



# City of North Canton Drinking Water Plant 2019 Consumer Confidence Report

**The City of North Canton**  
145 North Main Street  
North Canton, Ohio 44720

**Stephan Wilder, Mayor**  
**Patrick DeOrio, Director**  
**of Administration**

**Drinking Water Plant**  
7300 Freedom Avenue NW  
North Canton, Ohio 44720  
**Mark Leichtamer,**  
**Superintendent**

<b>City of North Canton Contact Phone Numbers:</b>	
Water treatment information or water quality problem: North Canton Drinking Water Plant	24 hours a day, 7 days a week 330-499-6473
Billing related questions or water service on/off: North Canton Utilities Department	Monday thru Friday 8am to 4pm 330-499-4801
Backflow assemblies or inspections: North Canton Backflow Department	Monday thru Friday 6:30am to 3:00pm 330-499-3801
Main breaks, meter repair and water taps: City of North Canton Service Center, Distribution	Monday thru Friday 7:00am to 4:00pm 330-499-1528
Water main breaks (after hours): North Canton Police Department, Non-emergency	24 hours a day, 7 days a week 330-499-5911

## CONTENTS

Contact Phone Numbers

North Canton Water Sources

Additional Information

Water Monitoring Results

Key to Abbreviations

Water Quality Data

Potential Sources of Drinking Water Contamination

Special Precautions for Immuno-Compromised Persons

**The City of North Canton DWP, ( PWSID# OH-7604312), has prepared the following report to provide you, the consumer, on the quality of your drinking water. Included within this report are general health information, water quality test results, how to participate in decisions concerning your drinking water, and water system contacts.** There are currently 7,831 residential accounts and 1,259 commercial accounts for a total of 9,090 water accounts. This gives us a combined 24,988 people served, 17,488 inside the city and 7,500 outside the city.

### Source Water Information & Susceptibility Analysis :

**The City of North Canton** receives its drinking water from nine ground water wells in five different locations. The City of North Canton averaged 3.09 million gallons of water use per day (MGD) and pumped a total of 1.129 billion gallons for the year of 2019. The North Canton Drinking Water Plant also has an emergency connection with the Canton Water System and Aqua Ohio Water System of Massillon, which we did not have to use in 2019. All of this water was drawn from the Buried Valley and Massillon Sandstone Aquifers.

### Susceptibility Analysis :

A susceptibility analysis evaluates the likelihood that a public water system's source water could become contaminated. The analysis is based on the sensitivity of the aquifer to contamination, the available water quality data for the water system, and the number and types of potential contaminant sources located within the protection area. More information on how the Ohio EPA determines a water supply's susceptibility to contamination can be found in the Ohio EPA Ground Water Susceptibility Analysis Process Manual. Copies of the manual are available at: [http://epa.ohio.gov/portals/28/documents/swap/swap\\_susceptibility\\_guidance.pdf](http://epa.ohio.gov/portals/28/documents/swap/swap_susceptibility_guidance.pdf)

This susceptibility analysis is based on the information provided in the update to the Delineation of the Source Water Protection Area for the City of North Canton's Freedom, Dressler Road, Price Park, Maple Street, and Oster Wellfields, developed by Bennett & Williams Consultants, Inc. on January 25, 2019, and by previous source water assessments completed by Ohio EPA in October 2002 and in June 2007.

This assessment indicates that North Canton City PWS source of drinking water has a HIGH susceptibility to contamination because of:

- The depth to the water table is shallow at 4 to 17.7 feet below the ground surface in both aquifers.
- There is no significant low-permeability protective layer between the sand and gravel and sandstone aquifers and the ground surface.
- Water quality results indicate the presence of several volatile organic compounds in groundwater, implying a pathway exists from the ground surface to the aquifer, and many potential significant contaminant sources exist within the protection area.

This susceptibility means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is relatively high. This likelihood can be minimized by implementing appropriate protective measures, which we are currently doing through public education, yearly surveys at all business contamination sources inside the protection areas, and signage put up indicating protection areas. Copies of the source water assessment report prepared for North Canton PWS are available by contacting Mark Leichtamer (330-499-6473) at the Water Treatment Plant.

### **What are sources of contamination to drinking water?**

The source of drinking water, both tap water and bottled water, include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and in some cases radioactive material; and water can pick up substances resulting from the presence of animals or from human activity.

### **Contaminants that may be present in source water include:**

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can, also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems; FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

- Lead \*see "*About Your Drinking Water*"

### **About Your Drinking Water :**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of North Canton Drinking Water Plant is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 1-800-426-4791 or <http://www.epa.gov/safewater/lead>.

