

Ontario County Public Health



Public Health
Prevent. Promote. Protect.
Ontario County, NY

**Clear Waters: Raising Awareness
of Harmful Algal Blooms in
Ontario County**
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CNL, CCCE, CLC**
Nov. 13, 2025



Project Overview

Objective:

- Engage, educate, and raise awareness about Harmful Algal Blooms (HABs) in Ontario County

Target Audiences:

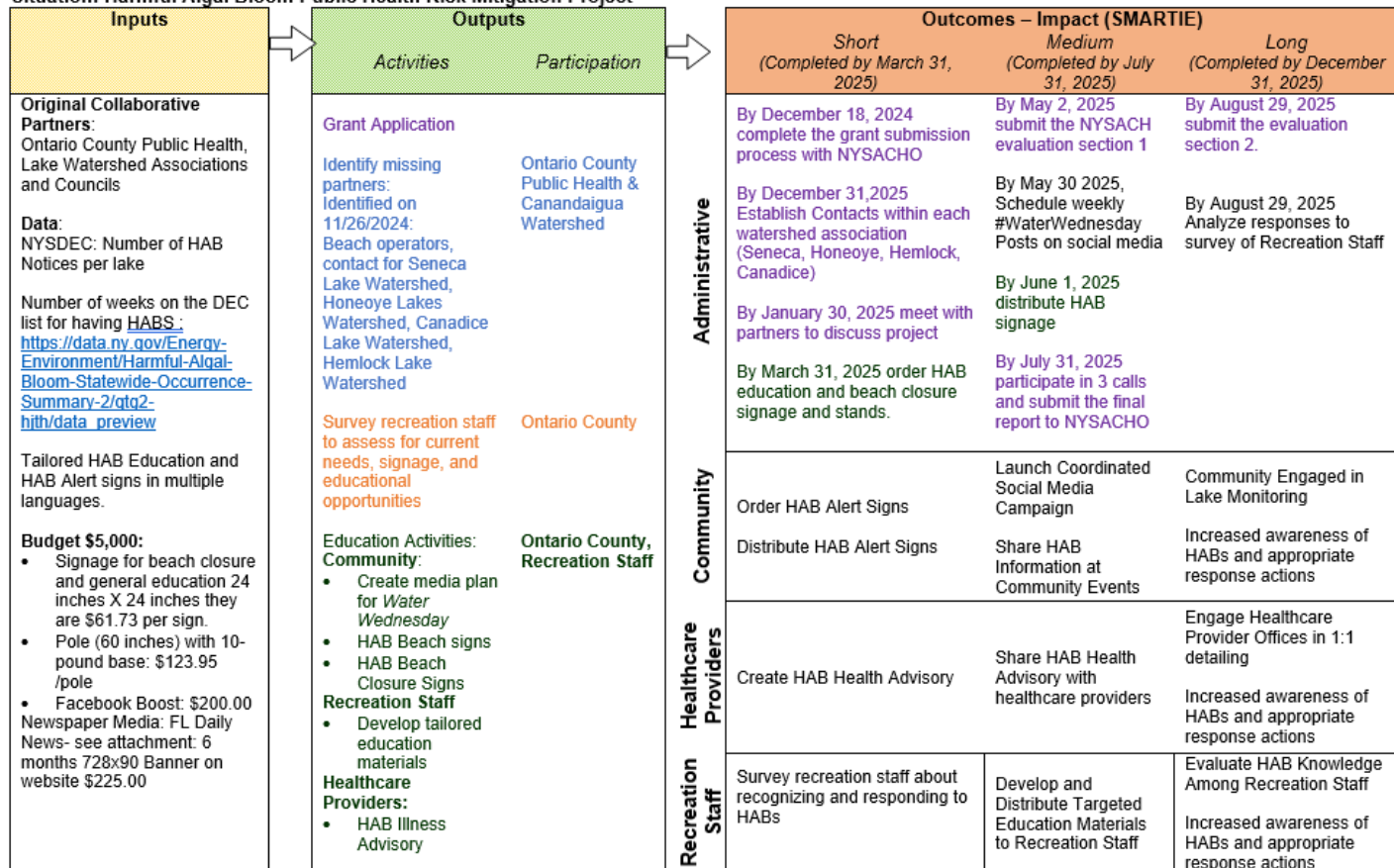
- Community members & visitors
- Recreation staff
- Healthcare professionals
- Veterinarians (added)



