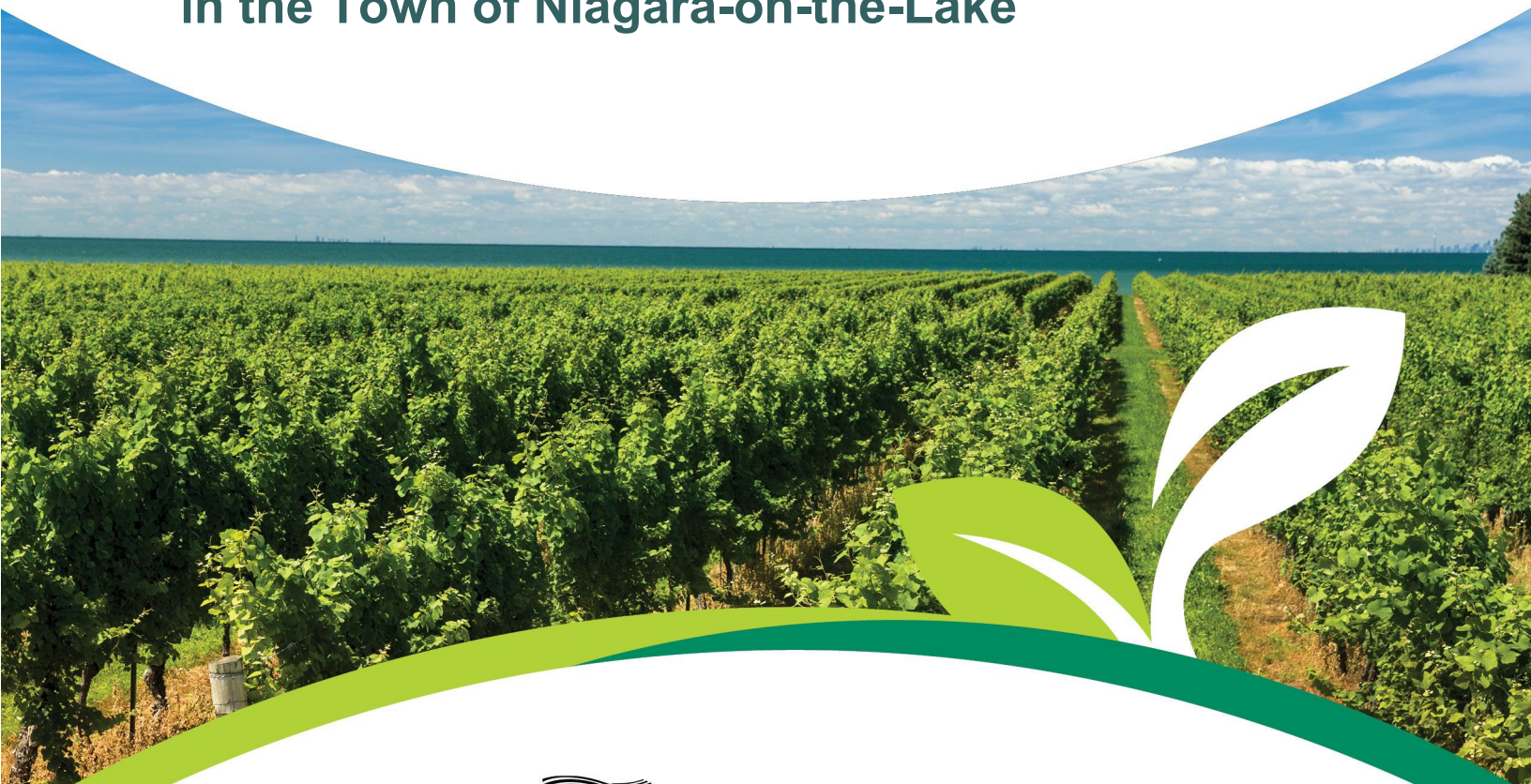


# Niagara Irrigation Initiative Project

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## Registered Irrigation User Survey Overview and Results

Upgrading and Enhancing Irrigation Infrastructure in the Town of Niagara-on-the-Lake



Possibility grows here.



