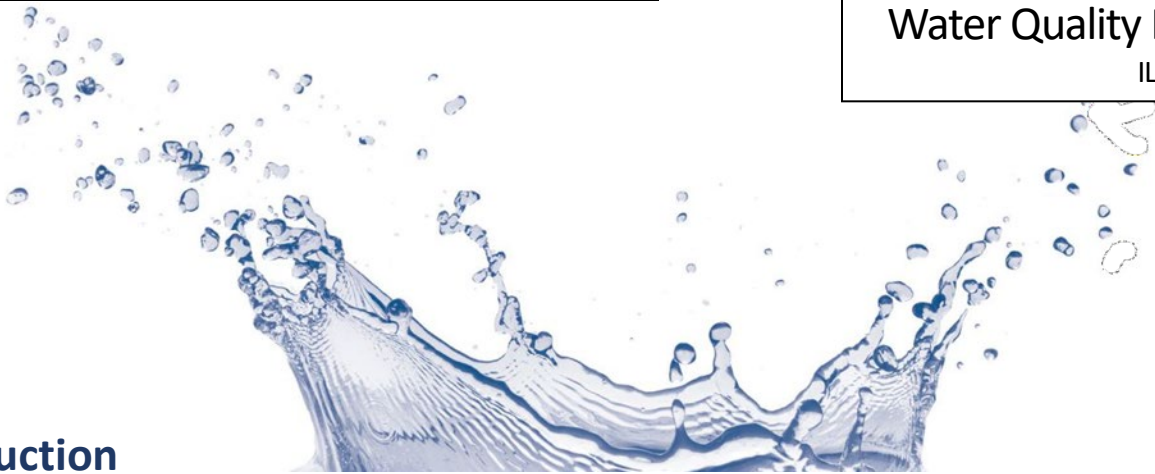




NAVAL STATION GREAT LAKES

2025 Annual Drinking Water Quality Report

IL#0975227



Introduction

Naval Station Great Lakes (NSGL) is pleased to present its Annual Water Quality Report for the period of January 1 to December 31, 2024. This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide it to you and ensure it is safe to consume.

NSGL is pleased to report that last year your tap water met or exceeded all federal and Illinois state drinking water standards. There were no samples over the Maximum Contaminant Level (MCL) during 2024.

However, we remain under an Administrative Order on Consent with the United States Environmental Protection Agency (EPA) related to our aging infrastructure. See pages 4 and 5 for more information.

Our continuing goal is to provide our consumers with a safe and dependable supply of drinking water. NSGL wants all customers to understand that efforts are continually being made to improve the water treatment process and to protect water resources. In short, NSGL is committed to ensuring the quality of your water.



The Source of Our Drinking Water



The source of drinking water used by NSGL is Surface Water from Lake Michigan. Lake Michigan is an excellent raw water source for drinking water treatment. To draw the highest quality raw water from the lake, our intake is located with sufficient depth and at an adequate distance from the shore. This location mitigates any shoreline impacts to the quality of the raw water enabling the production of the highest quality drinking water to be delivered to our customers throughout the year.

About the Data

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.

The NSGL Water Plant routinely monitors drinking water for these contaminants, in accordance with State and Federal laws. The following water quality table lists all the drinking water contaminants that were detected

during the period between January 1 and December 31, 2024. Although many more contaminants were tested, only those substances listed in the table were found in your water. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old.



Contact Us

For more information regarding
this report contact:

Naval Station Great Lakes Water Plant

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(847) 688-2121 x137

Utilities Director
(847) 688-2121 x130

2024 Water Quality Data Table

The “**Level Reported**” column represents the highest or averaged sample result collected during the calendar year, unless otherwise noted. The “**Range**” column represents a range of individual sample results, from lowest to highest that were collected during the calendar year. The “**Sample Date**” column will show the year the sample was most recently analyzed. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report.

The “**Violation**” column will indicate whether or not a violation occurred with each contaminant that was detected.

The “**Typical Source**” information lists where contaminants may originate.

Disinfectants & Disinfectant By-Products

There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Level Reported	Range of Levels Detected		Sample Date	Violation	Typical Source
Chlorine [as Cl ₂] (ppm)	MRDLG= 4	MRDL=4	1.6	1.4	2.0	2024	No	Water additive used to control microbes
TTHMs [Total Trihalomethanes] (ppb)	NA	80	55.5	28.7	55.5	2024	No	By-product of drinking water disinfection
Haloacetic Acids [HAA5] (ppb)	NA	60	25.6	17.6	25.6	2024	No	By-product of drinking water disinfection

Note: Some sample results for regulatory compliance are based on a running annual average of quarterly samples, therefore; the level reported is not the highest level detected. This is the case for Cl₂, TTHMs and HAA5.