Logic Model

Logic Model

Program: 2024-2025 NYSACHO Climate Grant
Situation: Harmful Algal Bloom Public Health Risk Mitigation Project



Theory of Planned Behavior

Statement of Need

- Increasing HABs:
 - 157 average blooms annually (2000–2023), with record highs in 2024
- Health Threats:
 - Skin irritation, GI issues, respiratory symptoms, neurological effects
- Economic Impact:
 - HABs threaten tourism — 16% of NYS tourism revenue from Finger Lakes region
- Climate Change:
 - Warmer wet summers, more Growing Degree Days = more blooms



Project Activities

- **Signage:** Multilingual, weatherproof HAB warnings at public water access points
- **Water Wednesdays:** Social & digital media campaign (English/Spanish)
- **Training:** Targeted outreach to recreation staff & healthcare providers
- **Outreach Materials:** Printed educational materials, HAB health advisories



Climate Change & Health Connection

- Local Impact:
 - 2024: Worst HAB season on Canandaigua Lake
 - Lakes = drinking water, recreation, and economic engine
- Projected Temps: +1.5 to 3°F by 2030
- Health Risks: Pets, livestock, and human health at increasing risk
- Alignment: Supports NYS Climate Adaptation & Environmental Health Goals



Climate Justice Focus

- Equity in Access:
 - 9.6% in poverty; many rely on free beaches
 - Prioritizing signage at high-risk, underserved areas
- Language Justice:
 - Signs in English, Spanish, and Mandarin
 - Reaches underserved Hispanic and Asian visitors



Building on Previous Work

- Water Wednesdays (2024):
 - 2024- Established Relationship with Canandaigua Watershed
 - Now expanding to include more partners & platforms
- Sunscreen Pilot (NYSACHO Grant2024):
 - Now expanding signage and educational support
- Existing Gaps:
 - Inconsistent monitoring & fragmented response across agencies



Collaboration

- Internal:
 - Ontario County Public Health, Finance, Parks & Rec
- External:
 - Watershed Associations (Canandaigua, Seneca, Honeoye, FLRWA)
 - NYSDOH Geneva District Office, NYS DEC
 - Veterinarian Offices (Added)



Collaboration

Stakeholder Name	How will they be involved?
Canandaigua Lake Watershed	Share HAB Monitoring Data Assist with volunteer recruitment and education Distribute Water Wednesday materials
Seneca Lakes Pure Waters Association	
Finger Lakes Regional Watershed Alliance	
Honeoye Lake Task Force	
Beach Operators	Share HAB Monitoring Data Complete survey at beginning and end of project
Park Directors	Support signage installation Complete survey at beginning and end of project
Lifeguards	Complete survey at beginning and end of project Participate in HAB identification education



Evaluation Plan

- Community
 - +15% community-submitted HAB monitoring reports (Canandaigua & Seneca Lake Watersheds)
- Recreation
 - Staff+20% knowledge gain on HAB response
- Healthcare Providers
 - 75% of provider offices reached with 1:1 education



Timeline & Milestones

- Q1 (Jan–Mar 2025)
 - Surveys, advisory creation, signage ordered
- Q2 (Apr–May)
 - Launch social campaign, distribute materials
- Q3 (Jun–Aug)
 - Outreach, training, event presence, provider detailing
- Q4 (Aug)
 - Evaluation & outcome reporting