Ontario Tender Fruit Growers





## Survey Overview

An online survey was developed for the Niagara Irrigation Initiative Project: Upgrading and Enhancing Irrigation Infrastructure in the Town of Niagara-on-the-Lake (the Project). The purpose was to gather input from Registered Irrigation Users to better understand current practices, water use, irrigation methods and expectations for the Project. The survey results will be used to help the design process.

Survey questions included:

1. Name (open response)
2. Email Address (open response)
3. Mailing Address (open response)
4. Roll Numbers or Municipal Address of Irrigated Parcels (open response)
5. Telephone Number (open response)
6. Which irrigation service area are you connected to? (multiple answers)
  - Harrison Routh
  - Four Mile Creek
  - Airport-Bright Lavigne
  - Lake Ontario/Niagara River
  - Unknown
  - Other (*open response*)
7. How close is the irrigation water source to your property? (*single choice*)
  - Less than 100 metres
  - 100 metres to 250 metres
  - 250 metres to 500 metres
  - 500 metres or more
  - Unsure
8. How are you getting irrigation water from a channel? (*multiple answers*)
  - Temporary pump and pipe system from closest channel
  - Permanent pump and pipe system from closest channel
  - Privately owned pond supplemented with irrigation water
  - Privately owned pond NOT supplemented with irrigation water

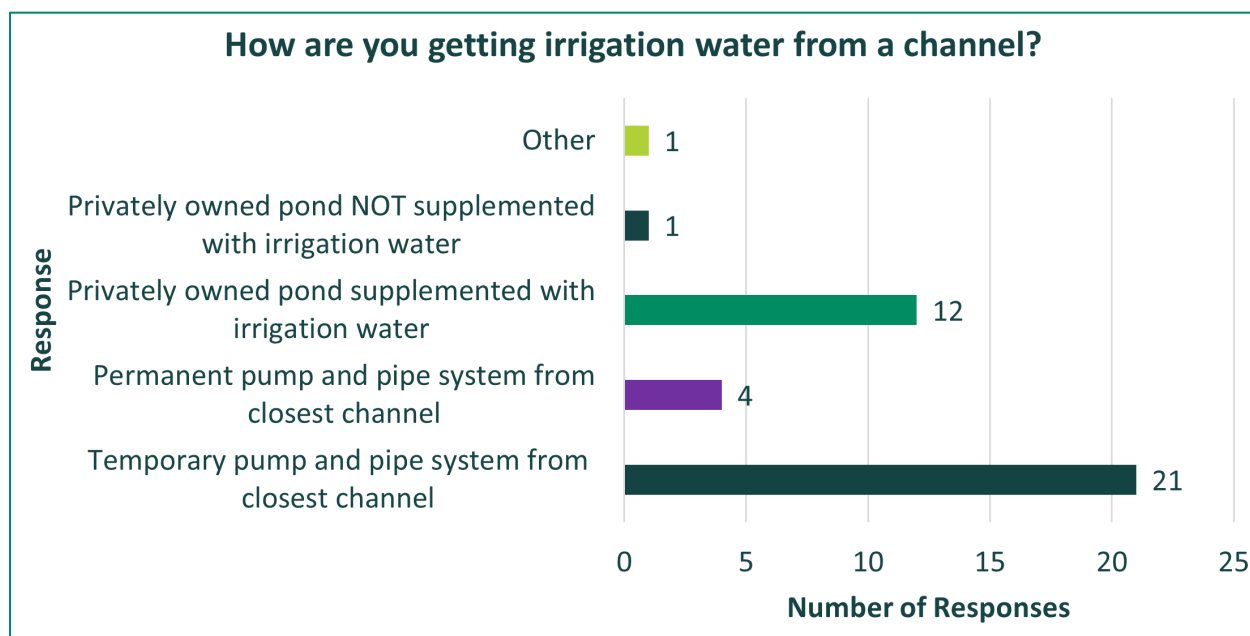
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9. Is there typically water in the irrigation system ready for you to use near your property? (*single choice*)
    - Yes, there is always water
    - Yes, except during years of drought
    - Sometimes
    - No
  10. How long does it take to get water to your area during drought conditions? (*single choice*)
    - 1 to 3 days
    - 4 to 7 days
    - 1 to 2 weeks
  11. During drought conditions, how do you water your crops? (*open response*)
  12. What irrigation method do you use? (*single choice*)
    - Drip/trickle
    - Overhead/gun
    - Combination of the above
  13. Do you have your own water storage pond? (*single choice*)
    - Yes
    - No, but I would be interested in having one on my property
    - No, but I am interested in a pond but I do not have the space for one
    - No and I am not interested
  14. If known, please share your current water usage rate (i.e. millimetres per day across a certain acreage, metres squared per month, litres per minute for X amount of time each day etc.). (*open response*)
  15. What are you currently growing / how are you using your property? (*multiple answers*)
    - Grapes
    - Tender Fruit and orchard
    - Vegetable and melon
    - Greenhouse and/or nursery
    - Floriculture
    - Cash crops
    - Golf course

