2022 Consumer Confidence Report (CCR) Certification Form

Water System Name: Town of Broadway

Water System No.: NC0353015 Report Year: 2022 Population Served: 1783

The Community Water System (CWS) named above hereby confirms that all provisions under 40 CFR parts 141 and 142 requiring the development of, distribution of, and notification of a consumer confidence report have been executed. Further, the CWS certifies the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the primacy agency by their NC certified laboratory. In addition, if this report is being used to meet Tier 3 Public Notification requirements, as denoted by the checked box below, the CWS certifies that public notification has been provided to its consumers in accordance with the requirements of 40 CFR 141.204(d).

Certified by: Name: John M. Godfrey Title: Town Manager

Signature: John M. Godfrey Phone #: 919 258-9922

Delivery Achieved Date: 06/12/23 Date Reported to State: 06/12/23

☐ The CCR includes the mandated Tier 3 Public Notice for a monitoring/reporting violation (check box, if yes).

Check **all** methods used for distribution (see instructions on back for delivery requirements and methods):

☐ Paper copy to all ☐ US Mail ☐ Hand Delivery

☐ Notification of availability of paper copy (Provide a copy of the notice.)
Notification Method _____ (i.e., US Mail, door hanger)

X Notification of CCR URL (must be direct URL): http://www.broadwaync.com/CCR.pdf
Notification Method _____ (i.e., on bill, bill stuffer, separate mailing, email)

☐ Direct email delivery of CCR ☐ Attached ☐ Embedded
Notification Method _____ (i.e., on bill, bill stuffer, separate mailing)

☐ Newspaper (attach copy) Name of Paper? _____ Date Published: _____

Notification Method _____ (i.e., on bill, bill stuffer, separate mailing, email)

☐ **"Good faith" efforts** (in addition to one of the above required methods) were used to reach non-bill paying consumers such as industry employees, apartment tenants, etc. Extra efforts included the following methods:

- X posting the CCR on the Internet at URL: http://www.broadwaync.com/CCR.pdf
- ☐ mailing the CCR to postal patrons within the service area
- ☐ advertising the availability of the CCR in news media (attach copy of announcement)
- ☐ publication of the CCR in local newspaper (attach copy of newspaper)
- X posting the CCR in public places such as: (attach list if needed) Broadway Town Hall
- ☐ delivering multiple copies to single bill addresses serving several persons such as: apartments, businesses, and large private employers
- ☐ delivery to community organizations such as: (attach list if needed) _____

Note: Use of social media (e.g., Twitter or Facebook) or automated phone calls DO NOT meet existing CCR distribution methods under the Rule.

INSTRUCTIONS for Water System (Remove this page prior to distribution.)

1. Create your 2022 CCR using the template and instructions on the following pages

- **Make sure all instructions are removed when report is complete. Instructions are in blue text with ** symbols at the beginning of each paragraph. The **s are included in case the blue color is not visible.**
- Systems that have a large proportion of non-English speaking customers must include information in the appropriate language(s) regarding the importance of the report or provide a telephone number or address where such residents may contact the system to obtain a translated copy of the report or assistance in the appropriate language.
- It is best to remove all non-detected contaminants and all contaminants not required to be monitored by the water system from the report. This will make the report shorter, so that it is easier to read and less expensive to print. If you wish to include non-detected contaminants in your report, the CCR Rule requires that all detected and non-detected contaminants be presented in separate tables.
- A detected contaminant stays in the report from year to year until the particular contaminant is tested again, in which case, the result may either be modified, if detected again, or removed, if not detected. No data older than 5 years needs to be included.

