

Freshwater HABs Newsletter



Lake Tschida, ND, 2017
Courtesy of Mike Ell,
[North Dakota Department of Health](#)

EPA Releases Materials for Cyanobacterial Bloom Management in Recreational Waters

EPA has released several materials to assist public health officials, States and communities interested in [monitoring and responding to cyanobacteria and cyanotoxins in recreational waters](#). These materials also include a [recreational water communication toolbox for cyanobacterial blooms](#) and a [recommendations document for monitoring for cyanobacteria and cyanotoxins in recreational waters](#).

For more information on cyanobacteria and their toxins in recreational waters please visit the EPA's CyanoHABs Website at <https://www.epa.gov/nutrient-policy-data/guidelines-and-recommendations#what3>

UPCOMING EVENTS

Workshops/Webinars [WRF Cyanotoxin Webcast Series](#)

[August 15 - Treatment](#)

[OSU's Workshops](#)

Dealing with Cyanobacteria
Algal Toxins and Taste & Odor
Compounds

[August 7-8, 2017](#)

[August 9-10, 2017](#)

Algae ID Workshop

[August 7-8, 2017](#)

[August 9-10, 2017](#)

[Taxonomic ID of Harmful Algae in U.S. Marine Waters](#)

August 13-23, 2017
East Boothbay, ME

Conferences

[6th International Symposium Marine and Freshwater Toxins Analysis](#)

October 22-25, 2017
Baiona, Spain

[9th Symposium on Harmful Algae](#)

November 11-17, 2017
Baltimore, MD

[19th International Conference on Harmful Algae](#)

December 18-19, 2017
San Diego, CA

EPA is Using Fluorescent Microscopy to Detect Cyanobacteria



1: Discovery Lake, NIEHS/EPA Campus, NC. 2: *Lyngbya* bloom at Discovery Lake (Courtesy of Bill Willis, NIEHS). 3: *Microcystis aeruginosa* (fluorescence). Cyanobacteria in red and algae in green (Courtesy of Bob Zucker, ORD).

EPA's Office of Research and Development is using flow cytometry, microscopy and hyperspectral imaging to distinguish between either algae or cyanobacteria in lakes. Cyanobacteria is distinguished from algae using a fluorescent microscope that selectively excited different photosynthetic pigments in the two species with different wavelengths of light (Picture 3). With these techniques, EPA can also detect the percentage of live and dead cells in a water sample providing an overview of the composition of viable phytoplankton in the water sample under different growth conditions. For more information, contact Dr. Robert Zucker, National Health and Environmental Effects Research Laboratory, ORD, U.S. EPA at Zucker.Robert@epa.gov

More News and Important Links

- ✦ [Calls to poison control rise as algal bloom remains in Utah Lake](#)
- ✦ [Blue-green algae bloom kills 32 cattle in S. Oregon](#)
- ✦ [Robotic Underwater Lab Tracking Toxicity of Lake Erie Algal Bloom Video](#)
- ✦ [US EPA Fish and Shellfish Program Newsletter June Issue](#)
- ✦ [Ohio River Valley Harmful Algae Bloom Network](#)
- ✦ [NY Sea Grant Dogs and HABs Fact Sheet and Brochure](#)
- ✦ [NEW Toxins Publication:](#)

[Microcystin Prevalence Throughout Lentic Waterbodies in Southern California](#)

Meredith Howard, Carey Nagoda, Raphael Kudela, Kendra Hayashi, Avery Tatters, David A. Caron, Lilian Busse, Jeff Brown, Martha Sutula, Eric Stein. July 22, 2017. *Toxins*, 9(7), 231.

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

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States with HABs, Advisories and/or Beach Closures Reported in July 2017



HABs, BEACH CLOSURES and/or HEALTH ADVISORIES, JULY 2017

California: Iron Gate Reservoir, Lake Britton, Lake Temescal, Quarry Lakes Silverwood Lake, Castaic Lake

Florida: Doctor's Lake, Lake Okeechobee

Indiana: Cecil; M. Hardin Lake, Brookville Lake, Monroe Lake, Starve Hollow Lake, Hardy Lake, Deam Lake, Mississinewa Lake, Salamonie Lake, Sand Lake, Worster Lake, Whitewater Lake

Idaho: Little Camas Reservoir, Black Lake

Iowa: Black Hawk Beach, Nine Eagles Beach, Lake of Three Fires Beach, Green Valley Beach, Clear Lake, McIntosh Woods Beach, Lake Darling Beach, Lake Anita Beach, Denison Beach (for the presence of MCs)

Kansas: Overbrook City Lake, Sam's Pond, Webster Lake, Marion County Lake, Marion Reservoir, Milford Reservoir (all Zones), Geary, Wolf Pond, Lovells Pond – Barnstable

Maryland: Lake Needwood, Lake Frank

Massachusetts: Mystic River at Blessing of the Bay Boathouse, Lovells Pond, Savery Pond, Lake Siog, Tully Lake, Upper Mystic Lake, West Monponsett Pond

Nebraska: Kirkman's Cove Lake, Swan Creek Lake

New Hampshire: Pelham Town Beach, Long Pond, Silver Lake, Lake Monomonac

New York: Agawan Lake, Allegheny Reservoir, Beaver Lake, Bowne Pond, Burden Third Lake, Chautauqua Lake, Conesus Lake, Indian Lake, Java Lake, Kissena Lake, Lake Carmel, Lake Lacoma, Mill Pond, Mohegan Lake, Lake Montgomery, Morningside Pond, Nassau lake, Nooteming Lake, Old Town Pond, Oneida Lake, Otisco Lake, [Owasko Lake](#) Prospect Park Lake, Red House Lake, Roaring Brook Lake, Roth Pond, Sylvan Beach Smith Pond, The Lake in Central Park, turtle Pond,

North Dakota: Crimmins WPA Lake, Bowman-haley Reservoir, Lake Tschica, Patterson Lake, Channel A -Devis Lake

Ohio: Grand Lake St. Marys, Buckeye Lake - Crystal Beach and Fairfield, Kiser Lake

Oklahoma: Fly Creek, off the Horse Creek Arm of Grand Lake

Oregon: South Umpqua River - Permanent Advisory, Areas of lake Billy Chinook, Drews Reservoir

Rhode Island: Melville Pond

Utah: Utah Lake

Washington: Lone Lake, Rufus Woods Lake, Anderson Lake, Lind Coulee, [Spanaway Lake](#), [Waughop Lake](#)

RECENTLY PUBLISHED ARTICLES ...ON SATELLITE REMOTE SENSING

[A method for examining temporal changes in cyanobacterial harmful algal bloom spatial extent using satellite remote sensing](#)

Erin Urquhart, Blake A. Schaeffer, Richard P. Stumpf, Keith A. Loftin, and P. Jeremy Werdell.
Harmful Algae. Vol. 67, July 2017, pp. 144–152.

[Ten-year survey of cyanobacterial blooms in Ohio's waterbodies using satellite remote sensing](#)

Tyler Gorham, Yuanyuan Jia, C.K. Shum, Jiyoun Lee, Harmful Algae, Vol. 66, June 2017, pp. 13-19.



Sentinel-2 image of Utah Lake
June 27, 2017. ESA



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