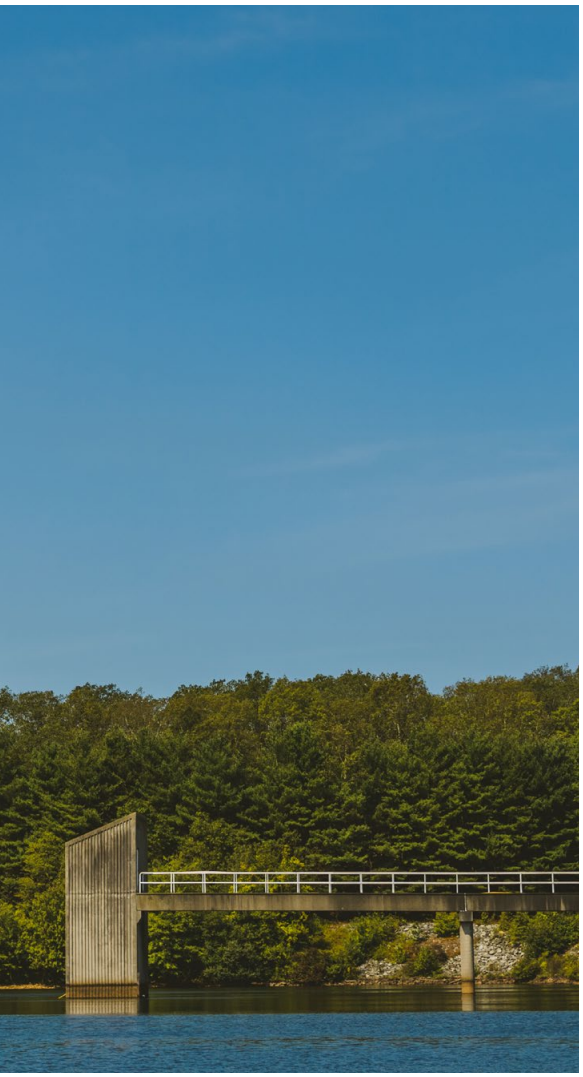
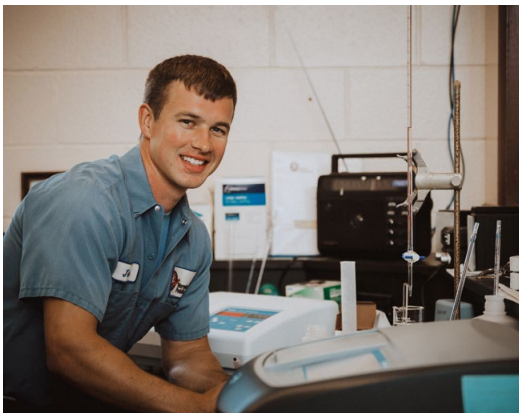
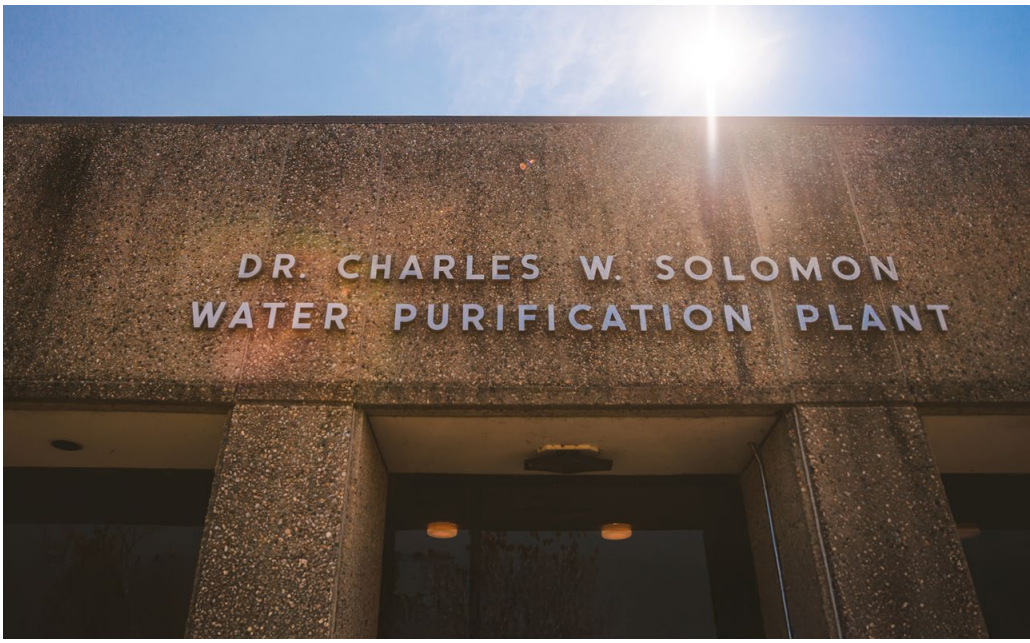
ANNUAL WATER QUALITY REPORT

Reporting Year 2024







Presented By

Norwich Public Utilities

이 안내는 매우 중요합니다.
본인을 위해 번역인을 사용하십시요.

