

Wellhead Protection Zones

What is a Wellhead?

A wellhead is simply the physical structure of the well above ground. A wellhead protection area is the area around the wellhead where land use activities have the potential to affect the quality of water that flows into the well.



The amount of land involved in a wellhead protection area is determined by a variety of factors such as the way the land rises or falls, the amount of water being pumped, the type of aquifer, the type of soil surrounding the well, and the direction and speed that ground water travels. All of these factors help to determine how long it takes water to move underground to the well itself and how much land around the wellhead should be protected.

The Facts:

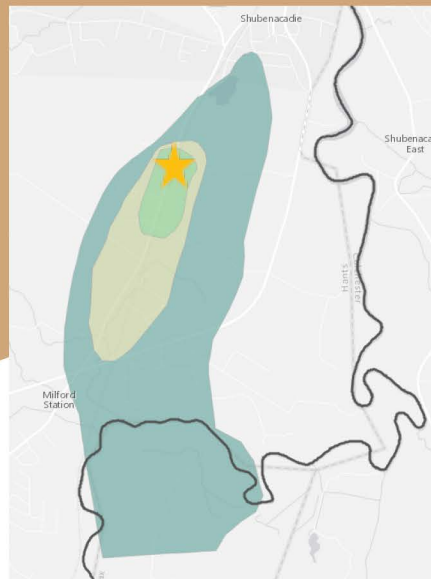
- The water source is an artesian aquifer.
- Water is supplied by two non-GUDI production wells.
- The system provides water to approximately 715 residents and the commercial core of Shubenacadie.
- There are 3 Wellhead travel time areas. The time of travel is based on the time for a groundwater contaminant to reach the production wells at the Shubenacadie Water Treatment Plant. These areas are the focus of our source water protection plan.
- Zone 1: 0-2 year travel time
- Zone 2: 2-5 year travel time
- Zone 3: 5-25 year travel time

What are the highest risks?

- Zone 1:** Contamination entering the aquifer by way of drilled well that is currently being drilled, currently in operation, or which has been improperly decommissioned.
- Zone 3:** Potential contamination if the barrier between the clay pit is broken

Ways you can protect water:

- Keep your septic system in proper working order
- Protect and maintain your private well
- Manage animal waste on farms
- Manage livestock grazing
- Protect the vegetation along the banks of ponds, streams and lakes



* Star shows location of municipal production wells

Quality water into the water treatment plant
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Quality water out of the water treatment plant

What the Municipality of East Hants is doing to protect the aquifer:

- Inventory of drilled wells
- Engage with the farming community
- Establish a monitoring plan
- Public education
- Enhance planning regulations