### **Who needs to take special precautions ?**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as individuals with cancer undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

## **MORE ABOUT YOUR DRINKING WATER :**

The EPA requires regular sampling to ensure drinking water safety. The City of North Canton conducted sampling for the following contaminants: bacteria, inorganics, synthetic organics, radioactive substances, and volatile organics. Samples were analyzed for different contaminants, most of which were not detected in the City of North Canton water supply. The Ohio EPA requires us to monitor for some contaminants less often than once per year because the concentrations of these contaminants do not change frequently. Consequently, some of our data, though accurate, are more than one year old. Please know that none of the contaminants tested for exceeded the EPA's Maximum Contaminant Levels in 2019.

### **2019 License to Operate (LTO) Status Information :**

The City of North Canton was issued a green unconditional license to operate in 2019.

### **How do I participate in decisions concerning my drinking water?**

Public participation and comment are encouraged at regular meetings of City Council, which meets the second and fourth Monday of each month. Call the Council office (330) 499-3986 for further information on Council meetings.

**For more information on your drinking water** contact Mark Leichtamer, Superintendent of the North Canton Drinking Water Plant. Mr. Leichtamer is available to answer any questions you may have about your water and is available weekdays from 7 a.m. to 4 p.m. at (330) 499-6473. You can also call the local office of the Ohio Environmental Protection Agency at (330) 963-1200 with any water questions.

## **HOW TO READ THIS REPORT :**

The City of North Canton is required to provide this annual report on drinking water quality to every North Canton water customer. The Environmental Protection Agency (EPA) requires regular sampling to ensure drinking water safety and the results of testing those samples are in this report. In addition, since it is your water system and you pay for it, we believe you should understand where the water comes from, how it is processed and transported to you, and what the city is doing to make certain the system is not only safe, but reliable. As you read this report, please note, that the chemicals listed are at different detection levels. **None of these levels are in violation of EPA standards. We test more frequently than required so that when we detect any elevation in levels. We can take action immediately to correct it.**

## **WHERE YOUR WATER COMES FROM :**

**Buried Valley and Massillon Sandstone aquifers provided all of the source water for North Canton DWP in 2019.**

The City of North Canton is a ground water system. Nine wells at five different locations. Two on the water plant freedom Ave. property, two on the price park property, two on the Dressler Road property, two at the east maple ball field property, and one on the Oster property.

## **REVISED TOTAL COLIFORM RULE (RTCR) INFORMATION ----**

**The Consumer Confidence Report (CCR) reflects changes in the drinking water regulatory requirements during 2016. All water systems were required to comply with the Total Coliform Rule from 1989 to March 31, 2016, and begin compliance with a new rule, the Revised Total Coliform Rule, on April 1, 2016. The new rule maintains the purpose to protect the public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of total coliform bacteria, which includes E. Coli bacteria. The U.S. EPA anticipates greater public health protection under the new rule, as it requires water systems that are vulnerable to microbial contamination to identify and fix problems. As a result, under the new rule there is no longer a maximum contaminant level violation for multiple total coliform detections. Instead the new requires water systems that exceed a specified frequency of total coliform occurrences to conduct an assessment to determine if any deficiencies exist. If found, these must be corrected by the PWS. No coliform event occurred for North Canton PWS in 2019.**

## **DEFINITIONS OF SOME TERMS CONTAINED WITHIN THIS REPORT.**

**First Tap or EP001:** First entry point from treatment plant into the distribution system.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Picocures per Liter (pCi/L):** Measure of radioactivity in water.

**Parts per Million (ppm) or Milligrams per Liter (mg/L):** Units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

**Parts per Billion (ppb) or Micrograms per Liter (ug/L):** Units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

DEFINITIONS CONTINUED :

**Symbols :** Less than (<) looks like a small L ; Greater than (>)

**ND =**  
Non-detection of chemicals tested for.

**NR =**  
Not Required.

**CT =**  
**Contact Time (CT)**-The mathematical product of a “residual Disinfectant Concentration” (C), which is determined before at the first customer, and the corresponding “disinfectant contact time” (T).

**AL =**  
**Action Level** – Requires action be taken if concentration of contaminant exceeded the **AL** level.  
The action could be different types of testing and require increased treatment methods.