此份有关你的食水报告,
内有重要资料和讯息,请找
他人为你翻译及解释清楚。

Cé rapport contient des information importantes concernant votre eau potable. Veuillez traduire, ou parlez avec quelqu' un qui peut le comprendre.

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

PWS ID#: CT1040011

Our Commitment

We are pleased to provide our 2024 Water Quality Report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2024, and includes details about your sources 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 also 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.

Where Does My Water Come From?

NPU customers enjoy a safe water supply from two reservoirs located in Colchester and Montville. We also have a groundwater well and interconnections with other water suppliers, which serve as reserve supplies in case of an emergency. Combined, our treatment facilities provide roughly 1.9 billion gallons of clean drinking water every year, or approximately 5.3 million gallons a day.

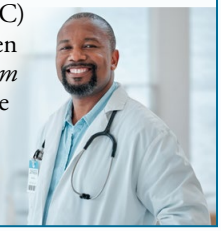
Our distribution system is carefully maintained and tested, using chlorine for disinfection, to ensure the water coming out of your faucet is of the same high quality as when it leaves the plant. This includes the regular flushing of our system to remove sediment and keep the water clear.

Important Health Information

Sources of lead in drinking water include corrosion of household plumbing systems and erosion of natural deposits. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Sources of copper in drinking water include corrosion of household plumbing systems, erosion of natural deposits, and leaching from wood preservatives. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult a health-care professional.

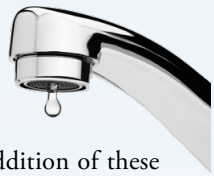
Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health-care providers. The U.S. Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (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 at (800) 426-4791.



Community Participation

The Norwich Public Utilities (NPU) Board of Commissioners meets the fourth Tuesday of every month at 6:00 p.m. These meetings are open to the public and, unless otherwise noted, take place at 16 South Golden Street. For more information about these meetings, visit norwichpublicutilities.com.

Water Treatment Process



NPU's treatment process consists of a series of steps. First, raw water is drawn from our water source and goes to a mixing tank where aluminum sulfate and sodium hydroxide are added. The addition of these substances causes particles called floc to adhere to one another, making them large enough to be removed by filtration methods. The water is then filtered through layers of sand, where smaller suspended particles are removed and clear water emerges. Chlorine is then added for disinfection. (We carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of your water without compromising taste.) Finally, sodium hydroxide (to adjust the final pH and alkalinity), fluoride (to prevent tooth decay), and a corrosion inhibitor (to protect distribution system pipes) are added before the water is pumped to underground reservoirs and water storage facilities and into your home or business.

Source Water Assessment

Assessments of the two reservoirs were completed by the Department of Public Health (DPH), Drinking Water Section, in 2003. The DPH assessment found that NPU's public drinking water sources have a low susceptibility to potential sources of contamination. The assessment report can be found at https://www.dir.ct.gov/dph/Water/SWAP/Community/CT1040011.pdf.

Questions?

For more information about this report or questions relating to your drinking water, please reach out to Alisa Morrison at (860) 887-2555.

Substances That Could Be in Water

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 occur naturally in the soil or groundwater or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

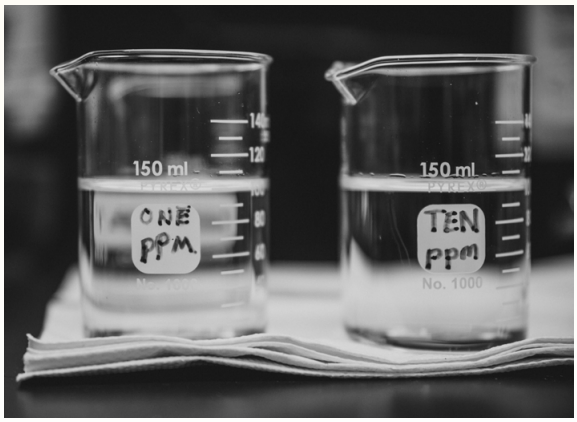
Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

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.

Radioactive Contaminants, which can occur naturally or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (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 mean that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline at (800) 426-4791 or visiting epa.gov/safewater.



State-Certified Laboratories

We continually monitor our reservoirs and surrounding lands to prevent potential contamination of our water supplies. Testing is performed by the following certified laboratories:

NPU Stony Brook Laboratory (PH-0196)

NPU Deep River Laboratory (PH-0449)

NPU Falls Avenue Laboratory (PH-0453)

Complete Environmental Testing (PH-0116)

Analytical Consulting Technology (PH-0518)

Eurofins Eaton Analytical (PH-0535)

Microbac (PH-0465)

Source water is untreated water from streams, rivers, lakes, or underground aquifers that is used to supply public drinking water. Preventing drinking water contamination at the source is the safest and most practical approach from a public health, economic, and environmental perspective.