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16. Are you considering changing the types of crops you grow? (single choice)
    - Yes
    - No
    - Maybe
  17. If irrigation water became more easily available through this project, would you consider changing the types of crops you grow? (single choice)
    - Yes
    - No
    - Maybe
  18. If yes to previous questions, what would you change to? (multiple answers)
    - Grapes
    - Tender fruit and orchard
    - Vegetable and melon
    - Greenhouse and/or nursery
    - Floriculture
    - Cash crops
    - Golf course
  19. If you had access to more water, would you switch your type of irrigation? (single choice)
    - Yes
    - No
  20. Do you have any questions about the project? (open response)

## Feedback – Current Irrigation Practices

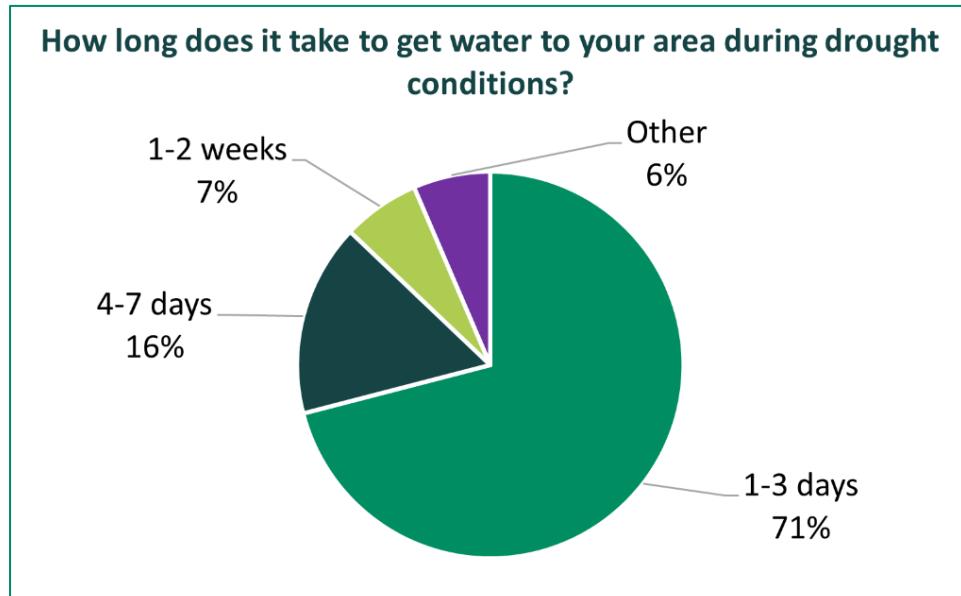
- ◆ Most respondents are connected to multiple irrigation systems, with Harrison Routh (15 responses) and Airport-Bright Lavigne (15 responses) being the most common service areas. Nine respondents indicated they were connected to Four Mile Creek, and 10 respondents connect directly to Lake Ontario, Niagara River or used other systems for irrigation.
- ◆ More than half of respondents (57%) are less than 100 metres from an irrigation water source.
- ◆ 21 respondents reported that they collect irrigation water from a temporary pump and pipe system from the closest channel; 12 respondents reported that they use a privately owned pond that is supplemented with irrigation water. Figure 1 shows a detailed breakout of responses.

