

Exploring Lessons Learned with Municipal Re-inspection Programs for Residential On-site Wastewater Systems in Ontario: *Spotlight on the Township of Rideau Lakes' Septic Re-inspection Program*

Background

The Township of Rideau Lakes (i.e. Rideau Lakes) is a rural municipality located in Eastern Ontario, with a population of 10,207 residents. The township is made up of picturesque villages and hamlets, including Morton, Delta, Elgin, Chaffeys Locks, Jones Falls, Crosby, Newboro, Portland, Philipsville, Lombardy, and Chantry [1]. The township has 6,258 households, all privately-serviced (i.e. there is no publicly operated water or wastewater systems in the Township) [1].

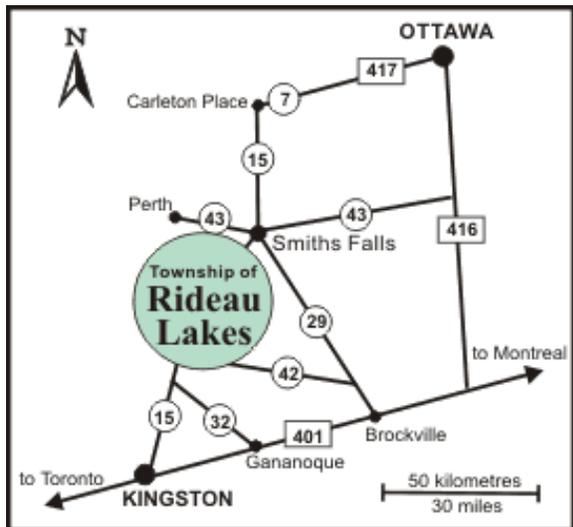


Figure 1. Location of Township of Rideau Lakes [1]

This case study profiles Rideau Lakes' septic re-inspection program. In preparation for this profile, three key informant interviews were conducted in order to fully understand the details of the program, benefits, challenges, and lessons learned.

History of the Septic Re-inspection Program

The septic re-inspection program in Rideau Lakes was instituted due to concerns about the

impact waterfront properties could have on surface water quality. Rideau Lakes has an abundance of lakes in their municipality used for multi-purposes, including: recreation, drinking water, habitat for flora and fauna, and providing a sense of place to the Township. It was explained,

“Given we are cottage country, and given the potential link between water quality and septic systems, they [council] just thought it was good value for dollars. Prudent. You know, our program here costs us \$15,000. It is a good investment in terms of trying to protect water quality in the municipality” (Municipal Representative).

The original septic re-inspection program was a voluntary program. This version of the program was implemented from 2008-2015 [2]. It was then realized that Rideau Lakes had reached a saturation point for volunteers for the program, and a mandatory program was needed. It was explained,

“So, everyone either had participated or was not interested in participating in the voluntary program. So, at that point you either have to discontinue the program or move to something where it is mandatory” (Municipal Representative).

It was explained by another informant that there are very active lake associations in Rideau Lakes that pushed council to institute the mandatory program due to concerns such as blue green algae outbreaks in recent years. Protecting the quality of water supplies remain an important economic, social, and political driver in the Township.

Starting in 2016, the Township now implements a hybrid approach, where there are approximately 100 mandatory inspections

conducted and a goal to conduct 50 voluntary inspections per year [2].

Re-Inspection Program Details

Rideau Lake's implements their septic re-inspection program through the powers of the Ontario Building Code. Re-inspections are conducted by the Mississippi Rideau Septic System Office. Waterfront properties are prioritized in this program, and the Township has divided lakes into Primary, Secondary and Undeveloped Lakes. The lakes chosen to participate in this program are added by Council resolution annually [2]. It was explained,

"Now we are focussing the mandatory more on a science basis. The lakes with the biggest concern in terms of water quality. So, it has grown over time in terms of our understanding and approach and I think that water quality for recreational purposes remains the primary focus of why council undertakes the program"
(Municipal Representative).

Rideau Lakes' septic re-inspection program costs the Township \$15,000 per year. Each year they do approximately 100 re-inspections per year, that cost roughly \$150 per re-inspection. The Township also has a voluntary program, where they aim to conduct 50 re-inspections per year, and these re-inspections are performed by Development Services Department at the Township [2]. Re-inspections are funded through residential taxes, therefore, there is no cost at the time of re-inspection for the resident.

Re-inspections are primarily visual with the inspector opening up any tanks and an interior inspection of the tank. The interior inspection is followed by a visual inspection of the bed and the use of a soil probe to check the amount of cover over the bed and if there's any saturation within the bed area itself. An inspection camera is used in some cases if it is warranted.

The Mississippi Rideau Septic System Office uses protocols set out by the Ontario Building Code and keeps all records within their internal database. All paper copies on individual re-inspection reports are sent to the Township, along with a copy of the excel sheet of the completed re-inspections for that year.

In 2017, 123 mandatory re-inspections were conducted, as well as four voluntary re-inspections. Out of these 127 re-inspections, "55 systems were identified as having no concern, 59 requiring remedial work, 4 system replacement required and 9 properties were requested to provide more information" [3, p. 3]. See Figure 2 for an example of an issue requiring remedial action.



