

Source: Wyoming DEQ

Cyanobacteria are microscopic, photosynthetic organisms that can be found naturally in all aquatic systems. Under certain conditions, cyanobacteria can multiply and become very abundant, discoloring the water throughout a water body or accumulating at the surface. These occurrences are known as blooms. Cyanobacteria may produce potent toxins (cyanotoxins) that pose a threat to human health. Cyanobacteria can also harm wildlife and domestic animals, aquatic ecosystems, and local economies by disrupting drinking water systems and source waters, recreational uses, commercial and recreational fishing, and property values.

This guidance is focused on strategies that you may use in response to cyanobacterial blooms that are found in freshwater aquatic environments, including lakes, streams, rivers, reservoirs, ponds, and freshwater-influenced estuaries. It is intended to help you select [monitoring](#), [excess nutrient reduction](#), [in-lake management](#), and [communication](#) approaches that may be suitable for use in your water body. We provide interactive tools to help you explore options in [monitoring](#), [management](#), and [nutrient reduction](#). Our [Visual Guide](#) will help you recognize cyanobacteria and other common aquatic phenomena that can be confused with them.

Together, this information, interactive tools, and embedded resources will help you respond to and manage for cyanobacteria.

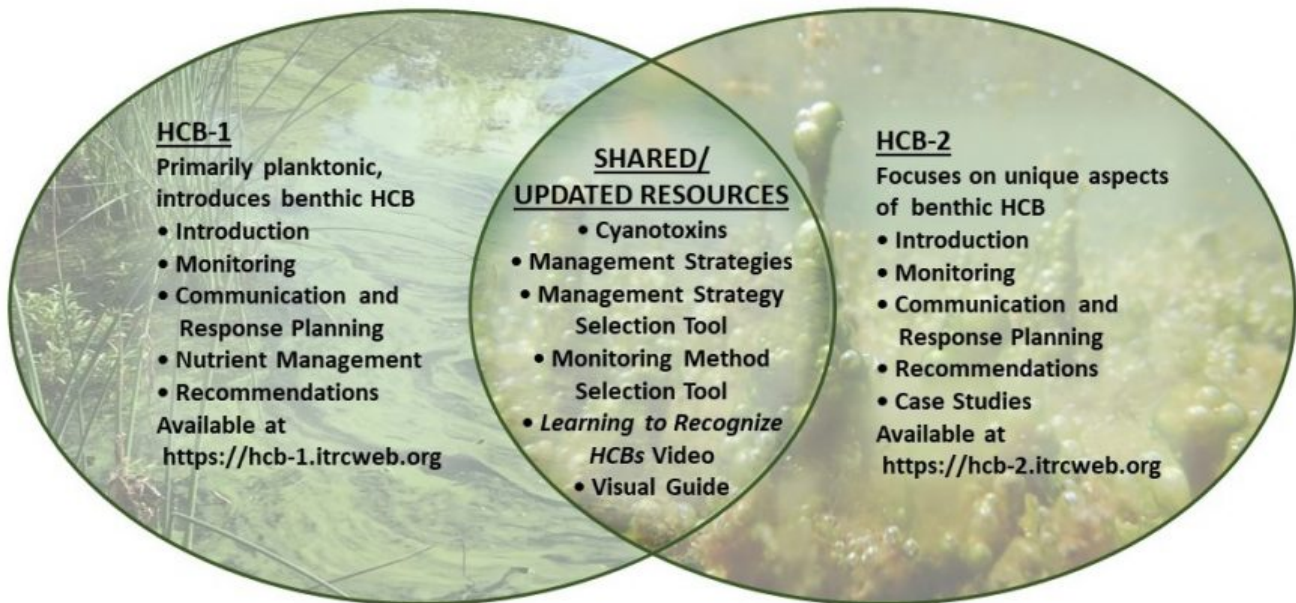
ITRC has created two guidance documents, one focused primarily on planktonic HCBs, [HCB-1](#), and the other focused primarily on benthic HCBs, [HCB-2](#). While each document has a primary focus, each document has sections that are applicable to all HCBs, including several interactive tools. The [framework](#) shows how the two guidance documents are related and where they overlap.

Harmful Cyanobacterial Bloom (HCB) Resource Guide

The following guide can be used to assist in navigation between the two ITRC Harmful Cyanobacterial Bloom (HCB) guidance documents, as well as all other materials ITRC has published regarding this guidance:

- [HCB Resource Guide](#)

Framework of HCB Guidance Documents



Harmful Cyanobacterial Bloom (HCB) Training

The Harmful Cyanobacterial Bloom team developed an online training to accompany this guidance.

- [HCB Training Archive](#)

The training video below, [Learn to Identify Cyanobacteria Blooms](#) - published with help from the Lake Champlain Basin Program - identifies and describes different types of cyanobacteria and offers guidance on best management and safety practices involving harmful blooms.

[Published by the Interstate Technology & Regulatory Council, March 2021](#)

Permission is granted to refer to or quote from this publication with the customary acknowledgment of the source. The suggested citation for this document is as follows:

ITRC (Interstate Technology & Regulatory Council). 2021. *Strategies for Preventing and Managing Harmful Cyanobacterial Blooms* (HCB-1). Washington, D.C.: Interstate Technology & Regulatory Council, HCB Team. www.itrcweb.org.