Social Media Campaign



Total: 17,482 views, 336 link clicks

Beach Closure Signs

 BEACH CLOSED Harmful Blue-green Algae Blooms STAY OUT OF THE WATER Contact can make people and animals sick. If contact occurs, rinse with clean water. If symptoms occur, contact a medical provider.  If you see discolored water, blooms, or scum outside the beach, don't swim, fish, or boat in those areas. Keep kids and pets away.	 PLAYA CERRADA Cianobacterias MANTÉNGASE FUERA DEL AGUA El contacto puede enfermar a personas y animales. Si hay contacto, enjuáguese con agua limpia. Si tiene síntomas, comuníquese con un proveedor médico.  Si ve agua descolorida, proliferación de algas o espuma fuera de la playa, no nade, pesque ni navegue en esas áreas. Mantenga alejados a los niños y a las mascotas.
 PLAGE FERMÉE Cyanobactéries RESTEZ HORS DE L'EAU Un contact peut causer des maladies chez les humains et les animaux. En cas de contact, rincez à l'eau propre. En cas de symptômes, consultez un médecin.  Si vous voyez de l'eau décolorée, une prolifération de plantes aquatiques ou de l'écume en dehors des zones de baignade, ne nagez pas, ne pêchez pas et ne naviguez pas dans ces endroits. Éloignez les enfants et les animaux domestiques.	 海滩已关闭 蓝藻 远离水区 接触可使人 and 动物生病 如果发生接触，请用清水冲洗。 如果出现症状，请联系医疗提供者。  如果您在海滩外看见有变色水、水华或浮渣，则请勿在这些区域游泳、钓鱼或划船。 让孩子和宠物远离这些物质。



Posted at Deep Run Beach and East Lake Landing
(Ontario Beach Park) in Canandaigua.



Public Health

Beach Closure Signs



Posted at Kershaw Park in Canandaigua during active HABS.



Public Health

HAB Education Signs

WARNING

Stay away from colored water, blooms and scums. Keep kids and pets away.



Swim, boat, fish, and play in areas with clear water and no blooms or scums.



HARMFUL ALGAE BLOOMS
can cause symptoms in people and can make pets very sick. Rinse with clean water after contact.

www.health.ny.gov/health/alerts/2014/06/01/algae

CUIDADO

Manténgase alejado de agua con color, con proliferación de algas y con espuma. Mantenga alejados a los niños y a las mascotas.



Nade, navegue, pesque y juegue en áreas con agua clara y sin flores ni espuma.

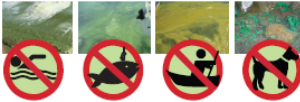


CYANOBACTERIAS
puede causar síntomas en las personas puede enfermar gravemente a las mascotas. Enjuague con agua limpia después del contacto.

www.health.ny.gov/health/alerts/2014/06/01/algae

AVERTISSEMENT

Évitez l'eau colorée, la prolifération de plantes aquatiques et les écumes. Éloignez les enfants et les animaux domestiques.



Nagez, naviguez, pêchez et jouez dans des zones où l'eau est claire, sans prolifération de plantes aquatiques ni d'écumes.



CYANOBACTÉRIES
peut causer des symptômes chez les humains et rendre les animaux domestiques très malades. Rincez à l'eau propre après un contact.

www.health.ny.gov/health/alerts/2014/06/01/algae

警告

远离有色水、水华和浮渣。让孩子和宠物远离这些物质。



在水质清澈、没有水华和浮渣的地方游泳、划船、钓鱼和玩耍。



蓝藻
可使人在接触后出现症状，并且可使宠物严重生病。接触后请用清水冲洗。

www.health.ny.gov/health/alerts/2014/06/01/algae



Posted Deep Run Beach & East Lake Landing in Canandaigua, Sandy Bottom Park on Honeoye Lake. 4 signs posted in Geneva on Seneca Lake Geneva Community Lakefront Playground and the Geneva Visitors Center.

