Lion’s Head Water and Wastewater Master Plan

Public Information Centre

Municipal Class Environmental Assessment Study

August 27, 2025



Land Acknowledgement



We acknowledge that we are situated on the traditional territory of the Nawash and Saugeen Nations, a place that has long served as a site of meeting and exchange amongst many First Nations including The Iroquois Confederacy, Huron/Wendat, Abenaki, and Anishinabek.

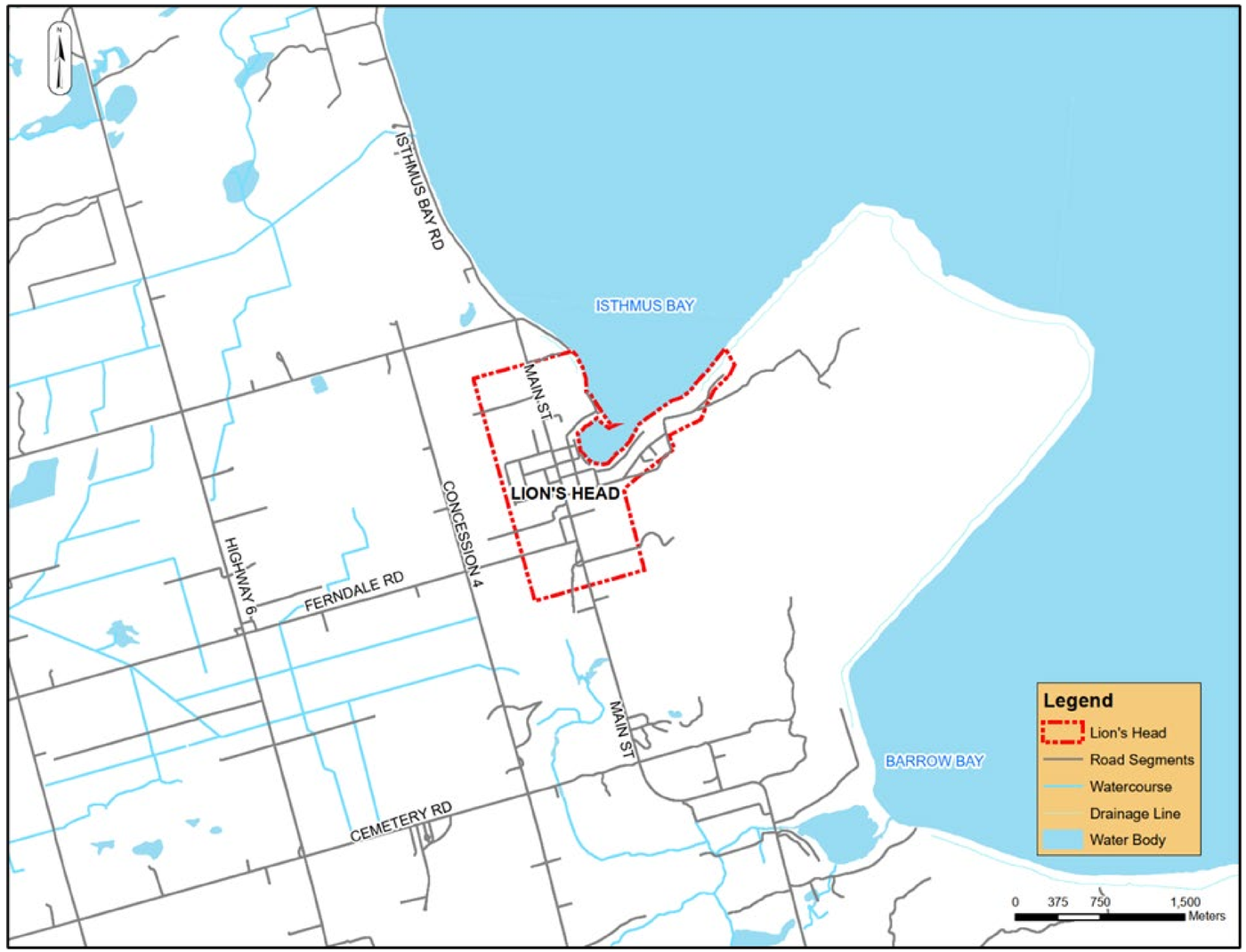
We recognize and respect the Anishinabek as the traditional custodians of the lands and water. We are committed to supporting the Anishinabek and Haudenosaunee Peoples, among other First Nations, Inuit, Métis, and Indigenous Peoples globally.

