United States Environmental Protection Agency

September 2019

Freshwater HABs Newsletter

Cincinnati, Ohio September, 2019

EPA's Request for Comments to Inform the Development of a Policy to Determine HAB and hypoxia Events of National Significance in Marine and Coastal Waters

On Monday, September 16th, the USEPA published a Federal Register notice requesting public comment to inform the development of an Agency policy for determining if a harmful algal bloom (HAB) or hypoxia event in freshwater is an "event of national significance." Recent amendments to the Harmful Algal Bloom and Hypoxia Research and Control Act (HABHRCA) provide the EPA with the statutory authority to make such a determination in the case of a freshwater HAB or hypoxia event. Under HABHRCA, the EPA is responsible for addressing HAB and hypoxia in fresh water and NOAA is responsible for the same in marine and coastal waters. A federal determination that such an occurrence is an event of national significance enables mobilization of federal resources to assess and mitigate its detrimental effects, subject to the availability of appropriations. Using public input, and in coordination with NOAA, the EPA will develop a policy for making a determination of a freshwater HAB or hypoxia event of national significance and subsequently seek public comment on that draft policy.

Members of the public may submit comments on the EPA's notice for 45 days (until October 31st, 2019). Access the notice and public docket via EPA's website *here*.

Benthic HAB Workgroup Webinar

The Benthic HABs discussion group will hold a webinar on October 30th from 12:30pm to 2:00pm (Pacific Daylight Time) on *Cryptic Cyanotoxin Producer in Benthic Mats* by Keith Bouma-Gregson. In addition to our featured presenter, the group will discuss issues related to benthic HABs, group survey results, and plans moving forward for the workgroup.

Useful Resources

- ✓ **EPA's Fish and Shellfish Program Newsletter – August 2019**
- ✓ **Surfrider Foundation's Beach Water Quality Monitoring Programs in Coastal States**
- ✓ **NOAA's Lake Erie Harmful Algal Blooms Bulletin**
- ✓ **NRDC's 2008 to 2018 HABs Map**

UPCOMING EVENTS

Webinar

Benthic HABs Discussion Group
October 30th, 2019
12:30-2:00pm (PT)

Conferences

10th US HAB Symposium
Nov 3-8, 2019
Orange Beach, Alabama

Important Links:
- ✓ **Conference Schedule**
- ✓ **Plenaries Speakers**
- ✓ **Registration**

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

Please visit the *EPA's CyanoHABs in Water Bodies* website **here**.

'See a Bloom, Give it Room' High School Video Challenge!

The US EPA Regions 7 and 8 is calling on high school students in both regions to help the EPA promote awareness of harmful algal blooms through creative filmmaking.

The Challenge
Make an informational video about:
1) How to spot harmful algal blooms, and
2) How to be safe around them.

Deadline
January 3, 2020 11:00 PM ET

The Incentive
Winning individuals or teams for each state and two regional tribal winners will receive a $2,000 cash prize. Two grand prize winners will also be selected to receive $4,000. In addition to cash prizes, winning videos will be posted on the EPA web page, used for educational outreach, and announced on February 5th, 2020 during the EPA Harmful Algal Blooms Workshop in Lenexa, Kansas.

Eligibility
Entrants must be students in grades 9-12 and reside in EPA Region 7 or Region 8, which includes: Iowa, Kansas, Missouri, Nebraska, Montana, North Dakota, South Dakota, Wyoming, Utah, Colorado, and 36 tribal nations.

Be creative, have fun, and be part of the solution!

HAB Affecting Portions of the Ohio River in Ohio, Indiana and Kentucky

States affected by the bloom have posted recreational advisories and bulletins to inform the public on the affected recreational activities and the safety of the drinking water.

