

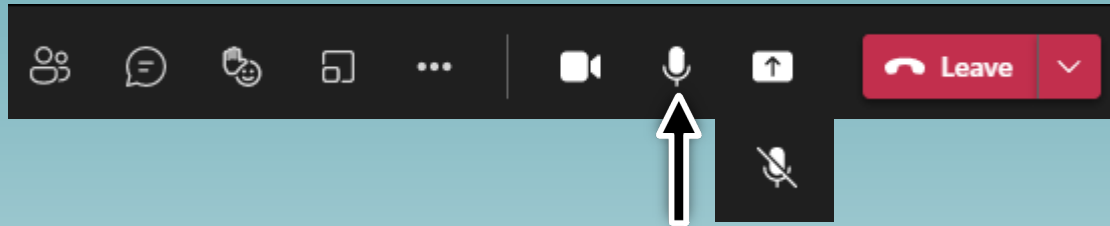


HAB Lake Management Guidance Workshop

April 23, 2024



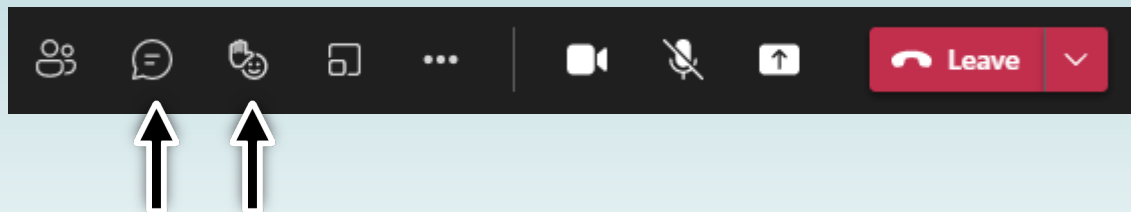
Ground Rules:



- Please click your microphone button on the toolbar to mute your microphone.



- Type your questions in the chat



- During the QA sessions, you can raise your hand to ask a question or type your questions in the chat.

HAB Lake Management Guidance Workshop

April 23, 2024

- Welcome!
- [NJDEP | HABs | Expert Team](#)



