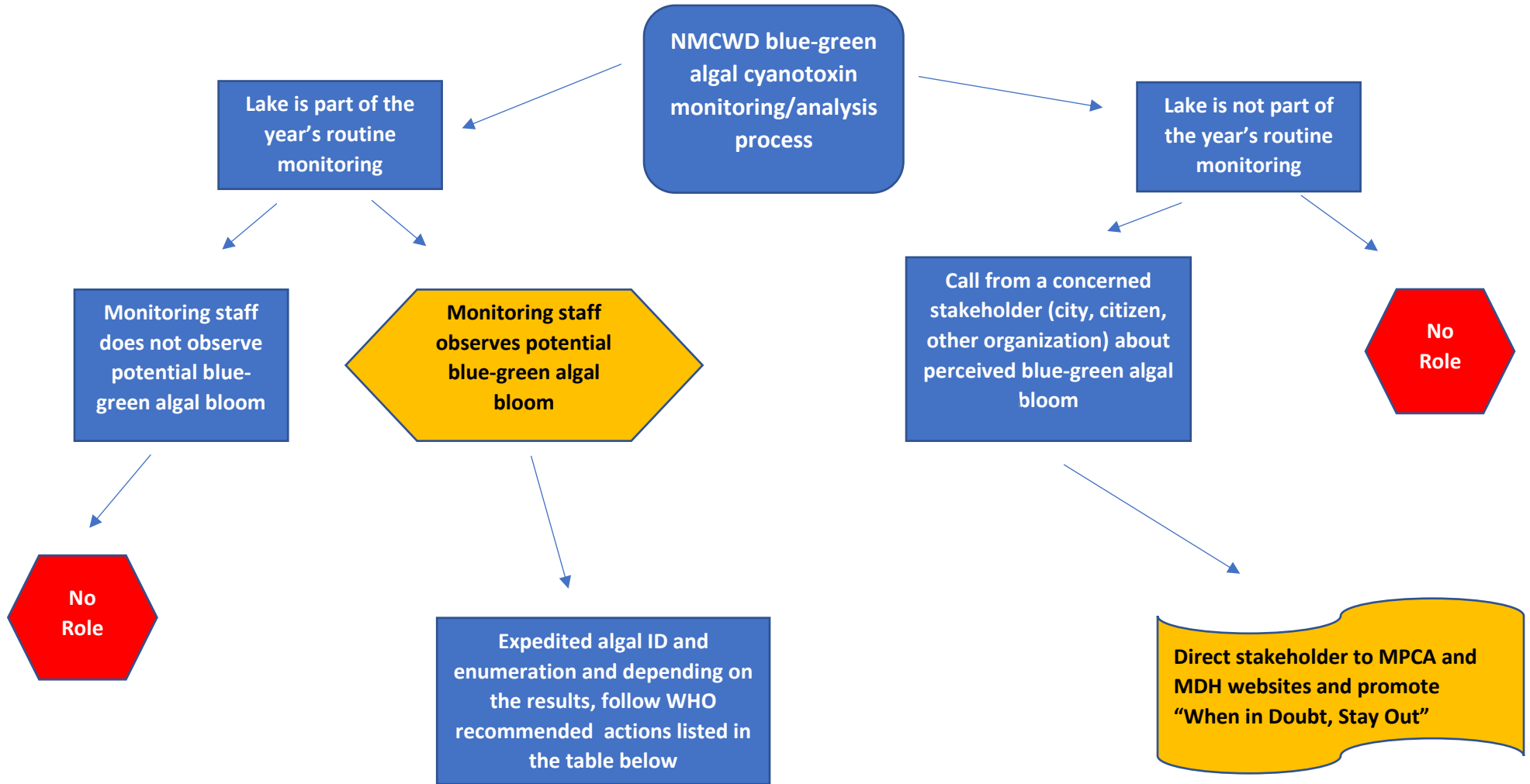


NMCWD's Role in Blue-Green Algal Bloom and Potential HAB Monitoring & Analysis Protocol

The District's protocol of testing for a potential Harmful Algal Bloom (HAB) will continue through our normal rotating lake monitoring program and follows recommendations of the World Health Organization (WHO). Whenever District monitoring staff observes algal scum on a lake the District is currently monitoring, staff will take a water sample expedite algal identification and enumeration and if the analysis determines blue-green cell counts exceeding WHO thresholds for low or moderate probability of health risk to recreational users we will notify the proper entities (e.g., city, MPCA and MDH) of the health risk, advise the city of potentially posting signs at the lake's access points and post the advisory(ies) on the District's website. Below is a flowchart detailing the District's protocol.



World Health Organizations Guideline Thresholds

Guidance Level	Health Risk Level	Health Risks	District Actions
< 20,000 blue-green algal cells per milliliter	Little, If any probability	<ul style="list-style-type: none"> Little if any 	None
> 20,000 blue-green algal cells per milliliter but < 100,000 blue-green algal cells per milliliter	Low probability	<ul style="list-style-type: none"> Short-term health outcomes (e.g., skin irritations, gastrointestinal effects) 	Inform the City, the MPCA, MDH and other stakeholder partners of findings of a low probability of a health risk to lake users and post advisory information on the District's website "when in doubt stay out."
> 100,000 blue-green algal cells per milliliter but < 10,000,000 blue-green algal cells per milliliter	Moderate probability	<ul style="list-style-type: none"> Short-term health outcomes (e.g., skin irritations, gastrointestinal effects) Potential for long-term effects from some cyanobacterial species 	Inform the City, the MPCA, MDH and other stakeholder partners of findings of a moderate probability of a health risk to lake users and post health risk advisory information on the District's website. Recommend that property owner post advisory signs on the property.
> 1,000,000 blue-green algal cells per milliliter	High probability	<ul style="list-style-type: none"> Short-term health outcomes (e.g., skin irritations, gastrointestinal effects) Potential for long-term effects from some cyanobacterial species Potential for acute poisoning 	Inform the City, the MPCA, MDH and other stakeholder partners of findings of a high probability of a health risk to lake users and post health risk advisory information on the District's website. Recommend that property owner post advisory signs on the property.

Who should you contact if you suspect a potential blue-green algal bloom?

- Contact the Minnesota Pollution Control Agency (MPCA) or the Minnesota Department of Health (MDH)
- MPCA lake monitoring staff track reports of potential harmful algae blooms. You can email pictures of the suspected bloom to algae.mPCA@state.mn.us. For more information on harmful algae blooms, call 651-757-2822 or 800-657-3864 or visit the [MPCA's Blue-Green Algae and Harmful Algal Bloom web page](#).
- Report human health effects to the Minnesota Department of Health (MDH) [Foodborne and Waterborne Illness Hotline](#) at 1-877-366-3455. For health questions, citizens can contact MDH's Waterborne Diseases Unit at 651-201-5414 or visit the [MDH's Harmful Algal Bloom web page](#).
- In addition, if you think you or your pets are experiencing adverse health effects due to contact with, or ingestion of, lake water/algae, seek medical attention immediately.