# Sustainable Quality Drinking Water





Residents of Grandhill Drive

# Water Quality Testing – One of Many Steps to Safe Drinking Water

• 2. Drinking water quality testing is an important step needed to properly manage drinking water systems that serve the public, and to make sure the water delivered to users is safe. There are many important steps to prevent contamination (such as harmful bacteria or chemicals) from getting into a drinking water system. These include source water protection, appropriate water treatment, proper operations and maintenance, a secure distribution **system**, monitoring and alarms, and emergency response protocols. Together these steps make up an approach that is widely-used by regulators and water suppliers called "the multi-barrier approach to drinking water protection" (see Figure 2 below). This report focuses on the results of drinking water quality monitoring, which can tell us whether the water is safe and whether the other steps to prevent contamination are working properly.

#### Source:

https://www2.gnb.ca/content/dam/gnb/Departments/env/pd f/Water-Eau/drinking-water-in-my-community.pdf



## Regulations in NB to support the multi-barrier approach:

- Potable Water Regulation that requires regulated water supplies to sample and test water according to an approved sample plan
- Watershed and Wellfield Protected Area designation Orders that allow for source water protection
- Clean Environment Act and Water Quality Regulation that requires water supply systems to haveApprovals to Operate (which set conditions for operating and maintaining a safewater supply); and
- Public Health Act that allows for issuing advisories to limit health hazards, such as boil-water orders

Source: https://www2.gnb.ca/content/dam/gnb/Departments/env/pdf/Water-Eau/drinking-water-in-my-community.pdf

Monitoring water quality is a very important step because it confirms that the water is safe for drinking and that steps to prevent contamination are working properly. The findings in this report are useful because they will increase the transparency of drinking water quality data that is available to the public and can help government to:

- Prioritize water systems to determine which ones may need improvements in treatment, disinfection, or distribution system operations;
- Prioritize wells that should be investigated as possible Groundwater Under Direct Influence of surface water (GUDI) sources, which are more likely to become contaminated by surface water, and so require additional water treatment;
- Inform funding priorities for infrastructure improvements;
- Assist in evaluating which infrastructure investments are working to improve or maintain water safety;
- Provide information about the success and / or challenges of the source water protection programs (Watershed and Wellfield Protected Area Designation Orders);
- Provide information about the success and / or challenges of the multi-barrier approach to drinking water protection used in the Approvals to Operate; and
- Identify bacteria or chemistry parameters that should be tested more (or less) often to be sure the right testing is being done to address potential problems in a water system.

# Drinking Water Guidelines

The following Drinking Water Quality Guidelines have been adopted from the Guidelines for Canadian Drinking Water Quality established by Health Canada. Municipally and provincially owned and operated water systems are required to sample their water according to the Clean Water Act. Regulated water supplies must test for the specific parameters within this list. Regulated drinking water that exceeds these limits will be subject to a health risk assessment which may result in the issuance of an interdiction (in the form of a boil order, do not consume order, or other directive), to ensure the safety of citizens

Source: https://www2.gnb.ca/content/dam/gnb/Departments/hs/pdf/en/HealthyEnvironments/DrinkingWaterGuidelines.pdf

#### Aesthetic Objectives (AO)

An Aesthetic Objective (AO) is established for parameters that may impair the taste, smell, or colour of water; or which may interfere with the supply of good quality water. They do not cause adverse health effects.

# Riverview's Corporate Objectives

#### RIVERVIEW SUSTAINABILITY PLAN

Water – see next screen

#### **Riverview Bi-Law**

- 19.3. From May 1 September 30 use an outdoor water hose in the following way:
- 19.3.1. On odd number calendar days if you live at an odd numbered residence; 19.3.2. On even number calendar days if you live at an even numbered residence; 19.3.3. Plan the watering of gardens/lawns to times before 8:00 a.m. and after 6:00 p.m.
- 19.3.4. Limit outdoor watering to no more than one hour at a time (2 hours max per 24 hour period);
- 19.3.5. Not water lawns or gardens when it is raining
- https://www.townofriverview.ca/sites/default/fi les/2024-05/By-Law%20400-25-02%20Respecting%20Water%20and%20Sewer age%20Systems.pdf