2. Distribute your 2022 CCR to customers through direct delivery

CCR DELIVERY METHOD	METHOD DESCRIPTION (Click link: EPA-CCR Rule Delivery Options Memo January 3, 2013. for referenced Appendix Figures below.)
Mail – paper copy	CWS mails a paper copy of the CCR to each bill-paying customer.
Mail – notification that CCR is available on web site via a direct URL	CWS mails to each bill-paying customer a notification that the CCR is available and provides a direct URL to the CCR on a publicly available site on the Internet where it can be viewed. A URL that navigates to a web page that requires a customer to search for the CCR or enter other information does not meet the "directly deliver" requirement. The mail method for the notification may be, but is not limited to, a water bill insert, statement on the water bill or community newsletter. See Figure 1 in the Appendix. A copy of the notice of the direct URL must be submitted to the State with the CCR and Certification Form.
Email – direct URL to CCR	CWS emails to each bill-paying customer a notification that the CCR is available and provides a direct URL to the CCR on a publicly available site on the Internet. A URL that navigates to a web page that requires a customer to search for the CCR or enter other information does not meet the "directly deliver" requirement. This method may only be used for customers when a CWS has a valid email address to deliver the CCR electronically. See Figure 2 in the Appendix. A copy of the email must be submitted to the State with the CCR and Certification Form.
Email – CCR sent as an attachment to email	CWS emails the CCR as an electronic file email attachment [e.g., portable document format (PDF)]. This method may only be used for customers when a CWS has a valid email address to deliver the CCR electronically. See Figure 3 in the Appendix. A copy of the email must be submitted to the State with the CCR and Certification Form.
Email – CCR sent as an embedded image in an email	CWS emails the CCR text and tables inserted into the body of an email (not as an attachment.) This method may only be used for customers when a CWS has a valid email address to deliver the CCR electronically. See Figure 4 in the Appendix. A copy of the email must be submitted to the State with the CCR and Certification Form.
Additional electronic delivery that meets "otherwise directly deliver" requirement	CWS delivers CCR through a method that "otherwise directly delivers" to each bill-paying customer and in coordination with the primacy agency. This category is intended to encompass methods or technologies not included above. CWSs and primacy agencies considering new methods or technologies should consult with the EPA to ensure it meets the intent of "otherwise directly deliver."

- **Systems serving 100,000 or more persons must** post the CCR on a publicly accessible Internet site using a direct URL.
- **Systems serving 10,000 or more persons must** distribute the CCR using a delivery method in the table above.
- **Systems serving less than 10,000 persons but more than 500 persons must either:** (1) distribute the CCR using a delivery method in the table above OR (2) notify their customers that the CCR is not being mailed, but it will be in what newspaper(s) and when (attach copy of notice). The complete CCR should be printed in the local newspaper, and a copy of the CCR must be made available upon request. *(The 2nd option is not acceptable if using the CCR for Tier 3 Public Notification!)*
- **Systems serving 500 or fewer persons must either:** (1) distribute the CCR using a delivery method in the table above OR (2) notify their customers that the CCR is not being mailed, and a copy of the CCR must be made available upon request. *(The 2nd option is not acceptable if using the CCR for Tier 3 Public Notification!)* A copy of the notice must be submitted to the State with the CCR and Certification Form.

Note: Use of social media or automated phone calls DO NOT meet existing CCR distribution methods under the Rule.

3. Submit and certify a copy of the CCR and all supporting documentation (copy of notice, email, or bill example) through our ECERT Online Certification application in one PDF file

ECERT Online Certification and Submittal of CCR: https://pws.ncwater.org/ECERT/pages/default.aspx

The certification form on the previous page is not required for CCRs submitted through ECERT. For assistance with accessing ECERT please email PWSS.CCR@ncdenr.gov or go to https://pws.ncwater.org/ECERT/pages/CCRHELP.pdf

If you do not have access to the internet, you can mail your CCR, Certification form, and supporting documentation to: *Public Water Supply Section, 1634 Mail Service Center, Raleigh, NC 27699-1634, Attn: CCR Rule Manager* or FAX your CCR, Certification form, and supporting documentation to (919) 715-6637, *Attn: CCR Rule Manager*

**Special Instructions for Systems that purchase water from another water system

**Water systems that purchase treated water from another water system are required to include information from their wholesalers CCR in their own CCR. If you purchase from multiple systems, then you must include this information for each of the systems that you purchase from.

**Here are a couple options for including this information in your CCR:

1. Follow the CCR Template, including the selling systems source and SWAP information in your report, and at the end of the report attach the pages from your sellers CCR that show all their data tables and any violations they received. Make sure that the attached pages are clearly labeled to show which water system they belong to.
2. If the selling system posted their CCR on the internet, you can provide the direct URL to their CCR in your report. For example, in the section titled "when you turn on the tap, consider the source," you could add the following: "We purchase treated water from [XYZ Water System], and their annual report can be viewed at [XYZwatersystem.org/CCR]"

**Note: Systems that sell water to another water system, are required to provide a copy of their CCR to the systems that purchase from them by April 1st so that the purchase systems will be able to meet the July 1st CCR deadline. Purchasing and selling systems should coordinate with each other to confirm when the CCR information will be delivered to the purchasing systems.