Just in time....

Town of Richmond Recreation's post



Town of Richmond Recreation

4m · 🌐

...

It is with a very sad heart that I let everyone know that the Department of Health has confirmed what we have all been dreading. The blue green algae blooms are back at our favorite swimming hole. Please take this as notice that the beach will be closed, they will be out Monday to take more samples to ensure every ones health and safety. No swimming for people or pets is safe when blooms are present. I will notify everyone as soon as we are back open (no blooms in 24 hours.)

Beach Closed Until



Further Notice

Town of Richmond Recreation
Recreation Center

Send message



Public Health

Healthcare Detailing

- 104 medical entities:
- 3 Hospitals
 - 3 Urgent Care Clinics
 - Multiple provider offices



Health Advisory:
Increase in Harmful Algae Bloom (HAB) Illness



Harmful Algae Bloom (HAB) Illness Alert

- Algae and cyanobacteria are plant-like organisms that live in water.
- They often occur in warm, slow-moving freshwater or coastal areas with lots of nutrients (like from fertilizers or sewage).

Common Symptoms:

Symptoms of HAB-related illness can vary depending on the route of exposure (ingestion, skin contact, inhalation) and may appear within hours to days after exposure.

- Stomach pain
- Rash
- Headache
- Coughing
- Watery eyes
- Nose irritation
- Sore throat

Diagnosing HAB:

- Diagnosis is primarily clinical, based on symptoms and exposure history.
- Obtain a detailed exposure history, including recent recreational water activities, consumption of untreated water, or exposure to airborne toxins near lakes or ponds. Consider and test for HAB in the presence of clinically consistent symptoms, without an alternative diagnosis

Testing:

Serum chemistry and liver function tests, Urinalysis (to evaluate kidney function), and Cyanotoxin testing in water samples, if available (not widely accessible in clinical settings)

Treatment:

- There's no specific cure for illnesses caused by harmful algal blooms.
- Treatment focuses on relieving symptoms and providing support.

Control:

Patient Education:

1. Stay out of discolored, scummy, or smelly water and keep pets away.
2. Check for and follow swimming, fishing, and shellfish advisories.
3. Follow guidance from local officials if there is a harmful algal bloom in your drinking water supply.

For questions or concerns, contact us at:
Phone (585) 396-4343 • Fax (585) 396-4551
ontariocountypublichealth.com QB
Poison Control Hotline 1-800-222-1222

Issued 2/1/2024



Public Health

Veterinarian Detailing

Veterinarian Reference for Cyanobacterial Blooms



Dogs, livestock, and other animals can suffer severe illness or death within minutes to days of swallowing toxins from cyanobacterial blooms. Providing supportive medical care soon after exposure can save an animal's life.

Cyanobacterial Bloom Basics

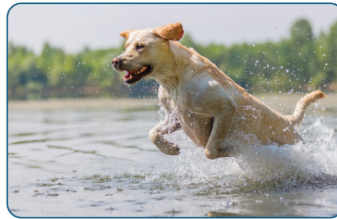
Cyanobacteria (also called blue-green algae) can grow quickly, or bloom, when water is warm, slow-moving, and full of nutrients. Cyanobacterial blooms are most commonly found in fresh water, such as lakes, rivers, and streams. These blooms can discolor the water and look like foam, scum, mats, or paint on the surface, but some blooms are hard to see because they grow below the water's surface. These blooms sometimes produce toxins (cyanotoxins) that can be lethal to animals.

Exposure and Health Impacts

- Dogs and other animals are often exposed by drinking contaminated water, swallowing water while swimming, or licking cyanobacteria from their fur.
- Dogs and other animals can become seriously ill or die suddenly after exposure. Signs depend on how they were exposed, how long they were exposed, and the types of toxins they were exposed to.
- Monogastric animals appear to be less sensitive than ruminants or birds; however, the dose-response curve is very steep in dogs—up to 90% of a lethal dose may elicit no clinical signs.

