## Sussex Water Source of Supply

Sussex draws its potable (drinkable) water from an underground, unconfined aquifer supplied by two deep wells located within the municipality. The pumping stations are capable of a maximum combined flow rate of 5.7 cubic meters/minute (1,250 Imperial gallons/minute) into the distribution system. Reservoirs with a combined capacity of 5,428,000 litres provide backup supply.

The Town of Sussex chlorinates its potable water at the well heads by means of constant automated chlorination to maintain a safe residual level at all times. The rate of chlorine integration is approximately 0.8mg/L (ppm).

#### **Related Links**

For those who wish to explore water and wastewater issues, the following websites may be helpful:

Water in Canada

https://www.canada.ca/en/ environment-climate-change/ services/water-overview.html

American Water Works Association **www.awwa.org** 

Water Environment Federation www.wef.org

Water Use It Wisely (For Kids)
https://wateruseitwisely.com/
kids/

### Did you know?

Approximately 45% of bottled water comes from **municipal sources**.

You can refill a half-litre water bottle **1,740 times** with tap water for the same cost as a 99 cent water bottle at a convenience store. And you'll be helping the environment at the same time!



# Tips to conserve water at home

- On average, dishwashers use less water than hand washing. Give your dishes a quick rinse and run the dishwasher when there is a full load.
- Use the load settings on your washing machine rather than running a full load cycle for a few items.
- Install aerators on bathroom faucets to save water.
- Stop using your toilet as a wastebasket.
   Every item or tissue you flush away also flushes away five to seven gallons of water

#### **Water Leaks**

A continuous leak through a hole this small wastes **74,000 gallons** of water in just three months!

If you hear noises in pipes in your home or property, that you suspect might be caused by water leakage, give us a call! We will be happy to help determine the cause and remedy.



# 2022 Annual Water Quality Testing Results

524 Main Street Sussex, NB E4E 3E4

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# WATER QUALITY INORGANIC (CHEMICAL) TESTING RESULTS 2022

Chemical Parameters		Canadian Drinking Water Quality Guideline	Average of Results	Range of Detection
Inorganic Parameters-naturally occurring or synthetic substances containing carbon, hydrogen, nitrogen, and oxygen.				
Alkalinity-capacity of water to neutralize acids	mg/L	-	114	111 - 119
Aluminum-inorganic element	ug/L	100	<5	<5
Antimony-element used in metal manufacturing	mg/L	6	<2	<2
<b>Arsenic</b> -can be naturally occurring or from industrial effluents	ug/L	10	<1	<1
<b>Barium</b> -found in naturally occurring compounds and industrial processes	ug/L	1000	72	60 - 79
<b>Boron-</b> naturally occurring in over 80 minerals and within the earth's crust	mg/L	5000	45	45-46
<b>Cadmium-</b> present as an impurity in galvanized pipe, also present in solder	ug/L	5	<0.02	<0.02
Calcium-related to hardness	mg/L	-	43.2	41.3 - 46.9
<b>Chloride</b> -natural element, found in salt used for ice control and in chemical industry effluents	mg/L	250	13.7	13.4 - 14.2
Chromium-naturally occurring metallic ion	ug/L	50	<1	<1
<b>Conductivity</b> -measure of the ability of water to carry electric current	uS/ cm	-	318	306 - 339
<b>Copper-</b> can cause staining in laundry above Health Advisory Limit	ug/L	1000	2	<1 - 4
Fluoride-naturally occurring in minerals and soils	mg/L	1.5	<0.1	<0.1
Iron-natural metallic ion, can cause laundry and plumbing fixture staining	ug/L	300	<2	<2
<b>Lead-</b> common element, found in older plumbing installations, also can be present in solder	ug/L	5	<1	<1
Magnesium-contributed to water hardness	mg/L	-	4.1	3.8 - 4.5
<b>Manganese</b> -natural metallic ion, can cause laundry and plumbing fixture staining	ug/L	50	<2	<2
Mercury-a heavy crystalline salt	ug/L	1	<0.02	<0.02
<b>Nitrate-nitrite</b> -naturally occurring ion, used in inorganic fertilizers	mg/L	-	0.9	0.7-1.3
<b>pH-</b> measure of acidity or causticity	ug/L	7.0-10.5	7.50	7.48 - 7.52
<b>Potassium-</b> second most abundant element in the earth's crust	mg/L	-	0.1	0.1 - 0.2
Selenium-inorganic element	ug/L	10	<2	<2
<b>Sodium-</b> most abundant element in the earth's crust, high concentrations can affect taste	mg/L	200	8.6	7.3 - 9.5
Sulfate-naturally occurring in numerous minerals.	mg/L	500	22	19 - 28
Thallium-rare natural metallic element	ug/L	-	<1	<1
<b>Total Hardness</b> -caused by dissolved natural salts	Ca/ Mg	-	125	119 - 136
<b>Turbidity-</b> measurement of suspended material in the water	NTU	1	0.26	.2330
Uranium-found in certain rare minerals	ug/L	20	<0.5	<0.5
Zinc-can be found in some plumbing fixtures	ug/L	500	<2	<2
<b>TDS</b> —quality is its effect on taste	mg/L	-	152	146 - 162

#### WATER SAMPLING & TESTING

# CHEMICAL ANALYSIS (INORGANIC)

Town of Sussex water comes from two municipal wells. As the water travels through the ground, it dissolves naturally occurring minerals.

In order to ensure that Sussex water is safe to drink, a number of chemical analyses are performed each year.

#### **INORGANIC ANALYSIS**

The results from the most recent analysis are presented in this report. The Average of Results indicates the average of the **three** locations tested. The Range of Detections indicates the lowest detections to the highest in each parameter.

#### **ORGANIC ANALYSIS**

Two Town wells and a third location are sampled for Clean Water Act parameters twice a year.

#### **BACTERIOLOGICAL ANALYSIS**

Ten sites are sampled weekly for bacteriological parameters.

#### **CHLORINE ANALYSIS**

Twelve sites are sampled twice weekly for chlorine content. Of these twelve sites, four sites are sampled on each working day. These include the well sites.