2022 Annual Drinking Water Quality Report
Town of Broadway

Water System Number: 03-53-015

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is a snapshot of last year's water quality. Included are details about your source(s) of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and to providing you with this information because informed customers are our best allies. **If you have any questions about this report or concerning your water, please contact Town of Broadway at 919-258-9922. We want our valued customers to be informed about their water utility. If you want to learn more, please attend a Town Commissioners Meeting. The Board meets on the fourth Monday of each month at 6:00 pm in the Council Chambers at 103 N Main Street.**

What EPA Wants You to Know

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 (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons 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 (800-426-4791).

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 Town of Broadway 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 or at http://www.epa.gov/safewater/lead.

The sources 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 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 stormwater 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 stormwater 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 stormwater runoff, and septic systems; and 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, 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.

When You Turn on Your Tap, Consider the Source

The water that is used by this system is from the Cape Fear River and purchased from the City of Sanford.

Source Water Assessment Program (SWAP) Results

The North Carolina Department of Environmental Quality (DEQ), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information and a relative susceptibility rating of Higher, Moderate or Lower.

The relative susceptibility rating of each source for The Town of Broadway was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area). The assessment findings are summarized in the table below:

Susceptibility of Sources to Potential Contaminant Sources (PCSs)

Source Name	Susceptibility Rating	SWAP Report Date
Cape Fear River	Higher	September 2020

The complete SWAP Assessment report for City of Sanford may be viewed on the Web at: https://www.ncwater.org/?page=600 Note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this web site may differ from the results that were available at the time this CCR was prepared. If you are unable to access your SWAP report on the web, you may mail a written request for a printed copy to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634, or email requests to swap@ncdenr.gov. Please indicate your system name, number, and provide your name, mailing address and phone number. If you have any questions about the SWAP report, please contact the Source Water Assessment staff by phone at 919-707-9098.

It is important to understand that a susceptibility rating of "higher" does not imply poor water quality, only the system's potential to become contaminated by PCSs in the assessment area.

Help Protect Your Source Water

Protection of drinking water is everyone's responsibility. We have implemented the following source water protection actions: You can help protect your community's drinking water source(s) in several ways: (examples: dispose of chemicals properly; take used motor oil to a recycling center, volunteer in your community to participate in group efforts to protect your source, etc.).

Violations that Your Water System Received for the Report Year

During 2022, or during any compliance period that ended in 2022, we received no violations that covered the time period.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

For more information about this violation, please contact the responsible person listed in the first paragraph of this report.

Important Drinking Water Definitions:

- ***Not-Applicable (N/A)*** – Information not applicable/not required for that particular water system or for that particular rule.
- ***Non-Detects (ND)*** - Laboratory analysis indicates that the contaminant is not present at the level of detection set for the particular methodology used.
- ***Parts per million (ppm) or Milligrams per liter (mg/L)*** - One part per million corresponds to one minute in two years or a single penny in $10,000.
- ***Parts per billion (ppb) or Micrograms per liter (ug/L)*** - One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

- ***Maximum Residual Disinfection Level (MRDL)*** – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

- ***Maximum Residual Disinfection Level Goal (MRDLG)*** – The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

- ***Locational Running Annual Average (LRAA)*** – The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters under the Stage 2 Disinfectants and Disinfection Byproducts Rule.

- ***Running Annual Average (RAA)*** – The average of sample analytical results for samples taken during the previous four calendar quarters.

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

➢ ***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.

Water Quality Data Tables of Detected Contaminants

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The tables below list all the drinking water contaminants that we detected in the last round of sampling for each particular contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. **Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2022.** The EPA and the State allow us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

REVISED TOTAL COLIFORM RULE:

Microbiological Contaminants in the Distribution System

Contaminant (units)	MCL Violation Y/N	Number of Positive/Present Samples	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	N/A	N/A	N/A	TT*	Naturally present in the environment
E. coli (presence or absence)	N	0	0	Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli* Note: If either an original routine sample and/or its repeat samples(s) are *E. coli* positive, a Tier 1 violation exists.	Human and animal fecal waste

Lead and Copper Contaminants

Contaminant (units)	Sample Date	Your Water (90th Percentile)	Number of sites found above the AL	MCLG	AL	Likely Source of Contamination
Copper (ppm) (90th percentile)	8/17/22	0.095 ppm	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) (90th percentile)	8/17/22	ND	0	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits

