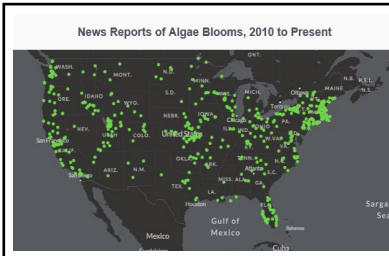


# Freshwater HABs Newsletter



## USEFUL RESOURCES FOR THE HABs SEASON

- [Health Advisories for Cyanotoxins in Drinking Water](#)
- [Recommendations for Public Water Systems to Manage Cyanotoxins in Drinking Water](#)
- [Cyanotoxin Management Plan Template and Example Plans](#)
- [Water Treatment Optimization for Cyanotoxins Document](#)
- [Drinking Water Cyanotoxin Risk Communication Toolbox](#)
- [Analytical methods for cyanotoxins](#)
- [Treatment Techniques for Cyanotoxins in Drinking Water](#)
- [EPA HABs Incident Action Checklist](#)
- [Possible Funding Sources for Managing Cyanobacterial Harmful Algal Blooms and Cyanotoxins in Drinking Water](#)
- [Recommended Human Health Recreational Ambient Water Quality Criteria or Swimming Advisories for Microcystins and Cylindrospermopsin](#)
- [Recommendations for Cyanobacteria and Cyanotoxin Monitoring in Recreational Waters](#)
- [Recreational Water Communication Toolbox for Cyanobacterial Blooms](#)
- [Control Measures for CyanoHABs in Surface Waters](#)
- [List of Laboratories Conducting Cyanotoxin Analysis](#)
- [Video: Tools for Addressing the Risks of Cyanotoxins in Public Water Systems](#)
- [Video: Protect your Pooch from Harmful Algal Blooms](#)
- [Video: Safeguards Drinking Water from Harmful Algal Blooms](#)
- [Idaho Department of Environmental Quality Cyanobacteria Workshop Toolkit](#)
- [Florida Department of Environmental Protection Interactive Algal Bloom Dashboard](#)
- [WRF State of Science: Harmful Algal Blooms – Guidance for Utilities Workshop Presentations](#)
- [CDC's HABs Health Promotion Materials](#)
- [CDC's Be Aware of Harmful Algal Blooms Page](#)

[Environmental Working Group \(EWG\) U.S. Interactive Map of Algae Blooms](#)

## UPCOMING EVENTS

### WEBINARS

[Partnering to Mitigate Harmful Algal Blooms across the Midwest and Beyond](#)

Wednesday, July 10, 2019  
2:00 to 3:00 pm CT

[CyAN App: Cyanobacteria Assessment Network Mobile Application](#)

Wednesday, July 24, 2019  
2:00 to 3:30 pm ET

### CONFERENCES

[10th US HAB Symposium](#)  
Nov 3-8, 2019  
Orange Beach, Alabama

[SETAC North America Annual Meeting, Benthic and Pelagic HABs and their Toxins: Detection, Fate, Effects, Monitoring and Management](#)  
Nov 3-7, 2019  
Toronto, Canada

This newsletter was created by [Dr. Lesley D'Anglada](#), Office of Science and Technology, Office of Water. 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.



To sign up for the newsletter send an email to [epacyanohabs@epa.gov](mailto:epacyanohabs@epa.gov)

Please visit the *EPA's CyanoHABs in Water Bodies* website [here](#).

## [EPA's Webinar: Planning for and Responding to Cyanotoxins in Recreational Waters](#)

On June 20, the Office of Science and Technology hosted a webinar focusing on available tool and approaches for assessing the risks and managing cyanobacteria and their toxins in recreational waters. The webinar also included presentations on HABs monitoring and surveillance efforts in New York State and a presentation on the lessons learned from the 2018 Microcystin dogs poisoning in Stuart, Florida. Presentations and recording of the webinar are posted [here](#).

## **10<sup>th</sup> US HABs Symposium November 3-8, 2019 at Orange Beach, Alabama**

The 10<sup>th</sup> US Harmful Algal Bloom Symposium website (<http://ushabs.com/>) was recently updated with the schedule that includes many exciting events, including five workshops, three plenaries, four events targeted for early career scientists, three special sessions, many contributed sessions, a stakeholder meeting, a town hall meeting, and several fun social events.

If you have not yet registered, please do so before the early bird deadline (**August 31, 2019**) to save some money. Abstract submissions and workshop registrations will be considered up to August 31<sup>st</sup> or October 15<sup>th</sup>, respectively.

Travel grants for graduate students, postdocs, and managers are available to attend this meeting (special thanks to the National Oceanic and Atmospheric Administration National Centers for Coastal Ocean Science (NOAA/NCCOS)). The deadline to apply is **July 31, 2019**. Learn more about this opportunity at [http://ushabs.com/lib/travel\\_awards.pdf](http://ushabs.com/lib/travel_awards.pdf)

The Early Career Workshop will be held on Sunday, 3 November 2019, from 4:00pm to 5:45pm. All students, postdocs and early career scientists are encouraged to attend. The agenda is a mixture of information exchange amongst participants through elevator speeches and discussions with a panel of HABs scientists from diverse backgrounds. Please contact Molly Miller ([mmmiller@disl.org](mailto:mmmiller@disl.org)) if you have questions about this event.

