



LIFESAVING SOCIETY

The Lifeguarding Experts

COMPREHENSIVE AQUATIC SAFETY AUDIT REPORT

Colchester Beach, ON

File: ON-Essex



CLIENT

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LIFESAVING SOCIETY

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Summary Findings

Introduction-Summary

Aquatic Safety Audit

On June 23, 2023, the Town of Essex retained the Lifesaving Society to undertake a comprehensive aquatic safety audit of their aquatic operations. An initial meeting was held with Mr. Jake Morassut for the Town of Essex and Mr. Michael Shane, Safety Management Director - Lifesaving Society. It was agreed that the purpose of the aquatic audit was to maximize the safety of participants at Colchester Beach, Town of Essex. The safety audit would identify what steps might be taken to minimize the risk of drowning or serious water-related injuries. It was agreed that the scope of the safety audit would include discussions with management in addition to an evaluation of the aquatic facility's operation. This evaluation would report only on those items that require attention. It would not address aspects that were satisfactory or exceptional.

Aquatic Safety Audit Process

Personnel

The Lifesaving Society appointed Peter Mumford as Aquatic Safety Management Services - Chief Auditor. Peter Mumford has extensive experience in municipal aquatic management. The Lifesaving Society also appointed the following Aquatic Safety Auditors: Lisa Adams and Patrick D'Almada. All the individuals appointed have extensive experience in aquatic facility operations.

Audit Components

The audit team followed a process that included:

- On-site safety inspection of the aquatic facility.
- Interviews with management staff at various levels within the organization.
- A review of existing documentation provided to facilities and staff concerning the operation of the beach.
- Completion of a final report.

Facility Safety Inspections

The safety audit team completed its inspection of Colchester Beach on August 17th, 2023. In their detailed inspection, the auditors examined the facilities applying criteria developed by the Lifesaving Society from sources that included:

- Government of Ontario statutes governing water quality.
- Recommendations from coroners' inquests.
- Lifesaving Society standards concerning the operation of public waterfronts.
- Lifesaving Society research into drownings in open water environments.
- Other relevant government regulations and acts.

As part of the inspections, staff members designated on the inspection day as the facility representative were questioned regarding specific facility operations, staff training, staff certifications and other general topics. If Priority Concerns were identified, they were discussed with the designated facility representative immediately following the facility inspection. In addition, a Priority Report form was given to this representative.

Staff Interviews

Following the facility inspections, the safety audit team conducted interviews with a selected cross-section of two employees representing various relevant functions. The interviews were designed to gather the views of staff on the Town's aquatic operations. The audit team asked questions of each interviewee, after which staff were invited to share additional thoughts with assurances that specific comments would be unattributed.

Documentation Review

There was no documentation to review for this audit.

Summary Findings

The Lifesaving Society has completed an aquatic safety audit of Colchester Beach on August 17th, 2023. It is the Lifesaving Society's opinion that at the time of the audit, the Town of Essex was operating Colchester Beach below the range of Safe Practice for an unsupervised beach.

The Lifesaving Society recognizes a range of Safe Practice. When operating within this range, the Town of Essex is providing a reasonable standard of care in all four categories we audit: personnel, procedures, communication and facility and equipment.

The Lifesaving Society considers the Town of Essex to be operating within the range of Safe Practice if the aquatic safety audit identifies no Priority Concerns, and only Primary Recommendations which in the opinion of the Society represents a low risk to public safety.

The Lifesaving Society considers the Town of Essex to be operating below the range of Safe Practice if any Priority Concerns are identified, or if any Primary Recommendations address unreasonable risk to public safety.

We direct your attention to the following concerns and recommendations:

Priority Recommendations



Priority Concerns

Priority Concerns

The Society's aquatic safety audit revealed two (2) problems to warrant Priority Concern status. Priority Concerns represent major safety risks to the public and merit immediate action.

Primary Recommendations



Primary Recommendations

Primary Recommendations

The Society's aquatic safety audit presents four (4) Primary Recommendations. Primary Recommendations address situations in contravention of a relevant Province of Ontario statute or the Lifesaving Society's position on what constitutes reasonable safe practices. Primary Recommendations should receive focused attention by facility management.

Secondary Recommendations



Secondary Recommendations

Secondary Recommendations

The Society's aquatic safety audit presents two (2) Secondary Recommendations are designed to enhance the safe use of the aquatic facility. Action on Secondary Recommendations can proceed within the facilities ongoing operations.

Public Waterfront

Facility- Waterfront Unsupervised



Priority Concerns

Designate a safe swimming area.

Given the proximity of the marina and boating traffic in the area, we recommend that the swimming area be clearly designated through signs, buoy lines, buoy markers or any combination of these. During the audit there were no buoy markers situated in the water identifying the swimming area or no boating area. During the interviews it was noted that the buoy markers had been put in the water in the past however the employee responsible for installing them felt they were not necessary this year.

