

WELCOME!

Little Dover Domestic Water Study

Drop-in Community Open House
October 22, 2026
6:00 p.m. - 7:00 p.m.

The presentation will provide you more information about the Study. Feel free to speak with a member of MODG Staff and/or WSP to share your comments or ask questions.

Municipality of the District of Guysborough

WSP

Why was this Study Completed?

The Municipality of the District of Guysborough initiated a Domestic Water Study to explore options to provide a reliable and secure water supply for the community of Little Dover. In Little Dover:

- About **1 in 3 households** have experienced seasonal or ongoing water shortages.
- Approximately **46% of households** have reported concerns about their water quality, including taste, colour, odour, staining.

The study was completed to better understand these concerns and explore options for a **reliable and secure community water supply**.

Project Timeline

Step 1:	Step 2:	Step 3:	Step 4:	Step 5:
Community Engagement	Household Survey about your well and water quality	Water sampling at residents' homes	Analyzing your water samples at an accredited laboratory	Preparing a report with findings and recommendations.
Fall/Winter 2025			**Spring 2025**	**Summer 2026**

What was Completed?

- **Community Engagement**
    - Resident Survey: A total of 45 responses were received
    - Open House: Held on October 9, 2025
- **Private Well Sampling**
    - Water samples were collected from 43 private wells:
        - 35 dug wells
        - 8 drilled wells
    - Tested for:
        - Bacteria
        - Metals
        - General water chemistry.
    - Results were compared against Health Canada’s drinking-water guidelines.
- **Supporting Review**
    - Existing well records, geology, potential wellfield areas, and a possible water-line route were also reviewed.

The sampling provides a useful picture of conditions in the community, but it does not represent every private well in Little Dover.

What We Learned about Existing Wells

Health-Related Findings

- **E. coli** detected in 7 wells
    - *May indicate contamination entering from the surface*
- **Total coliforms** detected in 35 wells
    - *May indicate that a well is poorly sealed*
- **Manganese** above guidelines in 12 wells
    - *Occurs naturally, but elevated levels can be a concern over long-term use*

Other common aesthetic concerns:

- Discoloured water
- Iron staining
- Taste and odour issues
- Sediment and mineral buildup



Most concerns occurred in shallow dug wells. Drilled wells generally performed better but were not free of water-quality concerns.

Dug Wells vs. Drilled Wells



Dug Wells

- **Shallower water source**
  - Generally, draws water from closer to the ground surface
- **Observed Concerns**
  - More likely to show bacterial contamination and other water-quality concerns
  - Wells running dry during dry periods
  - Changes in colour, odour, or taste
  - Water-quality changes following heavy rainfall
- **Key Takeaway**
  - Some dug wells appear to be strongly influenced by seasonal conditions and surface water entering the well.



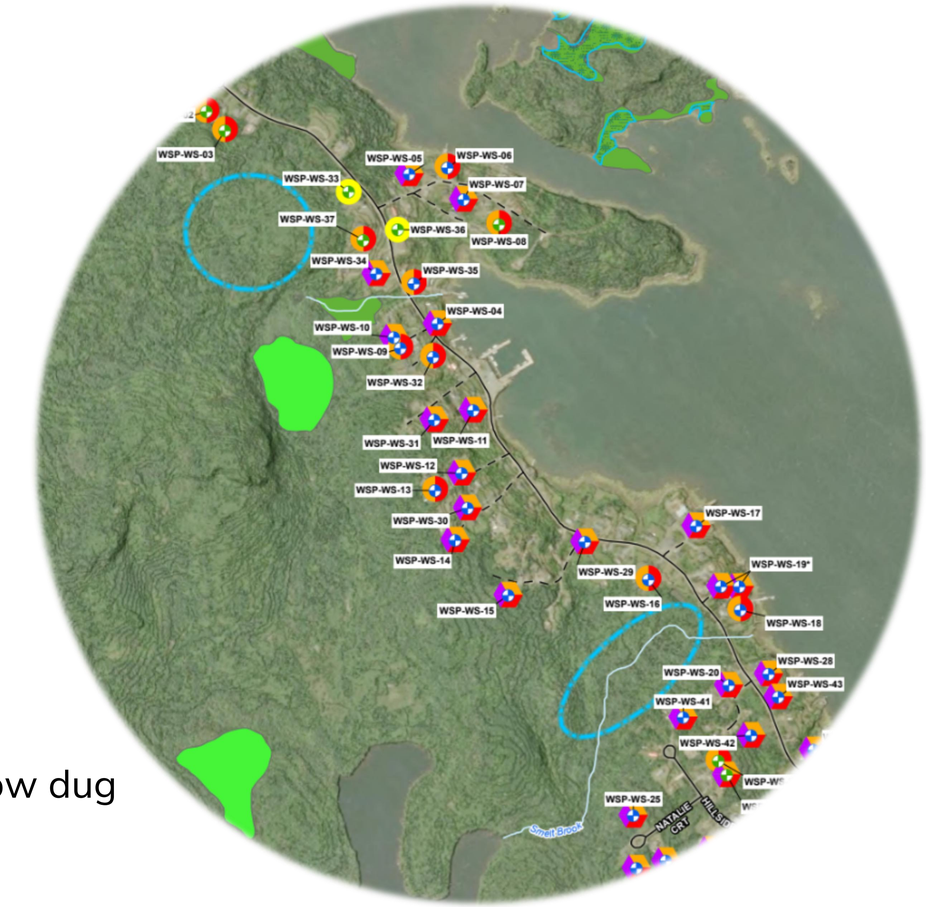
Drilled Wells

- **Deeper water source**
  - Draws water from fractures in the bedrock
- **Overall Performance**
  - Generally performed better than dug wells for water quality and reliability
- **Concerns Still Identified**
  - Four (4) wells indicated manganese above the health-based guideline
  - Two (2) wells indicated total coliform bacteria
- **Key Takeaway**
  - The findings indicate that a future community wellfield may be possible, but water quantity and quality would need to be confirmed through drilling and pumping tests

Option 1: Develop a Community Wellfield

What would this option involve?