The public should take part in protecting public water sources by properly disposing of household chemicals, helping clean up watersheds that are the source of our community's water, and attending public meetings to ensure that our need for safe drinking water is considered in making decisions about land use. Contact NPU for more information on our source water protection. You may also find information at www.epa.gov/sourcewaterprotection/source-water-protection-practices.

Lead in Home Plumbing

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. NPU is responsible for providing high-quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, or doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute-accredited certifier to reduce lead in drinking water. Contact us at GetTheLeadOut@npumailcom if you are concerned about lead and wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

To address lead in drinking water, public water systems were required to develop and maintain an inventory of service line materials by October 16, 2024. Developing an inventory and identifying the location of lead service lines (LSL) is the first step for beginning a LSL replacement program and protecting public health. The lead service inventory may be found at norwichpublicutilities.com. Please contact us if you would like more information about the inventory or any lead sampling that has already been done.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels. We are pleased to report that your drinking water meets or exceeds all federal and state requirements.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data is included, along with the year in which the sample was taken.

NPU participated in the fifth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR5) program by performing additional tests on our drinking water. UCMR5 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water to determine if it should consider introducing new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data is available to the public, so please feel free to contact NPU if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES

				Deep River Treatment Plant		Stony Brook Treatment Plan		Distribution System			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2024	15	0	1.52	NA	1.29	NA	NA	NA	No	Erosion of natural deposits
Chlorine (ppm)	2024	[4]	[4]	NA	NA	NA	NA	0.89	0.05–1.64	No	Water additive used to control microbes
Combined Radium (pCi/L)	2024	5	0	<1	NA	<1	NA	NA	NA	No	Erosion of natural deposits
Haloacetic Acids [HAAs] (ppb)	2024	60	NA	NA	NA	NA	NA	29.4	17.3–45.0	No	By-product of drinking water disinfection
Nitrate (ppm)	2024	10	10	0.105	0.054–0.21	0.093	ND–0.122	NA	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (ppm)	2024	1	1	ND	NA	ND	NA	NA	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total Organic Carbon [TOC] (ppm)	2024	TT[1]	NA	1.2	0.91–1.47	1.13	0.91–1.27	NA	NA	No	Naturally present in the environment
TTHMs [total trihalomethanes] (ppb)	2024	80[2]	NA	NA	NA	NA	NA	50.4	12.1–100.2	No	By-product of drinking water disinfection
Turbidity[3] (NTU)	2024	TT	NA	0.21	NA	0.28	NA	NA	NA	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2024	TT = 95% of samples meet the limit	NA	100	NA	100	NA	NA	NA	No	Soil runoff
Uranium (ppb)	2024	30	0	<1.0	NA	<1.0	NA	NA	NA	No	Erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2024	1.3	1.3	0.0768	ND–0.123	0/60	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2024	15	0	1.00	ND–3.0	0/60	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES

				Deep River Treatment Plant		Stony Brook Treatment Plan		Distribution System			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2024	250	NA	13.7	NA	10.8	NA	NA	NA	No	Runoff/leaching from natural deposits
Color (units)	2024	15	NA	1	ND–1	1	ND–1	NA	NA	No	Naturally occurring organic materials
Fluoride (ppm)	2024	2.0	NA	0.68	0.55–0.83	0.68	0.51–0.85	NA	NA	No	Water additive which promotes strong teeth
Odor (TON)	2024	3	NA	ND	NA	ND	NA	NA	NA	No	Naturally occurring organic materials
pH (units)	2024	6.5-8.5	NA	7.6	7.1–8.3	7.6	6.7–8.3	NA	NA	No	Naturally occurring

UNREGULATED SUBSTANCES

		Deep River Treatment Plant		Stony Brook Treatment Plan		Distribution System		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Perfluorobutanesulfonic Acid [PFBS] (ppt)	2023	6	ND–6	ND	NA	NA	NA	Human-made industrial chemical
Perfluorohexanesulfonic Acid [PFHxS] (ppt)	2023	ND	NA	ND	NA	NA	NA	Human-made industrial chemical
Perfluorononanoic Acid [PFNA] (ppt)	2023	4.3	ND–4.3	ND	NA	NA	NA	Human-made industrial chemical
Perfluorooctanesulfonate Acid [PFOS] (ppt)	2023	6	ND–6	ND	NA	NA	NA	Human-made industrial chemical
Perfluorooctanoic Acid [PFOA] (ppt)	2023	ND	NA	ND	NA	NA	NA	Human-made industrial chemical
Sodium (ppm)	2024	14.1	NA	14.3	NA	NA	NA	Stormwater runoff containing road salt; Erosion of natural deposits

[1] The value reported under Amount Detected for TOC is the lowest ratio of percentage of TOC actually removed to the percentage of TOC required to be removed. A value greater than 1 indicates that the water system is in compliance with TOC removal requirements. A value less than 1 indicates a violation of the TOC removal requirements.

[2] 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 system and may have an increased risk of getting cancer.

[3] Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

SMCL (Secondary Maximum Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

TON (Threshold Odor Number): A measure of odor in water.

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