

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

EPA, NOAA and the Sitka Tribe of Alaska's Managing Harmful Algal Blooms in Tribal Waters Webinar Series



Members of the Planning Team (from top left): Rochelle Labiosa (EPA), Steve Morton (NOAA), Tina Laidlaw (EPA), Chris Whitehead (Sitka Tribe), Katie Foreman (EPA), Todd Leighfield (NOAA) and Lesley D'Anglada (EPA)

Members of tribal communities, water utilities, city and county government agencies, local and regional watershed groups, state environmental and health agencies, federal government, local and national environmental non-profits, universities, and attendees from academia and non-profit research organizations from Portugal, Canada, and Denmark joined the three-part webinar series on the impacts of marine and freshwater HABs in tribal communities held on March 10, 16 and 18.

More than 300 people attended the webinar on each of the respective three webinar days. This webinar series is the first of its kind and the largest national effort to engage tribes in managing the unique challenges that HABs pose to their communities. Recordings and presentations will be posted to the [EPA CyanoHABs website](#) soon.

[ITRC's New Strategies for Preventing and Managing Harmful Cyanobacterial Blooms \(HCBs\) Guidance](#)

On March 19, the Interstate Technology & Regulatory Council (ITRC) Harmful Cyanobacterial Blooms Team (HCB) Team published a technical [guidance document](#) with useful tools and resources on prevention, monitoring, mitigation strategies, communication and response to planktonic HCBs. The guidance, intended to assist waterbody managers and other interested parties to respond and manage harmful cyanobacterial blooms, provides several tools to help them select appropriate methods for monitoring, managing of nutrients and response planning.

Along with the guidance, the HCB Team also developed a series of [downloadable sheets](#) that provide descriptions of management strategies evaluated for effectiveness, advantages, limitations, relative cost, and regulatory and policy considerations.

In the next few months, the ITRC's HCB Team will be hosting live internet-based training sessions to accompany this new guidance. Members of the ITRC HCB Team included representatives from States and Local Health and Environmental Agencies, academia and federal government.

[CDC Releases Spanish Language Cyanobacteria Health Promotion Web Pages](#)

The CDC recently translated to Spanish health promotion resources on cyanobacteria. See the resources here:

- 1) Information for animal owners: [Alerta para la seguridad de los animales](#)
- 2) Information for healthcare providers: [Referencia para los médicos sobre las proliferaciones cianobacterianas](#)
- 3) Information for veterinarians: [Referencia para los veterinarios sobre las proliferaciones cianobacterianas](#)
- 4) Animal safety poster: [Posters | Harmful Algal Blooms | CDC](#)
- 5) Physician, veterinarian, and pet or livestock owner reference cards: [Reference Cards](#)

[Virginia Department of Health \(VDH\) Guidance for the Recreational advisory management of cyanobacteria Available for Public Comments](#)

The Virginia Department of Health (VDH) has proposed updated guidance for the recreational advisory management of cyanobacteria. **The guidance is available for formal public comment March 15 through April 14.** To view and comment on the proposed guidance please visit:

<https://townhall.virginia.gov/L/comments.cfm?GDocForumID=507>

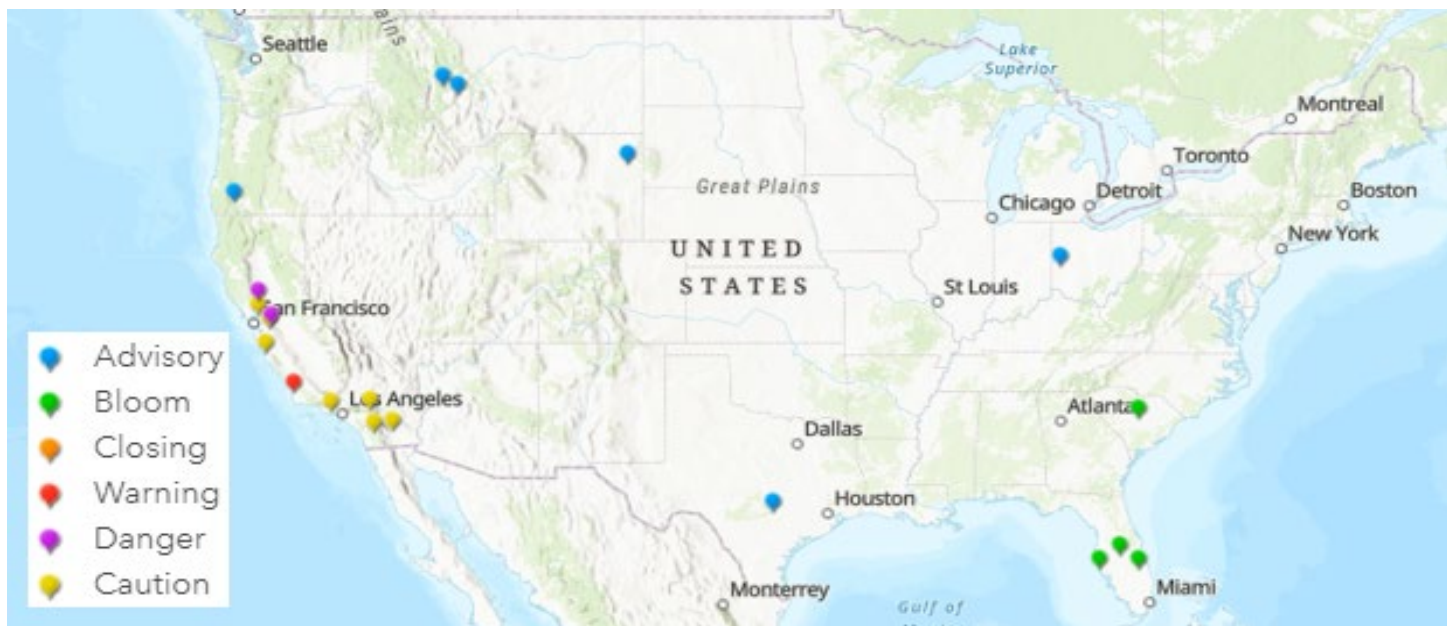
For more information please contact Margaret Smigo at margaret.smigo@vdh.virginia.gov