7/3/2024

Janil Antas And Sinaltelity for Society

# Water: Maintaining a Healthy System

The Greater Moncton area is served by the Turtle Creek Reservoir and transmission system managed by the City of Moncton. Town of Riverview owns the distribution system of 130 kilometres of piped infrastructure within the Town's serviceable boundary and purchases water from Moncton's transmission system for distribution. As Riverview's population grows, the Town will need to communicate a better understanding of the entire system to manage the increased demand on the water system. Mismanagement may lead to sedimentation creating more impervious surfaces that lead to flooding.

The City of Moncton has taken measures to protect the water quality of the watershed. PlanMoncton, the City of Moncton's Municipal Plan has a number of policies aimed at preserving the communities' water supply. An important part of ensuring good quality of water is by preserving the Turtle Creek Watershed. However, a lack of awareness of the impact of pesticides, fertilizers, gas, oil, heat, and unconscious consumption can lead to adverse effects on water system health.

GOAL STATEMENT
A HEALTHY WATER SYSTEM

To be a forward-thinking community that strives to maintain a dependable supply of high-quality, clean water to ensure the health of aquatic ecosystems, habitats, and residents of Riverview.

# WHAT CAN I DO?

- · Set-up a rain barrel in your back yard
- Do not waste water washing driveway/sidewalk
- Install aerators on taps
- · Install low flow toilets
- · Install water-efficient showerheads

#### **EXISTING COMMUNITY ASSETS**

- Petitcodiac River
- Mill Creek Master Plan
- Parks and Recreation Department Programs
- Parks
- Nature of Topography provides decent security from flooding
- Bay of Fundy
- Schools

#### SNAPSHOT OF KEY PLAYERS

- Petitcodiac Watershed Alliance
- Town council and staff
- · City of Moncton
- Engaged public body
- TransAqua
- Schools
- Local business
- Wildlife

#### ACTIONS

- Consider implementing residential water meters
- Encourage guided tours of TransAqua and Turtle Creek Reservoir
- Ban aesthetic and residential chemical fertilizers and pesticides
- Limit the development of private water systems\*
- Consider implementing an urban forest strategy for low impact development to reduce flooding risks
- Encourage residential rain barrels for lawn irrigation

#### SUCCESS INDICATORS

- Decrease or maintained water demand
- Number of participants in tours to TransAqua and Turtle Creek Reservoir
- Reduction or elimination of pesticides and fertilizers harmful to water system



Michel Ouellet<MOuellet@townofriverview.ca>

← Reply ← Reply all → Forward 🔠 ···



Tue 2024-06-11 4:36 PM

To: You

Cc: Pete bateson@outlook.com; Bob&Gisele Riley; Jason Langille; Mike; aubreymorrell01@gmail.com; Lynn Cormier

Hi,

Before I answer your question, I want to explain the work done over the past 20 years, the backlog of projects that Riverview is facing, and our budget process.

Since 2006, the Town has replaced 27 km of cast iron watermains with PVC. We have reduced our break rates from 57 in 2007 to 16 in 2023. Unfortunately we still have 41km of cast iron WM that need replacing. This is a large backlog and impacts over 78 different streets throughout the Town.

The Town's budget process includes a 10yr capital budget plan. The budget planning process allows all the departments to bring forward priorities for Council's consideration. Council has made street reconstructions and water renewals a high priority for several years and will continue to invest in this in many years to come. Currently, Grandhill is 16 on a list of 38 streets for a watermain replacement. We now have added water quality concerns as a criteria which will elevate this street's priority in the future. The streets identified for construction for 2025-2027 are already set and the timing for these projects are critical to other work being planned throughout the Town.

We are looking at addressing the noise in the house caused by the flushing. Public works did some work to the hydrant which inadvertently has caused this vibration which travels via the pipes and causes the noise. We hope this problem will be fixed soon. A crew will be dispatched to the hydrant soon.

