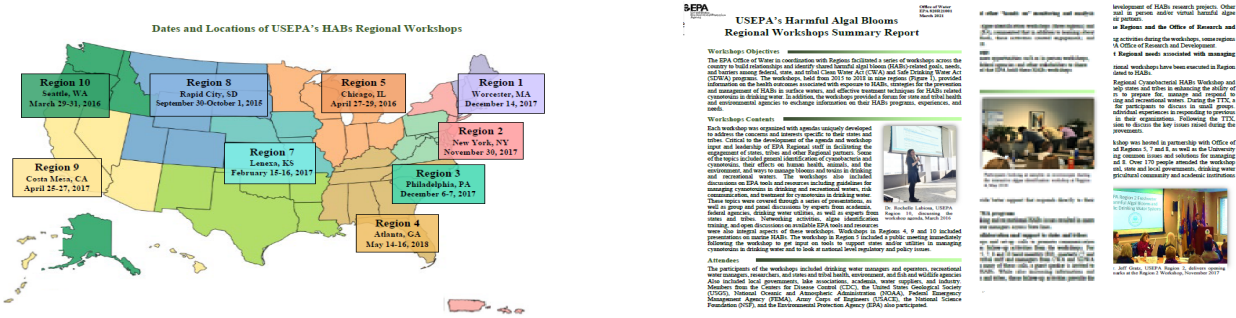
Register separately for each webinar online.

Recording of the webinar *Overview of HABs in Fresh and Marine Waters*, held on March 10th, will be posted to the [EPA CyanoHABs website](#).

For questions or more information, please send an email to EPACyanoHABs@epa.gov

U.S. EPA's Harmful Algal Blooms Regional Workshops Summary Report

On March 3, 2021, EPA released a [summary report](#) of the outcomes and recommendations from a series of workshops held from 2015 to 2019 in nine EPA regions on the protection of public health from HABs in fresh and marine waters. The Office of Water, in coordination with the EPA Regions, brought together HABs experts from federal, state, and local agencies, and representatives from utilities, academia, and other stakeholders to learn and discuss the strategies for managing HABs in drinking water and recreational waters; make connections; and identify shared goals, needs, and barriers among federal, state, and tribal Clean Water Act (CWA) and Safe Drinking Water Act (SDWA) programs.



How Do You Respond to Benthic CyanoHABs?

The Interstate Technology and Regulatory Council's (ITRC) Strategies for Managing and Preventing Benthic Harmful Cyanobacterial Blooms (BHCB) team is requesting your assistance in determining if and how states respond to **benthic** harmful cyanobacterial blooms. The BHCB is sharing this survey to learn about the variety of state response capabilities and needs regarding benthic HABs. The team will use information gathered from this survey to target the topics to be covered and resources to be developed in its guidance.

If interested, please complete the survey located at <https://www.surveymonkey.com/r/8PVX2L2> by April 2, 2021.

If you have questions or need additional information, please contact:

Becky Stanton (Team Leader) - rebecca.stanton@oehha.ca.gov

Ben Holcomb (Team Leader) - bholcomb@utah.gov

Cherri Baysinger (Program Advisor) - cbaysinger@socket.net

Benthic HABs Discussion Group: Upcoming Webinar

On March 30, the Benthic HABs Discussion Group will host a webinar with presentations from:

- Dr. Franziska Bauer of the Technical University of Munich on the occurrence of Anatoxin-a- and Dihydroanatoxin-a producing *Tychonema Sp.* in Mesotrophic Reservoir Mandichosee (River Lech, Germany) as a cause of neurotoxicosis in dogs, and
- Dr. Becky Stanton, from the California Office of Environmental Health Hazard Assessment, on the progress of the ITRC Benthic Cyano team work.

Registration is not required. The webinar will be held 11:30am to 1:00pm EST. More details will be online [here](#).

Publication of the 2nd Edition of WHO's Toxic Cyanobacteria in Water

On March 8, 2021, the WHO published the 2nd Edition of *Toxic Cyanobacteria in Water*. This publication presents the current state of knowledge on the occurrence of cyanobacteria and cyanotoxins, as well as their impacts on health through water-related exposure pathways. It also provides information to support the effective assessment and management of the risks posed by cyanobacteria and their toxins.



