



Hamilton Board of Health Report for Consideration

To: Chair and Members
Hamilton Board of Health

Date: April 27, 2026

Report No: BOH26012

Subject/Title: Hamilton Public Health Public Beach Water Quality
Monitoring at Binbrook Conservation Area

Ward(s) Affected: (City Wide)

Recommendations

- a) That Hamilton Public Health **BE AUTHORIZED** to delegate public communication related to beach water quality and safety for Escherichia coli (E. coli) at the Binbrook Conservation Area beach to the Niagara Peninsula Conservation Authority commencing the Spring/Summer 2026; and,
- b) That Hamilton Public Health **BE DIRECTED** to remove the onsite “Flip Signs” at all public beaches that indicate “safe” or “unsafe” for swimming, as depicted in Appendix “A”, and maintain the current permanent beach sign, as depicted in Appendix “B”.

Key Facts

- Reporting back to the Board of Health on the outcome of discussions between Hamilton Public Health and the Niagara Peninsula Conservation Authority regarding beach water quality testing and public swimming advisories at Binbrook Conservation Area Beach to ensure the continued protection of public health and effective inter-agency collaboration;
- Following a review of Ontario's legislative framework, legal opinions received, and applicable Program Standards, Hamilton Public Health staff will continue to deliver beach water quality testing and monitoring for long term water quality surveillance at all public beaches;
- Both Hamilton Public Health and the Niagara Peninsula Conservation Authority recognize the importance of consistent and clear public messaging regarding beach water quality and safety. Communication of beach water quality results will be transitioned to Niagara Peninsula Conservation Authority and will be maintained through public advisories, postings, and other communication methods to ensure the public receives timely and reliable information.

Financial Considerations

Not Applicable.

Background

At its meeting on July 28, 2025 the Board of Health provided the following direction via Motion:

9.1 Beach Water Quality Testing and Advisory Protocols at Binbrook Conservation Area - REVISED

- (a) That Public Health Services be directed to engage in formal discussions with the Niagara Peninsula Conservation Authority to explore the feasibility, legal authority, and operational requirements for transitioning beach water quality

testing and public swimming advisories at Binbrook Conservation Area Beach from Hamilton Public Health Services to Niagara Peninsula Conservation Authority staff;

- (b) That staff report back to the Board of Health with findings and recommendations no later than Q3 2025;
- (c) That the report consider relevant legal opinions, service delivery models, operational impacts, communication strategies, public safety considerations, and opportunities for inter-agency collaboration; and,
- (d) That the City Clerk forward a copy of this resolution to the Niagara Peninsula Conservation Authority Board of Directors for information.

Analysis

Historical Background

A question from the public in June 2020 concerning water quality at the Binbrook Conservation Area public beach identified conflicting messaging from Niagara Peninsula Conservation Authority and Hamilton Public Health. Hamilton Public Health issued an advisory that the beach was unsafe for swimming due to elevated *Escherichia coli* (*E. coli*) levels, while Niagara Peninsula Conservation Authority suggested the water was safe for swimming. To avoid public confusion, both organizations agreed to align messaging based on Hamilton Public Health's results and direction.

In June 2020, Niagara Peninsula Conservation Authority obtained a legal opinion, asserting that the responsibility for water testing at Niagara Peninsula Conservation Authority beaches rests with Niagara Peninsula Conservation Authority as the operator. In September 2020, Hamilton Public Health reviewed the legal opinion provided with City of Hamilton Legal Services and determined that it conflicts with the requirements of the *Health Protection and Promotion Act* and related Ontario Public Health Standards.

On April 2021, Hamilton Public Health and Niagara Peninsula Conservation Authority managers held a virtual meeting to discuss roles and responsibilities, Hamilton Public Health's beach water monitoring schedule, procedures for public communication during

adverse water quality events, the on-site notification process, and Hamilton Public Health developed fact sheets to support public messaging for Niagara Peninsula Conservation Authority patrons and visitors to the Binbrook Conservation Area.

On March 21, 2022, the Board of Health received Report BOH22004 from Hamilton Public Health recommending the discontinuation of on-site “Flip Signs” at all seven Hamilton-area public beaches. These signs are manually “flipped” by beach operators to indicate changes from “Safe for Swimming” to “Unsafe for Swimming”, as directed by Hamilton Public Health staff. The Board of Health did not support this proposed operational change, voting not in-favour of the recommendation in Report BOH22004 Public Beach Signage at the March 21, 2022 meeting.

Meetings were held between Hamilton Public Health and Niagara Peninsula Conservation Authority representatives on October 7, 2025, and January 7, 2026, to discuss Niagara Peninsula Conservation Authority’s request to assume operational responsibility for monitoring and testing beach water quality at the Binbrook Conservation Area effective spring/summer 2026.

The recommendations affirm Hamilton Public Health’s legislated authority and responsibility to monitor and test water quality under the *Health Protection and Promotion Act* and Ontario Public Health Standards.

Under the *Health Protection and Promotion Act*:

- **Section 2:**
Establishes the purpose of public health programs to prevent disease and protect the health of the public.
- **Section 7(1):**
Mandates that every Board of Health must comply with standards published by the Minister of Health.
- **Sections 41 and 42:**
Grant Public Health Inspectors rights of entry and inspection to fulfil duties under the *Health Protection and Promotion Act* on behalf of the local Medical Officer of Health.

- **Schedule 12 of Regulation 553:**

Areas Comprising Health Units designates the City of Hamilton as the jurisdiction for Hamilton Public Health, including Binbrook, Ontario.

The Ontario Public Health Standards include the Recreational Water Protocol, 2019 and Operational Approaches for Recreational Water Guideline, 2018, requires local Boards of Health to conduct surveillance, inspection, and public communication regarding the safety of public beaches.

