

CASE STUDY: LAKE HURON SOUTHEAST SHORES PHOSPHOROUS REDUCTION CBSM PROJECT

**Client: Ontario Ministry of Agriculture, Food, and Rural Affairs
and Ausable Bayfield Conservation Authority, Ontario, Canada**

OVERVIEW

Over the past 20 years, there has been an increase in water quality issues in Lake Huron, including nuisance algae and beaches that are unclean and unsafe for swimming. A major contributing factor to nuisance algae growth along the Lake Huron shoreline is due to phosphorous. Two areas of concern from the residential sector are the use of phosphorous in lawn care practices and malfunctioning or leaking septic systems. The aim of the Lake Huron Southeast Shore Phosphorous Reduction Project was to foster pro-environmental behaviours that reduce the amount of phosphorous loading occurring in Lake Huron from the activities of shoreline residents.

SERVICES

The pilot project utilized Community-Based Social Marketing (CBSM) to develop and pilot test strategies aimed at changing behaviours of shoreline residents. Building on previous work completed by Lura on phosphorous loading behaviours in the Great Lakes, this pilot project further explored phosphorous loading behaviours of residents in the Southeast Shores area of Lake Huron. Lura conducted research in the community through a survey and focus groups to identify behaviours to target and the barriers and benefits associated with those behaviours. Based on research findings, CBSM strategies were developed and pilot tested on 500 households at five different sites across Huron County. A number of different strategies requiring varying levels of resources were tested and evaluated to measure effectiveness. Pilot testing involved door-to-door discussions, information packages, and signage in local stores. Baseline data and pilot delivery data were collected to evaluate the success of the different strategies.

RESULTS

The results of the pilot project demonstrate that CBSM is an effective approach for encouraging behaviours that can reduce phosphorous loadings in Lake Huron. The results also demonstrate that the more intensive strategies – based on personalized interactions – was the most effective approach. In most cases, the strategies and tools used resulted in improvements to attitudes and awareness, and showed a scalable impact on the way people behaved compared to the level of personal interaction they received. During the project, the strategies that targeted lawn care practices were most effective, compared to those targeting septic system maintenance behaviours. The pilot project resulted in useful findings that can inform similar pilot behaviour change initiatives involving phosphorous loadings from the residential sector or full-scale implementation.