Where swimming area buoys are utilized, they should meet Transport Canada standards. Typically, these are white with No Swimming demarcation and reflective tape. These markers should be no more than 150 m apart and designed to warn and educate boaters in the area from entering the swimming area.

Given the depth of the water and fact that conditions can become quite adverse quickly, The Town may want to consider installing a secondary set of markers that demark a shallow water area for bathers. This should be approximately 25 meters from the shore where the water is approximately 4 feet deep. It should also be a safe distance away from the pier rock wall (at least 10-15 meters).





In this image, the auditor is approximately 15 meters from shore. Water depth is already up to his chest, approximately 4 ft.



In this photo, the auditor is 25 meters from shore with the water up to his shoulders, approximately 5 ft.



In this photo the auditor is 50 meters from shore with water at his head, approximately 6 ft.



Priority Concerns

Install lifesaving stations in designated areas.

At the time of the audit, no lifesaving stations were provided on the beach. There is a need for these stations to be installed to ensure the public has access to rescue equipment to assist in a water emergency, without having to enter the water or to provide safety separation from the victim if they do enter the water.

It is recommended that a lifesaving stations be located at each end of the beach and one on the pier.

Equipment located at each rescue station should include:

- A reaching pole of at least 3m in length.
- A buoyant throwing aid attached to a 6mm line at least 8m in length.
- Appropriate signage as dictated by the Lifesaving Society Waterfront Safety Standards.
- Signage that indicates the purpose of the equipment and warns of misuse and consequences should also be installed on each station (see Appendix)



Primary Recommendations

Revise the current beach signage.

Although signage was installed on the beach, access points to the beach had little signage. These areas are often ideal opportunities to warn and educate the public on safe practices in waterfront areas. For this reason, we recommend that signs be installed at the top of the main stairs, the accessible ramp and at the base of the boat launch. These signs should identify the following items:

- where staff are available to maintain, a system (flag or sign) be created to warn and educate bathers as to the water conditions present on the beach (E. coli, wave, undertow, etc.).
- "Swimming area is not supervised; children require direct supervision by parents or adults." "Don't swim alone." "Waterfront conditions (depth, bottom, etc.) may change."
- location of telephone for emergency use (or other communication device), and nearest first aid station.
- diving can result in serious injury or death; patrons are cautioned against diving, or to perform only foot first entries in areas unsafe for diving or where uncertain of water depth.
- Hours of operation are identified where applicable.
- Beach safety rules such as "No Dogs", "No Fires", "No Glass" etc.
- name and address of facility and operated by: _____.
- report any site deficiencies to: _____.

It is also recommended that signage be installed at the entrance of the pier advising visitors that it can be quite hazardous during rough water conditions and during winter months when icing over occurs on the pier.





Primary Recommendations

Conduct a safety review of public access to the pier.

During the inspection it was noted that there was a lack of signage warning visitors not to go onto the rocks along the pier. During the inspection the lake conditions were quite rough which staff noted is quite common. The waves easily splashed and sprayed onto the pier creating a slip hazard.

It is recommended that the Town of Essex staff review the current signage available for visitors and look to upgrade to warn about hazards of waves, slippery conditions (during all times of the year). In addition, staff should explore the feasibility of creating a barrier that will restrict access to the rock from the pier.





Primary Recommendations

Enhance beach signage.

During the audit the wave conditions were quite hazardous, reaching heights of 1.5 meters. There is the potential that under these conditions for the development of rip currents along the beach. The Town should investigate this to ensure that if rip currents do develop, they address this with bather warning signage and education messaging.



Primary Recommendations

Ensure frequent lake water testing is completed and posted.

To ensure the safety of the water and health of bathers, frequent water testing should be done, and the results posted on an information board adjacent the beach. While this information is posted online through the town and region website it is recommended that the Town explore the possibility of posting this information at the beach. This will ensure that members of the public have had ample opportunity to be educated on the water quality of Colchester Beach.



Secondary Recommendations

Install beach map signage.

The Town should ensure that a beach map is provided at each access points to the beach. This map should include at least the following:

- Location of the designated safe swimming area.
- Identification of the No swimming area(s).
- AED location.
- Emergency telephone location.



Secondary Recommendations

Provide lifesaving station rescue equipment logs.

Lifesaving stations equipment should be checked and replaced on a regular basis to ensure it is ready for use by bathers in an emergency. A log should be maintained of these checks and filed by the owner for at least one year.

During the time of the audit and interviews, it was confirmed that there were no records for when the beach was inspected or raked.

It is recommended that a log be created that will track when the beach is inspected, raked, if hazards are found (i.e., glass, needles, excessive seaweed, dead sea life, etc.) and any corrective action taken to mitigate or eliminate the hazards.

Appendix

Equipment Signage

