

Freshwater HABs Newsletter



Muckcross Lake, Killarney, Ireland
August 17th, 2018

[Case Studies on State-Level Risk Communication on HABs](#)

In early 2018, the Environmental Council of the States (ECOS) and the Association of State and Territorial Health Officials (ASTHO) interviewed health and environmental agency staff from 13 states regarding their risk communication strategies and lessons learned for per- and polyfluoroalkyl substances (PFAS) (6 states) and HABs (7 states). The results were compiled into case studies that outline the background of contamination in the state, development of guidance values and health advisories, rollout of advisories and relevant resources, key messages for the public, and challenges and gaps. To view the case studies, see [here](#). The slides for [MO](#) and for [UT](#) from the June 2018 webinar are available in the links above.



[Harmful algal blooms linger in parts of southern Florida in July and August 2018](#) Source: Climate.gov

Unusually persistent harmful algal blooms have plagued fresh and salt water environments in southern Florida during the summer 2018. The result has been plethora of dead wildlife and negative impacts on the people and communities that rely on those marine environments. To read more go [here](#).

[U.S. Senate Hearing on HABs: The Impact on Our Nation's Waters](#)

On Tuesday, August 28, 2018 the U.S. Senate subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard, convened a hearing entitled, "Harmful Algal Blooms: The Impact on Our Nation's Waters," to examine HABs events in the U.S. and provide an update on current research, technology, and monitoring techniques. An archive webcast of the hearings is available [here](#).



Have you done air monitoring for algal toxins in your State?
Let us know at epacyanohabs@epa.gov

UPCOMING EVENTS

Conferences

[Understanding Algal Blooms: State of the Science Conference](#)

September 13, 2018
Toledo, Ohio

[2018 Joint Oregon Lakes Association/Washington State Lakes Protection Association Conference](#)

September 26-28, 2018
Portland, Oregon

[18th ICHA](#)


October 21-26, 2018 Nantes, France

[NALMS 2018](#)

October 30 – Nov. 2, 2018
Cincinnati, OH

Important Links

- ✓ [Risky Rivers: benthic cyanobacterial blooms and toxin production in New Zealand](#) presentation - temporary link will expire on September 5th!
- ✓ [CyanoSED: A Workshop on Benthic Cyanobacteria and Cyanotoxins Site](#)
- ✓ [NOAA's Lake Erie HAB Forecast](#)
- ✓ [Understanding, Tracking, and Predicting Harmful Algal Blooms Webinar Recording](#)

 To sign up please send an email to:

epacyanohabs@epa.gov

 For more information, please visit [EPA's CyanoHABs Website](#)

BLOOMS, BEACH CLOSURES and HEALTH ADVISORIES, August 2018

The following map includes 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.