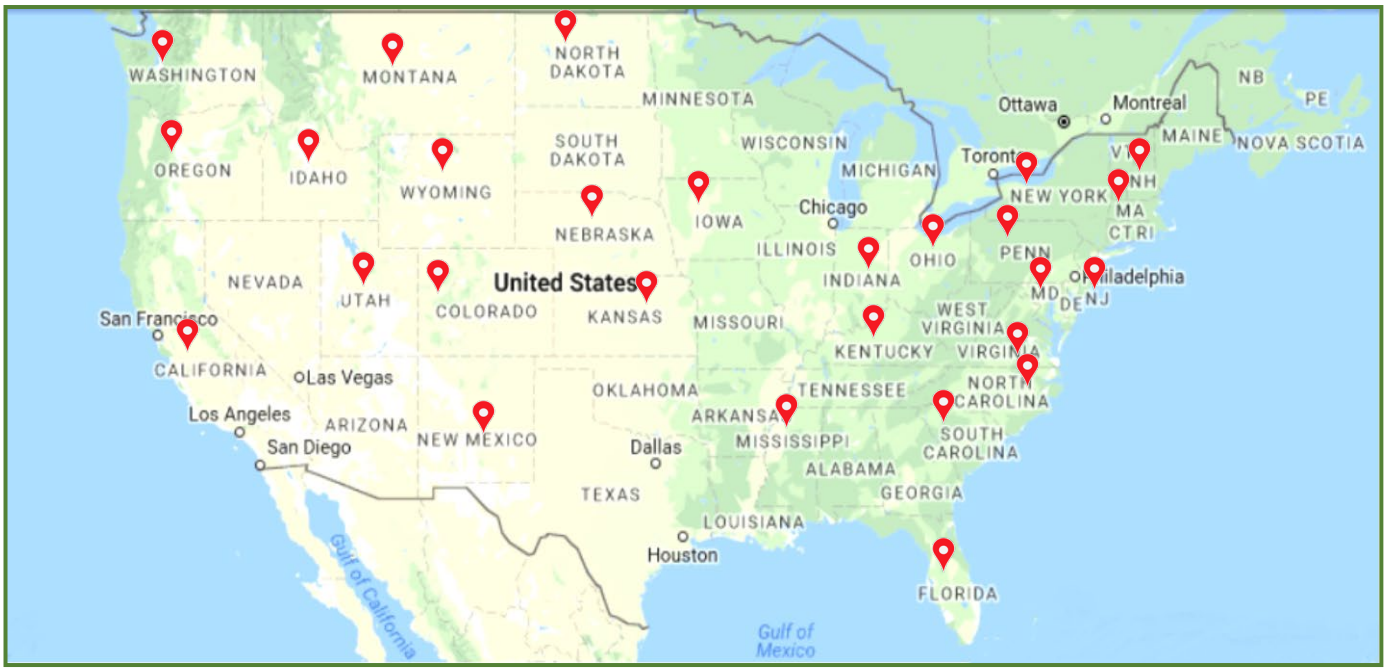
- Kentucky Division of Water's Recreational Advisory Statement
- Cincinnati Water Works and Cincinnati Health Department's Statement
- Indiana Department of Environmental Management's Statement
- Hamilton County Health Department's Statement
- The Great Ohio River Swim Postponement Statement

The Ohio River Valley Water Sanitation Commission (ORSANCO) is working closely with the affected States to monitor the HABs in the Ohio River. For more information on ORSANCOS monitoring program go ***here***.

Photo by Stacey Cochran, ORSANCO

Blooms, Beach Closures and Health Advisories* September 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 (25): Corpco Reservoir, Iron Gate Reservoir, Klamath River, Eel River, Ralphine Lake, Rincon Valley Community Dog Park, Spring Lake, Lake Anza, Lake Chabot, Lake Temescal, Quarry Lakes, Castaic Lake, Pyramid Lake, Big Break Regional Shoreline Area, Clear Lake, Schindler Creek, Lake Isabella, Laguna Creek, San Luis Reservoir, West of Sulphur Bank Mercury Mines, Diaz Lake, Lake Baron, Red Lake, Silverwood Lake, Star Lake

Florida (10): Lake Okeechobee, Cape Coral, Cresent Lake, Elevenmile Creek, Lake Buffum, Lake Trafford, L-40 Canal, Rim Canal, Scott Lake, Sewell Lock

Idaho (16): Cascade Reservoir, Hordemann Pond, Winchester Lake, Salmon Falls Creek Reservoir, Fernan Lake, Mormon Reservoir, Blacks Creek Reservoir, Mountain Home Reservoir, Indian Creek Reservoir, Magic Reservoir, Lake Lowell, Little Cama Reservoir, Thorn Creek Reservoir, Twin Lakes, Snake River, Brownlee Reservoir