(Bruce County Land Acknowledgment)

Introduction

Why is the Lion's Head Water and Wastewater Master Plan taking place?

- The existing drinking water and wastewater services in Lion's Head are not meeting current community needs.
- Currently, the Lion's Head Drinking Water System provides **limited municipal drinking water servicing**, and the community has **no municipal wastewater service or wastewater treatment facilities.**
- The goal of the Master Plan is to develop a preferred strategy to provide accessible and reliable **drinking water** and **wastewater services** in Lion's Head to meet **current and future needs, to 2046 and beyond.**
- The Master Plan will take into consideration climate change, social and economic impacts and current limitations to Lion's Head's growth, given the existing infrastructure.



Purpose of this Public Information Centre

The purpose of this public consultation is to tell you about:

- The study and the Municipal Class Environmental Assessment process being followed
- The alternative solutions being evaluated and the preliminary preferred solutions
- How **you** can be involved and stay informed!

What is a Master Plan?





A Master Plan is a high-level strategic document that sets out growth-related goals, objectives and priorities for municipal infrastructure. It identifies existing issues and future servicing requirements to help support ever-growing communities.

A Master Plan is developed using Environmental Assessment planning principles and fulfills Phase 1 and Phase 2 of the Municipal Class Environmental Assessment process. Future projects identified as part of the Master Plan are then subject to further assessment, either through completing the Schedule B or Schedule C process of the MCEA.

The Master Plan will take into consideration climate change and social and economic impacts, as well as current limitations to each community's growth, given the existing infrastructure.

Master Plan Approach

The current approach for the Master Plan is **Approach No.1** per the MCEA process (**broad master planning where identified projects are subject to project specific requirements**).

