

Welcome

Feasibility, Costing, and Preliminary Design Study

Public Information Centre

December 3, 2025

This Public Information Centre will:

- Provide key Study updates;
- Introduce you to Project funders and the Project Team;
- Provide background information and historical timelines;
- Present the importance of irrigation to the region;
- Present the problem and opportunity statement, evaluation criteria and a high-level list of alternatives under consideration;
- Seek feedback on key topics;
- Describe how we're planning to keep you involved; and
- Next steps.

Study Overview

Feasibility and Costing Study for a new piped irrigation system in Lincoln/St. Catharines below the escarpment, including:

- Evaluation of source water and alignment options;
- Preliminary (10%) engineering design of a communal piped irrigation system;
- Cost estimates for capital, design, lifecycle, and the operation of the proposed system;
- A comprehensive consultation and engagement program; and
- Recommendations for next steps and implementation.

Detailed design, permitting, and construction are not part of the Study. Decisions on ownership, operation, and governance are also not part of the Study.

Improving Irrigation in Niagara – A History

- Early 2000's – Raw Water for Agricultural Purposes Study identified feasible options for supplying raw water to Niagara's agricultural community.
- 2016 – Niagara Irrigation Strategic Action Plan addressed water security needs for Niagara growers and developed a strategic framework for irrigation infrastructure.
- 2020 – Irrigation Committee of the Whole Formed.
- 2020 – 2023 – Project Visioning and Scoping.
- 2021 – Review of Possible Governance Models.
- 2020-2024 – Over 100 interviews were conducted with growers in the study area to understand grower needs and preferences for a communal irrigation system method.
- Current – Niagara Irrigation Initiative Project: Feasibility, Costing, and Preliminary Design Study.

Study Area Map



2025

2026

We are here



Project Funders

- Government of Canada
- Ontario Ministry of Agriculture, Food, and Agribusiness
- Canada Infrastructure Bank
- Greenbelt Foundation
- Niagara Region
- Grape Growers of Ontario
- Ontario Tender Fruit Growers
- Town of Lincoln
- Town of Niagara-on-the-Lake
- City of St. Catharines
- Local Niagara Greenhouse Growers

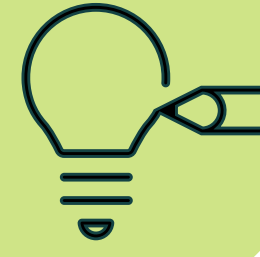


Problem and Opportunity Statement



Problem

Niagara is one of only a few areas in Canada with climate and soil conditions suitable for high value crops such as grapes and tender fruit. However, the impacts of climate change, including drought conditions, have highlighted the need for improved irrigation infrastructure across Niagara. Previous studies have identified that there is significant room for increased yields of high value crops throughout the region. However, difficulties in accessing irrigation water and capital funding to build water delivery systems is preventing expansions.



