

DRINKING WATER SOURCE PROTECTION

Our Actions Matter



LAKEHEAD REGION

CONSERVATION AUTHORITY

LAKEHEAD SOURCE PROTECTION AREA

January 2019

The *Clean Water Act, 2006* is part of the multi-barrier approach to ensure clean, safe and sustainable drinking water for Ontarians, by protecting sources of municipal drinking water such as lakes, rivers and well water. Under this legislation, the Drinking Water Source Protection Program was established by the Government of Ontario. This resulted in the development of science-based assessment reports and local source protection plans by multi-stakeholder Source Protection Committees, supported by Source Protection Authorities.

Lakehead Source Protection Area

The Lakehead Source Protection Plan applies within the Lakehead Source Protection Area, which is 11,526 square kilometres and covers the area of land where the flow of water contained within the secondary watershed would eventually pass through the Lakehead Region Conservation Authority (LRCA) area of jurisdiction and reach Lake Superior. The LRCA area of jurisdiction, which differs from the Lakehead Source Protection Area, covers 2,700 square kilometres and is defined by the municipal boundaries of its eight Member Municipalities including: City of Thunder Bay, Municipalities of Oliver Paipooonge, Shuniah and Neebing and the Townships of O'Connor, Conmee, Dorion and Gillies.

Municipal Drinking Water Systems Located in the Lakehead Source Protection Area

Within the Lakehead Source Protection Area, there are only two sources of Municipal drinking water: Bare Point Water Treatment facility, providing drinking water to the City of Thunder Bay, and the Rosslyn Village Drinking Water Facility, which provides drinking water to 31 homes within Rosslyn Village.





Source Protection Authority (SPA)

The Source Protection Authority for the Lakehead Source Protection Area follows the same structure as the LRCA Board of Directors. The LRCA Board is made up of members appointed by their respective municipal councils, which are either elected officials or appointed members of the public.

The duties of the Source Protection Authority are listed in the *Clean Water Act* and its regulations, some of which include:

- Establish a Source Protection Committee
- Assist Source Protection Committee in exercising and performing the powers and duties under the Act.
- Provide scientific, technical and administrative support and resources to the Source Protection Committee.
- When warranted propose to the Minister amendments to the Source Protection Plan.
- Annually prepare and submit to the Director and Source Protection Committee an annual report regarding the implementation of the Source Protection Plan.
- May have to prepare and submit to the Minister, in accordance with the direction, a report on any matter relating to the use of the Great Lakes as a source of drinking water.
- Respond to Minister's Section 36 Orders related to required updates to Source Protection Plans, including creating work plans for any required work.

Source Protection Committee (SPC)

The Source Protection Committee, as stated in the *Clean Water Act*, was responsible for preparing the Terms of Reference, the Assessment Report and the Source Protection Plan, while being supported by Source Protection Authority. The Source Protection Committee Chair is appointed by the Minister of Ministry of Environment, Conservation and Parks. The Committee is tasked with contributing to the Lakehead Source Protection Planning process while adhering to the Lakehead Source Protection Committee Procedural Manual.

The Source Protection Committee is responsible to review and provide comments on the Source Protection Authority's Annual Report prior to submission to the Director.

Lakehead Source Protection Plan

The Lakehead Source Protection Plan is the culmination of the Lakehead SPC's efforts to draft policies to ensure that significant threats to Municipal Drinking Water Sources in the Lakehead Source Protection Area cease to be or never become significant drinking water threats.

The Lakehead Source Protection Plan was approved by the Minister of the Ministry of Environment and Climate Change on January 16, 2013, with an effective date of October 1, 2013.

The Source Protection Plan contains a series of policies developed by the SPC in consultation with the local community to protect municipal drinking water sources from existing and future drinking water threats. The Plan describes the actions that must be taken by various agencies to protect surface water and groundwater sources that supply municipal drinking water.

There are two implementing bodies that are required to implement the Plan's legally binding policies, they include the Municipality of Oliver Paipoonge and the Thunder Bay District Health Unit and are related to the Wellhead Protection Zones associated with the Rosslyn Village water supply. No significant or moderate threats were found to occur within the Intake Protection Zones of the City of Thunder Bay's Bare Point Water Treatment Plant; therefore, only two non-legally binding policies, which do not require mandatory actions, are applicable to the City of Thunder Bay.