Indiana (8): Lake James, Worster Lake, Mississinewa Lake, Cecil M. Hardin Lake, Brookeville Lake, Monroe Lake, Hardy Lake, Whitewater Lake

Kansas (23): Watches (Big Eleven Lake, Camp Hawk Lake, Carousel Lake, Hodgeman Country State Fishing Lake, Lake Afton, Lebo Kid's Pond, Neocho Country State Fishing Lake, Rock Garden Pond In Gage Park, South Lake), Warnings (Atchison Country Park Lake, Elk Horn Lake, Gathering Pond (Hatchery Supply Pond), Hiawatha City Lake, Jerry Ivey Pond, Lake Jeanette, Lakewood Park Lake, Marion Country Lake, Meadowbrook Park Lake, Melvern outlet Pond, Melvern Outlet Swin Pond, Webster Reservoir, Westlake in Gage Park, Yates Center Kids' Fishing Pond)

Kentucky (3): Lake Malone, Briggs Lake near Russellville, Ohio River (Bordering Indiana and Ohio from the McAlpine Dam near Louisville to the Greenup Dam near Greenup)

Maryland (2): Piscataway Creek, Potomac River

Massachusetts (14): Arlington Reservoir, Billington Sea, Hopkinton Reservoir, Lake Boone, Lake Cochituate, Lake Holbrook, Lake Massapoag, Lake Warner, Magnolia Pond, Plunkett Reservoir, Round Pond, Santuit Pound, Triangle Pond, West Reservoir

Mississippi (28): Pascagoula Beaches, Shearwater Beach, Front Beach, Biloxi Beachs, Edgewater Beach, Gulfport Beaches, East Courthouse Road Beach, Long Beach Beach, Pass Christian Beaches, Bay St. Louis Beach, Waveland Beach, Buccaneer State Park Beach, Lakeshore Beach, Gulfport, Long Beach, Pass Christian, Bay St. Louis Small Craft Harbor, Long Beach Small Craft Harbor, Pass Christian Small Craft Harbor

Montana (4): North Fork of Flathead River, Willow Creek, Cooney Reservoir, Medicine Lake

Nebraska (3): Rockford Lake, Wagon Train Lake, Willow Creek Reservoir

New Hampshire (4): Keyser Pond, Showell Pond, Morison Pond, Tucker Pond'

New Jersey (28): Elmer Lake, East Lake, Pemberton Lake, Lake Ceva, Daretown Lake, Avis Mill Pond, Slabtown Lake, Salem River (Between Avis Mill Pond and Slabtown lake), Unnamed Pond in Burlington County, Lake Owassa, Deal Lake, Sunset Lake, Spruce Run Reservoir, Lake Hopatcong, Rosedale Lake, Greenwood Lake, Budd Lake, Musconetcong Lake, Stacy Pond, Memorial Lake, Rogerene Lake, Dramasei Park Lake, Sussex Co. Fire Academy Pond, Papaianni Lake, Sylvan Lake, Amico Island Pond, Branch Book Park Lake

New York (54): Washington Park Lake, Agawam Lake, Mountain Lake, Canadice Lake, Prospect Park Lake, The Lake in Central Park, Turtle Pond, Washington Park Pond, Lake Lincolndale, Loon Lake, Peach Lake, Clove Lake, Lake Neatahwanta, Nassau Lake, Canandaigua Lake, Song Lake, Chautauqua Lake, Seneca Lake, Cazenovia Lake, Little Fresh Pond, Skaneateles

