St. Catharines

Aquafor Beech Limited

Martindale Pond Weir Study
Public Information Centre



Welcome
November 5th, 2026

- Please sign in and view displays
- Discuss the study with project staff
- Feel free to ask questions!

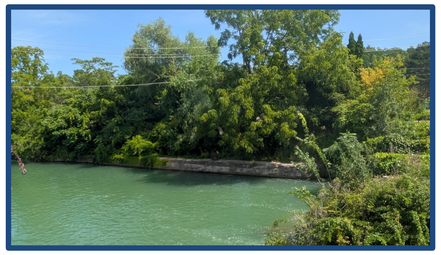
Background

The Project

The City of St. Catharines has initiated a study to evaluate and recommend a long-term solution for the Martindale Pond Weir, constructed in approximately 1887. The masonry overflow weir has been the subject of several previous condition and dam safety assessments. The purpose of this study is to assess existing conditions, develop and evaluate alternative solutions, recommend a preferred solution, and mitigate any potential negative environmental impacts associated with the proposed works.









Study Area

The Martindale Pond Weir is located on Twelve Mile Creek at the north end of Martindale Pond, between Lakeport Road and the Harbour Walkway Trail.

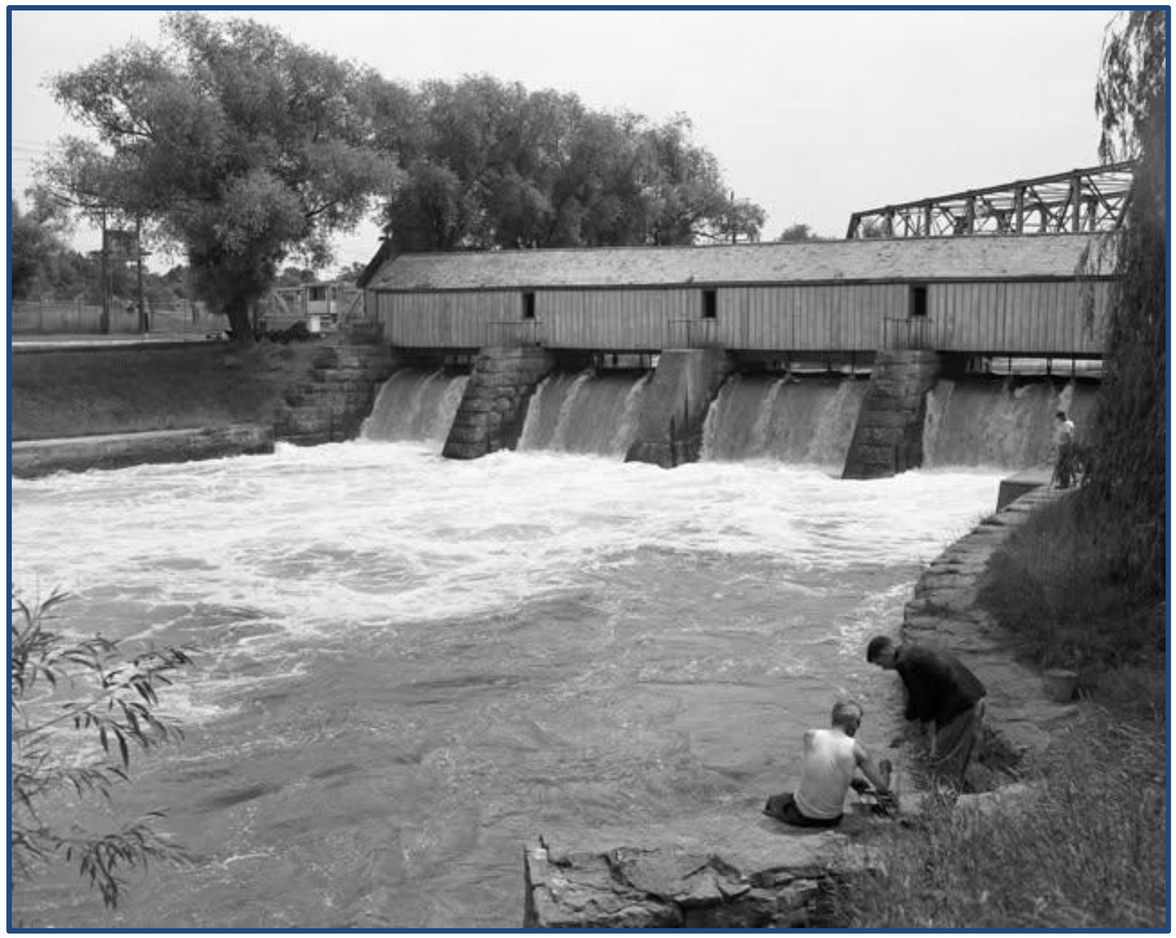
The study is specifically focused on the Martindale Pond Weir, however will give due consideration to the surrounding Twelve Mile Creek, Martindale Pond, adjacent Heywood Generating Station, and surrounding municipal lands and infrastructure. The Heywood Generating Station is located approximately 50 m east of the weir and currently uses flows from Martindale Pond for power generation.



