

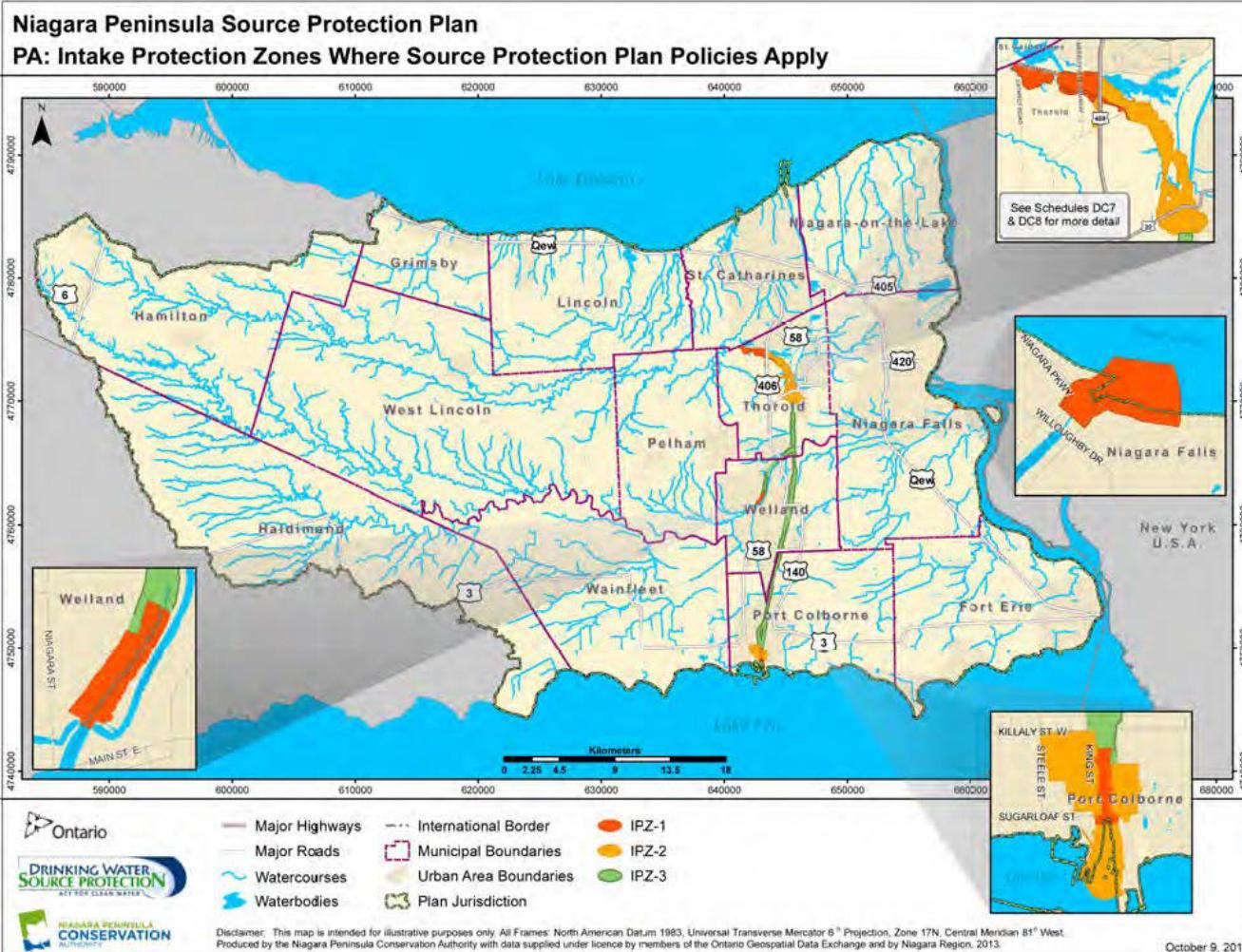


## Source Protection Annual Progress Report

### I. Introduction

This annual progress report outlines the progress made in implementing our source protection plan for the Niagara Peninsula Source Protection Area, as required by the Clean Water Act and regulations.