- New drilled wells would be developed to supply water to the community. Two (2) general areas have been identified for further investigation (identified in blue):
    - An inland area northwest of Hillside Drive
    - An open area west of the Parish Hall
- The areas were identified based on available information about:
    - Existing drilled wells and water quality
    - Potential groundwater recharge
    - Distance from the coastline
    - Access and land availability



Potential Advantages

- Uses a groundwater source located near the community
- Deeper groundwater appears less vulnerable to surface contamination than shallow dug wells
- The system is be designed for reliable water production, including backup wells

<u>Next Steps</u>

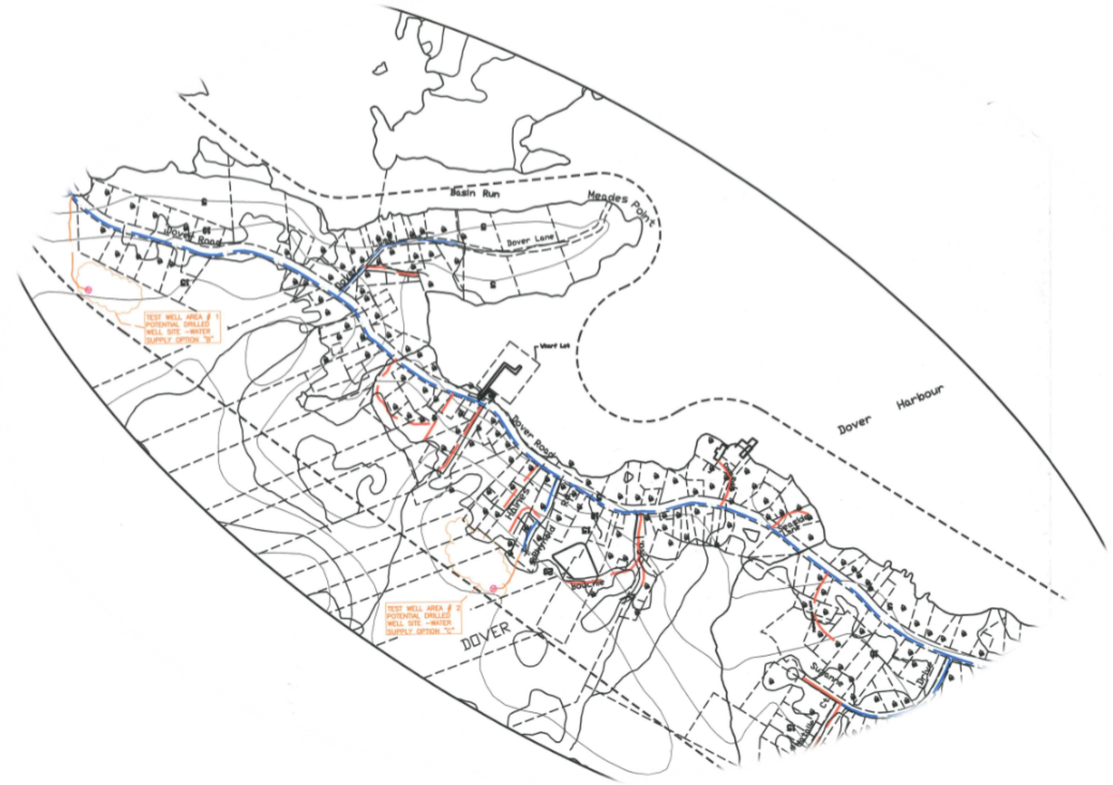
For candidate areas only, test drilling and pumping tests are required to confirm groundwater quantity, quality, treatment needs, and wellfield suitability.

Option 2: Extend the Canso/Hazel Hill Water Line

What would this option involve?

- Extend the existing Canso/Hazel Hill water system to Little Dover through:
    - A transmission water main along Dover Road
    - A distribution network within Little Dover
    - Individual service connections to participating properties

The concept considered approximately **168 households and facilities** that could potentially require a connection



Potential Advantages

- Provides treated water from an existing municipal system
- Water quality would be managed through a municipal treatment and distribution system
- A community distribution system could potentially include hydrants for fire protection

Next Steps

Additional assessment would be needed to confirm the preferred route, infrastructure requirements, system capacity, costs, and level of community participation.

What Does the Study Tell Us Today?

- **Private Well Concerns Are Real**
  - Water-quality and reliability concerns were identified throughout the community
  - Shallow dug wells were generally more vulnerable to bacteria, seasonal shortages, and changes following rainfall
- **Not All Concerns Are Health-Related**
  - Discolouration, staining, taste, and odour issues are often linked to local geology and naturally occurring minerals
  - Bacteria and elevated manganese were the findings of greatest concern for drinking-water safety
- **Two Potential Long-Term Options**
  - Investigate a community wellfield further
  - Evaluate extending the Canso/Hazel Hill water system

The study identifies potential paths forward, but additional technical, financial, and community considerations are required before decisions are made.

Questions?
Thank You!

For further information, please reach out to:

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