Disinfectant Residuals Summary

	MRDL Violation Y/N	Your Water (highest RAA)	Range Low High	MRDLG	MRDL	Likely Source of Contamination
Chlorine (ppm)	N	0.22 ppm	0.03-1.19 ppm	4	4.0	Water additive used to control microbes
Chloramines (ppm)	N	2.24 ppm	0.4-3.2 ppm	4	4.0	Water additive used to control microbes

Stage 2 Disinfection Byproduct Compliance - Based upon Locational Running Annual Average (LRAA)

Disinfection Byproduct	Year Sampled	MCL Violation Y/N	Your Water (highest LRAA)	Range Low High	MCLG	MCL	Likely Source of Contamination
TTHM (ppb)	2022	N			N/A	80	Byproduct of drinking water disinfection
Location (B01)			75 ppb	69-127 ppm			
Location (B02)			78 ppb	69-138 ppb			
HAA5 (ppb)	2022	N			N/A	60	Byproduct of drinking water disinfection
Location (B01)			34 ppb	27-34 ppb			
Location (B02)			34 ppb	27-34 ppb			

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

2021 Annual Drinking Water Quality Report
City of Sanford

Water System Number: 03-53-010

Filtered Water Quality Data (Regulated)

TURBIDITY				
CONTAMINANT (UNIT OF MEASURE)	**TT VIOLATION Y/N**	**YOUR WATER**	**TREATMENT TECHNIQUE (TT) VIOLATION IF:**	**LIKELY SOURCE OF CONTAMINATION**
Turbidity (NTU)-Highest single turbidity measurement	**No**	**0.2**	**Turbidity > 1 NTU**	**Soil Runoff**
Turbidity (NTU)-Lowest monthly percentage (%) of samples meeting turbidity limits	**No**	**100%**	**Less than 95% of monthly turbidity measurements are ≤0.3 NTU**	

- Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The turbidity rule requires that 95% or more of the monthly samples must be less than or equal to 0.3 NTU

INORGANIC CONTAMINANTS						
CONTAMINANT (UNIT OF MEASURE)	**MCL VIOLATION**	**YOUR WATER**	**RANGE LOW-HIGH**	**MCLG**	**MCL**	**LIKELY SOURCE OF CONTAMINATION**
Fluoride (ppm)	**No**	**0.56**	**0.09-0.81**	**4**	**4**	**Erosion of natural deposits. Water additive which promotes strong**

						teeth; discharge from fertilizer and aluminum factories

SYNTHETIC ORGANIC CONTAMINANTS

CONTAMINANT (UNIT OF MEASURE)	MCL VIOLATION	YOUR WATER	RANGE LOW-HIGH	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
Atrazine (ppb)	No	0.17	N/A	3	3	Runoff from herbicide on row crops
Simazine (ppb)	No	0.07	N/A	4	4	Runoff from herbicide on row crops

COPPER AND LEAD CONTAMINANTS (Tap water samples were collected for copper and lead analysis from 30 sample sites throughout the community during the 3rd quarter of 2022)

CONTAMINANT (UNIT OF MEASURE)	YOUR WATER	SITES ABOVE AL/ TOTAL SITES	MCLG	AL	LIKELY SOURCE OF CONTAMINATION
Copper (ppm) (90th percentile)	0.118	0/30	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) (90th percentile)	<0.003	0/30	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits

Filtered Water Quality Data (Regulated)

TOTAL ORGANIC CARBON

CONTAMINANT (UNIT OF MEASURE)	TT VIOLATION Y/N	YOUR WATER	RANGE MONTHLY REMOVAL RATIO LOW-HIGH	MCLG	TT	LIKELY SOURCE OF CONTAMINATION	COMPLIANCE METHOD
Total Organic Carbon (Removal Ratio) (TOC)-TREATED	NO	1.05	0.97-1.37	N/A	TT	Naturally present in the environment	STEP 1

STEP 1 TOC REMOVAL REQUIREMENTS

SOURCE WATER TOC (mg/ L)	SOURCE WATER ALKALINITY mg/L as CaCO3 (in percentages)		
	0-60	>60-120	>120
>2.0-4.0	35.0	25.0	15.0
>4.0-8.0	45.0	35.0	25.0
>8.0	50.0	40.0	30.0

DISINFECTION RESIDUALS SUMMARY

CONTAMINANT (UNIT OF MEASURE)	MCL/MRDL VIOLATION Y/N	YOUR WATER (Highest RAA)	RANGE LOW-HIGH	MRDLG	MCL	LIKELY SOURCE OF CONTAMINATION
Chloramines (ppm)	N	3.48	2.5-3.7	4	4	Water additive used to control microbes
Chlorine (ppm) {March only}	N	2.52	2.3-2.9	4	4	Water additive used to control microbes