**MRDL =**  
Maximum Residual Disinfection Level

**MRDLG =**  
Maximum Residual Disinfection Level Goal.

**Treatment Technique (TT) =**  
A required process intended to reduce the level of a contaminant in drinking water.

**Haloacetic Acids or HAA5’s**

**Total Trihalomethanes or TTHM’s**

**LRAA – Locational Running Annual Average**

**2019 LIST OF DETECTED CONTAMINATES :**

<b>Volatile Organic Compounds Plant Tap EP-001 (monthly average reported result)</b>							
Sample Date	Contaminant (Units)	Violation	MCLG	MCL	Results AVG.	Detection Range	Typical Source Contaminants
<b>MONTHLY 2019</b>	Chloroform (PPB)	No	0	Unreg	1.29	< 0.50 to 2.40	Discharge from industrial facilities: byproducts of drinking water chlorination
	Bromodichloromethane (PPB)	No	0	Unreg	2.90	1.50 TO 4.50	
	Dibromochloromethane (PPB)	No	0	Unreg	4.48	2.70 TO 5.70	
	Bromoform (PPB)	No	0	Unreg	2.86	1.70 TO 4.30	
	Cis-1,2-Dichloroethylene (PPB)	No	0	70	0.28	< 0.5 to 1.30	

**RADIOACTIVE SUBSTANCES (pCi/L)**  
NOT REQUIRED IN 2018. ( Taken from EP-001 plant tap. )

Sample Date	Contaminant (Units)	Violation	MCLG	MCL	Results	Detection Range	Typical Source Contaminants
<b>6/8/16</b>	Gross Alpha ; Incl. Radon & Uranium (pCi/L)	No	0	15	ND	<3	Certain minerals, which can be naturally occurring or the results of oil and gas production and mining activities; are radioactive and may emit forms of radiation known as protons and beta radiation
<b>6/8/16</b>	Gross Beta (pCi/L)	No	0	AL50	ND	<3	
<b>6/8/16</b>	Radium 228 (pCi/L)	No	0	5	ND	<1	

**TOTAL CHLORINE RESIDUAL**

Sample Date	Contaminant (Units)	Violation	MRDLG	MRDL	Results	Detection Range	Typical Source Contaminants
<b>Monthly 2019</b>	Total Chlorine ( PPM )	No	4 ppm	4 ppm	0.94	0.84 to 1.03	Product of drinking water disinfection

(monthly average from 25 + distribution sites)

**PHOSPHATE; AND FLUORIDE RESULTS 2019**

2019 monthly averages at plant tap. (EP-001)

Sample Date	Contaminant (Units)	Violation	MCLG	MCL	Results	Detection Range	Typical Source Contaminants
<b>Monthly avg. 2019</b>	Phosphorus ( PPM )	NO	0	2	0.15	0.09 to 0.20	Additive to help pipe corrosion; water additive that promotes strong teeth
<b>Monthly avg 2019</b>	Fluoride ( PPM )	NO	4	4	1.01	0.98 to 1.05	

**LEAD & COPPER – Tested at Customer’s Tap. Testing done every 3 years. Last test JUNE 2017**

Contaminant	Action Level (Units)	Individual results over the Action Level	90 th percentile value reported	Violation	MCLG	Sample Date	Typical Source
<b>LEAD</b>	15 ( PPB )	0	0.00 ppb	NO	0.00	2017	Corrosion of household plumbing
<b>COPPER</b>	1.3 ( PPM )	0	0.00 ppm	NO	1.3	2017	Corrosion of household plumbing

**LEAD - ZERO** out of 35 samples were found to have lead levels in excess of the Action Level of 15 PPB.

**COPPER - ZERO** out of 35 samples were found to have levels in excess of the Action Level of 1.3 PPM

**MICRO-ORGANISMS: Total Coliforms (Including coliform and E. Coli)**

**Revised Total Coliform Rule (Taken from distribution sampling sites monthly.)**

Sample Date	Contaminant (Units)	MCL	MCL Goal	Highest Monthly % of Samples with Total Coliform Present	Highest Monthly % of Samples with E-COLI Present	Required Monthly Test	Violation	Typical Source Contaminants
<b>2019</b>	Total Coliform (for systems that collect less than 40 samples/month)	5% monthly sample positive	0 %	0.00 %	0.00 %	25 per month.	NO	Coliforms are naturally present in the environment as well as feces, fecal coliforms, and E. Coli, coming from human and animal fecal waste.

## Disinfection By Product Results Stage 2 Rule Monitoring

LRAA = Locational running Annual Average

( Taken from distribution sites in 2019.)

(Source of this contaminate is a by- product of drinking water chlorination.)