NEW JERSEY DEP
**Division of Water Monitoring,
Standards & Pesticide Control**



April 2024



2024

Harmful Algal Bloom Lake Management Guidance

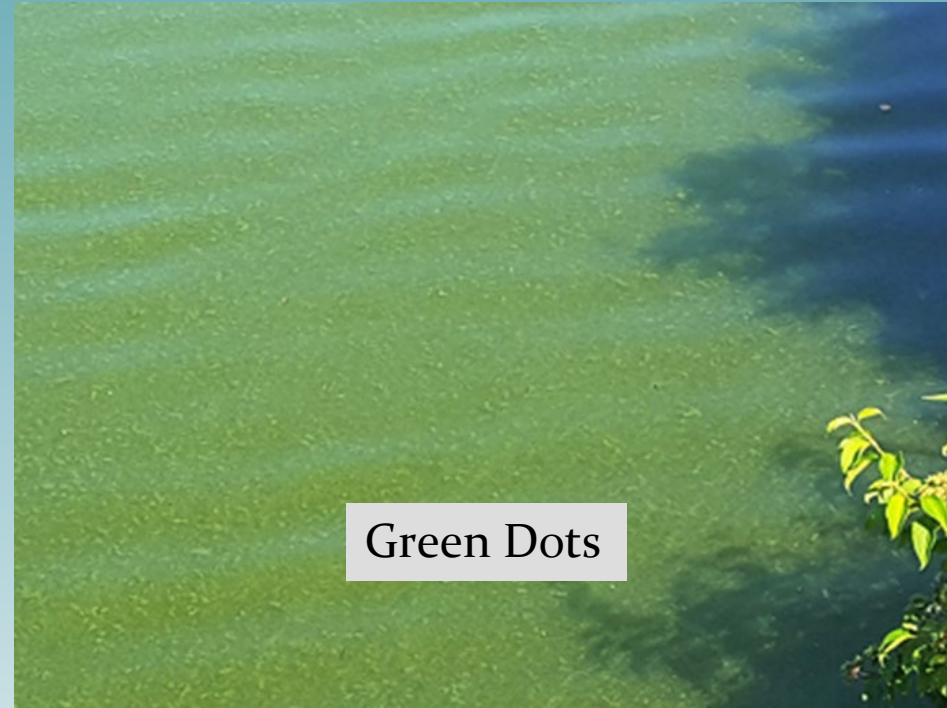


NJDEP HAB Expert Team
4/1/2024

Cyanobacteria



Green Streaks



Green Dots

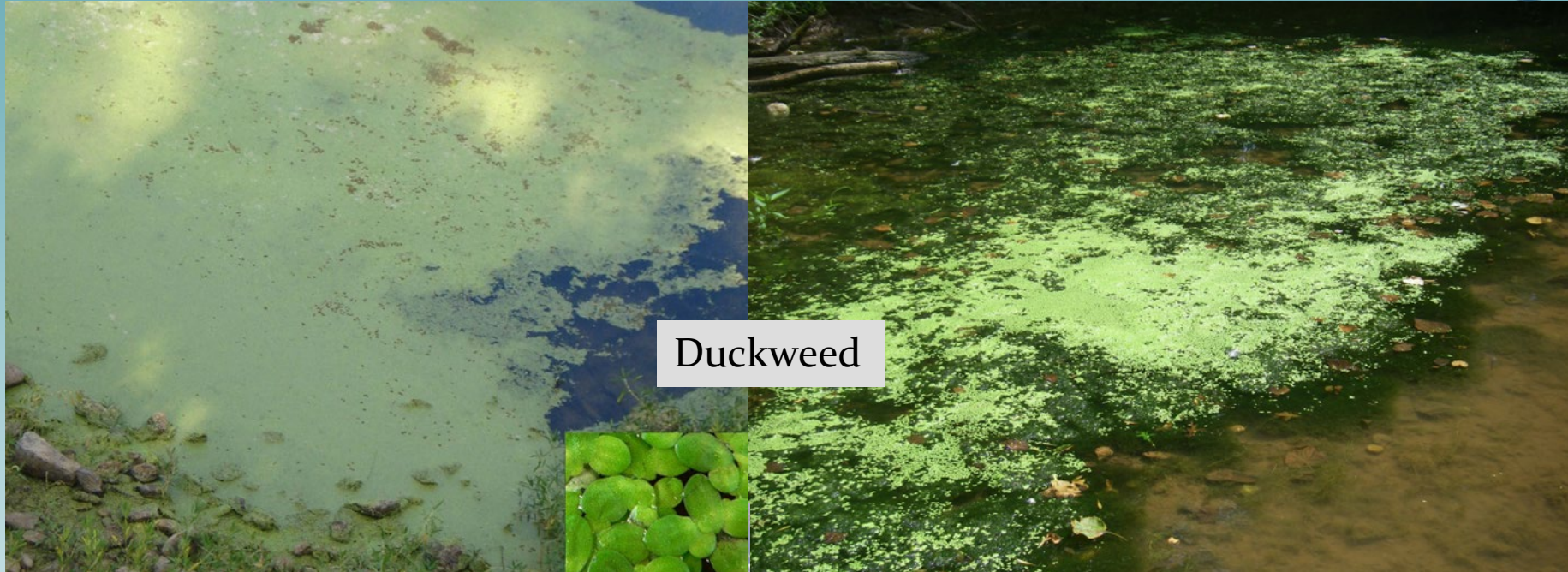


Spilled Paint



Pea Soup

What is not a HAB?



