

LOWER TRENT SOURCE PROTECTION AREA – OVERVIEW

The Lower Trent Source Protection Area (SPA) is one of five Source Protection Areas in the Trent Conservation Coalition Source Protection Region. It includes the area under the jurisdiction of Lower Trent Conservation as well as a small area draining into the Trent River within the Township of Havelock-Belmont-Methuen outside Conservation Authority jurisdiction.

Encompassing 2,166 square kilometres, the Lower Trent SPA is bordered on the south by Lake Ontario and the Bay of Quinte; Rice Lake forms the north-western boundary. The area is composed of twelve subwatersheds. Some form part of the Trent River drainage basin including Squires, Rawdon, Trout, Percy/Burnely, Salt, Cold and Mayhew Creeks. A number of small creeks east of the Trent River, including DND Creek, flow in to the Bay of Quinte while, in the western portion of the SPA, there are several watercourse including Barnum House and Shelter Valley Creeks that drain directly in to Lake Ontario.

The Oak Ridges Moraine, Peterborough Drumlin Field and Lake Iroquois Plain are the predominate physical features of the Lower Trent SPA. The Oak Ridges Moraine is the

rainbarrel of the watershed with virtually every stream west of the Trent River in Northumberland County having a source connection to the Moraine.

The Trent-Severn Waterway attracts many recreational boaters and is an important draw for tourists to the area. The Bay of Quinte is a popular sport fishing destination. These traditional uses and their contribution to the local economy are dependant on good water quality and quantity.

Agricultural land uses, forests and wetlands, characterize the landscape. Urban areas are mostly confined to the shore of Lake Ontario and the Bay of Quinte with the exception of historic settlement areas that exist along main historic rail or road corridors and the Trent-Severn Waterway.

The population of the Lower Trent SPA is approximately 71,000; Trenton is the largest urban centre with a population of 16,770. Approximately 43% of the population lives in rural areas and depends on private water supplies and septic systems.

Water resources across the Lower Trent SPA do not have the same magnitude of stresses as major urbanized areas of Ontario, yet surface and groundwater quality has the potential to be impacted by human actions. Nutrients, road salts, closed landfills and historic brownfields (buried gas station tanks, historic landfills or dumping grounds, industrial and commercial sites, and hazardous waste sites) all potentially contribute to water quality degradation.



MUNICIPALITIES

Lower Tier

Township of Alnwick/Haldimand
 Municipality of Brighton
 Municipality of Centre Hastings
 Township of Cramahe
 Township of Stirling-Rawdon
 Municipality of Trent Hills
 Township of Havelock-Belmont-Methuen

Single Tier

City of Quinte West

Upper Tier

Northumberland County
 Hastings County
 Peterborough County

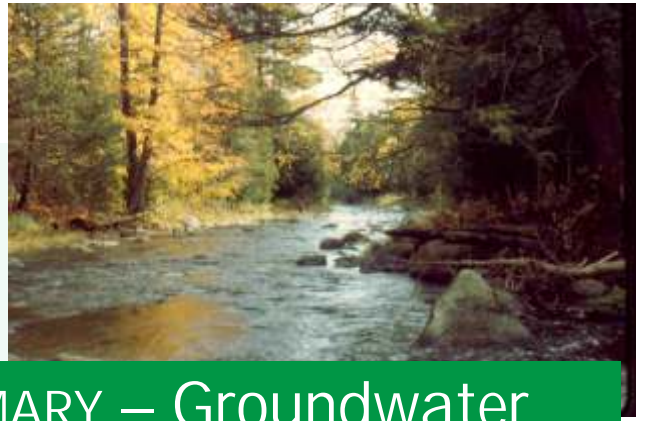


MUNICIPAL WATER SUPPLY SUMMARY – Surface Water

Municipality	System Name	Background	Source
City of Quinte West	Trenton	The Trenton Water Treatment Plant provides water to the community of Trenton, which has a population of approximately 16,000 people. It is a Large Municipal Residential System.	Trent River
	Batawa	The Batawa Treatment Plant provides water to the community of Batawa which has a population of approximately 670 people. It is classified as a Large Municipal Residential System.	Trent River
	Bayside	The Bayside Water Treatment Plant services the 'South Sidney' area with a population of approximately 3,500. It is a Large Municipal Residential System.	Bay of Quinte
	Frankford	The Frankford Water Treatment Plant services the community of Frankford, which has a population of approximately 2,200 people. It is a Large Municipal Residential System.	Trent River
Municipality of Trent Hills	Campbellford	The Campbellford Water Treatment Plant services the Town of Campbellford that has a population of approximately 3,500 people as well as an additional population of 600 at the Warkworth Penitentiary. The facility is a Large Municipal Residential System.	Trent River
	Warkworth	The Warkworth Water Treatment Plant serves the Village of Warkworth which has a population of approximately 725 people. It is a Large Municipal Residential System.	Mill (Burnley) Creek

Summary of Technical Studies:

XCG Consulting is completing Issues Evaluation and Threats Inventory, and the Tier 1 Water Quality Risk Assessment for the above systems. Scheduled for completion – Spring 2008. XCG completed the Surface Water Vulnerability Analysis for these systems in 2006.