Hotel Reservations: Don't forget to book your room at the beautiful Perdido Beach Resort as our reserved room block expires **October 3, 2019**. Reservations can be made by calling the hotel directly (800-634-8001) or using [their online reservations system](#). **Make sure to use our group code** – Group name: HAB Conference 2019, Booking ID# 16042 - **to obtain discounted group hotel rates**. Government participants will need to call the hotel to book their rooms at the government rate using this group code - Group name: HAB Conference 2019, Booking ID# 16471.

We very much look forward to seeing you at the beautiful Alabama coast this November!

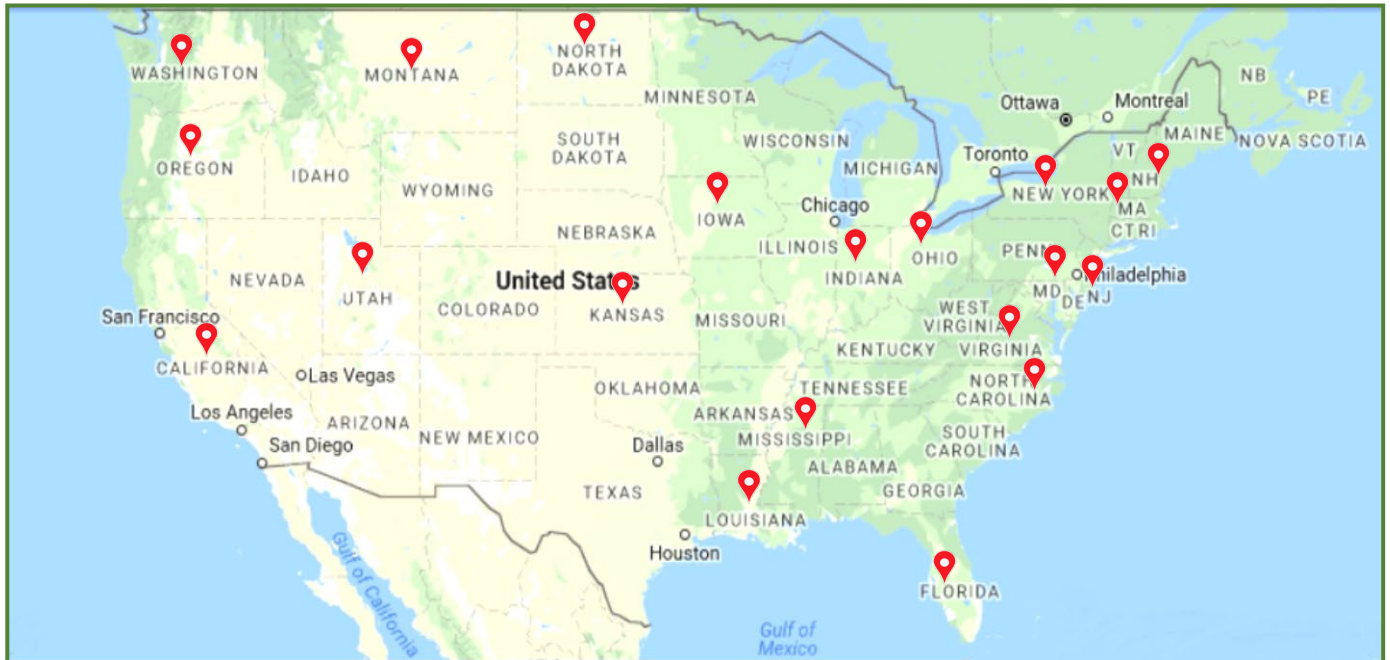
Alan Wilson, Alison Robertson, Matt Waters, Molly Miller, and Dave Hambright  
10<sup>th</sup> US Symposium on Harmful Algae Organizers



The [Cyanobacteria Assessment Network mobile application \(CyAN app\)](#) is free and available for download on Google Play™. It is designed for use on Android™ devices and is compatible with versions 4.2-8.0 (API levels 18-26). It is currently being developed as a web-based app, which will be compatible with most devices.

## Blooms, Beach Closures and Health Advisories\* June 2019

\* Include 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 or lakes are not actively monitored.