Duckweed







Filamentous Green Algae

Alert Tiers

HAB ALERT LEVEL	CRITERIA	RECOMMENDATIONS
NONE	HAB report investigated and no HAB found	NONE
WATCH <i>Suspected or confirmed HAB with potential for allergenic and irritative health effects</i>	Suspected HAB based on visual assessment or screening test OR Lab confirmed cell counts between 20k – 40k cells/mL AND No known toxins above public health thresholds	Public Bathing Beaches Open (dependent upon local health authority evaluation and assessment) Waterbody Accessible: Use caution during primary contact (e.g., swimming) and secondary (e.g., non-contact boating) recreational activities Do not ingest water (people/pets/livestock) Do not consume fish
ALERT <i>Confirmed HAB that requires greater observation due to increasing potential for toxin production</i> PUBLIC BATHING BEACHES INCREASE MONITORING	Lab confirmed cell counts between 40k – 80k cells/mL AND No known toxins above public health threshold	WATCH remains in effect. Public Bathing Beaches Open (dependent upon local health authority evaluation and assessment) and should observe and report changing bloom conditions Waterbody Accessible: Use caution during primary contact (e.g., swimming) and secondary (e.g., non-contact boating) recreational activities Do not ingest water (people/pets/livestock) Do not consume fish
ADVISORY <i>Confirmed HAB with moderate risk of adverse health effects and increased potential for toxins above public health thresholds</i>	Lab testing for toxins exceeds public health thresholds OR Lab confirmed cell counts above 80K cells/mL OR Field measurement evidence indicating HAB present and above guidance thresholds (e.g., phycocyanin readings)	Public Bathing Beaches Closed Waterbody Remains Accessible: Avoid primary contact recreation (e.g., swimming) Use caution for secondary contact recreation (e.g., boating without water contact) Do not ingest water (people/pets/livestock) Do not consume fish
WARNING <i>Confirmed HAB with high risk of adverse health effects due to high toxin levels</i>	Toxin (microcystin) 20 - 2000 µg/l AND/OR Additional evidence, including, expanding bloom, increasing toxin levels (i.e., duration, spatial extent or negative human or animal health impacts) indicates that additional recommendations are warranted	Public Bathing Beaches Closed Waterbody Remains Accessible: Avoid primary contact recreation (e.g., swimming) May recommend against secondary contact recreation (e.g., boating without water contact) with additional evidence Do not ingest water (people/pets/livestock) Do not consume fish
DANGER <i>Confirmed HAB with very high risk of adverse health effects due to very high toxin levels</i>	Toxin (microcystin) > 2000 µg/l AND/OR Additional evidence, including, expanding bloom, increasing toxin levels (i.e., duration, spatial extent or negative human or animal health impacts) indicates that additional recommendations are warranted	Closure of Public Bathing Beaches Possible closure of all or portions of waterbody and possible restrictions access to shoreline. Avoid primary contact recreation (e.g., swimming) May recommend against secondary contact recreation with additional evidence Do not ingest water (people/pets/livestock) Do not consume fish

ADVISORY

HAB Alert Level	Criteria	Recommendations
<p style="text-align: center;">ADVISORY</p> <p><i>Confirmed HAB with <u>moderate risk of adverse health effects</u> and increased potential for toxins above public health thresholds</i></p> 	<p>Lab testing for toxins exceeds public health thresholds</p> <ul style="list-style-type: none"> ○ Microcystins (as total): 2 µg/L ○ Cylindrospermopsin: 5 µg/L ○ Anatoxin-a: 15 µg/L ○ Saxitoxin: 0.6 µg/L <p><u>OR</u></p> <p>Lab confirmed cell counts above 80Kcells/mL</p> <p><u>OR</u></p> <p>Field measurement evidence HAB present and above guidance thresholds (e.g., phycocyanin readings)</p>	<p>Public Bathing Beaches closed</p> <hr/> <p>Waterbody Remains Accessible:</p> <ul style="list-style-type: none"> ➤ Avoid primary contact (e.g., swimming) ➤ Use caution for secondary contact recreation (e.g., boating without water contact) <p>Do not ingest water (people/pets/livestock)</p> <p>Do not consume fish</p> <div style="border: 2px solid red; padding: 5px; text-align: center; color: white; font-weight: bold; margin: 10px 0;"> <p>BEACH CLOSED PLAYA CERRADA</p> </div> <p>HARMFUL ALGAL BLOOM (HAB) No Swimming • No Wading BLOOM ALGAL NOCIVO No nadar • No vadear</p> <div style="border: 2px solid red; padding: 5px; text-align: center; color: white; font-weight: bold; margin: 10px 0;"> <p>Contact can make people and animals sick. El contacto puede enfermar a personas y animales.</p> </div> <div style="display: flex; justify-content: center; gap: 20px; margin-top: 10px;">    </div>

BEACH CLOSED
PLAYA CERRADA

HARMFUL ALGAL BLOOM (HAB)
No Swimming • No Wading
BLOOM ALGAL NOCIVO No nadar • No vadear

Contact can make people and animals sick.
El contacto puede enfermar a personas y animales.