**Figure 1: Irrigation Water Connection Responses**



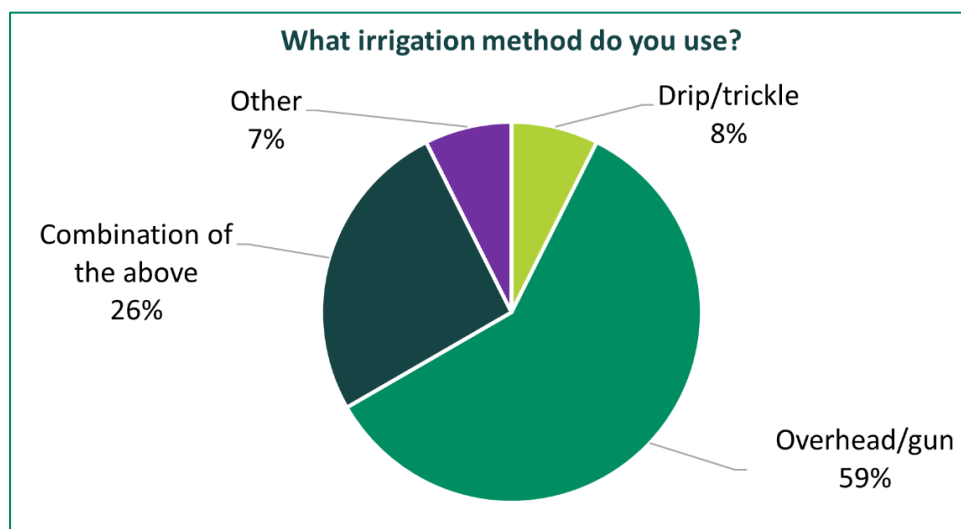
- ◆ 42% of respondents reported that there is typically water readily available in the irrigation system near their property, except during years of drought. 29% reported that there is always water available and only 6% said there is not typically water in their local system.
- ◆ As shown in Figure 2, most respondents stated that it usually takes 1 to 3 days to get water to their area during drought conditions.

**Figure 2: Water Sourcing Timelines During Drought Among Respondents**



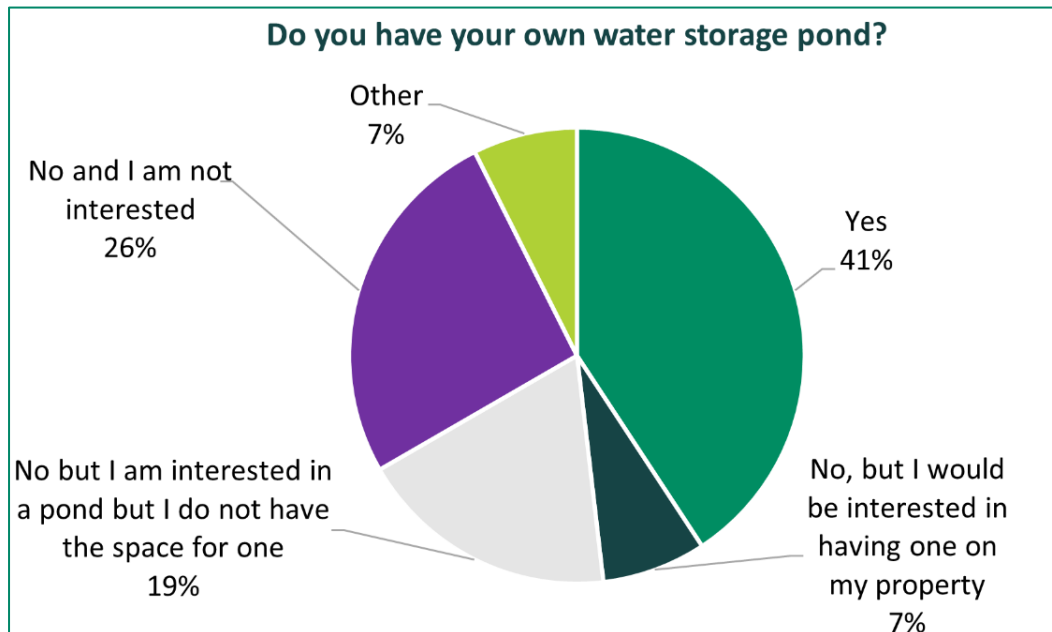
- ◆ During drought conditions, several respondents reporting using overhead irrigation as their primary method and that the irrigation system is their only water source. Other respondents maintained private storage ponds to supplement their irrigation water. Respondents that did not have access to an alternative water supply often only watered their highest value crops (e.g. grapes).
- ◆ Most respondents use an overhead/gun irrigation method or a combination of drip/trickle and overhead/gun. Few respondents use drip/trickle. Reference Figure 3 for a detailed breakout of replies.