STAGE 2 DISINFECTION BYPRODUCT COMPLIANCE - Based upon Locational Running Annual Average (LRAA)

CONTAMINANT (UNIT OF MEASURE)	MCL/MRDL VIOLATION Y/N	YOUR WATER	RANGE LOW-HIGH	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION

		(Highest LRAA)				
TTHM (ppb) {Total Trihalomethanes}	**NO**	(Location B04-N. Horner Blvd.)		**N/A**	**80**	**Byproduct of drinking water disinfection**
Location B01	**NO**		**32.5-110.9**			
Location B02	**NO**		**37.1-103.4**			
Location B03	**NO**		**31.7-101.7**			
Location B04	**NO**		**35.6-123.1**			
HAA5 (ppb) {Total Haloacetic Acids}	**NO**	(Location B01-Branch Drive)		**N/A**	**60**	**Byproduct of drinking water disinfection**
Location B01	**NO**		**21.1-41.0**			
Location B02	**NO**		**23.4-35.0**			
Location B03	**NO**		**8.6-33.5**			
Location B04	**NO**		**21.0-38.2**			

Raw Water Quality Data (Regulated)

CRYPTOSPORIDIUM

- The City of Sanford monitored for cryptosporidium in both the Cape Fear River and the facilities reservoir during 2018. Monitoring detected a level of 0.091 oocysts per liter in the Cape Fear River during February. Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immune-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immune-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

Filtered Water Quality Data (Non-Regulated Secondary Substances)

OTHER MISCELLANEOUS WATER CHARACTERISTICS

CONTAMINANT (UNIT OF MEASURE)	YOUR WATER	SMCL	LIKELY SOURCE OF CONTAMINATION
Alkalinity	**33.6**	**N/A**	**Water additive, erosion of natural deposits**
Hardness	**37.2**	**N/A**	**Erosion of natural deposits**
pH	**7.3**	**6.0-9.0**	**Measurement of acid or base neutralizing capacities of water**
Sodium (ppm)	**25.5**	**N/A**	**Water additive, erosion of natural deposits**
Sulfate (ppm)	**34.4**	**250** mg/L	**Erosion of natural deposits**

Emerging Contaminants

Emerging contaminants, or contaminants of emerging concern, are unregulated synthetic or naturally occurring chemicals that are not commonly monitored by water utilities. The health significance of these trace contaminants is under review and the subject of further study and research.

Beginning March 2020, we started monitoring for per and polyfluoroalkyl substances, and 1,4 dioxane monthly. The data presented in the tables is testing done from January 1 through October 31, 2022.

Per and polyfluoroalkyl substances (PFAS) are a class of man-made chemicals used for consumer products such as waterproof and stainproof products, nonstick cookware, food packaging and fire suppression foams.

1,4 dioxane is a clear, flammable liquid used as a solvent or stabilizer in the manufacturing of chemicals, cosmetics, detergents, and shampoos. 1,4 dioxane was below detection on both the raw water and entry point on all samples collected.

(Non-Regulated)

Per and Polyfluoroalkyl Substances (PFAS)				
	CONTAMINANT (UNIT OF MEASURE)	**SAMPLING POINT**	**YOUR WATER** (Average)	**RANGE LOW-HIGH**
Acids	**PFPeA, Perfluoropentanoic Acid** (ppt)	**EP**	**13.03**	**5.32-29.8**
		RW	**12.74**	**5.07-28.6**
	PFBA, Perfluorobutanoic Acid (ppt)	**EP**	**7.4**	**4.18-14.8**
		RW	**7.17**	**3.46-12.3**
	PFHxA, Perfluorohexanoic Acid (ppt)	**EP**	**12.23**	**6.26-23.2**
		RW	**12.36**	**5.57-24.1**
	PFHpa, Perfluoroheptanoic Acid (ppt)	**EP**	**5.34**	**2.84-9.43**
		RW	**5.26**	**3.04-8.91**
	PFOA, Perfluorooctanoic Acid (ppt)	**EP**	**8.19**	**6.14-11.5**
		RW	**8.05**	**5.96-11.3**
	PFNA, Perfluorononanoic Acid, (ppt)	**EP**	**1.16**	**0.8-1.55**
		RW	**1.15**	**0.81-1.54**
	PFDA, Perfluorodecanoic acid, (ppt)	**EP**	**0.72**	**0.47-1.17**
		RW	**0.73**	**0.52-1.22**
	PFUnA (PFUnDA), Perfluoundecanoic acid (ppt)	**RW**	**3.03**	**0.27-5.79**
Sulfonates	**PFBS, Perfluorobutane sulfonic acid,** (ppt)	**EP**	**7.33**	**2.44-15.6**
		RW	**7.56**	**0.86-18.4**
	PFPeS, Perfluoropentane sulfonic acid, (ppt)	**EP**	**0.89**	**0.54-1.36**
		RW	**0.79**	**0.5-1.39**
	PFHxS, Perfluorohexane sulfonic acid, (ppt)	**EP**	**3.88**	**2.53-5.95**
		RW	**4**	**2.12-5.98**
		EP	**0.33**	**0.26-0.38**