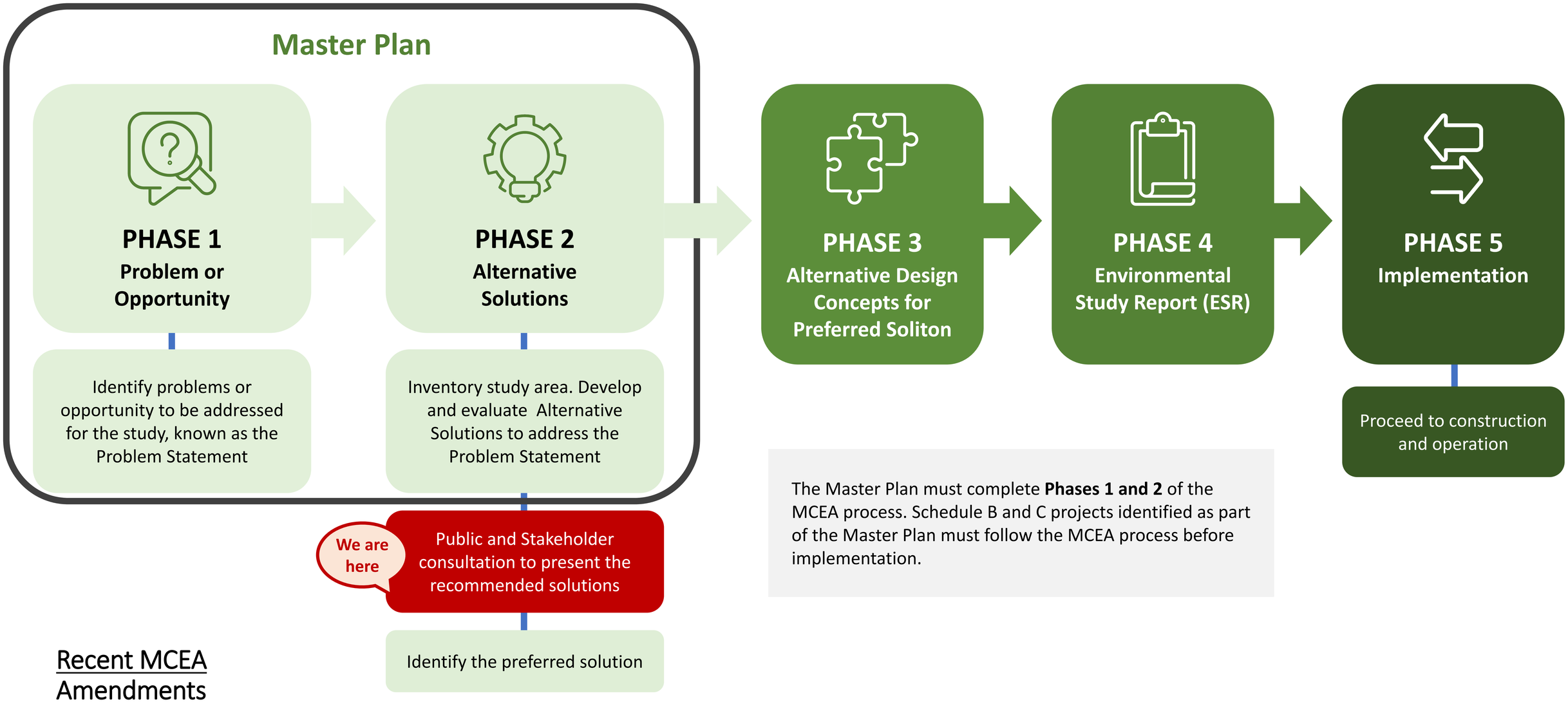
- Involves the analysis on a regional or systems scale, which enables the proponent to identify needs and establish broader infrastructure alternatives and solutions
- Specific projects are that required to achieve the preferred solution described in the Master Plan may be identified within the Master Plan document, however the level of detail at a project-specific level is minimal
- Therefore, more detailed investigations at the project-specific level are required to fulfil the Class EA requirements for the specific Schedule B and C projects identified within the Master Plan

Master Plan Approach

The current approach for the Master Plan is **Approach No.1** per the MCEA process (**broad master planning where identified projects are subject to project specific requirements**).

- Involves the analysis on a regional or systems scale, which enables the proponent to identify needs and establish broader infrastructure alternatives and solutions
- Specific projects are that required to achieve the preferred solution described in the Master Plan may be identified within the Master Plan document, however the level of detail at a project-specific level is minimal
- Therefore, more detailed investigations at the project-specific level are required to fulfil the Class EA requirements for the specific Schedule B and C projects identified within the Master Plan

Municipal Class Environmental Assessment (MCEA) Process



The Master Plan must complete **Phases 1 and 2** of the MCEA process. Schedule B and C projects identified as part of the Master Plan must follow the MCEA process before implementation.

Recent MCEA Amendments

The MCEA process was amended in March 2023. The following provides an overview of the major changes:

- Certain projects are now exempt from the MCEA process (previously known as Schedule A and A+ projects)
- Certain projects are now eligible for exemption upon completion of a new archaeological screening process
- Municipalities may now follow their own notification procedures to advise the public and stakeholders of their studies.

Problem Statement

To service the existing and future needs of the community of Lion's Head's Water and Wastewater Systems, the following Problem Statement was adopted to guide the master planning study analysis, in accordance with the MCEA process:

"To develop an infrastructure plan for the community of Lion's Head which meets servicing needs for today and future development to 2046 and beyond, considering climate change and social and economic impacts, as well as current limitations to Lion's Head's growth due to the extents of the existing municipal drinking water service and lack of municipal water and wastewater service."