**Figure 3: Irrigation Methods Used by Respondents**



- ◆ Almost half of respondents have, or are interested in, a water storage pond (48%), as shown in Figure 4.

**Figure 4: Water Storage Pond Usage Among Respondents**



## Feedback – Crop Types and Future Changes

- ◆ Grapes and tender fruit/orchards were by far the most reported land use, with 74% of respondents currently growing grapes and 33% currently growing tender fruit.
- ◆ A large majority of respondents are not considering changing the type of crops they grow. Even with greater access to water through this project, most users would still not make any changes to their crop type(s). Figure 5 and Figure 6, show the number of users currently considering changing their crops and the number of users who may consider changing the crops they grow with greater access to irrigation water.

Figure 5: Future Changes to Crop Selection – Current Conditions

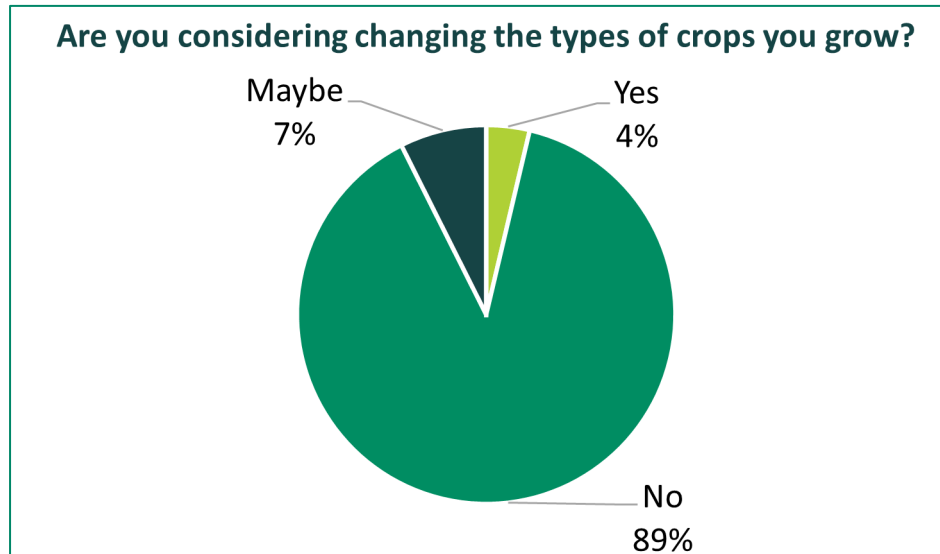
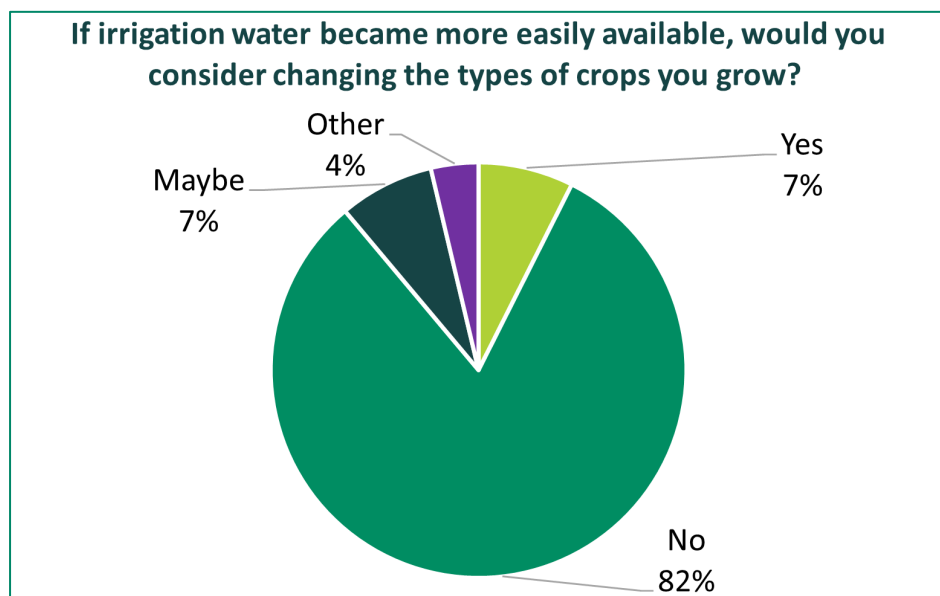