**Source Protection Plan Map # 1
Lakehead Source Protection Area**

This publication was produced by:
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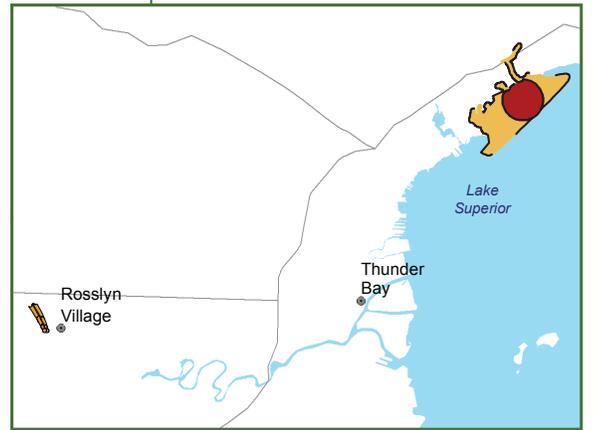
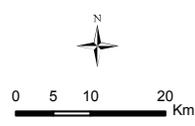
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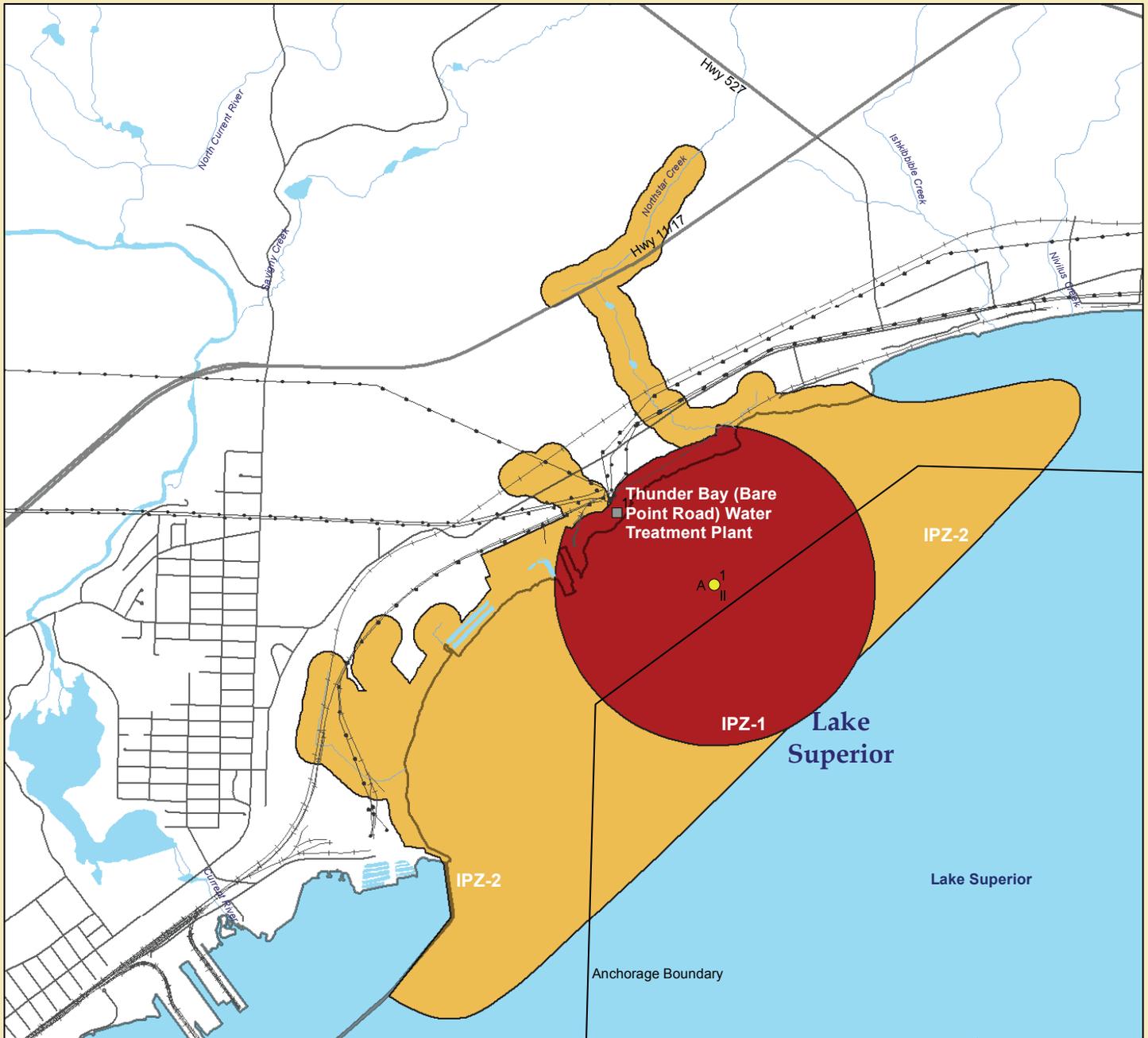


Legend

- Wellhead Protection Areas
- Intake Protection Zone**
- IPZ-1
- IPZ-2
- Highway
- LRCA Jurisdiction Boundary
- Lakehead Source Protection Area
- Lake

Prepared by: Roman Augustyn
Date: November 2011
Projection Information:
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Lakehead Region Conservation Authority





