

Staff Report

Presented By: Kristan Shrider, Director, Community Services
Meeting Date: November 10, 2025
Subject: Smart Beach Program Update
Attachment(s): Appendix A – Wave Buoy and Camera Data Collection Report
Appendix B – 2025 Survey Report

Recommendation

That Council receive the Smart Beach Program Update report for information.

Report Summary

Phases 4 to 6 of the Smart Beach Program is a partnership between the Town of Saugeen Shores, University of Waterloo and Georgian College designed to promote beach safety. Phase 4 occurred in 2025, and this report provides a summary of activities and next steps.

Background/Analysis

At the September 23, 2024, meeting, Council authorized the Chief Administrative Officer to enter into an Agreement through the Municipal Innovation Council for the Town of Saugeen Shores to participate in Phases 4 to 6 of the [Smart Beach Program](#).

At the March 24, 2025, meeting, Council received a [report](#) regarding the Municipal Innovation Council Closeout. Included in that report was the commitment to continue the work on the Smart Beach Program between the Town of Saugeen Shores, University of Waterloo and Georgian College. A grant of \$340,000 was secured for this work and the project was identified in the Town's 2025 Business Plan with Community Services.

Key areas of focus of the work completed in 2025 (Phase 4 - Test Model Transferability) include:

- Awareness Campaign and Communication
A research assistant from University of Waterloo visited the Saugeen Shores beaches 8 times providing Smart Beach Program awareness and encouragement to complete the survey to assist in understanding beachgoer behaviour and to guide the development of a potential beach safety application. Community Services staff distributed business cards and posters to promote the program and survey.

- Survey and FlashVote Exercise and Data Collection
Goals of the two survey methods included identifying the factors that influence trip planning and water entry decisions, documenting swimming ability and hazard awareness, and capturing public preferences for digital safety tools and features.
- Wave Buoy Information and Data Collection
The wave buoy was located 1.2km offshore of the Port Elgin Beach. The buoy recorded weather, wave, currents, and water temperature every 20 minutes. All data is reported in real time and is accessible to the public through the [seagull website](#).
- Camera Information and Data Collection
A camera was installed at the Beach House Building at the Port Elgin Main Beach. Images were taken every 20 minutes, and this data allows for the monitoring of beach users in response to lake conditions that are being recorded by the wave buoy. It is anticipated that a camera in a suitable location along the Southampton Beach will be installed in 2026.

Full details on the awareness campaign, communication, wave buoy and camera data collection can be found in Appendix A (attached).

Full details on the public survey and FlashVote engagement can be found in Appendix B (attached).

Highlights of the Saugeen Shores data collected in 2025 include:

- General wave height this summer was .27m.
- Strong westerly winds caused waves heights of over 1m, on 4 occasions this summer.
- Over 2000 images were collected from the camera.
- Further review of analysis will demonstrate beach users' activity when weather and wave hazards are present.
- 2/3 of the participants were local residents.
- Participants rely twice as heavily on their own assessment of onsite conditions as on forecasts when deciding to enter the water.
- Most participants enter the water on every trip to the beach, but 31% indicate that they are a beginner or non-swimmer.

Next steps identified for 2026 and 2027 for the Smart Beach Program include but are not limited to:

- Phase 5 - Integrate Models into Web and/or Mobile Applications
 - Test and refine a locally calibrated surf zone model.
 - Test and refine a beach user counting model.
 - Apply insights to design an application and supporting communication strategies that reflect beachgoer behaviour and meets the needs of residents and visitors.
- Phase 6 - Official Launch of Smart Beach Applications
 - Release the web and mobile apps to offer free access to the beach warning system.
 - Deploy on-site educational resources, and other educational resources through partnerships, and a live warning system at beach entrances to

boost safety awareness and promote the Smart Beach initiative throughout Ontario.

Linkages

- Strategic Plan Alignment: Pillar 4: Fostering a Vibrant Place to Live and Visit
- Business Plan Alignment: Community Services Division Highlight

Financial Impacts/Source of Funding

No costs or revenue is associated with this report.

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