	PFHpS, Perfluoroheptane sulfonic acid, (ppt)	**RW**	**0.3**	**0.26-0.34**
	PFOS, Perfluorooctane sulfonic acid, (ppt)	**EP**	**12.19**	**8.02-16.3**
		RW	**12.09**	**6.99-14.7**
	4:2, FTS (ppt)	**EP**	**0.30**	**NA**
	6:2, Fluorotelomer sulfonic acid, (ppt)	**EP**	**0.89**	**0.59-1.19**
		RW	**0.4**	**NA**

(Non-Regulated)

Per and Polyfluoroalkyl Substances (PFAS)				
	CONTAMINANT (UNIT OF MEASURE)	**SAMPLING POINT**	**YOUR WATER** (Average)	**RANGE LOW-HIGH**
Other	**FBSA,** (ppt)	**EP**	**1.12**	**0.40-1.56**
		RW	**1.18**	**0.32-1.81**
	PFOSA (ppt)	**EP**	**0.72**	**NA**
		RW	**1.31**	**NA**

(Non-regulated)

1,4-Dioxane			
CONTAMINANT (UNIT OF MEASURE)	**SAMPLING POINT**	**YOUR WATER** (AVERAGE)	**RANGE LOW-HIGH**
1,4 Dioxane (ppb)	**EP**	**<2.00**	**0-<2.00**
1,4 Dioxane (ppb)	**RW**	**<2.00**	**0<2.00**

Health Advisories

A health advisory provides information on contaminants than can cause human health effects and are known or anticipated to occur in drinking water. EPA's health advisories are non-enforceable and non-regulatory, but identify levels to protect all people, including sensitive populations and life stages, from adverse health effects resulting from a lifetime of exposure to these contaminants in drinking water. The advisory also takes into account other potential sources of exposure to these contaminants beyond drinking water (for example, food, air, consumer products, etc.) which provides an additional layer of protection.

In 2022, the EPA published both interim and final health advisories specifically targeting four per and polyfluoroalkyl substances (PFAS).

PFOA and PFOS

The EPA has published interim lifetime health advisories for PFOA and PFOS. These new interim health advisories are below the levels at which analytical methods can measure PFOA and PFOS. The minimum detection levels for measuring these contaminants are listed in the table below. The EPA Science Advisory Board is reviewing the EPA's analysis; therefore, these interim health advisory levels are subject to change. However, the EPA does not anticipate changes that will result in health advisory levels that are greater than the minimum detection levels.

Gen X Chemicals and PFBS

The EPA has published final lifetime health advisories for GenX chemicals and PFBS based on final toxicity assessments.

Summary of the Four Health Advisories

Per and Polyfluoroalkyl Substances (PFAS)		
Contaminant (Unit of Measure)	**Lifetime Health Advisory Level/ Value**	**Minimum Detection Level**
PFOA (ppt)	**0.004** (Interim)	**4**
PFOS (ppt)	**0.02** (Interim)	**4**
GenX Chemicals (ppt)	**10** (Final)	**5**
PFBS (ppt)	**2,000** (Final)	**3**

If you are concerned about PFAS in your drinking water:

- Consider and resources and recommendations from your state: https://www.epa.gov/pfas/us-state-resources-about-pfas
- Follow EPA's progress in developing a PFAS National Drinking Water Regulation: https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas
- Learn more about PFAS and review the agency's PFAS Strategic Roadmap: https://www.epa.gov/pfas/pfas-strategic-roadmap-epas-commitments-action-2021-2024