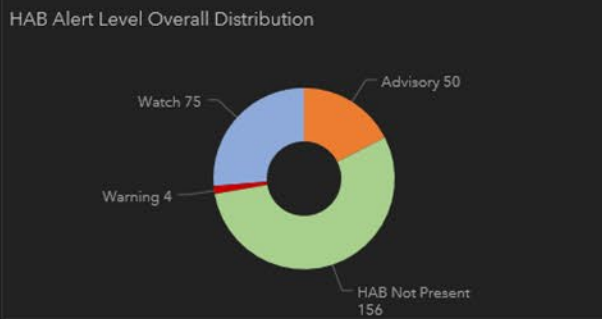
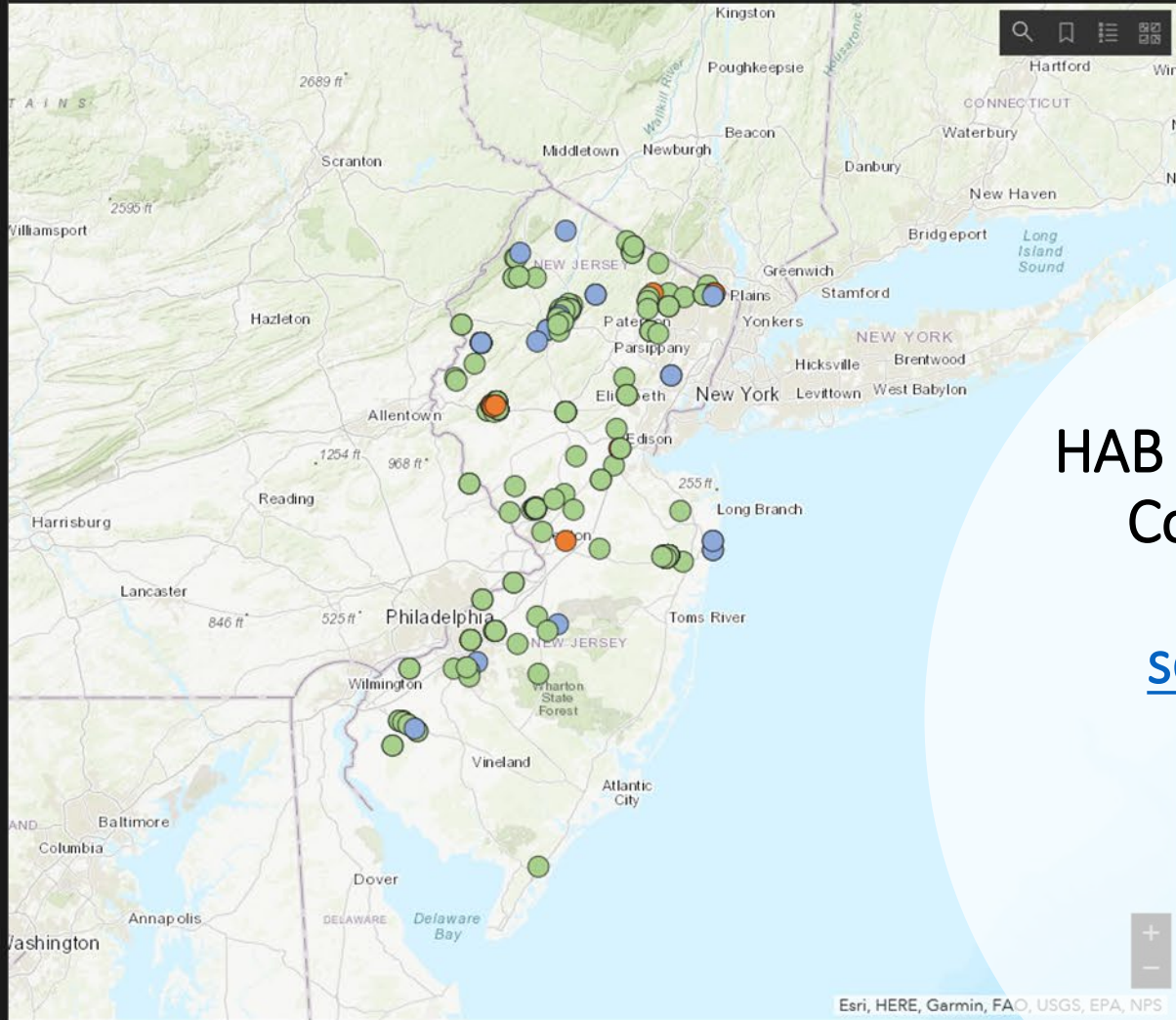
Public Bathing Beaches are closed under the authority of NJDOH regulation, New Jersey State Sanitary Code Chapter 17 Public Recreational Bathing N.J.A.C. 8:26.