MUNICIPAL WATER SUPPLY SUMMARY – Groundwater

Municipality	System Name	Background	# of Wells
Municipality of Brighton	Brighton	The Brighton Well Supply provides water to approximately 5,600 residents (2,400 residential dwellings, 200 commercial accounts). The system is supplied by 3 wells. The municipality also provides water to Presqu'île Provincial Park.	3
Township of Cramahe	Colborne	The Colborne Well Supply is designated a Large Municipal Residential System. This system supplies water to 1001 water connections, 114 hydrants. Colborne Well Supply draws its water from one duty well and has one well on standby.	2
Township of Alnwick/Haldimand	Grafton	The Grafton Well Supply has been designated to be a Large Municipal Residential System. There are 289 service connections associated with this system. The Grafton Well Supply draws its water from two wells.	2
Township of Stirling-Rawdon	Stirling	The Stirling Water Treatment Facility services a connected population of approximately 1877 persons, 79 fire hydrants and 168 valves. The system draws its water from 4 wells.	4

Summary of Technical Studies: XCG Consulting is completing Groundwater Vulnerability Analysis, Issues Evaluation and Threats Inventory, and the Tier 1 Water Quality Risk Assessment. Scheduled for completion – Spring 2008.

For more information

TRENT CONSERVATION COALITION SOURCE PROTECTION REGION
www.trentsourceprotection.on.ca

Lower Trent Source Protection Area

c/o Lower Trent Conservation, 714 Murray St., R.R. #1, Trenton ON K8V 5P4
 Anne Anderson, Special Projects Coordinator
 613-394-3915 ext. 219 anne.anderson@ltc.on.ca

or

Trent Conservation Coalition Source Protection Region

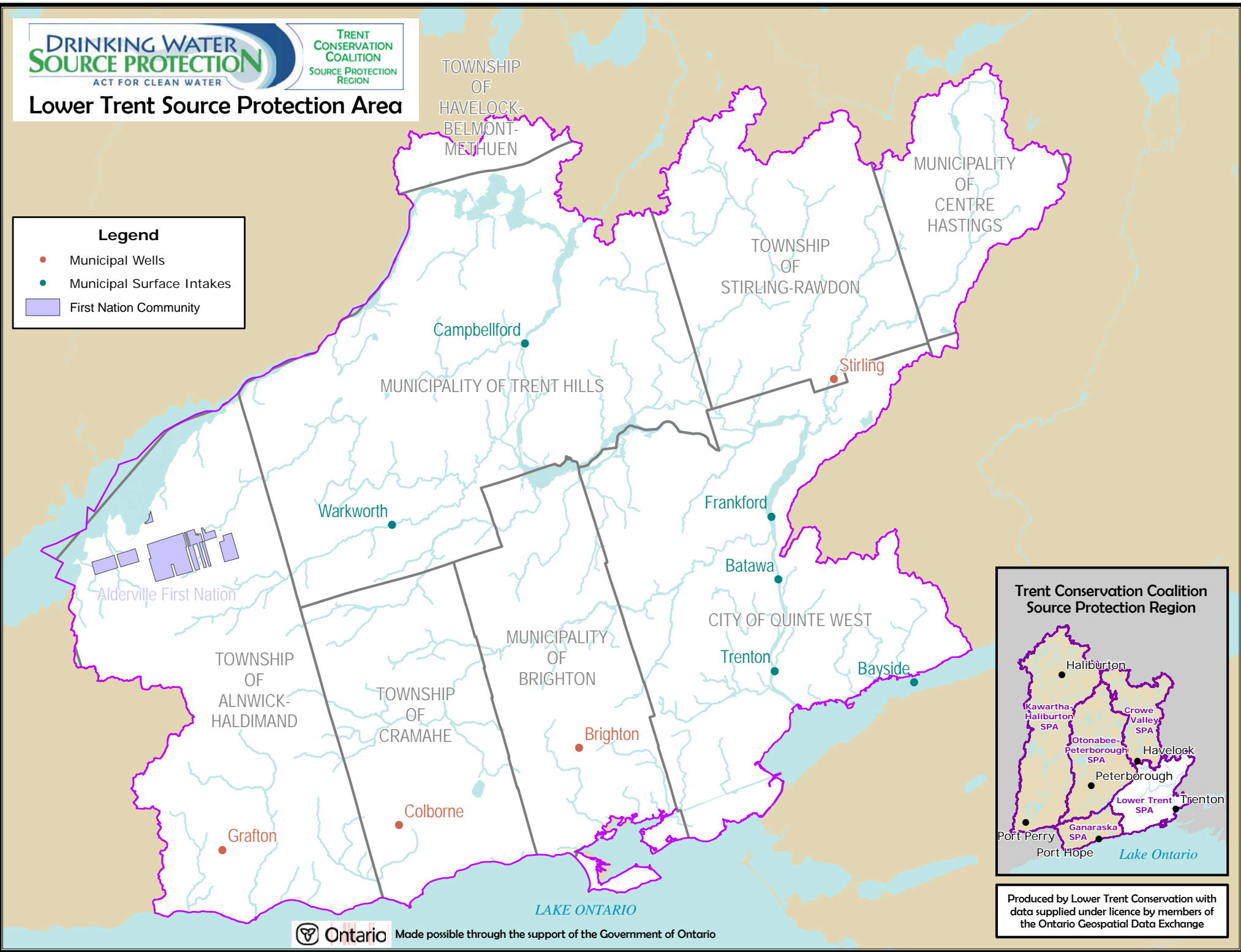
c/o Lower Trent Conservation, 714 Murray St., R.R. #1, Trenton, ON K8V 5P4
 Chris Wilkinson, Source Protection Project Coordinator
 613-394-3915 ext. 246 Chris.Wilkinson@ltc.on.ca



Lower Trent Source Protection Area

Legend

- Municipal Wells
- Municipal Surface Intakes
- First Nation Community



Produced by Lower Trent Conservation with data supplied under licence by members of the Ontario Geospatial Data Exchange