- **California (30):** Lake San Antonio, Lopez Lake, Half Moon Creek, Huichica Pond, Quarry Lakes, Lake Chabot (Alameda Co), Big Break, H.V. Eastman Lake, Hensley Lake, Russian River, Lake Cunningham, San Luis Reservoir, Lake Anza, Pinto Lake, Diaz Lake, Shadow Cliffs Arroyo, Klamath River Estuary, Lake Oroville, Lake Elsinore, Pyramid Lake, Crystal Lake, Mad River, Clear Lake, Jenks Lake, San Diego River, Rim Rock Lake, Eagle Lake, Unnamed Pond, Sacramento River, San Joaquin River
- **Connecticut (1):** Jackson Cove
- **Idaho (5):** Little Camas Reservoir, Fernan Lake, Brownlee Reservoir, Mormon Reservoir, Salmon Falls Creek Reservoir
- **Indiana (10):** Low levels and Advisories: Worster Lake, Lake James, Sand Lake, Mississinewa Lake, Salamonie Lake, Cecil M. Lardin Lake, Brookville Lake, Monroe Lake, Starve Hollow Lake, Deam Lake
- **Kansas (23):** Watches (Cottonwood River South of Emporia, Hodgeman County State Fishing Lake, Lake Wabaunsee, Linn Valley Lake, Mary's Lake, Melvern Lake, Perry Lake Zone A and B, Pomona Lake, Rock Garden Pond); Warning (Atchison County Park Lake, Atwood Township Lake, Carbondale West Lake, Frazier Lake, Jerry Ivey Pond, Lake Afton, Lake Scott State Park Lake, Lakewood Park Lake, Marais Des Cygnes Wildlife Area, Melvern Outlet Pond, Overbrook City Lake, South Lake Park); Closures (Webster Lake and Melvern Outlet Swim Pond, Osage County)
- **Florida (2):** Lake Okeechobee, Caloosahatchee River (several areas), **Red Tide** (Pinellas County, Manatee, Sarasota, Lee, and Collier counties)
- **Maryland (3):** Sassafras River, Budds Landing, Fishing Bay (*Prorocentrum minimum*)
- **Massachusetts (8):** Cedar Pond, Sturbridge; Central Pond, Seekonk; East Monponsett Pond, Halifax; Hummock Pond, Nantucket; Miacomet Pond, Nantucket; Mill Pond, Wareham; South Watuppa Pond, Fall River, Westport; Turner Reservoir, Seekonk
- **Michigan (1):** Belleville Lake, Van Buren (Closure)
- **Montana (2):** Canyon Ferry and Clark Canyon
- **New Hampshire (7):** Danforth Bay, Jones Pond, Marsh Pond, Hothole Pond, Keyser Pond, Showell Pond Beach, Silver Lake State Park Beach
- **New Jersey (8):** Lincoln Park Community Lake, Rahway River/Orange Reservoir, Deal Lake, Duck Pond, Weequahic Lake, Memorial Lake, Unnamed Lake Saddle River Park, Cupsaw Lake
- **New York (62):** Agawam Lake, Avon Marsh Dam Pond, Beaver Dam Lake, Beaver Lake, Beverly's Pond, Big Fresh Pond, Black Lake, Brooks Lake, Canandaigua Lake, Cayuga Lake, Chautauqua Lake, Clove Lake, Craine Lake, Dean Pond, Deer Lake, Diverting Reservoir, Duane Lake, Findley Lake, Georgica Pond, Goose Pond, Harlem Meer, Honeoye Lake, Indian Pond, Jamesville Reservoir, Java Lake, Keuka Lake, Kissena Lake, Lake Carmel, Lake Casse, Lake Mohegan, Lake Neatahwanta, Lake Peekskill, Long Pond, Mariaville Lake, Mill Pond (Watermill), Montgomery Lake, Morningside Pond, Nassau Lake, New Croton Reservoir, North Sandy Pond, Oneida Lake, Orange Lake, Pleasure Lake, Prospect Park Lake, Putnam Lake, Roaring Brook Lake, Roth Pond, Round Lake, Sagg Pond, Saratoga Lake, Seneca Lake, Smith Pond, Tanglewood Lake, The Lake in Central Park, Tully Lake, Turtle Pond, Tuxedo Lake, Upper Little York Lake, Washington Park Pond, Wilcox Park North Pond, Wyomoco Pond
- **North Dakota (12):** Advisories (Dry Lake, Lake Tschida, Coal Mine Lake, Harvey Reservoir, Patterson Lake, Bowman-Haley Reservoir, Lake LaMoure, Sweet Briar Dam, Long Lake NWR, Green Lake); Warning (Antelope Lake, Homme Dam)
- **Ohio (2):** Buckeye Lake, Grand Lake St. Marys
- **Oregon (3):** South Umpqua River, Willow Creek Reservoir, Cullaby Lake
- **South Dakota (1):** Brant Lake
- **Utah (8):** Jordan River and Canals, Manning Meadow Reservoir, Matt Warner Reservoir, Mill Meadow Reservoir, Otter Creek, Panguitch Lake, Utah Lake, Scofield Reservoir
- **Vermont (21):** North Hero State Park, Alburgh, Strong House Lane, St. Albans Marina, Phillipsburg, Black Bridge, Ferrisburgh Stone Beach, Lake Carmi, Nichols Pond, Button Bay, Burgey Farm Road, Ramsons Bay, Shelburne Farm, Lake Champlain, St. Albans Bay, Highgate Springs, Cove Beach, Pike River, North Harbor, Rock River, Sand Bar State Park
- **Virginia (2):** Pamunkey And North Anna Branches, Lake Anna, Woodstock Pond at York River State Park
- **Washington (6):** Lake Marcel, Vancouver Lake, Cottage Lake, Lone Lake, Rufus Woods Lake, Anderson Lake, Wiser Lake, Hammond Lake, Lake Fenwick
- **Wyoming (3):** [Boysen Reservoir](#), [Kemmerer Reservoir](#), [Lake Viva Naughton](#)

