

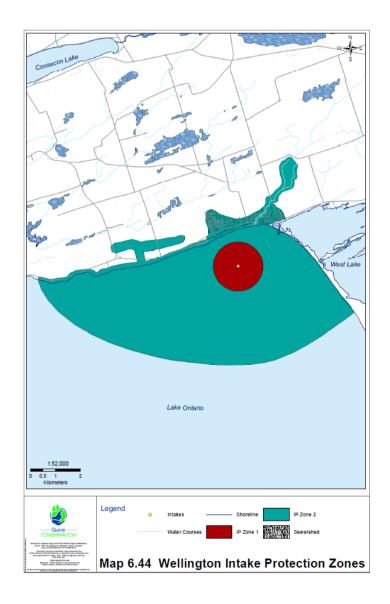
# Wellington's Drinking Water System

The Village of Wellington is located in the south western area of Prince Edward County and features a mixture of land uses including agricultural, residential and some commercial. Wellington's municipal water supply comes from a surface water intake located in Lake Ontario. Lake Ontario water is considered a well regulated supply and generally good quality. The water treatment plant draws water from Lake Ontario through an intake located about 1500 metres offshore in 8.5 metres depth of water. The water treatment plant services over 1,700 people in Wellington.

#### Wellington's Vulnerable Areas

Using science, the Assessment Report has delineated zones to show which areas near the municipal intake are the most vulnerable to pollution and contamination. These zones are called Intake Protection Zones (IPZs) and include the water and land where activities could affect the quality and quantity of water flowing towards the intake. The location and size of an IPZ is determined in part by the direction of flow and the speed/rate it moves. In Wellington, there are three IPZs:

- **IPZ 1:** this zone is the closest to the intake. This is the zone of highest concern because contaminants can reach the intake quickly with little or no dilution.
- IPZ 2: this zone is calculated based on how far water can travel to the intake within two hours or less.
- IPZ 3: For intakes on Lake Ontario the IPZ 3 can only be developed by modelling. Two potential events were considered. The first was a Tritium spill from Pickering and Darlington nuclear generating stations modelled after an actual spill which occurred in 1992. The second spill event model was a sewage spill from the Wellington sewage treatment plant. As a result of the spill scenarios modelling, there is not anticipated to be a significant threat to water quality in this zone. Therefore an IPZ 3 has not been established for Wellington.





## **Vulnerability Scores**

Vulnerability scores help to quantify how vulnerable the drinking water source is to contamination. Scores are calculated based on the characteristics of the intake and the IPZs around the intake, taking into account how contaminants might move through zones.

An area with a higher vulnerability score is more likely to allow contaminants from that area to reach the well. The vulnerability scores range from 2 (lowest) to 10 (highest). The vulnerability scores for the Wellington Drinking Water System are:

- **IPZ 1** = 5
- IPZ 2 = 3.5
- IPZ 3 = no zone delineated

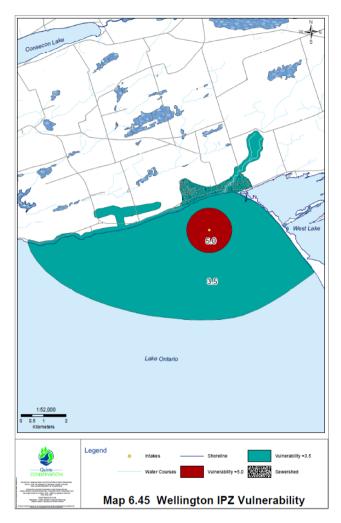


#### **Drinking Water Issues**

Drinking water issues are chemicals or bacteria found in untreated water that exceeds the provincial allowable values. A four-step screening process confirmed that no issues in the raw water exist for the Wellington Drinking Water System.

### **Drinking Water Threats**

Drinking water threats are based on 22 categories prescribed by the Ministry of the Environment, Conservation and Parks. No threats were identified in Wellington's IPZs. Due to Wellington's low vulnerability scores and the location of the drinking water intake, it is not likely that there would be any significant drinking water treats now, or in the near future.



# The Quinte Source Protection Plan

The Quinte Source Protection Plan has over 80 policies to protect and maintain clean and plentiful drinking water sources. The policies address drinking water threats that were identified in the science-based Assessment Report. Each policy was developed by the Quinte Source Protection Committee in consultation with communities and stakeholders.

The Quinte Source Protection Plan came into effect January 1, 2015 and has undergone amendments in 2019, 2023, and 2024.