Interstate Technology and Regulatory Council

Strategies for Preventing and Managing Benthic Harmful Cyanobacterial Blooms

Fact Sheet

THE INTERSTATE TECHNOLOGY REGULATORY COUNCIL (ITRC) IS EXCITED TO START A TEAM IN JANUARY 2021 ON STRATEGIES FOR PREVENTING AND MANAGING HARMFUL CYANOBACTERIAL BLOOMS (BENTHIC)

The Interstate Technology Regulatory Council (ITRC) is a state-led coalition dedicated to reducing barriers to the use of innovative environmental technologies. ITRC represents over 1,000 individuals, across 50 states, working to produce guidance and training on innovative environmental solutions. Bringing together teams of state, federal, tribal, industry, academic, and stakeholder experts, ITRC broadens and deepens technical knowledge and reduces barriers to expedient regulatory approval. Since 1995, the collective success of this coalition has generated huge benefits to the environment, inspired new technical innovations, and saved hundreds of millions of dollars.

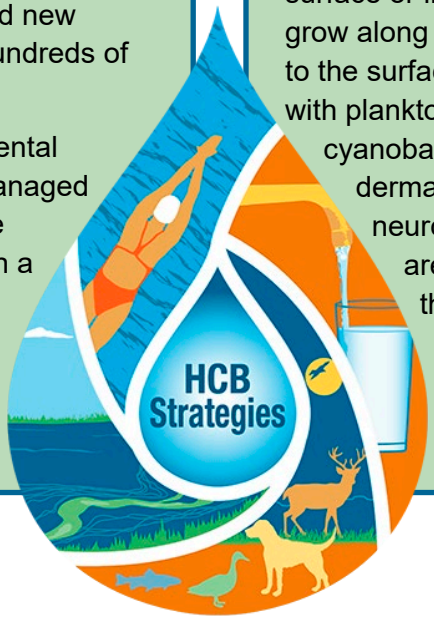
ITRC is a program of the Environmental Research Institute of the States, managed by the Environmental Council of the States. This partnership is based on a commitment to protect and improve human health and the environment across the country.

BENTHIC HARMFUL CYANOBACTERIAL BLOOMS (HCBs)

Freshwater inland lakes and reservoirs supply approximately 70% of our nation's drinking water and industry withdrawals. They serve as vibrant hubs for recreation, tourism, and local identity. Human activities can influence and alter their natural ecological equilibrium.

Harmful Cyanobacterial Blooms (HCBs) are complex ecological phenomenon that can occur where cyanobacteria proliferate and dominate aquatic ecosystems.

Much of what we know about HCBs is based on those planktonic forms that occur on the water surface or in the water column. Benthic HCBs grow along the bottom until pieces detach, float to the surface, or strand along the shoreline. As with planktonic HCBs, many benthic cyanobacteria produce toxins that can impact dermatologic, respiratory, hepatic, and neurologic systems. When these toxins are present in freshwater, they can threaten humans, wildlife, livestock, and pets.



January 2021

THE STRATEGIES FOR PREVENTING AND MANAGING HARMFUL CYANOBACTERIAL BLOOMS TEAMS

The original 2019-2020 HCB team developed a technical guidance document that provides a great overview of HCBs and provides useful tools and resources related to monitoring, communication and response, prevention and mitigation strategies, and recommendations, primarily focused on planktonic HCBs.

The 2021 benthic HCB team will build on that foundation to develop a companion technical-regulatory guidance document focused on:

- Introduction to benthic cyanobacteria and connection to existing HCB document
- Field screening and sampling for benthic cyanobacteria
- Analytical toxin testing methods for mat samples
- Toxin Thresholds
    - All cyanotoxins in mats
    - Neurotoxins and dermal toxins in water
- Communication and Response Planning
- Specific advisory signage and messaging
- Specific considerations for Prevention and Management and Control Strategies

This project will begin in January 2021 and is expected to take one year to prepare the guidance document and training materials.

JOIN THE BENTHIC HCB TEAM!

The Strategies for Preventing and Managing Benthic Harmful Cyanobacterial Blooms Team will begin in January 2021! By joining the team, you will help write the guidance document and develop training. To join, click here: http://itrcweb.org/Membership/TeamRegistration

For more information, please contact the ITRC Team Leaders:

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