Evaluation Criteria

Criteria	Indicators	What does this mean?
Natural Environment	Surface and groundwater	Impacts to the environment from infrastructure development
	Natural Heritage	Potential impacts due to construction on natural habit and species at risk
	Climate Change	Potential impacts to surrounding natural environment from climate change events
Social/Economic Environment	Impact to existing infrastructure (private and municipal)	Disruption to residents and businesses during construction
	Aesthetics	The presence of infrastructure in communities
	Redundancy and security of supply	Ability of system to provide a consistent Level of Service
	Climate change	Impacts to residents and businesses during climate change events to provide Level of Service
Technical Suitability	Existing capacity	Current/proposed infrastructure to service existing water/wastewater demand capacity
	Impacts on future expansion	Opportunity to service the greater community and ability to connect future areas under expansion
	Full build out	Opportunity to service full-build out of the community
	Climate change	Impacts from climate change events which impact maintaining Level of Service
Constructability	Ease of construction and site access	When traditional construction approaches are applied, the impacts associated with installation
	Impact on operations during construction	Impacts associated with maintaining the current level of Service
	Ease of integration with existing infrastructure	Impacts associated with tie-in to existing infrastructure or disconnection of old infrastructure
	Climate change	Impacts from climate change events on the installation and timing of projects
Cost	Capital Costs	Cost to construct new infrastructure to establish the system or existing system upsizing and/or replacement
	Relative operation and maintenance costs	Cost to maintain yearly operations

Description of Alternatives

Drinking Water Servicing Alternatives

Alternatives	Description of Alternatives
1. Do nothing	❖ Maintain existing level of service as is.
2. Expand Drinking Water to Service New Growth in Lion's Head and Provide Fire Flow	❖ Review and assess existing level of service and optimize; ❖ Expand drinking water to service new growth in Lion's Head and provide fire flow.
3. Expand Drinking Water Supply to Ferndale	❖ Review and assess existing level of service and optimize; ❖ Expand drinking water to service new growth in Lion's Head and provide fire flow; ❖ Expand drinking water supply to Ferndale **Note:** Existing residences along proposed drinking water service corridor to Ferndale to be excluded at this time
4. Expand Drinking Water Supply to Isthmus Bay And Barrow Bay	❖ Review and assess existing level of service; ❖ Expand drinking water to service new growth in Lion's Head and provide fire flow; ❖ Expand drinking water servicing to existing properties within service corridor to Isthmus Bay; ❖ Providing drinking water supply's only to the settlement areas of Isthmus Bay and Barrow Bay **Note:** Existing residences along proposed drinking water service corridor to Barrow Bay to be excluded at this time.

Wastewater Servicing Alternatives

Alternatives	Description of Alternatives
1. Do nothing	❖ Maintain existing private servicing and no municipal collections system
2. Construct new wastewater treatment facility and provide wastewater servicing to downtown Lion's Head	❖ Review and assess existing level of service and optimize; ❖ Establish new system to service existing and new growth in Lion's Head

Evaluation of Alternatives – Drinking Water Servicing

Evaluation Criteria – Lion's Head Drinking Water	1. Do Nothing	2. Expand Drinking Water to Service New Growth in Lion's Head and Provide Sufficient Volume for Fire Flow	3. Expand Drinking Water to Service New Growth in Lion's Head and Send to Ferndale	4. Expand Drinking Water to Service New Growth in Lion's Head and Send to Isthmus Bay and Barrow Bay
Natural Environment				
Social/Economic Environment				
Technical Suitability				
Constructability				
Cost				

Preferred Solution

EVALUATION COLOUR RANKING SYSTEM

Most Preferred

Least Preferred

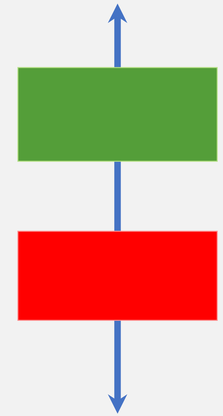
Evaluation of Alternatives – Wastewater Servicing

Evaluation Criteria – Lion's Head Wastewater	1. Maintain Existing Level of Service	2. Construct New Wastewater Treatment Facility and Provide Wastewater Servicing to Downtown Lion's Head
Natural Environment		
Social/Economic Environment		
Technical Suitability		
Constructability		
Cost		