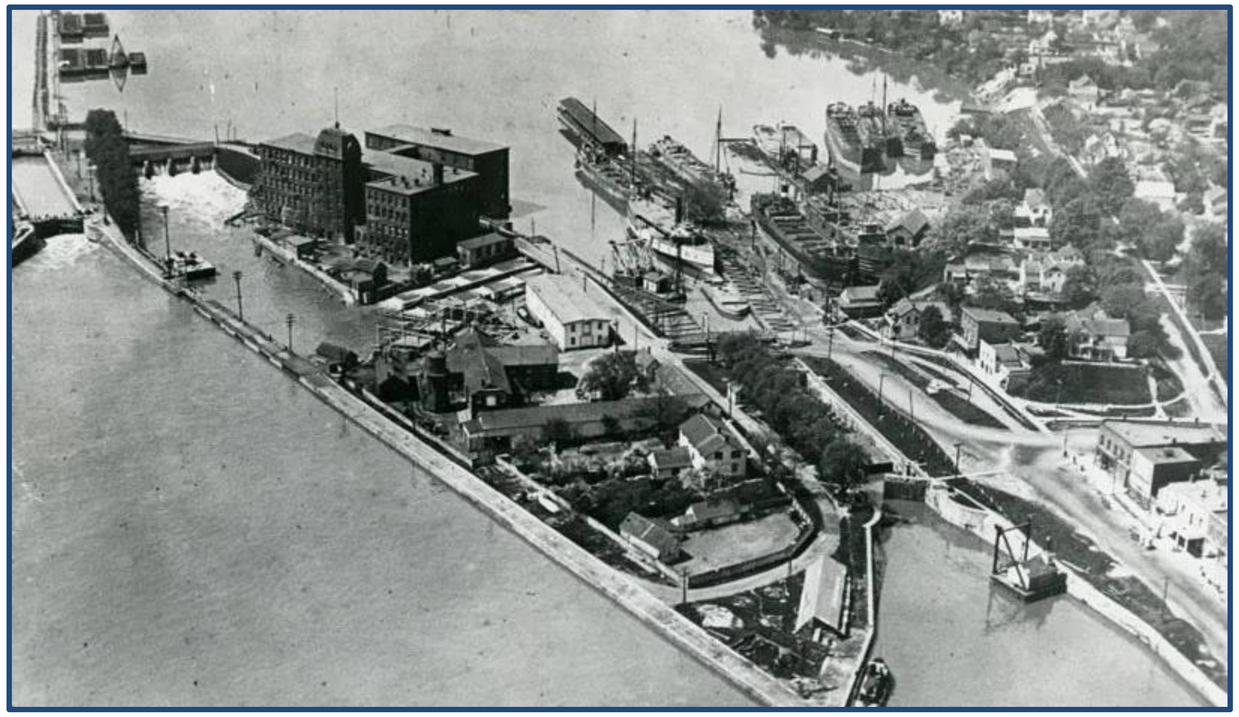
History

History of the Martindale Pond Weir

Believed to be built in approximately 1887, the structure was originally constructed as an overflow weir for Lock 1 of the Third Welland Canal. It consists of a stone masonry structure with four spillway bays and timber stop logs. Following the decommissioning and replacement of the Third Welland Canal by the Welland Ship Canal in the 1930s, the weir has remained as a surviving remnant of Port Dalhousie's historic canal infrastructure.