**Source Protection Plan Map # 5
Thunder Bay (Bare Point)
Intake Protection Zones**

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Legend

Intake Protection Zone

IPZ-1

IPZ-2

Municipal Residential Drinking Water System Utilities

1 Large

2 Small

A 1 Surface Water Intake

— Anchorage Line

Roads

Highway

Road

Transmission Line

Pipeline

Railway

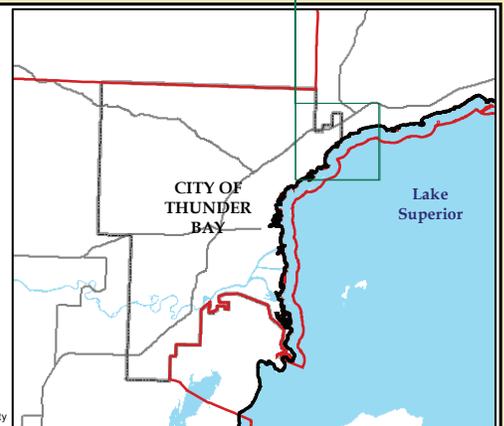
Water

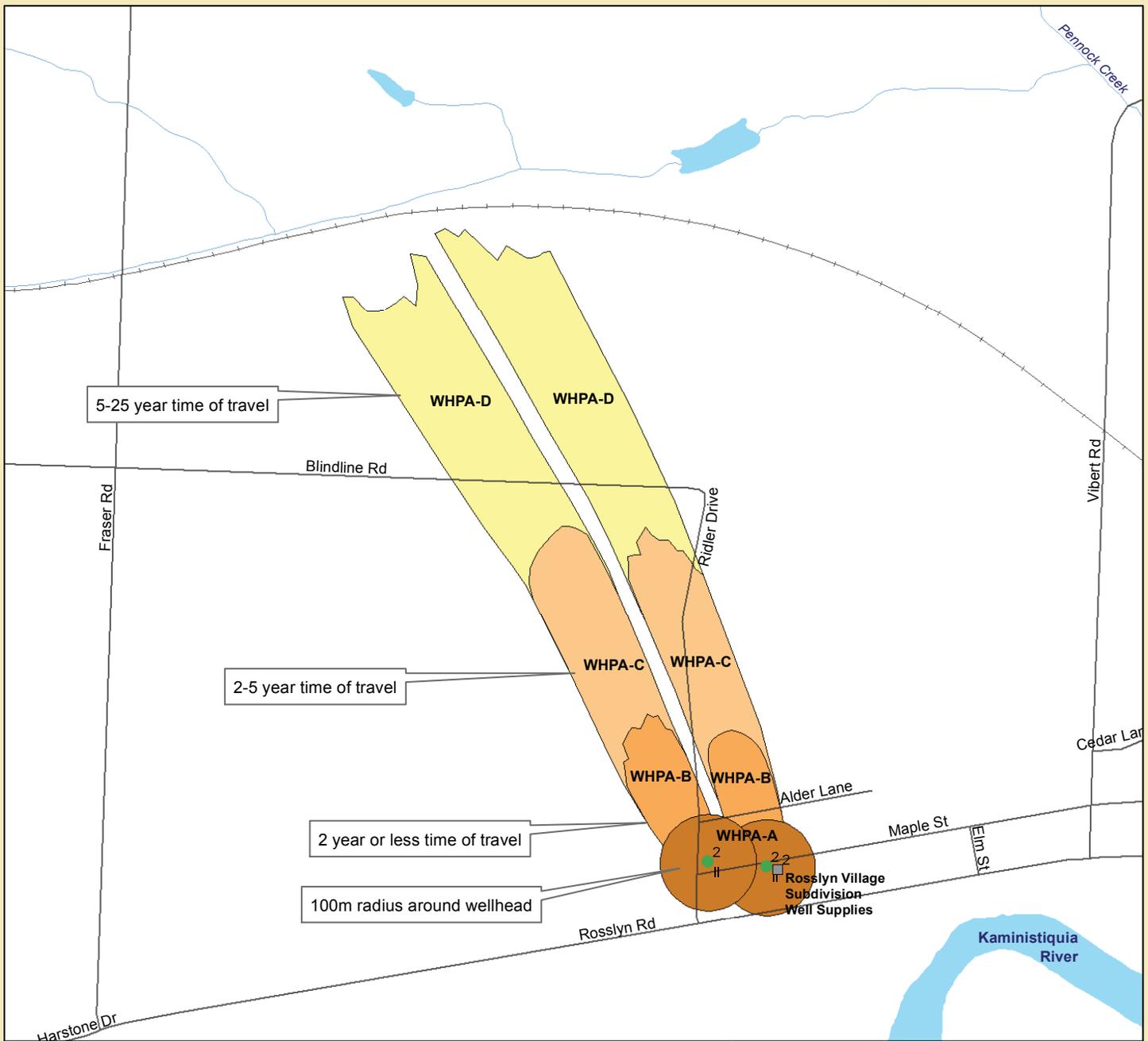
Lake

Permanent Watercourse



Prepared by: Roman Augustyn
Date: November 2011
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**Source Protection Plan Map # 4
Rosslyn Village Subdivision
Wellhead Protection Area**

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Legend

Wellhead Protection Areas

- WHPA-A 100 metre radius
- WHPA-B 2 year time of travel
- WHPA-C 5 year time of travel
- WHPA-D 25 year time of travel

Municipal Residential Drinking Water System

- 1 Large
- 2 Small

Municipal Water Well

- 2

Roads

- Highway
- Road
- Railway
- Lake
- Permanent Watercourse

N

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