The Niagara Peninsula Source Protection Plan was completed and approved by the province in December 2013. The Niagara Peninsula Source Protection Plan came into effect October 2014. The Plan is entirely implemented. The Source Protection Committee is now focused on updating and improving the Source Protection Plan.



## II. A message from your local Source Protection Committee

- P : Progressing Well/On Target – The majority of the source protection plan policies have been implemented and/or are progressing.
- S : Satisfactory – Some of the source protection plan policies have been implemented and/or are progressing.
- L : Limited progress – A few of source protection plan policies have been implemented and/or are progressing.

The Source Protection Committee states that based on the information provided that all of the threats have been addressed and all of the policies are implemented.

### III. Our Watershed

To learn more, please read our assessment report(s) and source protection plan(s)

The Niagara Peninsula Source Protection Area overlies the same jurisdiction as the Niagara Peninsula Conservation Authority. With an area of 2,430 square kilometers and over 450,000 residents, it is comprised of three major drainage areas; Lake Ontario, Lake Erie, and Niagara River (including Welland River) drainage areas. NPCA contains over 180 watersheds within these drainage areas, and 117 kilometers of Great Lakes shoreline.

NPCA is marked by several prominent physiographic features that have had a major effect on development in the area. These features include the Niagara Escarpment which runs east-west across the peninsula, the relatively flat Haldimand Clay Plain which dominates the central portion of the watershed, the Iroquois Shore Sand Plain along Lake Ontario, the Fonthill Kame-Delta Complex which contains the highest point in the peninsula, and the Onondaga Escarpment which runs east-west across the peninsula just north of the Lake Erie shoreline and is of relatively low topographical relief.

The soils in the large central portion of the peninsula are dominated by clays, silty clays, and silty clay loams, characteristic of the Haldimand Clay Plain. Sands and sandy loams are found extensively along the Lake Ontario shoreline. Wetlands include bogs, fens, swamps, and marshes and encompassing almost 10% of the watershed.

Land uses can have a significant impact on the water quality and quantity. Approximately 64% is agricultural, and about 21% is rural wooded or natural. The remaining 15% is considered urban. The main urban centres include St. Catharines, Niagara Falls, and Welland. Urban growth is expected to be greatest along the Welland Canal corridor particularly in the southern portion of the peninsula.

There are six municipal water treatment plants with surface water intakes which supply over 80% of the population. There are no municipal wells. The six water treatment plants that supply municipal drinking water to residents are: Welland, DeCew Falls, Port Colborne, Niagara Falls, Grimsby and Rosehill (Fort Erie). Only Grimsby is on Lake Ontario, the remainder are on Lake Erie or a connecting channel (Welland Canal or Niagara River).

Vulnerable areas known as Intake Protection Zones (IPZs) were delineated around each municipal water treatment plant intake. The source protection program focused on drinking water threats within these IPZs. Existing and potential future threats within these IPZs were ranked and significant threats identified for policy action under the Source Protection Plan. The Source Protection Committee chose also to include transportation, storage and handling of diesel and gasoline along the Welland Canal as significant drinking water threats requiring addressing under the Source Protection Plan.

The Source Protection Plan contains policies to address significant drinking water threats for four water treatment plants, Welland, DeCew Falls, Port Colborne and Niagara Falls. No significant drinking water threats were determined for Grimsby or Rosehill (Fort Erie).

## IV. At a Glance: Progress on Source Protection Plan Implementation

### 1. Source Protection Plan Policies

P : Progressing Well/On Target

All of the policies (100%) that address significant drinking water threats have been implemented in accordance with the time lines set out in our source protection plan.

### 2. Municipal Progress: Addressing Risks on the Ground

There are a total of three (3) lower tier municipalities and one (1) upper-tier municipality in the source protection area that have vulnerable areas where significant drinking water threats apply. All three (3) of the lower tier municipalities (City of Thorold, City of Port Colborne, and City of Niagara Falls) have completed their Official Plan and Zoning By-law conformity exercises. The upper-tier municipality (Regional Municipality of Niagara) has also updated their Official Plan conformity exercise, however, the upper-tier municipality has no Zoning By-laws.

### **3. Septic Inspections**

Not applicable to our source protection area.