2019 Total Trihalomethane Results - ( TTHM's ) - ( PPB )					
<u>QUARTER</u>		<i>Jan - Mar</i>	<i>Apr - June</i>	<i>July - Sept</i>	<i>Oct - Dec</i>
<i>Site 1 - Sample Value</i> <i>First Friends Church</i>	<i>( PPB )</i>	NONE	NONE	59.10	NONE
<i>Site 1 - LRAA -</i>	<i>( PPB )</i>	NONE	NONE	59.10	NONE
<i>Site 2 - Sample Value</i> <i>Walsh College</i>	<i>( PPB )</i>	NONE	NONE	45.90	NONE
<i>Site 2 - LRAA-</i>	<i>( PPB )</i>	NONE	NONE	45.90	NONE
<b>CCR REPORT VALUES</b>		Highest Compliance Value = 59.1 ( PPB ) Range of Values = 45.9 to 59.1 ( PPB )		MCLG for TTHM's is N/A MCL FOR TTHM's is 80 (PPB)	

( Taken from distribution sites in 2019)

( Source of this contaminate is a by-product of drinking water chlorination.)

2019 HALOACETIC ACIDS Results - ( HAA5's ) - ( PPB )					
<u>QUARTER</u>		<i>Jan - Mar</i>	<i>Apr - June</i>	<i>July - Sept</i>	<i>Oct - Dec</i>
<i>Site 1 - Sample Value</i> <i>First Friends Church</i>	<i>( PPB )</i>	NONE	NONE	6.50	NONE
<i>Site 1 - LRAA -</i>	<i>( PPB )</i>	NONE	NONE	6.50	NONE
<i>Site 2 - Sample Value</i> <i>Walsh College</i>	<i>( PPB )</i>	NONE	NONE	5.40	NONE
<i>Site 2 - LRAA -</i>	<i>( PPB )</i>	NONE	NONE	5.40	NONE
<b>CCR REPORT VALUES</b>		Highest Compliance Value = 6.50 (PPB) Range of Values = 5.40 (PPB) to 6.50 (PPB)		MCLG for HAA5's is N/A MCL for HAA5's is 60 (PPB)	

## UCMR 4 Testing :

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. In **2019** North Canton PWS (OH-7604312) participated in the fourth round of the Unregulated Contaminant Monitoring Rule (UCMR4). For a copy of the results please call the the Water Treatment Plant at 330-499-6473. More information about these contaminants can be found at US EPA's website and in the Data Summary.

**TABLE OF UNREGULATED CONTAMINANTS:**

*Samples taken from EP-001-Plant Tap; Raw Water Intake; and distribution locations DS 201 & 202*

CONTAMINANTS (Units)	Sample Year	Average Level Found	Range of Detection	Sample Location
<b>Bromide (ppm)</b>	2019	0.111 ppm	N/A	Raw Water Intake
<b>Total Organic Carbon (ppb)</b>	2019	820 ppb	N/A	Raw Water Intake
<b>Manganese (ppb)</b>	2019	N/D ppb	N/A	EP-001-Plant Tap
<b>Haloacetic Acids HAA5 (ppb)</b>	2019	3.64 ppb	3.27 to 4.00 ppb	Distribution sample
<b>Haloacetic Acids HAA6Br (ppb)</b>	2019	5.08 ppb	4.63 to 5.52 ppb	Distribution sample
<b>Haloacetic Acids HAA9 (ppb)</b>	2019	5.50 ppb	4.96 to 6.04 ppb	Distribution sample

Examples of contaminants that **were not** detected under UCMR4 were : chloryrifos , total permethrin , alpha-hexachlorocyclohexane , dimethipin , oxyfluorfen , profenofos , tebuconazole , tribufos , ethoprop , butylated hydroxyanisole , 0-toluidine , quinolone , germanium , 1-butanol , 2-methoxyethanol , and 2-propen-1-ol . A full list may be obtained by contacting the water treatment plant.

**MONEY SAVING TIPS!**

**WATER USAGE AND SAVINGS CHART FOR COMPARISON**  
Source: City of Columbus, Ohio, 2015 CCR

Normal Usage		Conservation Usage		
Gals Used	Method	Gal Used	Method	Savings
50	Shower head running continuously	25	Shorter Showers (5 mins) OR	50%
		25	Low flow shower head (10 min) OR	50%
		12.5	Low flow shower head (5 min) OR	75%
36	Standard tub, full	18	Standard tub, half full	50%
4-6	Depends on tank size	2-4	Use a displacement bag, or milk jug in tank reservoir OR	50%
		1.6	Replace with low flow toilet	70%
5	With tap running continuously	1	Fill a standard basin	80%
10	With tap running continuously	1	Wet brush with brief rinses	90%
20	With tap running continuously	1	Fill a standard basin	95%
30	With tap running continuously	10	Wash and rinse with a half filled standard sink	66%
16	Full Cycle	7	Short cycle	56%
60	Full cycle: Highest water level	27	Short cycle	55%
10	Per minuet; Average garden hose	Varies	Eliminate, Night watering, etc	Varies