Separate United States Environmental Protection Agency **Freshwater HABs News**

EPA just released the Drinking Water Mapping Application to Protect **Source Waters** or DWMAPS, an online mapping tool to provide the public, water system operators, state programs, and federal agencies with critical information to help them safeguard the sources of America's drinking water. DWMAPS could be used to find which systems serve drinking water in a county, and whether or not they face contamination issues. DWMAPS could be used also to search for waste sites, industries with recent pollution permit violations, landfills and wastewater treatment plants, sewer overflow points, pipelines, and facilities that manage carcinogenic or other toxic waste and more. To learn more about DWMAPS please visit the DWMAPS webpage here: http://www.epa.gov/sourcewaterprotection/dwmaps

GRANTS Opportunities

2016 RFA for Great Lakes Long-Term Biology Monitoring Program: Phytoplankton Component NOAA Sea Grant Aquaculture Research Program 2016

Guideline Technical Document on Cyanobacterial Toxins Public Consultation: **Guidelines for Canadian Drinking Water Quality**

The proposed guideline technical document on cyanobacterial toxins in drinking water is available for public comment. Interested parties are encouraged to provide comments and suggestions to water eau@hc-sc.qc.ca by April 15, 2016

Video Town Hall Discussion on HABs and Hypoxia in the Great Lakes

The IWG-HABHRCA welcomes further input and feedback. Also if you interested in contributing information, please send documents in Word format, as well as in Mendeley, if you use the software, by email to IWG-HABHRCA@noaa.gov. Examples of brief annotated bibliographies, may be found here and here.

Public Meeting and Webinar: Update on Development of Recreational Criteria for **Cyanotoxins**

EPA held a public webinar on February 22, 2016 from 2:00-3:00 EST. EPA presented on the basic science being considered in the development of the criteria, a first look at implementation considerations, and provided an opportunity to receive feedback from participants.

Volunteer Light Aircraft Pilots Needed for Scientific Research

The Citizen Science and Harmful Algae Bloom Monitoring program is calling for volunteer GA pilots to help track Harmful Algae Blooms (HABs) in bodies of water across the country. Interested pilots please send an email to rafat.r.ansari@nasa.gov or jschuber@juno.com

Miami County State Fishing Lake, Kansas

Upcoming Events

Inland HABs Group Webinar on the Great Lakes March 10, 2016 11:30-1:30

2016 Recreational Waters Conference April 12 – 15, 2016

New Orleans, LA

US Algal Toxin

Conference 2016 May 9-11, 2016 Akron, Ohio

Summer 2016 Field **Courses on Algae** May - July, 2015

Iowa Lakeside Laboratory

ASLO 2016 June 5 – 10, 2016 Santa Fe, New Mexico

IAGLR 2016 June 6 to 10, 2016 Guelph, Ontario

17th ICHA

October 9-14, 2016 Florianapolis, Brazil

10th ICTC October 23-28, 2016 Wuhan, China

SETAC 2016 November 6 -10, 2016 Orlando, FL

This newsletter was created by Lesley V. D'Anglada, Dr.PH. (danglada.lesley@epa.gov) Office of Science and Technology, Office of Water, U.S.EPA For more information visit EPA's CyanoHABs website at www.epa.gov/cyanohabs

February, 2016

Toxins Topical Collection "Freshwater HABs and Health in a Changing World"

This Topical Collection serves as a forum to further discuss challenges in assessing freshwater HAB-associated effects on public health and the environment. Manuscripts are invited that provide information about exposure assessment; health outcomes; outbreak investigations; wild and domestic animal poisonings; toxicology of cyanobacterial toxins in animals and humans, and the production of toxins in the environment. Manuscripts on the absorption, distribution, and elimination of toxins in animals and humans, and the control of toxins in the built and natural environment, as well as related topics are also invited.

To submit a manuscript please visit <u>www.mdpi.com</u> by <u>registering</u> and <u>logging in to this website</u>.

RECENTLY PUBLISHED ARTICLES

<u>Spatial and temporal variation in microsystins occurrence in wadeable streams in the southeastern</u> <u>USA</u>

Loftin, K.A., Clark, J.M., Journey, C.A., Kolpin, D.W., Van Metre, P.C., and Bradley, P.M., 2016, Environmental Toxicology and Chemistry, v. 35, doi: 10.1002/etc.3391.

Prevalence of algal toxins in Alaskan marine mammals foraging in a changing arctic and subarctic environment

Kathi A. Lefebvre, Lori Quakenbush, Elizabeth Frame, Kathy Burek Huntington, Gay Sheffield, Raphaela Stimmelmayr, Anna Bryan, Preston Kendrick, Heather Ziel, Tracey Goldstein, Jonathan A. Snyder, Tom Gelatt, Frances Gulland, Bobette Dickerson, Verena Gill, Harmful Algae, Volume 55, May 2016, Pages 13-24.

Cyanotoxins at low doses induce apoptosis and inflammatory effects in murine brain cells: Potential implications for neurodegenerative diseases

Larissa Takser, Nora Benachour, Barry Husk, Hubert Cabana, Denis Gris, Toxicology Reports, Volume 3, 2016, Pages 180-189

<u>Microbiote shift in the Medicago sativa rhizosphere in response to cyanotoxins extract exposure</u> Fatima El Khalloufi, Khalid Oufdou, Marie Bertrand, Majida Lahrouni, Brahim Oudra, Philippe Ortet, Mohamed Barakat, Thierry Heulin, Wafa Achouak, Science of The Total Environment, Volume 539, 1 January 2016

Cyanobacteria and cyanotoxins are present in drinking water impoundments and groundwater wells in desert environments

Aspassia D. Chatziefthimiou, James S. Metcalf, W. Broc Glover, Sandra A. Banack, Soha R. Dargham, Renee A. Richer, Toxicon, Available online 24 February 2016.

<u>Chronic exposure to microcystin-LR affected mitochondrial DNA maintenance and caused</u> <u>pathological changes of lung tissue in mice</u>

Xinxiu Li, Lizhi Xu, Wei Zhou, Qingya Zhao, Yaping Wang, Environmental Pollution, V. 210, March 2016,pp. 48-56

Useful Resources

- ✓ EPA's CyanoHABs Website
- ✓ <u>EPA's Report: A compilation of Cost Data</u> <u>Associated with the Impacts and Control of</u> <u>Nutrient Pollution</u>
- ✓ <u>USGS's Environmental Health Newsletter</u>
- ✓ <u>NOAA's Prevention, Control and Mitigation of</u> <u>HABs (PCMHAB)</u>

HEALTH ADVISORIES AND POSTINGS

- Oregon South Umpqua River and Lawson Bar
- Texas Do NOT Drink the Water Advisory, City of Ingleside
- Florida Karenia Brevis red tide
- To sign up for the newsletter, send an email to <u>danglada.lesley@epa.gov</u>