Tests and Treatments

- There are currently no clinically available tests or designated treatments.
- Medical care is supportive. There are no known antidotes to these toxins.
- Activated charcoal may be useful within the first hour, and atropine has efficacy with saxitoxin exposure.
- There is some evidence that treatment with cholestyramine may be helpful for dogs exposed to microcystins.



CS319451-C

Animal Safety Alert

Cyanobacterial blooms can be deadly for pets and livestock.

When in doubt, keep animals out!



Cyanobacteria (also called blue-green algae) are microscopic organisms that can be found naturally in all types of water. Sometimes cyanobacteria rapidly grow out of control, or bloom. Cyanobacterial blooms are most commonly found in fresh water, such as lakes, rivers, and streams.

Cyanobacterial blooms can make toxins (poisons) that are deadly for animals.

- Pets and livestock can get very sick and die within hours to days after swallowing cyanobacteria toxins.
- The toxins can be in the cyanobacteria or in the water.

Signs of a cyanobacterial bloom



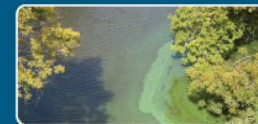
Foam, scum, mats, or paint-like streaks on the water's surface



Different colors like green, blue, red, or brown



As the bloom dies off, it may smell like rotting plants.



Cyanobacteria bloom more often in summer and fall, but can bloom anytime.

8 Veterinary Hospitals



U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention

You cannot tell if a cyanobacterial bloom is toxic or not just by looking at it.

CS 319451-E



Public Health

Community Detailing

WATCH OUT FOR HARMFUL ALGAL BLOOMS

Protect yourself, your family, and your pets from HABs.

Watch for These Danger Signs:

- Discolored water (green, blue, red, or brown)
- Scum, foam, or paint-like streaks
- Rotten or musty smell
- Water that looks slimy or like spilled paint

Health Impacts

- Nausea, vomiting, or diarrhea
- Headache, dizziness, or breathing problems
- Skin rashes or irritation
- Pets can get very sick– act fast!

Stay Safe:

- Avoid contact with suspicious water
- Don't let pets drink or swim in it
- Rinse off right away if exposed
- Seek medical help if you or your pet becomes ill after swimming



Think You've Spotted a Harmful Algal Bloom? – Report it to DEC using the *Suspicious Algal Bloom Report Form*.



7/16/2025



Public Health

Community Detailing



16 second digital video clips
Created by FLX Local Media
Aired on Finger Lakes Daily News
Reaching 790,000 users and nearly 2 ½ million page views

Lifeguard & Beach Operator Ed.

- Partnering with Canandaigua Watershed



Budget Summary

Item	Description	Quant Needed	Cost
Aluminum Signage (1)	NYSDOH Algae education- Multiple languages	10 x \$61.73	\$617.30
Aluminum Signage (2&3)	NYSDOH Beach Closure signage- - Multiple languages	10 X \$61.73	\$617.30
	NYSDOH Beach Closure in English	1 X \$61.73	\$61.73
Signage Base	Pole (60 inches) with 10-pound base	21 poles x \$123.95	\$2602.95
Facebook Boost	Water Wednesday Bloom education	\$200.00- Kassie and I	\$200.00
Finger Lakes Daily News	Advertising: 728x90 Banner on website which feeds into 7 local radio stations.		\$225.00
Shipping		\$117.70	\$117.70
Total			\$4442.98

Long-Term Sustainability

- Durable signage = years of use
- Updated campaign assets reused annually
- Engaged volunteers and trained staff = continued HAB readiness
- Fostered a positive relationship with local watershed agencies



Posted signs in October



Lessons Learned

- Facebook issues
- Additional informal beach fronts identified



Closing



Thank You



Public Health