Reported Blooms, Beach Closures, and Health Advisories* - February 2021

**Includes blooms, cautions, warnings, public health advisories, closings, and detections over state thresholds, due to the presence of algae, toxins, or both. This is not a comprehensive list, and many blooms may have not been reported or lakes are not actively monitored.*



Click the State below to see the reported blooms for the month of February, 2021

[Florida \(1\)](#) [South Carolina \(1\)](#) [Ohio \(1\)](#) [Montana \(2\)](#) [California \(12\)](#) [Oregon \(1\)](#)

Upcoming Virtual Events: 2021

Managing Harmful Algal Blooms in Tribal Waters Webinar Series -

1:00 - 3:30pm EST

March 16th - Monitoring for HABs and Creating Partnerships

March 18th - Funding HABs Management and Communicating Risks

Benthic HABs Discussion Group Webinar - March, 30th

11:30 - 1:00pm EST

2021 National Recreational Water Quality Workshop - April 6-8th

Focus on fecal contamination and HABs

10.5 US HAB Symposium - May 25-27th

Center around presentations from student, postdoctoral, and early career (< 3 years post terminal degree) community members.

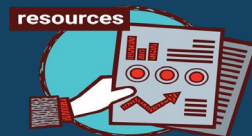
ASLO 2021 Aquatic Sciences Meeting - June 22-27th

Special Session on *Interactions of HABs, Eutrophication and Carbonate Chemistry in Coastal Oceans and Large Lakes*

19th International Conference on Harmful Algae - October, 10-15th

La Paz, B.C.S. (live and virtual)

USEFUL



The New York Department of Environmental Conservation (DEC) announces the release of the **Harmful Algal Blooms Research Guide**, which highlights topics to advance the study, management, and mitigation of HABs in New York. Four research focus areas - Prevention and Mitigation, Causes of HABs, Monitoring and Modeling, and Engagement - are intended to prioritize DEC research efforts and to lay the foundation for HABs research coordination. The initiative included regional HABs summits that led to the development of waterbody-specific **HABs Action Plans** and targeted **mitigation studies**.

Recently Published Articles*

Using a lake sediment record to infer the long-term history of cyanobacteria and the recent rise of an anatoxin producing *Dolichospermum* sp.

Hobbs, W. O., Dreher, T. W., Davis, E. W., Vinebrooke, R. D., Wong, S., Weissman, T., & Dawson, M. 2021. *Harmful Algae*, 101, 101971.

Prevalence and persistence of microcystin in shoreline lake sediments and porewater, and associated potential for human health risk

Preece, E. P., Hobbs, W., Hardy, F. J., O'Garro, L., Frame, E., & Sweeney, F. 2021. *Chemosphere*, 129581.

Spatial and temporal variability of nutrients and algae in the Republican River and Milford Lake, Kansas, June through November 2017 and May through November 2018

Leiker, B.M., Abel, J.R., Graham, J.L., Foster, G.M., King, L.R., Stiles, T.C., and Buley, R.P., 2021. U.S. Geological Survey Scientific Investigations Report. 2020-5135, 53 p.

The tide turns: Episodic and localized cross-contamination of a California coastline with cyanotoxins

Avery O. Tatters, Jayme Smith, Raphael M. Kudela, Kendra Hayashi, Meredith D.A. Howard, Ariel R. Donovan, Keith A. Loftin, David A. Caron. 2021. *Harmful Algae*, 103,.

Multiple co-occurring and persistently detected cyanotoxins and associated cyanobacteria in adjacent California lakes

Meredith D.A. Howard, Raphael M. Kudela, Kendra Hayashi, Avery O. Tatters, David A. Caron, Susanna Theroux, Stuart Oehrle, Miranda Roethler, Ariel Donovan, Keith Loftin, Zachary Laughrey. 2021. *Toxicon*, Volume 192. ages 1-14.

Marine Harmful Algal Blooms (HABs) in the United States: History, Current Status and Future Trends

Anderson, Donald M., Elizabeth Fensin, Christopher J. Gobler, Alicia E. Hoeglund, Katherine A. Hubbard, David M. Kulis, Jan H. Landsberg, et al. 2021. *Harmful Algae*, 101975.

Occurrence of Microcystins, Anabaenopeptins and Other Cyanotoxins in Fish from a Freshwater Wildlife Reserve Impacted by Harmful Cyanobacterial Blooms

Skafi, Mourad, Sung Vo Duy, Gabriel Munoz, Quoc Tuc Dinh, Dana F. Simon, Philippe Juneau, and Sébastien Sauvé. 2021. *Toxicon* 194. 44-52.

Factors affecting harmful algal bloom occurrence in a river with regulated hydrology

Jaeyoung Kim, John R. Jones, Dongil Seo. 2021. *Journal of Hydrology: Regional Studies*, Volume 33, 100769. <https://doi.org/10.1016/j.ejrh.2020.100769>.

*Articles are retrieved from Science Direct research database searching for the following key words: cyanobacteria, cyanotoxins, harmful algal blooms, and HAB(s).



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