**California (14):** Stone Lagoon, Big Lagoon, Horseshoe Lake, Lake Anza, Lake Temescal, Lake Chabot, Quarry Lakes, Salt Springs Valley Reservoir, H.V Eastman Lake, Hensley Lake, San Luis Reservoir at Basalt Boat Launch, Lake San Antonio, Lake Cachuma, Lake Oroville Middle Fork

**Florida (9):** St. Johns River, Doctor's Lake, Crescent Lake, Lake Okeechobee, Dead Lake, Flint Creek, Manatee River, Branden River, Caloosahatchee River,

**Indiana (4)** Kunkel Lake, Cecil M. Hardin Lake, Whitewater Lake, Hardy Lake

**Iowa (1):** Green Valley Beach

**Kansas (10):** Big Eleven Lake, Carbondale East Lake, Gathering Pond, Jerry Ivey Pond, Keith Sebelius Reservoir, Lake Shawnee, Marion County Lake, Marion Reservoir, Rock Garden Pond, Webster Reservoir

**Louisiana (1):** Lake Pontchartrain (Mandeville Beach)

**Massachusetts (4):** Shubael Pond, Santuit Pond, White Pond, Lake Dennison

**Maryland (1):** *Prorocentrum minimum* (308 cells/mL) at Harris Creek, reported as *HAB Present* by MDDNR

**Montana (1):** Canyon Ferry

**Mississippi (7)** Long Beach, Gulfport Beach, Christian Beach, Waveland Beach, Bay St. Louis Beach, Buccaneer State Park Beach, Lakeshore Beach

**New Hampshire (3):** Hunkins Pond, Elm Brook, Pelham Town Beach

**New Jersey (7):** Deal Lake, Sunset Lake, Spruce Run Reservoir, Spruce Run Reservoir, Swartswood Lake, Lake Mohawk, Lake Hopatcong

**New York (35):** Lake Lincolndale, Song Lake, Prospect Park Lake, The Lake in Central Park, Tanglewood Lake, Barrett Pond, Laurel Lake, Lake Ronkonkoma, Maratooka Lake, Roth Pond, Cross Lake, Hiawatha Lake, Smith Pond, Orange Lake, Cross Lake, Agawam Lake, Lake Neatahwanta, Tuscarora Lake, Lake Salubria Mill, Pond (Watermill), Wainscott Pond, Goose Pond, Wainscott Pond, Rockland Lake, Lake Mohegan, Unnamed pond Chestnut Ridge Park, Beaver Lake, Lake Purdy, Silver Lake, Lake Mohegan, Craine Lake, Goose Pond, Prospect Park, Lake Harlem, Meer Duane Lake

**North Carolina (3):** Perquimana River, Chowan River, Little River

**North Dakota (1):** Harmon Lake

**Ohio (3):** Grand Lake St. Marys, Maumee Bay Lake, Buckeye Lake-Crystal Beach

**Oregon (2):** Lake Billy Chinook, South Umpqua River

**Utah (3):** Calder Reservoir, Utah Lake, Matt Warner Reservoir

**Virginia (2):** York River Purtan Bay, Poropotank Bay

**Washington (8):** Gibbs Lake, Lake Leland, Crocker Lake, Anderson Lake [Round Lake](#), [Rufus Woods Lake](#), [Kitsap Lake](#), [Vancouver Lake](#)



## ACTIVE BLOOMS PICTURES

Lake Billy Chinook, Oregon June 16, 2019 Pictures by Dr. Daniel Sobota

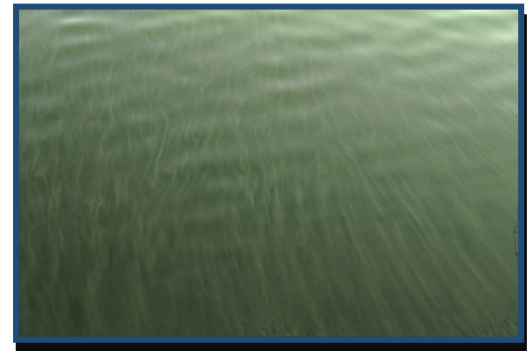


Overlook where Deschutes and Crooked River arms join in Lake Billy Chinook.



“Break” line where Metolius River joins Lake Billy Chinook.

Dolichospermum (Anabaena) in Lake Billy Chinook.



### Recently Published Articles

#### [The Prevalence of Cyanobacteria: A historical perspective from lake sediment](#)

William Hobbs and Siana Wong, Environmental Assessment Program, Department of Ecology, State of Washington. Publication No. 19-03-011.

#### [Scaling Up from Regional Case Studies to a Global Harmful Algal Bloom Observing System](#)

Anderson Clarissa R., Berdalet Elisa, Kudela Raphael M., Cusack Caroline K., Silke Joe, O'Rourke Eleanor, Dugan Darcy, McCammon Molly, Newton Jan A., Moore Stephanie K., Paige Kelli, Ruberg Steve, Morrison John R., Kirkpatrick Barbara, Hubbard Katherine, Morell Julio. *Frontiers in Marine Science*, No.6, 2019.

#### [A Comprehensive Review: Development of Electrochemical Biosensors for Detection of Cyanotoxins in Freshwater](#)

Vasileia Vogiazzi, Armah de la Cruz, Siddharth Mishra, Vesselin Shanov, William R. Heineman, Dionysios D. Dionysiou. *ACS Sens*, 2019, 451, 151-1173.