Inorganic Contaminants

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Level Reported	Range of Levels Detected		Sample Date	Violation	Typical Source
Aluminum (ppm)	N/A	N/A	0.01	0.01	0.01	2024	No	Erosion of natural deposits; Residual from some surface water treatment processes
Barium (ppm)	2	2	0.021	0.021	0.021	2024	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Calcium (ppm)	N/A	N/A	0.033	0.033	0.033	2024	No	Naturally occurring in earth’s crust
Fluoride (ppm)	4	4	0.8 (rounded)	0.815	0.815	2024	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Magnesium (ppm)	N/A	N/A	0.011	0.011	0.011	2024	No	This contaminant is not currently regulated by the USEPA or the state.
Nitrate (Measured as Nitrogen) (ppm)	10	10	0.35	0.35	0.35	2024	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium (ppm)	NA	NA	9 (rounded)	9.1	9.1	2024	No	Erosion of natural deposits; Leaching; Used in water softener regeneration.

Note: There is not a federal or state MCL for sodium. Monitoring is required for information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If the level is greater than 20 ppm, and you are on a sodium-restricted diet, you should consult a physician.

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set.

Coliform Bacteria

Contaminants	Total Coliform MCLG	Highest # of Positive Samples for: Total Coliform	Total # of Positive Samples for: E. Coli or Fecal Coliform	Violation	Likely Source of Contamination
Total Coliform Bacteria	0	0	0	No	Naturally present in the environment.

Note: If a monthly sample tests positive for Total Coliform, it is further analyzed for E. Coli. Also, repeat samples are then required to be taken from the site of the positive sample along with the upstream and downstream locations.

Drinking Water Definitions

In the water quality data table, you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms the following definitions are provided:

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

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

MCL: Maximum Contaminant Level or 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 or 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 or the highest level of a disinfectant allowed in drinking water.

MRDLG: Maximum Residual Disinfectant Level Goal or the level of a drinking water disinfectant below which there is no known or expected risk to health.

MP: Maximum Permissible Level that is state assigned.

UNIT DESCRIPTIONS

ppm: Parts per million or milligrams per liter (mg/L).

ppb: Parts per billion or micrograms per liter (µg/L).

ppt: Parts per trillion or nanograms per liter (ng/L).

NTU: Nephelometric Turbidity Units.

NA: Not applicable.

Turbidity

Contaminants	TT	Compliance	Sample Date	Violation	Typical Source
Turbidity (NTU)	0.3	100%	2024	No	Soil Runoff

100% of the samples were below the TT value of 0.3. A compliance value less than 95% constitutes a TT violation. The highest single measurement was 0.098 NTU. Any measurement in excess of 1 is a violation unless otherwise approved by the IEPA.

Note: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Lead and Copper Contaminants

Contaminants	MCLG	AL	90 th Percentile	Range of Levels Detected	Sample Date	# of Samples Exceeding AL	Violation	Typical Source
Copper - action level at consumer taps (ppm)	1.3	1.3	0.26	0.0089 - 0.3	2023	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	< 1.0	< 1.0	2023	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

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. NSGL 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, 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. If you are concerned about lead in your water, you may wish to have your water tested, contact NSGL Water Plant at 847-688-2121. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

The system's lead tap sampling data can be accessed at the following link:

https://water.epa.state.il.us/dww/JSP/NonTcrSamples.jsp?tinwsys_is_number=716999&tinwsys_st_code=IL&tsaanlyt_is_number=18&tsaanlyt_st_code=HQ&history=1&counter=0

Our community water supply has developed a service line material inventory. No lead lines were identified in the 2024 inventory. The system's service line inventory can be accessed at the following link using Facility ID # IL0975227:

<https://epa.illinois.gov/topics/drinking-water/public-water-users/lead-service-line-information.html>

Perfluoroalkyl- and Polyfluoroalkyl Substances (PFAS)

What are per- and polyfluoroalkyl substances and where do they come from?

Per- and polyfluoroalkyl substances (PFAS) are a group of thousands of man-made chemicals. PFAS have been used in a variety of industries and consumer products around the globe, including in the U.S., since the 1940s. PFAS are found in many consumer products, as well as in industrial products, like firefighting agents called aqueous film forming foam (AFFF). PFAS is also found in essential use applications such as microelectronics, batteries, and medical equipment. PFAS chemicals are persistent in the environment, and some are persistent in the human body – meaning they do not break down and they can accumulate over time.

Is there a regulation for PFAS in drinking water?