Lake, Honeoye Lake, Owasco Lake, Sturgeon Pool, Harlem Meer, East Sidney Lake, Wainscott Pond, Craine Lake, Guymard Lake, Orange Lake, Cuba Lake, Conesus Lake, Indian Pond, Sheldrake Lake, Morningside Pond, Maratooka Lake, Goose Pond, Saratoga Lake, Butterfield Lake, Kissena Lake, Fresh Pond, Java Lake, Cossayuna Lake, Melody Lake, Barger Pond, Old Town Pond, Roaring Brook Lake, Deer Lake, Tanglewood Lake, Lake Lucille, Montgomery Lake, Sleepy Hollow Lake, Findley Lake, Bedford Lake
New Mexico: Cochiti Lake
North Carolina (3): Fox Pond, Lake Norman, Lake Luke Marion
North Dakota (19): Lake Metigoshe, Stump Lake, Beaver Lake, Homme Dam, Buffalo Lake, Jamestown Dam, Dry Lake, Long Lake NWR, Blumhardt Lake, Wilson Dam, Schlecht-Thom Dam, Flood Lake, Patterson Lake, Bowman-Haley Dam, Devils Lake, Sweetbriar Lake, Larson Lake, Froelich Dam, Harmon Lake
Ohio (2): Grand Lake St. Mary's, Buckeye Lake
Oregon (2): South Tenmile Lake, North Tenmile Lake
Pennsylvania (3): Lake Cliff Boat Launch, Grahamville Reservoir, Presque Isle State Park –exceeding dog safety thresholds
Rhode Island (10): Melville Ponds, Sisson Pond, Roosevelt Lake, Pleasure Lake, Mashapaug Pond, JL Curran Reservoir, Elm Lake, Almy Pond, Carbuncle Pond, Little Pond (aka Sandy)
South Carolina (1): Lake Wateree
Utah (26): Calder Reservoir, Deer Creek Reservoir, East Canyon Reservoir, Echo Reservoir, Forsyth Reservoir, Holmes Creek Reservoir, Millrace Pond, Kents Lake, Lower box Creek Reservoir, Manning Meadow Reservoir, Mantua Reservoir, Matt warner Reservoir, Mill Meadow reservoir, Minersville Reservoir, Newcastle Reservoir, Otter Creek Reservoir, Panguitch Lake, Payson Lakes, Pineview Reservoir, Piute Reservoir, Rockport Reservoir, Scofield Reservoir, Utah Lake, Upper Box Creek Reservoir, Upper Kents Lake, Yuba Lake
Vermont (4): High alerts (Crane Brook, Lake Carmi, Multiple locations on Lake Champlain, Lake Memphremagog)
Virginia (7): Multiple Points on Lake Anna
Washington (14): Ohop Lake, Pattison Lake, Rapjohn Lake, Silver Lake, Cascade Park, Moses Lake, Pass Lake, Spanaway Lake, Lake Terrell, Leland Lake, Duck lake, Lone Lake, McNary Slough, Rufus Woods Lake
Wyoming (16): Keyhole Reservoir, Lake Viva Naughton, Kemmerer City Reservoir, Fontenelle Reservoir, Flaming Gorge Reservoir, Wheatland Reservoir #1, Festo Lake, Ocean Lake, Saratoga Lake, Pathfinder Reservoir, Boysen Reservoir, Wheatland Reservoir #3, Eden Reservoir, Toltec Reservoir, Leazenby Lake, Woodruff Narrows Reservoir

Recently Published Articles

A web based analysis and scenario tool for eutrophication of inland waters for Sweden and Europe
Lena Strömbäck, Charlotta Pers, Johan Strömqvist, Göran Lindström, Jens Gustavsson. Environmental Modelling & Software, Volume 111, 2019, Pages 259-267.

Mixture designs to investigate adverse effects upon co-exposure to environmental cyanotoxins
Rubia M. Martin, Jonathan Stallrich, Michael S. Bereman. Toxicology, Volume 421, 2019, Pages 74-83.

A laboratory based exposure of Microcystis and Oscillatoria cyanobacterial isolates to heterotrophic bacteria
L.L. Ndlela, P.J. Oberholster, J.H. Van Wyk, P.H. Cheng, Toxicon, Volume 165, 2019, Pages 1-12.

Multi-factor identification and modelling analyses for managing large river algal blooms
Rui Xia, Yuan Zhang, Gangsheng Wang, Yongyong Zhang, Ming Dou, Xikang Hou, Yunfeng Qiao, Qiang Wang, Zhongwen Yang, Environmental Pollution, Volume 254, Part B, 2019, 113056.

Control wildfire-induced Microcystis aeruginosa blooms by copper sulfate: Trade-offs between reducing algal organic matter and promoting disinfection byproduct formation
Kuo-Pei Tsai, Habibullah Uzun, Huan Chen, Tanju Karanfil, Alex T. Chow, Water Research, Volume 158, 2019, Pages 227-236.