Figure 6: Future Changes to Crop Selection – Improved Conditions



- ◆ Out of the respondents who are considering changing the crops they grow, there was no clear preference for a specific crop type. Each of the following crops received one selection: greenhouse/nurseries, tender fruit and orchard, vegetable / melon and grapes. Only floriculture received more than two selections for this question.
- ◆ Out of the respondents who are considering changing their crop type if they had greater access to water, three respondents would switch their irrigation method, and one would not.

## Feedback – Current Water Use

- ◆ Respondents reported using very different rates of water use, with some as high as 7,000 litres per minute and others as low as 400 litres per minute. Users also varied in their daily water usage with responses averaging around 1.27 megalitres per day. However, not all respondents irrigate daily, and many responses did not offer a defined time period for their water use.

## Questions and Answers

The following questions were asked through the survey, with answers provided below:

- ◆ **Q: What are the Project's main objectives?**

A: The purpose of this project is to update and consolidate the Town of Niagara-on-the-Lakes's three existing irrigation system's engineering reports. As part of that process an evaluation of alternative solutions to improve the Town's irrigation systems will be completed. The preferred solutions will then move to a detailed design process where drawings and tender documents will be completed. This survey is part of the overall consultation and engagement process for the project. Construction would follow as a subsequent project.

- ◆ **Q: When will this Project be complete?**

A: This Project is scheduled to be complete by the end of December 2026. Timing for construction is dependant on financing and permitting and approval process

- ◆ **Q: Will there be an additional cost to existing Registered Irrigation Users?**

A: The total construction cost of the project is yet to be determined and will be an outcome of the Consolidated Engineering Report and detailed design process. Any additional costs to the Registered Irrigation Users will be discussed by the Town's Irrigation Committee and a recommendation will be made to Council at that time.

- ◆ **Q: Are there any incentives to switch to drip irrigation?**

A: There are no incentives being offered as part of this current project to switch to drip irrigation.

- ◆ **Q: Would you consider integrating the private pump into the municipal system?**

A: The current project does not consider the integration of private infrastructure into the municipal system. Any requests of this type would need to be brought to the Town's Irrigation Committee.

- ◆ **Q: There are areas like Airport-Bright Lavigne that are grossly below adequate water supply, and I would encourage improvements in those areas as well as new areas.**

A: Thank you for your feedback. The Project Team is reviewing options for increasing water supply to the Airport-Bright Lavigne system.

- ◆ **Q: I would like to see a common pumping station at the east edge of my property – that could serve 3-4 properties. Pumping 800 metres to reach my property is a lot of work and pipe to get water.**

A: The current project does not consider the addition of any new common pumping stations to service 3-4 properties. Any inclusion of such infrastructure in the future would be discussed at the Town's Irrigation Committee.

- ◆ **Q: The NOTL system has millions invested by growers, are we going to get shorted because we have been proactive?**

A: Thank you for your comment. It is recognized that growers have invested in the Town's irrigation system.

- ◆ **Q: Will the Town be cleaning irrigation drains? There are overgrown shrubs in and around Airport-Bright Lavigne.**

A: The Town will continue vegetation management on municipal drains and irrigation channels for the 2026 season. Specific drains or irrigation channels that require maintenance can be reported by email ([irrigation.info@notl.com](mailto:irrigation.info@notl.com) or [info@notl.com](mailto:info@notl.com)), through the eRigator app/website, or by filing a service on the Town's website ([https:// www.notl.com/request-service-or-file-issue](https://www.notl.com/request-service-or-file-issue)).