The dirty water is caused by the lack of flushing as a result of the missing hydrant at the end of your street. We are waiting on utility locates before we can proceed with the installation of the hydrant. This will allow public works to use the new hydrant to adequately flush the line and bring clean water from Canusa into the Grandhill watermain. We expect to have this hydrant installed before the end of June.

Although the street will remain a dead-end, the new hydrant will allow public works to adequately flush the water. All older dead-end streets are faced with similar issues, however, the difference is most streets have a hydrant at the end to allow for proper flushing. The problem is made worst in Grandhill because of the grade of street allows gravity to bring any debris to flow to the end of the watermain with no way to flush it out.

The new hydrant added soon is not a band-aid but rather a must have to allow for proper flushing of every watermain in Town. I hope this clarifies a few misconception and I remain available to answer any questions.

Michel

On Jun 11, 2024, at 2:52 PM, Michel Ouellet <MOuellet@townofriverview.ca> wrote:

Hi,

Please let me start by apologizing for the inconvenience this water quality issue have caused you all. I want to reassure everyone that the water is safe to drink. I have been talking with Luc who, as I understand, has been talking to many of you. Lus has kept me informed of the issues. I may be able to help explain further what is happening on this street and the plans for the future. For some of you that are long term resident of this street, you will be able to confirm that this is not a new issue. We take all concerns seriously but unfortunate, we don't always have the means to address the problem as quickly as residents would like.

Some fact I wanted to share; According to our records the watermain is 250m long and is a 6" (150mm) cast iron pipe. It was originally installed on Grandhill in 1977, then extended to create your phase of the subdivision in 1983. The Town has been actively replacing cast iron watermains since 2006 starting with the worst streets, in term of breaks, first. Our records indicate this streets has had 5 breaks since 1981. We have only recently started tracking water quality issues and this will help prioritize this street over others in the future. We estimate the cost of replacing the watermain with new 200mm PVC to be over \$550,000.

I am available to meet at your convenience or we can discuss your concerns over the phone. I can be reached at 9506) 387-2220. I can also be available after normal work hours if this works better for everyone.

Regards, Michel

# Why are the residents from Grandhill here?

- 1. To request new pipes that are broken currently 16 of 38 streets (affecting 78 streets) that need replacing yet we can build a \$30M Community Center
- 2. We appreciate the temporary solution but bring to Town's attention this doesn't follow your own Sustainability Plan or Bi-Law.
  - 1. New Hydrant still needs draining weekly or bi-weekly (1/2 hr weekly from hydrant)
  - 2. We still must add tickets when water is yellow/brown
  - 3. Hose was run 24/7 for over 4 +weeks by request of Town no mention of recapture to be used on flower beds, etc
  - 4. We were not provided filters for our water consumption
  - 5. No notice of pipes being put under stress causing some homes issues (will play sound from video) Pipes rattled so much caused them to leak
  - 6. We must drain our hot water tanks as the sludge is causing them to fail early
  - 7. If a water pipe burst, it would be fixed without funding. We are requesting that this be completely repaired and added to 2025 budget not in 5 years. We have already been dealing with this for 5+ years
  - 8. We have not tested the water, but if this continues we want to understand if this is a correlation of the quality of the water and 90% of homes where people have had cancer or died as a result Has there been water samples taken from within the homes of this street?
  - 9. Cast iron pipe still causing leaching and discolouration –with so much debris in the system, there must be a crack

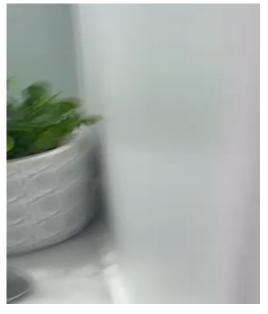




Video 1- Filtering water



Video 2 –Noise from pipes





Flush of water tank







Toilette





### Costs to date

- 7 year old hot water tank \$1063.73 when the town flushed the lines and caused all the noise, the 7 year old water heater developed a leak inside the cabinet. It is a natural gas fired water heater and the cost of the replacement unit was covered by warranty but we still had to pay the \$1063.73 and were out of hot water for 4 days.
- Pipes full of dirt and pipes leaked due to vibration Plumber had to blow the debris out of the pipes and replace the pipes under sinks. \$310.00