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

[California \(10\)](#) [Florida \(3\)](#) [Montana \(2\)](#) [Ohio \(1\)](#) [Oregon \(1\)](#) [South Carolina \(1\)](#) [Texas \(1\)](#)

Upcoming Virtual Events: 2021

2021 National Recreational Water Quality Workshop

April 6-8 - Focus on fecal contamination and HABs

10.5 US HAB Symposium - May 25-27

Presentations from student, postdoctoral, and early career (< 3 years post terminal degree) community members

ASLO 2021 Aquatic Sciences Meeting - June 22-27

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

19th International Conference on Harmful Algae

October, 10-15, La Paz, B.C.S. (live and virtual)

resources

USEFUL



Recordings from the New Jersey Department of Environmental Protection 2021 Virtual HABs Summit held on March 8 are now available [here](#).

Virginia Institute of Marine Science' Discovery Lab HABs

April 20, 6:00 - 7:30pm Free Online Event

Join VIMS scientist Marta Sanderson in explaining what we know about how and why HABs form and how that information is improving our ability to detect HABs and even forecast when and where they may occur. Discovery labs are free, family-friendly programs that include activities and a short presentation. They are presented by the Chesapeake Bay National Estuarine Research Reserve (CBNERR) at VIMS. Registration is required. [Register now!](#)

Recently Published Articles*

Effects of lake warming on the seasonal risk of toxic cyanobacteria exposure: Seasonal risk of toxic cyanobacteria exposure

Hayes, Nicole & Haig, Heather & Simpson, Gavin & Leavitt, Peter. 2020. Limnology and Oceanography Letters. 5. 10.1002/lol2.10164.

Capitalizing on harmful algal blooms: from problems to products

Alina A. Corcoran, Ryan W. Hunt. 2021. Algal Research, Volume 55, 102265.

Responses of cyanobacterial aggregate microbial communities to algal blooms

Congmin Zhu, Junyi Zhang, Xin Wang, Yuqing Yang, Ning Chen, Zuhong Lu, Qinyu Ge, Rui Jiang, Xuegong Zhang, Yunfeng Yang, Ting Chen. 2021. Water Research, Volume 196, 117014.

The Latin America and Caribbean HAB status report based on OBIS and HAEDAT maps and databases

Inés Sunesen, Silvia M. Méndez, José Ernesto Mancera-Pineda, Marie-Yasmine Dechraoui Bottein, Henrik Enevoldsen. 2021. Harmful Algae, 101920.

From unusual suspect to serial killer: Cyanotoxins boosted by climate change may jeopardize megafauna

Haijun Wang, Chi Xu, Ying Liu, Erik Jeppesen, Jens-Christian Svenning, Jianguo Wu, Wenxia Zhang, Tianjun Zhou, Puze Wang, Shingirai Nangombe, Jinge Ma, Hongtao Duan, Jingyun Fang, Ping Xie. 2021. The Innovation, Volume 2, Issue 2, 100092.

Cyanotoxin mixture models: Relating environmental variables and toxin co-occurrence to human exposure risk

Victoria G. Christensen, Erin A. Stelzer, Barbara C. Eikenberry, Hayley T. Olds, Jaime F. LeDuc, Ryan P. Maki, Alisha M. Saley, Jack Norland, Eakalak Khan. 2021. Journal of Hazardous Materials, Volume 415, 125560.

CyanoMetDB, a comprehensive public database of secondary metabolites from cyanobacteria

Martin R. Jones, Ernani Pinto, Mariana A. Torres, Fabiane Dörr, Hanna Mazur-Marzec, Karolina Szubert, Luciana Tartaglione, Carmela Dell'Aversano, Christopher O. Miles, Daniel G. Beach, Pearse McCarron, Kaarina Sivonen, David P. Fewer, Jouni Jokela, Elisabeth M.-L. Janssen. 2021. Water Research, Volume 196, 117017.

The sensitivity of multiple ecotoxicological assays for evaluating Microcystis aeruginosa cellular algal organic matter and contribution of cyanotoxins to the toxicity

Kamila Šrédlová, Simona Šilhavská, Lucie Linhartová, Jaroslav Semerád, Klára Michalíková, Martin Pivokonský, Tomáš Cajthaml. 2021. Toxicon, Volume 195, 2021, 69-77.

Hunting the Eagle Killer: A Cyanobacterial Neurotoxin Causes Vacuolar Myelinopathy

Breinlinger et al. 2021. Toxicon, Volume 195, 2021, 69-77.

*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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