The Recreational Water Protocol, 2019, defines “public beaches” broadly as any public bathing area accessible to the public, explicitly excluding only private residential beaches. Conservation Authority beaches are not exempt from this definition.

Hamilton Public Health operates a comprehensive Beach Water Quality Monitoring Program that includes:

- Routine sampling of all seven public beaches within the City of Hamilton, May to August annually;
- Public Health Inspector trainees conduct public beach water quality monitoring, testing, and reporting – supported by Certified Public Health Inspectors – in partnership with the Ontario Public Health Laboratory;
- The Ontario Ministry of Health fully funds the Public Health Inspector trainees working at Hamilton Public Health to a maximum of \$30,000 annually;
- Public Health Ontario Laboratory conducts free analysis of Escherichia coli (E. coli) levels for public health units;
- Assessment of results based on geometric mean thresholds; and,
- Public posting and advisories indicating “safe” or “unsafe for swimming” or “closed”.

On-site “Flip Signs” are “flipped” by beach operators from “Safe for Swimming” to “Unsafe for Swimming” as directed by Hamilton Public Health staff. The Flip signage remains in place until water resample results are below established thresholds then are “flipped” back to “Safe for Swimming”. These signs direct the public to the City of

Hamilton website www.hamilton.ca/beaches or the Safe Water Hotline at (905) 546-2189 regarding current water quality status (see Appendix “A” to Report BOH26012).

The use of Flip Signs and Escherichia coli (E. coli) bacteriological sampling does not provide real time risk information to beach patrons. Water samples are collected and delivered to the Public Health Laboratory in Hamilton the same day for analysis. Public Health Laboratory typically provide results within 24 hours after receiving the sample. The culturing of water samples requires 24 hours to allow bacteria present in the sample to grow and multiply where they can be identified and measured by Public Health Laboratory. Given that water conditions can change rapidly, this time delay means that laboratory results may not reflect the actual quality of the water at the time that Hamilton Public Health communicates results to beach operators and post advisories.

Relying on a prolonged reporting timeline for laboratory analysis can misrepresent current risk level, and result in information communicated to the public potentially not being reflective of the current risk. For example, a water sample collected on a Monday may lead to a beach being posted as ‘unsafe’ on Tuesday afternoon based on adverse laboratory results, despite the possibility that water conditions may have improved since the time the sample was taken and current risk to patron’s is lower. This may result in patrons unnecessarily avoiding beach activities and may contribute to an unfavourable public perception of Hamilton’s public beaches. Conversely, a beach may remain unposted due to satisfactory results of a Monday water sample, even though water quality may have worsened since sampling occurred. In such cases, patrons may receive inaccurate information and a false sense of safety.

Permanent beach signage provided by Hamilton Public Health at Binbrook Conservation Area public will continue to inform patrons of risk factors which may contribute to elevated Escherichia coli (E. coli) bacteria levels (see Appendix “B” to Report BOH26012). This signage provides guidance on actions that patrons can take to reduce their risk, such as waiting 48 hours after a heavy rainfall before swimming. This will provide beach patrons with the information they need to assess environmental conditions that increase their risk of exposure. Hamilton Public Health will maintain its

website to direct the public to the Niagara Peninsula Conservation Authority website for current beach water quality information and continue to engage the community through social media and other communication methods.

In agreement with the Niagara Peninsula Conservation Authority, Hamilton Public Health is requesting authority to delegate *Escherichia coli* (E. coli) water quality communications for Binbrook Conservation Area public beach to the Niagara Peninsula Conservation Authority. Notwithstanding potential adverse events that pose a significant public health risk requiring Hamilton Public Health intervention such as a blue-green algae bloom, Hamilton Public Health will continue to manage beach closures by directing the Niagara Peninsula Conservation Authority to limit access and post signage in appropriate locations to reduce the risk of public exposure.

Beach water quality and safety remain a priority for Hamilton Public Health and the Niagara Peninsula Conservation Authority. This model serves to strengthen inter-agency collaboration and reduces the potential for conflicting messaging across the Niagara Peninsula Conservation Authority's watershed jurisdiction while providing reliable information to the public.

On October 31, 2025, the Ontario government announced plans to introduce legislation creating the Ontario Conservation Agency, a centralized body intended to streamline the province's 36 conservation authorities into seven. It's unclear whether Niagara Peninsula Conservation Authority's jurisdictional boundaries will change or merge into a larger regional boundary. Niagara Peninsula Conservation Authority's roles and responsibilities for water-shed monitoring could potentially be re-evaluated or restructured during consolidation affecting local operations and partnerships.

Results of Consultations:

- **City of Hamilton Legal Services**

Confirmed that the *Health Protection and Promotion Act* and Ontario Public Health Standards clearly assign beach water quality monitoring to Boards of Health.

- **Niagara Peninsula Conservation Authority:**
Met with Hamilton Public Health October 7, 2025, and January 7, 2026, and both recognize the importance of consistent and clear public messaging regarding beach water quality safety and reporting.
- **Niagara Region Public Health:**
Consultation held regarding current approach to beach water quality monitoring and reporting across Niagara Region.
- **Central West Ontario Environmental Health Directors and Medical Officers of Health:**
Regarding current beach water quality monitoring within their respective jurisdictions.

Alternatives

Not Applicable.

Previous Reports Submitted

- [BOH22004](#) – Public Beach Signage

Consultation

- Legal Services, Corporate Services
- Niagara Peninsula Conservation Authority
- Niagara Region Public Health

Appendices and Schedules Attached

Appendix “A” to Report BOH26012: Flip Signs

Appendix “B” to Report BOH26012: Permanent Beach Status Sign

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