

Freshwater HABs Newsletter



FUNDING OPPORTUNITIES

EPA's Approaches to Reduce Nutrient Loadings for Harmful Algal Blooms (HABs) Management Request

The U.S. Environmental Protection Agency (EPA), as part of its Science to Achieve Results (STAR) program announces the release of the Approaches to Reduce Nutrient Loadings for Harmful Algal Blooms Management Request for Applications (RFA). EPA is seeking research on nutrient treatment technologies, best management practices, and agricultural conservation practice systems to reduce excess nutrient loadings and thereby prevent and control HABs. EPA aims to promote scientific progress towards preventing and controlling harmful algal blooms by seeking applications proposing research to:

- 1. Determine the effectiveness of existing nutrient treatment technologies.
- 2. Evaluate the scale-up of emerging nutrient treatment technologies and develop new technologies.
- 3. Develop best management practices to help both rural and urban communities control nutrients in their watersheds.

Close Date: <u>December 10, 2019</u> For information on eligibility, project specifications, or to apply go <u>here</u>.

***An Informational Webinar will be held on November 6 at 2:00 p.m. EST. Click here to register.

NOAA's Proposals for the Prevention, Control and Mitigation of Harmful Algal Blooms (PCMHAB) and HAB Socioeconomics Research Programs

The NCCOS Competitive Research Program (CRP) has posted <u>Fiscal Year 2020 Federal Funding Opportunities</u> (FFOs) for the Prevention, Control and Mitigation of Harmful Algal Blooms (PCMHAB) program and Harmful Algal Bloom (HAB) Socioeconomics Research program. The deadline for Letters of Intent for both programs is November 11, 2019, and for full applications is January 10, 2020.

The HAB Socioeconomic program funds socioeconomic research to assess impacts of the social and economic costs of HAB events as well as the costs and benefits of prevention, control, and mitigation efforts.

The PCMHAB Program supports the development, improvement and implementation of new and innovative prevention, control and mitigation technologies and strategies to help address the ever growing HABs issue in every state, in addition to supporting the socioeconomic research that assesses the impacts of HAB events.

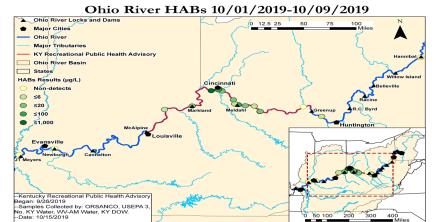
These programs expect to fund up 6 projects at the level of \$200,000 to \$400,000 per year per proposal, for up to three years in duration. In addition, 1-2 large projects up to 4 years in duration are expected to be funded under PCMHAB at approximately \$600,000 per year per proposal. The focus of PCMHAB is to develop, demonstrate, and make widely available new socially and environmentally acceptable strategies and methods for preventing, controlling, and mitigating HABs and their impacts.

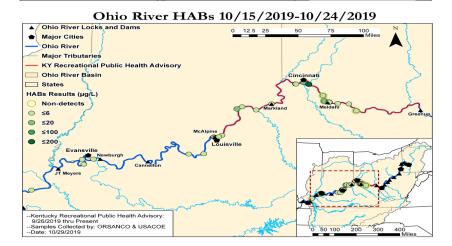
To sign up for the newsletter send an email to epacyanohabs@epa.gov

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

This newsletter was created by <u>Dr. Lesley 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.

Chronology of a Bloom - Ohio River HABs Monitoring





On Oct. 22, the U.S. EPA unveiled an updated the <u>Great Lakes Restoration Initiative (GLRI) Action Plan III</u> to guide the actions of federal agencies and their many partners over the next 5 years to protect and restore the Great Lakes — fueling local and regional economies and community revitalization efforts across the basin. The US EPA also announced \$11 million in funding for grants to support GLRI projects in Michigan.

EPA's Hypoxia Task Force Newsletter October 2019 – provides information about the HTF, highlight recent state activities, and include a snapshot of recent federal agency activities, publications, and resources.

Recently Published Articles

<u>Metatranscriptomic Analyses of Diel Metabolic Functions During a</u> <u>Microcystis Bloom in Western Lake Erie (United States)</u>

Davenport Emily J., Neudeck Michelle J., Matson Paul G., Bullerjahn George S., Davis Timothy W., Wilhelm Steven W., Denney Maddie K., Krausfeldt Lauren E., Stough Joshua M. A., Meyer Kevin A., Dick Gregory J., Johengen Thomas H., Lindquist Erika, Tringe Susannah G., McKay Robert Michael L. Frontiers in Microbiology. Vol. 10, 2019, 2081

Study of cyanotoxin degradation and evaluation of their transformation products in surface waters by LC-QTOF MS

Cristina León, Clara Boix, Eduardo Beltrán, Gustavo Peñuela, Francisco López, Juan V. Sancho, Félix Hernández, Chemosphere, Volume 229, 2019, Pages 538-548.

REQUEST FOR COMMENTS

The Centers for Disease
Control and Prevention
(CDC), is requesting
comments on a proposed
information collection
project titled <u>Aerosols</u>
from cyanobacterial
blooms: Exposures and
health effects in a highly
exposed population.

The CDC will conduct a study of 50 people highly exposed to CyanoHABs to assess exposure to CyanoHAB aerosols and determine if exposure is associated with health symptoms and/or outcomes.