Opportunity

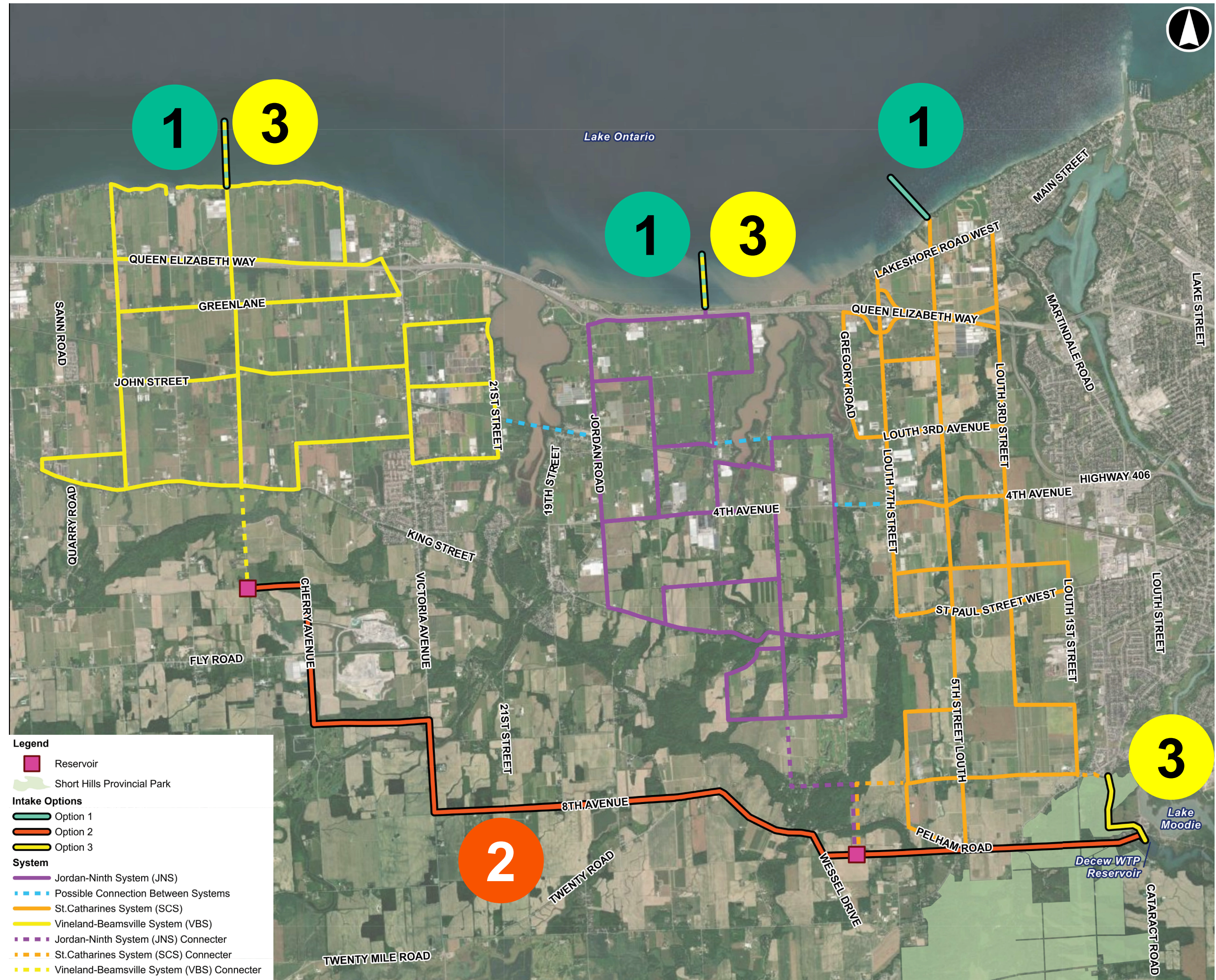
This Study will advance previous irrigation work, recommend the most efficient, environmentally sound and cost-effective design of a piped, communal irrigation system between Beamsville and St. Catharines below the escarpment, and provide the foundational technical, financial and engagement work needed to move toward detailed design and implementation.

Alternatives

Source Water Alternatives

There are three main source water intake alternatives being evaluated:

- 1 Pumping from Lake Ontario;
- 2 Gravity feed from above the escarpment; and
- 3 A hybrid system combining above two options.



Alignment Alternatives

The Study will be considering a looped vs branched system while also considering crossings and constructability and comparing the costs. A network of pipes will be developed taking into account water demand, permitting constraints (such as water volume permitting) and costs.

Evaluation Criteria

Each **source water alternative** will be assessed against the following proposed evaluation criteria:

- Capital Cost
- Operational Cost (length of system, number of pumps)
- Ability to Meet Water Demand
- Constructability / Technical Risk
- Ease of Implementation
- Permit to Take Water Considerations
- Water Quality / Algae / Sediment / Ice resistant
- Environmental Impact
- Permits / Approval Consideration
- Climate Change Impact
- Land Use and Property Constraints
- Impacts to Residents

Evaluation criteria for **alignment alternatives** are in development.



Project Steering Committee

A Project Steering Committee is undertaking the project on behalf of the growers, producers, agricultural community and others who will benefit from new and upgraded irrigation.

The Steering Committee includes Regional Staff, growers and municipal representatives from Town of Niagara-on-the-Lake, Lincoln and St. Catharines, as well as a representative from Grape and Tender Fruit Ontario Limited and Regional Council. Ontario Ministry of Agriculture, Food and Agribusinesses and Canada Infrastructure Bank staff are also participating as members of the Steering Committee.

Niagara Region Staff are providing project management and technical support for the overall Project. AECOM has been retained as the Project Engineer.



Thank You and Next Steps

Thank you for joining this Public Information Centre for the Niagara Irrigation Initiative Project: Costing, Feasibility, and Preliminary Design Study!

Share your thoughts until December 17, 2025, by completing the survey on our webpage:

<https://www.niagararegion.ca/projects/irrigation-initiative/>.

Join us at the next Public Information Centre in late 2026 to learn about the Final Report which will summarize technical findings, engagement outcomes and evaluation results to support the advancement of the preferred irrigation servicing solution.

Contact us via the email below to ensure that you are kept up-to-date, and that your input is collected at key points in the process.

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