Preferred Solution ✓

EVALUATION COLOUR RANKING SYSTEM

Most Preferred



Least Preferred

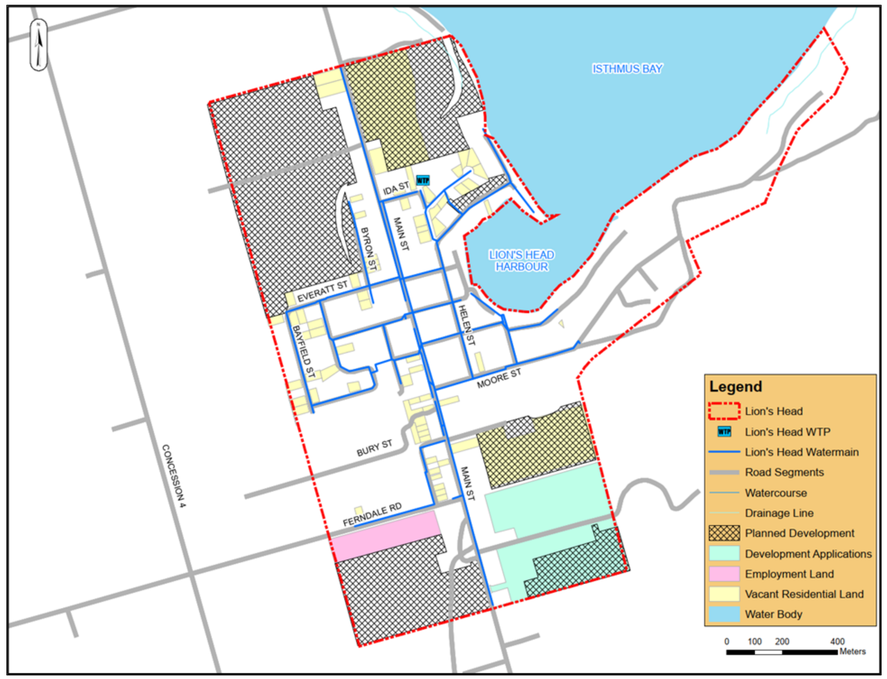
Preliminary Preferred Solutions and Rationale

Drinking Water Servicing Alternative 2:

Expand Drinking Water to Service New Growth in Lion's Head and Provide Sufficient Volume for Fire Flow

Wastewater Servicing Alternative 2:

Construct New Wastewater Treatment Facility and Provide Wastewater Servicing to Downtown Lion’s Head



Rationale for Preferred Drinking Water Servicing Alternative	Rationale for Preferred Wastewater Servicing Alternative
❖ Alternative 2 has less impact on the overall Natural Environment compared to Alternatives 3 and 4 and has less impact on climate change compared to Alternative 1. ❖ Has the least impact on the Social / Economic Environment ❖ Has the least negative impacts related to constructability compared to Alternatives 3 and 4 (which expand the servicing). ❖ Has less costs associated with it compared to Alternatives 3 and 4 (which expand the servicing).	❖ Alternative 2 has the least overall impact on Natural Environment, Social/Economic Environment, and Technical Suitability. ❖ Although higher costs and Constructability impacts are associated with Alternative 2, it is understandable since it includes the installation of one treatment facility, one new centralized pumping station and a new sanitary collection network. Alternative 1 would not include the construction of a municipal system.

Evaluation Criteria and Alternatives

Next Steps

The project team will respond to any questions received, evaluate the alternatives presented and select a preferred alternative solution to provide drinking water and wastewater servicing for Lion's head.

Stay Engaged!

If you have any questions or comments, please fill out a **comment sheet today** or submit your comments by **September 26, 2025**, to:



Peggy Van Mierlo-West
Chief Administrative Officer
Municipality of Northern Bruce Peninsula
Email: **admin@northernbruce.ca**
56 Lindsay Road 5
Lion's Head, ON N0H 1W0

Chris Wilson, P. Eng.
Consultant Project Manager
WSP
Phone: 1-226-279-0315
Email: **chris.wilson@wsp.com**
1450 1st Avenue West, Suite 101
Owen Sound, ON N4K 6W2