Comments are due on **Nov 18**, **2019**

You can submit comments to the Federal eRulemaking Portal here or by mail to: Jeffrey M. Zirger, Information Collection Review Office, Centers for Disease Control and Prevention, 1600 Clifton Road NE, MS—D74, Atlanta, GA 30329

To request more information contact Jeffrey M. Zirger, at 404–639–7570 or omb@cdc.gov

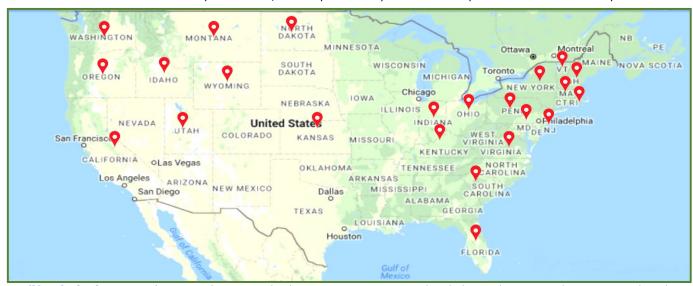
Useful Resource



California's Department of Water Resources (DWR) has created a video on HABs to help the public know how to spot HABs and understand why it's important to heed posted warning signs.

Blooms, Beach Closures and Health Advisories* October 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.



<u>California</u> (13): Caution (Castaic Lake, Pyramid Lake, San Luis Reservoir, Lake Chabot, Lake Temescal, Laguna Creek, Salt Springs Valley Reservoir, Whiskeytown Lake, Big Lake, Lake Britton); Danger (Quarry Lake, Lake Anza, Big Break Regional Shoreline Area)

Florida (10): Bayou Chico North of Barracas Ave, Blue Cypress Lake, Lake Carlton, Cresent Lake, Lake Denham, Lake Grace, Lake Okeechobee, Lake Olivia, Round Lake, Trout Lake

<u>Idaho</u> (12): Cascade Reservoir, Hordemann Pond, Winchester Lake, Fernan Lake, Mormon Reservoir, Blacks Creek Reservoir, Mountain Home Reservoir, Indian Creek Reservoir, Lake Lowell, Little Cama Reservoir, Thorn Creek Reservoir, Snake River, Indiana (8): Lake James, Worster Lake, Mississinewa Lake, Cecil M. Hardin Lake, Brookeville Lake, Monroe Lake, Hardy Lake, Whitewater Lake

Kansas (5): Watches (Gathering Pond, South Lake), Warnings (Jerry Ivey Pond, Lake Jeanette, Lakewood Park Lake)

Kentucky (7): Ohio River (Bordering Indiana and Ohio from the McAlpine Dam near Louisville to the Greenup Dam near Greenup and Markland), Briggs Lake

Maryland (2): Piscataway Creek, Potomac River

<u>Massachusetts</u> (10): Arlington Reservoir, Billington Sea, Lake Boone, Lake Holbrook, Lake Warner, Magnolia Pond, Plunkett Reservoir, Santuit Pound, Triangle Pond, South Wattupa Pond

Montana (1): Seeley Lake

New Hampshire (4): Showell Pond, Morison Pond, Tucker Pond, Hopkins Pond

New Jersey (22): Elmer Lake, East Lake, Pemberton Lake, Lake Ceva, Daretown Lake, Slabtown Lake, Unnamed Pond in Burlington County, Lake Owassa, Deal Lake, Sunset Lake, Lake Hopatcong, Rosedale Lake, Greenwood Lake, Budd Lake, Stacy Pond, Memorial Lake, Rogerene Lake, Dramasei Park Lake, Sussex Co. Fire Academy Pond, Papaianni Lake, Branch Book Park Lake New York (17): Prospect Park Lake, Goose Pond, Chautauqua Lake, Wainscott Pond, Raquette Lake, Roth Pond, Wainscott Pond, Kellis Pond, Agawam Lake, The Lake in Central Park, Lake Neatahwanta, Indian Pond, Seneca Lake, Song Lake, Tully Lake, Hatch Lake, Croton Falls Reservoir

North Dakota (9): Lake Metigoshe, Homme Dam, Buffalo Lake, Jamestown Dam, Blumhardt Lake, Sweetbriar Lake, Larson Lake, Froelich Dam, Devils Lake

Ohio (2): Grand Lake St. Mary's, Buckeye Lake

Oregon (4): South Tenmile Lake, North Tenmile Lake, Lake Billy Chinook, South Umpqua River and Lawson Bar

Pennsylvania (5): Elk Creek, Shades Beach, Erie Yacht Club, Shades Beach, Freeport Beach—exceeding dog safety thresholds Rhode Island (9): 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

<u>Utah</u> (29): Calder Reservoir, Deer Creek Reservoir, East Canyon Reservoir, Echo Reservoir, Forsyth Reservoir, Holmes Creek Reservoir, Jordan River and Canals, Jordanelle Reservoir, Kents Lake, Lower Box Creek Reservoir, Manning Meadow Reservoir, Mantua Reservoir, Matt Warner Reservoir, Maybey Pond, Mill Meadow Reservoir, Minersville Reservoir, Newcastle Reservoir, Otter Creek Reservoir, Panguitch Lake, Pineview Reservoir, Piute Reservoir, Rockport Reservoir, Scofield Reservoir, Starvation Reservoir, Strawberry Reservoir, Utah Lake, Upper Box Creek Reservoir, Upper Kents Lake, Yuba Lake

Vermont (14): High alerts (Eagle Bay, Lighthouse Point Rd, South Cove Beach, South West Shore Rd, Sunset Acres, Newport City Dock, Newport Marina, Treadswell Bay, Beech Bay, Lake Carmi, Mud Point, St. Albans Bay Park, Hathaway Point Rd, Crane Brook) Virginia (2): Wilcox Lake, Multiple Points on Lake Anna

Washington (7): Duck Lake, Moses Lake, Spanaway Lake, Wagner Lake, Harts Lake, Silver Lake, Pass 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