RECENTLY PUBLISHED ARTICLES

[The analysis of underivatized \$\beta\$ -Methylamino-L-alanine \(BMAA\), BAMA, AEG & 2,4-DAB in *Pteropus mariannus* specimens using HILIC-LCMS/MS](#)

Amanda J. Foss, Neil Chernoff, and Mark T. Aubel. *Toxicon* 152 (2018) 150–159

[pH dependent octanol–water partitioning coefficients of microcystin congeners](#)

James McCord, Johnsie R. Lang, Donna Hill, Mark Strynar and Neil Chernoff. *J Water Health*. 2018 Jun;16(3):340-345.

[Environmental factors influencing the quantitative distribution of microcystin and common potentially toxigenic cyanobacteria in U.S. lakes and reservoirs](#)

John R. Beaver, Claudia E. Tausz, Kyle C. Scotese, Amina I. Pollard, and Richard M. Mitchell. *Harmful Algae*, Volume 78, 2018, Pages 118-128

[A decade and a half of *Pseudo-nitzschia* spp. and domoic acid along the coast of southern California](#)

Jayne Smith, Paige Connell, Richard H. Evans, Alyssa G. Gellene, Meredith D.A. Howard, Burton H. Jones, Susan Kaveggia, Lauren Palmer, Astrid Schnetzer, Bridget N. Seegers, Erica L. Seubert, Avery O. Tatters, David A. Caron. *Harmful Algae*, 2018.

[A Cyanotoxin Primer for Drinking Water Professionals](#)

Judy A. Westrick and David Szlag. *Journal AWWA*, August 2018. 110:8.

[Understanding the effect of salinity tolerance on cyanobacteria associated with a harmful algal bloom in Lake Okeechobee, Florida: U.S.](#)

Rosen, B.H., Loftin, K.A., Graham, J.L., Stahlhut, K.N., Riley, J.M., Johnston, B.D., and Senegal, S., 2018, Geological Survey Scientific Investigations Report. 2018–5092, 32 p.

[A new microcystin producing *Nostoc* strain discovered in broad toxicological screening of non-planktic Nostocaceae \(cyanobacteria\)](#)

Andreja Kust, Petra Urajová, Pavel Hrouzek, Dai Long Vu, Kateřina Čapková, Lenka Štenclová, Klára Řeháková, Eliška Kozlíková-Zapomělová, Olga Lepšová-Skácelová, Alena Lukešová, Jan Mareš, *Toxicon*, Volume 150, 2018, Pages 66-73,

[Effective electrochemical inactivation of *Microcystis aeruginosa* and degradation of microcystins via a novel solid polymer electrolyte sandwich](#)

Belal Bakheet, Md Ashraf Islam, John Beardall, Xiwang Zhang, David McCarthy, *Chemical Engineering Journal*, Volume 350, 2018, Pages 616-626.

[Potential for dietary exposure to \$\beta\$ -N-methylamino-L-alanine and microcystin from a freshwater system](#)

Laura L. Scott, Simoné Downing, Tim Downing. *Toxicon*, Volume 150, 2018, Pages 261-266.

[Physico-chemical treatment for the degradation of cyanotoxins with emphasis on drinking water treatment—How far have we come?](#)

Pratik Kumar, Krishnamoorthy Hegde, Satinder Kaur Brar, Maximiliano Cledon, Azadeh Kermanshahi pour, *Journal of Environmental Chemical Engineering*, Volume 6, Issue 4, 2018, Pages 5369-5388.

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

For previous newsletters, go to [Freshwater HABs Newsletter](#) or visit the [USEPA's CyanoHABs Website](#)