### **4. Risk Management Plans**

P : - Progressing Well/On Target

Since 2016, the Risk Management Official was able to dismiss 9 of the 24 potentially significant drinking water threats in the vicinity of the DeCew Falls IPZs identified in the Assessment Report. The remaining 15 significant drinking water threats are being managed under the required risk management plans.

## **5. Provincial Progress: Addressing Risks on the Ground**

Several Ministries in Ontario are reviewing applications for new or amended and previously issued provincial approvals (e.g., Environmental Compliance Approvals issued under the Environmental Protection Act) where they have been identified as a tool in our plan to address activities that pose a significant risk to source water. The provincial approvals are either being issued, denied, amended, or revoked, where necessary to conform with plan policies in Niagara. The original policies written in Niagara provided a timeline of 3 years to complete the review and make any necessary changes to previously issued approvals. Any new or amended provincial approvals need to adhere to the Source Protection Plan policies since it took effect in October 2014. 100% of previously issued provincial approvals in the Niagara Peninsula Source Protection Area have been reviewed. In 2019, a single prescribed instrument application that may be subject to significant drinking water threat policies was reviewed for the category of Wastewater/Sewage Works. No action was required for the single prescribed instrument application.

## **6. Source Protection Awareness and Change in Behaviour**

Twenty-three (23) drinking water protection zone signs have been installed in our source protection area along municipal and regional roads that are in close proximity to intake protection zones. Community engagement and outreach continue to have a positive impact in our source protection region through programs like Yellow Fish Road™ and the Children's Water Festival.

Other positive impacts include the consideration that is given to vulnerable areas within the Niagara Peninsula Source Protection Area including Intake Protection Zones and Highly Vulnerable Aquifers.

## **7. Source Protection Plan Policies: Summary of Delays**

Not applicable to our source protection area.

## **8. Source Water Quality: Monitoring and Actions**

Not applicable.

## **9. Science-based Assessment Reports: Work Plans**

No work plans were required to be implemented for our assessment report.

## **10. More from the Watershed**

Future 2020 source water protection activities include:

-Yellow Fish Road education and outreach within the City of Niagara Falls and the City of Port Colborne and at the Niagara Children's Water Festival

-Implementation of the work plan to update the Source Protection Plan to address: (i) required municipal updates and (ii) improving municipal supply protection

- Upcoming changes to municipal drinking water intakes and infrastructure projects near vulnerable areas.

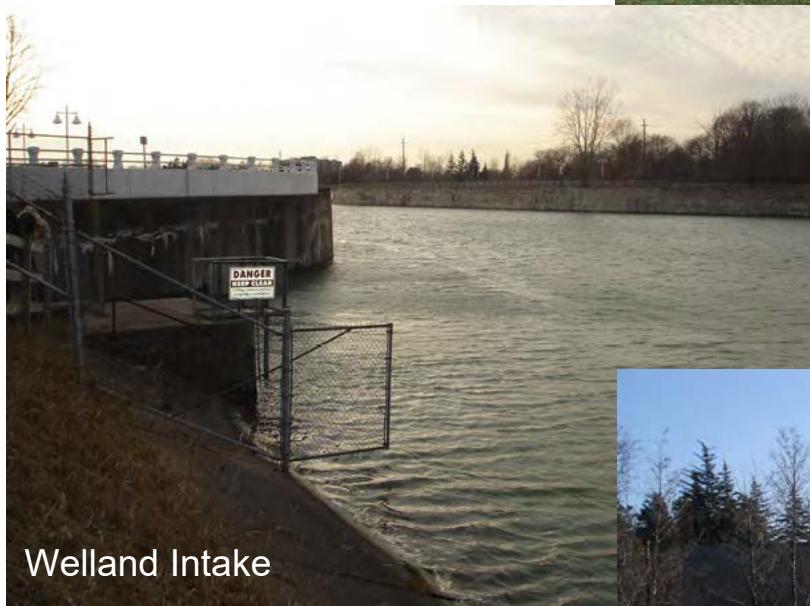


Port Colborne Intake (upstream)

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Niagara River  
Upstream of Niagara Falls Intake



Welland Intake



DeCew Intake Building