NJDEP Algal Bloom Sampling Status

Use dropdown to view samples at a waterbody All Waterbodies

- Samples By Date
- 12/15/2020, 1:05 PM West Lake Foxmoor
 - 12/15/2020, 11:15 AM Ramapo River - Pompton Lakes
 - 12/15/2020, 11:15 AM Amico Island Pond
 - 12/15/2020, 10:55 AM Pompton Lake
 - 12/15/2020, 10:13 AM Dramasei Park Lake
 - 12/15/2020, 9:22 AM Greenwich Lake
 - 12/14/2020, 9:18 AM Driscoll Pond
 - 12/14/2020, 8:59 AM Hopkins Pond

HAB Alerts are localized to the area where the monitoring occurred and do not apply to the entire waterbody, unless otherwise noted. Use caution as conditions may change. "Avoid it, and Report it"



- Links for more information:
- Bureau of Freshwater & Biological Monitoring HAB Website
 - Advisory Guidance
 - Outreach Materials
 - Dashboard Tutorial
 - Response Strategy
 - Report a Suspected HAB
 - Data Download

HAB Alert Level	Criteria	Recommendations
HAB Not Present	HAB reported and investigated. No HAB present.	None
WATCH Suspected or confirmed HAB with potential for allergic or irritative health effects	Suspected HAB based on field survey OR Confirmed cell counts $\geq 20K - < 80K$ cells/mL AND No known toxins above public health thresholds	Public Bathing Beaches Open Waterbody Accessible: Use caution during primary contact (e.g. swimming) and secondary (e.g. non-contact boating) activities Do not ingest water (people/pets/livestock) Do not consume fish
ADVISORY Confirmed HAB with moderate risk of adverse health effects, and increased potential for toxins above public health thresholds	Lab testing for toxins Microcystins: $\geq 3 \mu\text{g/L}$ Cylindrospermopsin: $\geq 8 \mu\text{g/L}$ Anatoxins: $\geq 27 \mu\text{g/L}$ OR Confirmed cell counts $\geq 80K$ cells/mL	Public Bathing Beaches Closed Waterbody Remains Accessible Avoid primary contact recreation Use caution for secondary contact recreation Do not ingest water (people/pets/livestock) Do not consume fish
WARNING Confirmed HAB with high risk of adverse health effects, due to high toxin levels	Toxin (microcystins) $\geq 100 \mu\text{g/L}$ OR Toxin (microcystins) $\geq 2000 \mu\text{g/L}$	Public Bathing Beaches Closed Restrictions as above Use caution against secondary contact recreation
DANGER Confirmed HAB with very high risk of adverse health effects: due to very high toxin levels	Toxin (microcystins) $\geq 2000 \mu\text{g/L}$	Public Bathing Beaches Closed Restrictions as above. Possible closure of all or portions of waterbody and possible restrictions access to shorelines

HAB Interactive Mapping and Communication System
(reporting system, searchable map, data, alerts...)

HABs confirmed at a recreational season, as reflected on this map, may persist or reoccur during the winter and cautions should be taken. A new map will be available once sampling commences in the 2021 season.

Message Details