Historic Photograph of Martindale Pond Weir
Source: Vintage Port Dalhousie



Port Dalhousie (1930)
Source: St. Catharines Museum

Study Outline

The Martindale Pond Weir Study will include the following tasks:

Identify Problem or Opportunity

- Background data review

Public Meeting #1

- Introduce purpose/outline of study
- Begin public consultation

Existing Conditions Technical Studies

- Dam condition/safety review
- Hydrologic & Hydraulic assessments
- Geomorphology & Sediment Analysis
- Aquatic and Terrestrial Environmental Assessment

Specialty Technical Studies

- Topographic Survey
- Archeology and Cultural Heritage Assessment
- Geotechnical investigation
- Hydrogeological investigation

Draft Alternatives and Preferred Solution

- Development of 5 distinct design alternatives to address study problem
- Preferred solution selected using numerical decision matrix and outlined criteria

Public Meeting #2

- Present draft design alternatives and preferred solution
- Receive public feedback/input

Final Alternatives

- Incorporate public feedback into finalized alternatives
- Draft project file report

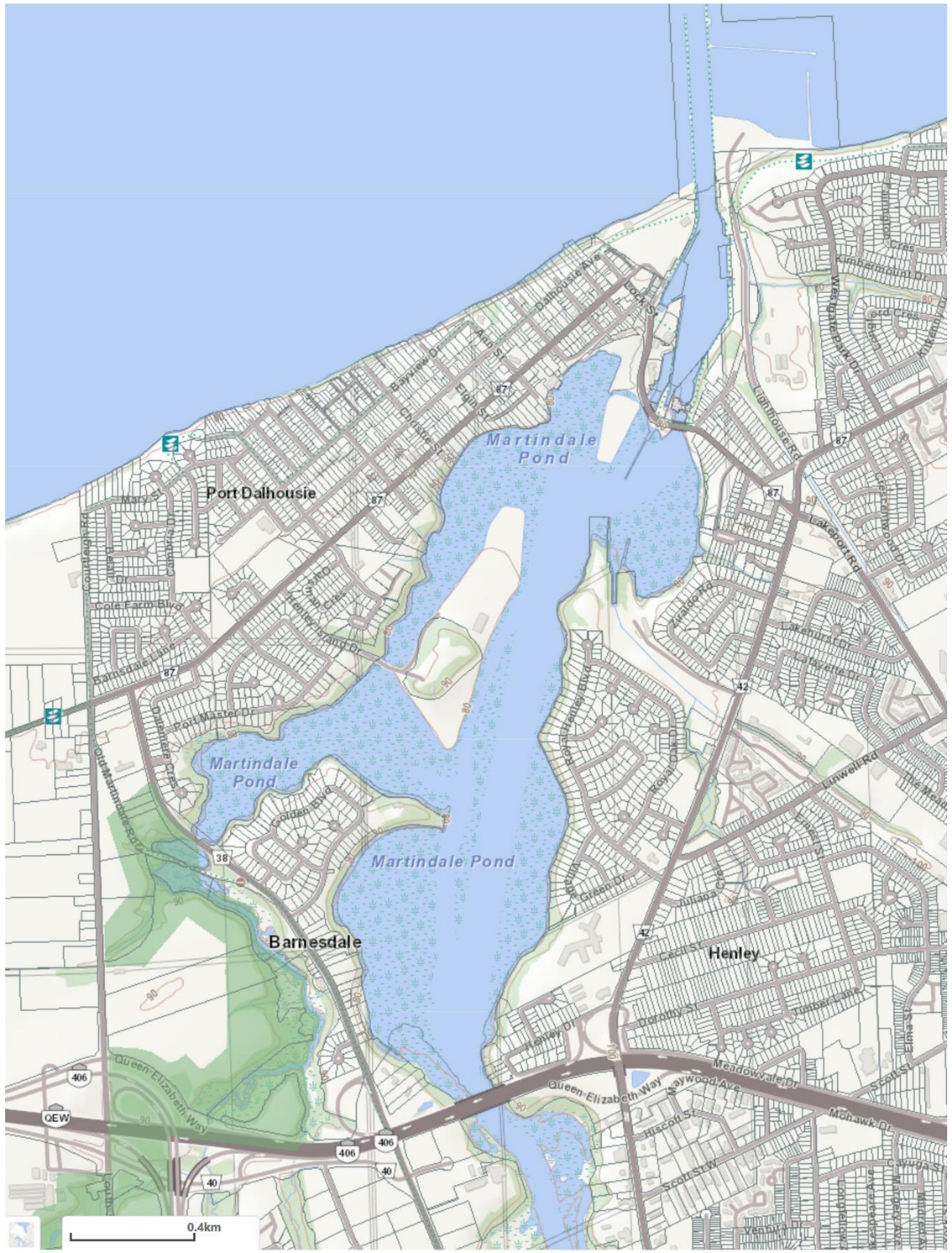
Public Meeting #3

- Present results of the study
- Receive final round of public feedback/input

Final Project File Report

- All public/stakeholder input incorporated into final report summarizing the study and recommending a final preferred solution

Study Area Extents





Existing Conditions Drawing

