

## July 2019

# **Freshwater HABs Newsletter**

### USEFUL EPA'S COMMUNICATION RESOURCES for the HABs SEASON

Infographic and ready-to-use downloadable templates and graphics to develop risk communication materials, including: press releases, drinking water advisories, recreational criteria/swimming advisories, social media and text alerts, talking points and messages for consumers and recreators, frequently asked questions and factsheets. Click here to access the <u>Drinking Water</u> <u>Cyanotoxins Risk Communication Toolbox</u> and here to access the <u>Tools</u> to <u>Communicate about</u> <u>CyanoHABs in Recreational Waters</u>



#### NOAA'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

NOAA is requesting public input on the criteria that it will use to determine HAB and hypoxia "events of national significance" in marine and coastal waters. The proposed language and instructions for providing input are in a Federal Register notice and are summarized below. The recent reauthorization of the Harmful Algal Bloom and Hypoxia Research and Control Act (HABHRCA) (Public Law 115-423) requires NOAA to determine whether HAB and hypoxia events are of national significance in marine and coastal waters. Upon such a determination "...the appropriate Federal official is authorized to make sums available to the affected State or local government for the purposes of assessing and mitigating the detrimental environmental. economic, subsistence use, and public health effects of the event..."

Factors to be considered in making a determination include the toxicity of a HAB, severity of hypoxia, potential for spread, economic impact, relative size in relation to the past five occurrences, and the geographic scope. NOAA is accepting comments to inform the development of the policy for assessing these considerations and whether additional factors should be considered. The determination process optimally will include quantitative and qualitative means of assessment. The agency will publish the draft policy for formal public review and comment later this year.

Please <u>refer to this webpage</u> or the Federal Register Notice for more specific information on the elements that NOAA would like to consider, and for details about providing feedback.



Willow Creek Reservoir Nebraska, July 2019

#### **UPCOMING EVENTS**

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 <u>Dr. Lesley</u> <u>D'Anglada</u>, 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.

#### Blooms, Beach Closures and Health Advisories\* July 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): Lake Chabot, San Luis Reservoir, Lake Perris, Moreno Swim Beach, Lake Anza, Castaic Lake, Silverwood Lake, Pyramid Lake, Castaic Lake, Lake Temescal, Lake Gregory, Whelan Lake, Willow Lake, Stanislaus River upstream of New Melones Lake, Clear Lake, Upper Blue Lakes, Iron Gate Reservoir, Copco Reservoir, Quarry Lakes, Lake Oroville, Stone Lakes National Wildlife Refuge, Ward Island, San Joaquin River, Sawpit Swim Beach

Florida (10): Yalaha Canal and Lakeshore Drive, Lake Weir near Eatons Beach, St. Johns River, Doctor's Lake, Lake Okeechobee, Lake George, Lake Stella, Flint Creek, Buzzard Island, Cocoa Beach

Idaho (4): Brownlee Resevoir, Salmon Falls Creek Resevoir, Fernan Lake, Mormon Reservoir

Indiana (7) Kunkel Lake, Cecil M. Hardin Lake, Whitewater Lake, Hardy Lake, Brookville Lake, Worster Lake, Salamonie Lake Iowa (3): Green Valley Beach, Lake of Three Fires Beach, Lake Darling

Kansas (16): Big Eleven Lake, Gathering Pond (Hatchery Supply Pond), Hiawatha City Lake, Hodgeman County State Fishing Lake, Jerry Ivey Pond, Keith Sebelius Reservoir, Lake Afton, Lake Shawnee, Lebo Kids' Pond, Lovewell Reservoir, Marion County Lake, Marion Reservoir, Rock Garden Pond in Gage Park, South Lake, Villa High Lake, Westlake in Gage Park Louisiana (1): Lake Pontchartrain (Mandeville Beach)

Massachusetts (8): Billington Sea, Charles River below the Boston University Bridge, Chauncy Lake, Devol Pond, Long Pond Marstons Mills, Lovells Pond, Santuit Pond, Shubael Pond

Montana (2): Hauser Reservoir; Hauser-Causeway

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

Nebraska (2): Willow Creek Reservoir, Harlan County Reservoir

New Hampshire (3): James Pond, Elm Brook, Keyser Pond

New Jersey (3): Rosedale Lake, Swartswood Lake, Greenwood Lake

<u>New York</u> (**36**): Dryden Lake, Lake Neatahwanta, Honeoye Lake, Hemlock Lake, Greenwood Lake, Roth Pond, Maratooka Lake, Java Lake, Wallkill Pond, Oneida Lake, Lake Champlain, Peach Lake, Wilcox Memorial Park, North Lake, Barger Pond, Lake Casse, Hemlock Lake, Cayuga Lake, Silver Lake, Findley Lake, Meizinger Lake, Lake Mohegan, Lake Tiorati, Long Pond, Big Reed Pond, Agawam Lake, Mill Pond (Watermill) Lake, Peekskill Lake, Ontario Prospect Park Lake, Washington Park Pond, Roth Pond, Tully Lake, Beaver Lake, Trachtman Pond, Barger Pond, Onondaga Lake

North Carolina (4): Sweet Martha Pond, NE Cape Fear River, Chowan River, Little River

North Dakota (2): Harmon Lake, Sweetbriar Lake

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

**<u>Oregon</u> (6):** Brownlee Reservoir, Upper Klamath Lake, Lake Billy Chinook, South Umpqua River, South Lake at Tenmile Lake, Cullaby Lake

Utah (4): Calder Reservoir, Utah Lake, Matt Warner Reservoir, McClellen Lake

Virginia (2):

Washington (8): Gibbs Lake, Lake Leland, Crocker Lake, Anderson Lake <u>Round Lake, Rufus Woods Lake</u>, Cottage Lake, <u>Vancouver Lake</u>, Moses Lake, Lake Minterwood, Hicklin Lake

## **ACTIVE BLOOMS PICTURES**

Jackson Lake, Colorado on July 16, 2019 Pictures by Kyla Reinir, Colorado Parks and Wildlife



Nontoxic *Plantothrix* bloom, Boat ramp in Jackson Lake, Colorado.

## **Recently Published Articles**

<u>Characterization of Cyanophages in Lake Erie: Interaction Mechanisms and Structural Damage</u> of Toxic Cyanobacteria

Xuewen Jiang, Chanhee Ha, Seungjun Lee, Jinha Kwon, Hanna Cho, Tyler Gorham and Jiyoung Lee. *Toxins* 2019, 11, 444.

**Economic impact of harmful algal blooms on human health: a systematic review** Christian R. C. Kouakou and Thomas G. Poder. J Water Health (2019) 17 (4): 499-516.

<u>Mixture designs to investigate adverse effects upon co-exposure to environmental</u> <u>cyanotoxins</u>

Rubia M. Martin, Jonathan Stallrich, Michael S. Bereman. Toxicology, Volume 421, 2019, Pages 74-83.

Demonstrated transfer of cyanobacteria and cyanotoxins along a freshwater-marine continuum in France

Myriam Bormans, Zouher Amzil, Emilien Mineaud, Luc Brient, Véronique Savar, Elise Robert, Emilie Lance. Harmful Algae, Volume 87, 2019,101639.

A Fast Detection Strategy for Cyanobacterial blooms and associated cyanotoxins (FDSCC) reveals the occurrence of lyngbyatoxin A in campania (South Italy)

Germana Esposito, Roberta Teta, Raffaele Marrone, Carlo De Sterlich, Marco Casazza, Aniello Anastasio, Massimiliano Lega, Valeria Costantino. Chemosphere, Volume 225, 2019, Pages 342-351.