

ETC PROJECT PROFILE

LONG-TERM WATER AND WASTEWATER SERVICING STUDY
CLIENT: COMMUNITY OF NORTH SHORE, PEI



**Engineering
Technologies
Canada Ltd.**

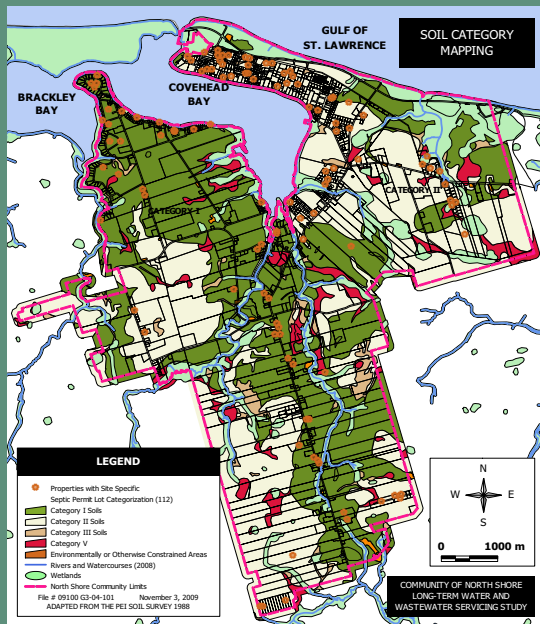
- Innovative Wastewater Management
- Environmental Engineering
- Soils and Site Evaluations

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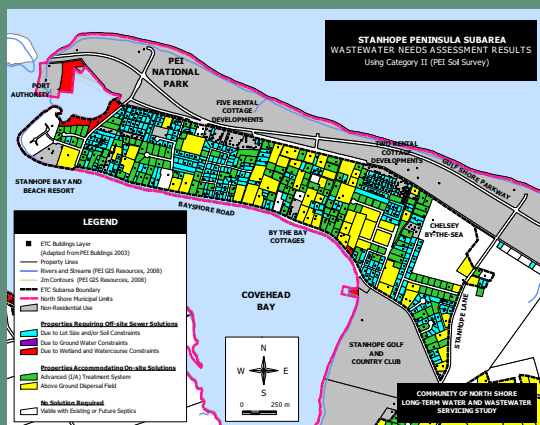
The Community of North Shore (Incorporated 1974) was struggling to deal with reports of growing water quality problems in the Stanhope Peninsula area caused by coliform and e-coli bacteria and salt water intrusion. There were many residents who believed that a central water system was urgently needed. However, there were at least as many who believed the problems to be few and far between.

The Stanhope Peninsula had been the subject of previous engineering studies by others. However, in 2009, North Shore Council decided that a more comprehensive study of the water and wastewater needs of the whole community was required.

Following a competitive RFP process, **Engineering Technologies Canada Ltd. (ETC)** was awarded the contract to conduct a **Long -Term Water and Wastewater Servicing Study**.



Soil Category Mapping - Community of North Shore



Stanhope Peninsula Subarea - Wastewater Needs Assessment Results

Public Consultation Key

ETC prepared a Community Profile, which provides background information on existing conditions relevant to the goal of developing a sustainable and cost effective plan for water and wastewater management within the Community. Public consultation and involvement was key throughout the process. Early on, ETC conducted a survey of all residents and property owners to gather information on individual septic systems and wells.

Comprehensive Water and Wastewater Needs Assessment

ETC collected, combined and analyzed data sets from North Shore, PEI Geographic Information Services, Septic permits and the PEI Dept. of Provincial Treasury (Property Records Division) among many others to create a comprehensive database for the subsequent needs assessments.

Queries were performed with GIS software using established "needs criteria" developed by ETC. A lot-by-lot analysis was carried out to identify which lots would be sustainable in the long-term with conventional septic systems and which lots were expected to be sustainable with an above-ground septic field, or advanced, on-site treatment system. The analysis also determined which lots would likely require an eventual, off-site (ie. central) sewer solution.

Only once the identified water and wastewater needs were accepted by Council and residents, was an analysis of options and solutions undertaken. ETC and its team carried out a technical, regulatory and cost-effectiveness analysis of various conventional and innovative/alternative options.

ETC's Conclusions and Recommendations

- There are a very small number of unresolved well and septic problems. Therefore, a central water or sewer system is not warranted at the present time.
- On-going monitoring of new development, and well and septic problems is recommended to be able to predict when the Community is close to a "tip-ping point" requiring central servicing.
- Institute a Septic System Management Program to improve the performance and longevity of septic systems within the Community.

Client Testimonial

"ETC successfully delivered the study needed to serve as the framework for the future of this municipality... it is without hesitation, I recommend ETC to other municipalities who are considering undergoing a water and wastewater servicing study"

Sandy Gallant, Chairperson, Community of North Shore



2011 FCM Sustainable Community
Award of Excellence



2009 Engineers PEI Award
for Engineering Achievement