On April 26, 2024, the US EPA published a National Primary Drinking Water Regulation (NPDWR) final rule on drinking water standards for six PFAS under the Safe Drinking Water Act (SDWA). The rule establishes the following maximum contaminant levels (MCLs):

- perfluorooctane sulfonic acid (PFOS) = 4 ppt
- perfluorooctanoic acid (PFOA) = 4 ppt
- hexafluoropropylene oxide dimer acid (HFPO-DA, commonly known as GenX) = 10 ppt
- perfluorononanoic acid (PFNA) = 10 ppt
- perfluorohexane sulfonic acid (PFHxS) = 10 ppt
- HI MCL for PFHxS, PFNA, perfluorobutane sulfonic acid (PFBS), and GenX = 1 (unit less).

Under the NPDWR, regulated public water systems (PWS) are required to complete initial monitoring by April 26, 2027. Beginning April 26, 2027, regulated PWSs will conduct ongoing compliance monitoring in accordance with the frequency dictated by the rule and as determined by the initial compliance monitoring results. Regulated PWSs must demonstrate compliance with the Maximum Contaminant Levels (MCLs) by April 26, 2029.

In order to provide safe drinking water to all Department of Defense (DoD) personnel, OSD policy extends this requirement to all DoD systems which provide drinking water for human consumption, regardless of size of the drinking water system. In addition to the six regulated compounds, DoD-owned systems are required by DoD policy to monitor for all compounds detected when using EPA Method 533.

Protecting the health of our personnel, their families, and the communities in which we serve is a priority for the Department. DoD is committed to complying with requirements of the NPDWR and the continued provision of safe drinking water to those that work and live on DoD installations.

Has Naval Station Great Lakes tested its water for PFAS in 2024?

Yes In August and November of 2024 samples were collected from the finished water at the Water Treatment Plant. We are pleased to report that drinking water test results for all 29 PFAS compounds covered by the sampling method, including the six regulated PFAS, and were not detected in our water system.

What is next?

NSGL will continue to monitor for PFAS in accordance with the EPA regulation and DoD policy. Once required initial monitoring information is available, we will calculate the Running Annual Averages (RAA) for the regulated PFAS and will compare those numbers to the MCL and Hazard Index (HI) trigger levels. This will determine what our continuing monitoring requirements will be beginning in 2027, and if needed, we will plan operational or infrastructure changes to ensure our water complies with the PFAS MCLs and HI by April 2029 in accordance with the SDWA.

Contaminants and Protection



EPA Source Water Assessment Completed

We want our valued customers to be informed about their water quality. If you would like to learn more, please reach out to the Public Works Department (PWD) for any questions, comments or concerns you may have. Contact information for the water department can be found on the first page of this report.

The source water assessment for our supply has been completed by the Illinois EPA. (IEPA). To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

Source of Water: NAVAL STATION GREAT LAKES (Lake Michigan)

Susceptibility is defined as the likelihood for the source water(s) of a public water system to be contaminated at concentrations that would pose a concern. The IEPA considers all surface water sources of community water supply to be susceptible to potential pollution problems. The very nature of surface water allows contaminants to migrate into the intake with no protection, only dilution, which is the reason for mandatory treatment for all surface water supplies in Illinois. NSGL's intake has a low sensitivity and therefore greater protection from shoreline contaminants due to mixing and dilution.

Although there are no potential sources within NSGL's critical assessment zone, there are several within the immediate source water area. Also, the combination of the land use, the proximity of storm sewer outfalls, Pettibone Creek and wastewater pumping stations add to the susceptibility of this intake. However, it should be stressed that treatment employed by NSGL is protective of our consumers, as noted by our finished water sample history.

Contaminant Sources

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 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.

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. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

Additional Information

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 at (800) 426-4791.

Notice of Violation Information

On November 1, 2022 our system received a Notice of Violation (NOV) for Failure to Correct a Significant Deficiency Within Required Time Frame.

As our customers, you have a right to know what happened and what we are doing to correct this situation. A routine inspection conducted by the USEPA found structural deterioration and areas of low water flow in our clearwell tanks at the treatment plant, which they classify as significant deficiencies. Because we could not identify an exact timeframe for correction, the EPA issued the NOV.

While not the case in this situation, inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

We have implemented temporary mitigation efforts and have increased sampling to ensure the water remains in compliance with all state and federal regulations.

In addition, NSGL and USEPA have signed an agreement that outlines the Navy's plan and timeline to resolve the NOV. As part of that plan, we are in the process of selecting a contractor to build new clearwell tanks at the treatment plant and discontinue use of the old clearwell tanks, which will correct the deficiency identified in the NOV.

Basically, parts of our treatment plant infrastructure are aging, but the water quality still meets and/or exceeds EPA Standards.

For additional information, please refer to the most recent Public Notification, which at the time of this printing is May 30, 2025.