

# Peats Point's Drinking Water System

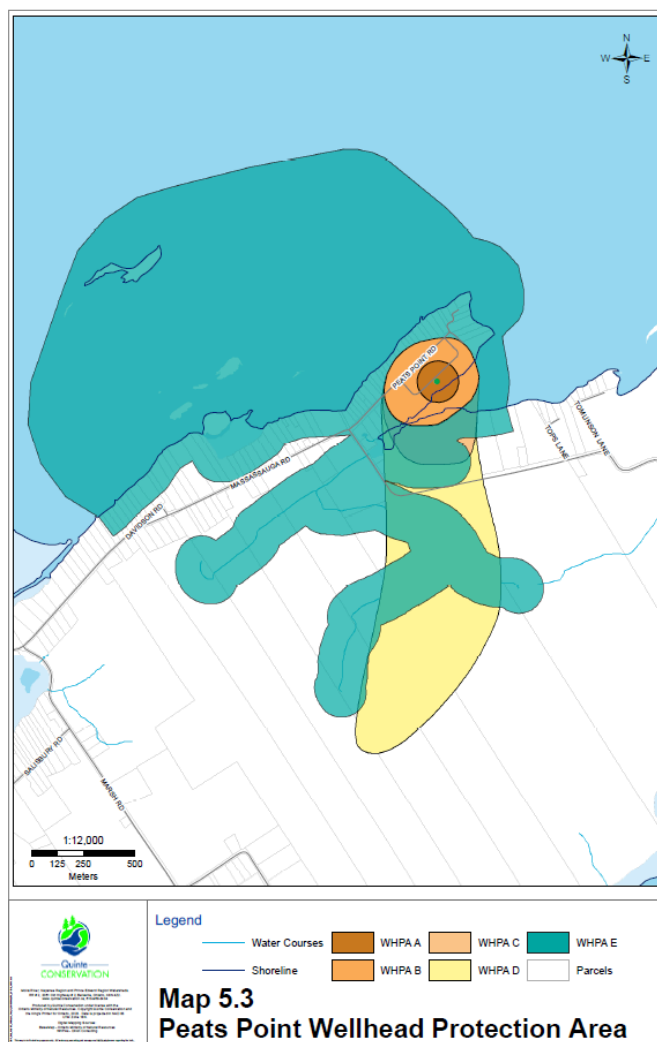
Peats Point is a small subdivision of approximately 20 residences in northern Prince Edward County that is served by a municipal drinking water well. The well is located on the south side of the point about 40 metres from the Bay of Quinte. Land use in the area includes residential, open space and agricultural land to the south. The drinking water system serves several residences in the subdivision, but not all households in the area are connected to the municipal well supply.

Peats Point's Drinking Water System was installed in May 2004 to replace a groundwater well that was of substandard construction. The new well was drilled to a depth of 36.9 metres into a fractured limestone aquifer. Given the proximity of this well to the Bay of Quinte, it is classified as Groundwater Under the Direct Influence (GUDI) of surface water which requires the delineation of an additional Wellhead Protection Area.

## Peats Point's Vulnerable Areas

Using science, the Assessment Report has delineated zones to show which areas near the well are the most vulnerable to pollution and contamination. These zones are called Wellhead Protection Areas (WHPAs) and include the land above and below ground where land use activities could affect the quality of water flowing toward the well. The location and size of a WHPA is determined by the direction of groundwater flow, the speed/rate it moves, and the volume of water that is pumped from the well. In Peats Point, there are five WHPAs:

- **WHPA A:** 100 metre radius around the well.
- **WHPA B:** the area where it would take two years or less for a contaminant to reach the well.
- **WHPA C:** the area where it would take five years or less for a contaminant to reach the well.
- **WHPA D:** the area where it would take 25 years or less for a contaminant to reach the well.
- **WHPA-E:** the area where contamination could travel to the well from a surface water source in two hours or less.



## Vulnerability Scores

Vulnerability scores help to quantify how vulnerable a drinking water source is to contamination. The scores are calculated based on the ground conditions around the well, and considering how contaminants might move.

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 Peats Point's Drinking Water System are:

- **WHPA A** = 10
- **WHPA B** = 10
- **WHPA C** = 8
- **WHPA D** = 6
- **WHPA-E** = 8.1

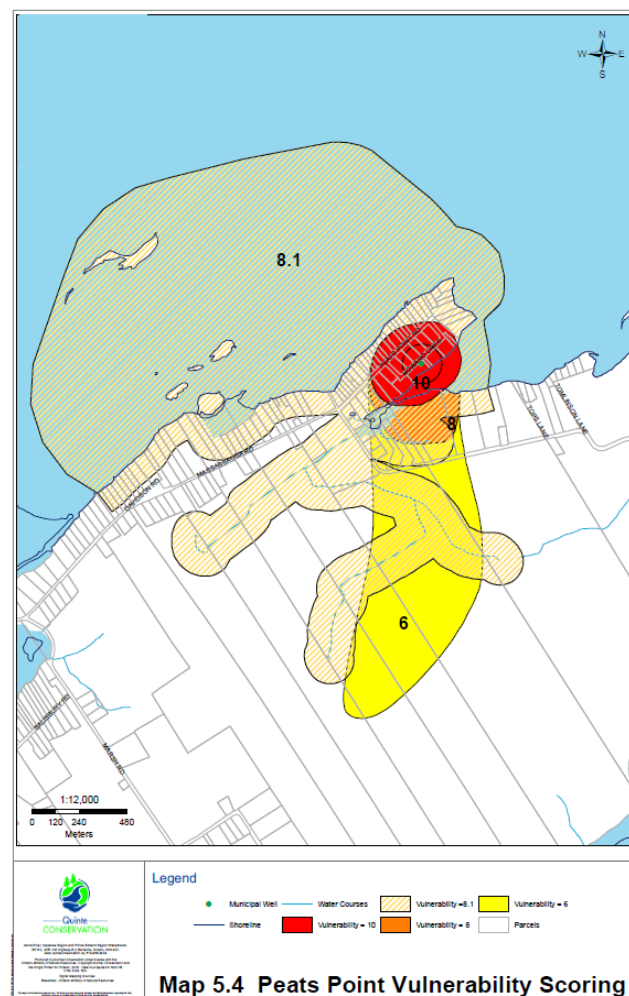
## Drinking Water Issues

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

## Drinking Water Threats

Drinking water threats are based on 22 categories prescribed by the Ministry of the Environment, Conservation and Parks. Threats were identified in Peats Point's WHPAs. Some of the identified threat types included, but are not limited to:

- Residential septic systems.
- Handling and storage of fuels.
- Application of pesticides to land for areas greater than one hectare.
- Application of agricultural source material.
- Use of land as livestock grazing or pasturing lands, and outdoor confinement areas or a farm-animal yard.



## 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.