Figure 2. Dirty effluent filter requiring remedial action [Photo credit: Mississippi Rideau Septic System Office]

If a failure occurs the resident and the Township are notified immediately about the specifics of the failure according to the Ontario Building Code. At that time, a secondary review is

conducted by the Township. The next steps are explained,

“...they will either tell them that they need to correct a specific deficiency or the system as a whole and they need a permit to do that. And if the person is not complying and in good faith not trying to do that, they have the opportunity and orders to comply or orders not to occupy if there is a concern there isn’t a reasonable interim solution to get a new system put in place” (Municipal Representative).

If repairs or replacements of systems are required, this cost falls on the system owner. It was explained,

“The Rideau Valley Conservation Authority has a rural clean water program but it’s a max of \$1,000. So, in some areas that just covers the permit fees, if that. But we try and promote, if it is a cottage, you can put in a grey water system by hand if you needed to, you can do an outhouse, you can do composting, incinerating toilets, so to be able to use your property it might cost you three to four thousand dollars, right. To be able to go back to using it. Or again, depending on what it is, maybe you have to go to that \$27,000, just because it’s a house and you live there 24/7” (Conservation Authority Representative).

Thus far the Township has not had an outright refusal, however, if this were to occur it was explained,

“...if there was an outright refusal, they would let us know then we would have to make a determination whether or not we would want to pursue prosecution or enforcement means because obviously that is going to come at a cost” (Municipal Representative).

Lessons Learned

Overall the benefits of this program outweigh the costs. It was noted,

“If a system has indeed failed or a system needs remediation it is positive for the environment and it is positive for human health, that [it] is identified and corrected. There are studies about the value of waterfront properties associated with water quality, so some would suggest the better water quality you have, the better assessment base you have. Therefore, there is a public good and an economic good associated with that” (Municipal Representative).

This sentiment has been reinforced in the 2018 study conducted by the Federation of Ontario Cottagers’ Associations that found that rural waterfront property owners are significant drivers of economic development in rural communities and cottages alone account for \$700 million of property tax dollars in Ontario [4].

Those consulted all agreed there are great outreach and education benefits associated with the re-inspection program. The benefits of the mandatory re-inspection program were explained,

“It firstly increased the number of systems that are performing adequately, and it increased the awareness of the responsibility of the home owner to make sure that things are working and functioning properly” (Resident Representative).

Strategies to enhance the education component of the re-inspection, such as making appointments with residents and encouraging them to be present for the re-inspection, was seen as beneficial.

A mandatory approach was deemed essential as, there was a saturation point with the voluntary program. A municipal representative also explained there was a benefit for the Township to use the external support of the Mississippi Rideau Septic System Office to conduct the mandatory inspections. It was explained,

“There is value in having an external party to the Township undertaking the inspections. It allows property owners to feel comfortable that the party doing the inspection has no other interest except for the program and its intent. I think for those that are hesitant or who have a negative impression of the Township due to its role in enforcement, this neutral party approach is beneficial, and likely even more critical under a mandatory program” (Municipal Representative).

It was urged that municipalities that are considering a re-inspection program do not need to reinvent the wheel. There are resources out there that can help (see the Further Resources section of this case study). The reality is, the septic re-inspection program does not find failure or deficiencies that do not already exist. Septic re-inspection provides benefits for the homeowner (by way of catching potential failures before it is a catastrophe), as well as benefits economically to the municipality, contributes to the environmental health of watersheds, and the overall sustainability and resilience of rural communities.

Further Resources

- Municipal webpage on Septic Re-inspection Program: <http://www.twprideaulakes.on.ca/development/septic-re-inspection.html>
- Property owner information package <http://www.twprideaulakes.on.ca/documents/2018/2017%20Rideau%20Lakes%20Re-inspection.pdf>
- Mississippi Rideau Septic System Office: <https://www.rvca.ca/regulations-planning/septic-re-inspection-program>
- Sewage System Management Agreement between Rideau Valley Conservation Authority and Township of Rideau Lakes: <http://rplc-capr.ca/wp-content/uploads/2019/02/2018-14-Septic-Re-inspection-Agreement-RVCA.pdf>
- Waterfront property owners and rural economic development:

<https://foca.on.ca/waterfront-property-owners-and-rural-economic-development/>

- Septic Maintenance Project website: <http://rplc-capr.ca/septic-maintenance-project/>

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More about the Project: More case studies like this and other additional research on municipal re-inspection programs for residential on-site wastewater systems can be found on the project’s webpage: <http://rplc-capr.ca/septic-maintenance-project/>

References

1. Township of Rideau Lakes. (2018). *About Us*. Retrieved December 17, 2018 from <http://www.twprideaulakes.on.ca>
2. Township of Rideau Lakes. (2018). *Septic Re-inspection Program*. December 17, 2018 from <http://www.twprideaulakes.on.ca/development/septic-re-inspection.html>
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4. FOCA. (2018). Waterfront Property Owners and Rural Economic Development. Retrieved December 20, 2018 from <https://foca.on.ca/waterfront-property-owners-and-rural-economic-development/>

