



Naval Support Activity South Potomac
Naval Support Facility Indian Head
Indian Head, Maryland

Maryland Public Water System MD0080058 and MD1080039

Your tap water meets all EPA and State drinking
water health standards.

Annual Drinking Water Quality Report

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) regulates Public Water Systems and the contaminants found in water through the implementation of the SDWA. The Maryland Department of the Environment (MDE) is responsible for the enforcement of the SDWA. MDE routinely conducts inspections and provides a yearly monitoring schedule for all public water systems. Monitoring schedules include the collection of monthly bacteria samples, annual nitrate samples, monitoring of chlorine disinfectant residuals, and other parameters sampled in multi-year intervals.

There are many different ways for you to get involved in the safety of your drinking water. If there are issues or concerns with your drinking water, contact the Environmental Office at Naval Support Facility Indian Head (NSFIH). Reporting issues immediately can help prevent problems from escalating. Your input is important to us! Check the MDE, and EPA, websites regularly to stay up to date with SDWA regulations and topics.

<http://mde.maryland.gov/programs/water/pages/index.aspx>

<https://www.epa.gov/environmental-topics/water-topics>

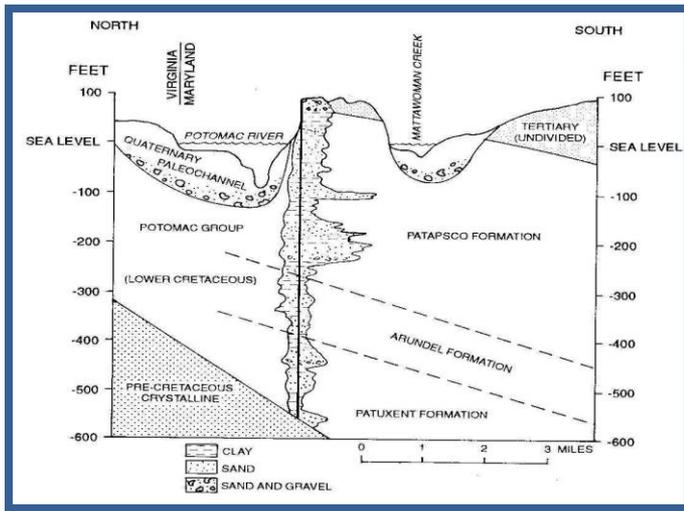
To ensure high water quality for consumers, NSFIH is actively pursuing the replacement of the Installation's underground water distribution lines. Replacement is anticipated to begin in 2020. Replacement of the distribution system will reduce water loss due to leakage and reduce costs associated with repairs. In the meantime, ongoing maintenance ensures the high quality of our drinking water.

Water Source Information

Drinking water for NSFIH is supplied by four wells, Stump Neck by two wells, drilled in to the Patapsco and Patuxent Aquifers.

An aquifer is an underground geologic formation of sand, gravel, or rock through which water can pass and is stored. Because the layers of sand, gravel, and rock provide natural filtration, groundwater is usually clear when it is pumped out of the ground; thus, it can be disinfected without prior treatment. NSFIH wells are deep wells and are protected by these layers from most contaminants and bacteria.

Your water is treated by disinfection with sodium hypochlorite. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century. Maintaining a chlorine residual is important in protecting the water and the distribution system from bacteria and microorganisms.



Sources of your drinking water include the **Patapsco and Patuxent Aquifers**

Source Water Assessment

As of March 31, 2006, MDE completed source water assessments for all public water systems in the State. The required components of this report are:

- ◆ Delineation of an area that contributes water to each source,
- ◆ Identification of potential sources of contamination within the areas, and
- ◆ Determination of the susceptibility of each water supply system to contamination.

A Source Water Assessment was completed for both NSFIIH and Stump Neck Annex. It was determined that both water systems are not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The NSFIIH water system was determined

to be susceptible to naturally occurring radiological contaminants. Your water is routinely sampled for radiological and other possible contaminants to ensure they are below levels of health concern.

A copy of the Source Water Assessment can be found in the Environmental Office.

Protecting our source water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- ◆ Eliminate excess use of lawn and garden fertilizers and pesticides - they contain hazardous chemicals that can reach your drinking water source.
- ◆ Pick up after your pets and dispose of properly.
- ◆ If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- ◆ Dispose of chemicals properly. Charles County Department of Public Works hosts a Household Hazardous Waste Collection Day the first Saturday of each month. Visit <https://www.charlescountymd.gov/commissioners/calendar/hazardous-waste-collection-day> for more details on acceptable materials and location.
- ◆ Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team, <https://cfpub.epa.gov/surf/locate/index.cfm>.

- ◆ Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Important Health Information

NSFIH routinely monitors its drinking water for contaminants, protecting the majority of consumers. Some people may be more vulnerable to contaminants in drinking water. 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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline, (800)426-4791.

Why are there substances in my water?

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 EPA Safe Drinking Water Hotline (800)426-4791.

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, can pick up substances resulting from the presence of animals or from human activity:

- ◆ Microbial contaminants, such as viruses and bacteria, that may come from 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

2017 Water Quality Monitoring

All sample results were below the maximum contaminant levels allowed by EPA and MDE regulations.

The 2017 NSFIIH drinking water monitoring schedule required the collection of routine monthly samples for bacteria at several sites approved by MDE, samples collected annually for nitrates, and disinfection byproducts including total trihalomethanes (TTHM) & haloacetic acids (HAA5). MDE assisted NSFIIH in 2017 by taking samples for volatile organic chemicals.

MDE allows public water systems to monitor for some 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. Some of our data, though representative, are more than one year old. To help you better understand terms used throughout this report, we have provided definitions on page 7. Sample results are provided on pages 8 and 9.

Required Information

The following is a required informational statement about lead in drinking water and its effects on children by the EPA.

“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. NSFIIH 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 www.epa.gov/safewater/lead.”

Water Quality Definitions

- ◆ **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- ◆ **Average:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.
- ◆ **Chlorine Disinfectant Residual:** Concentration of chlorine available for
- ◆ **Level 1 Assessment:** A level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- ◆ **Level 2 Assessment:** A level 1 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E.coli MCL violation has occurred and/or why total coliform have been found in our water system on multiple occasions.
- ◆ **Maximum Contaminant Level (MCL):** The highest level of a contaminant 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 contaminant in drinking water below which there is no known or expected risk to health.
- ◆ **Maximum Residual Disinfectant 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 Disinfectant 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.
- ◆ **mg/L:** Milligrams per liter or parts per million; number of milligrams of substance in one liter of water.
- ◆ **mrem:** Millirems per year (a measure of radiation absorbed by the body).
- ◆ **N/A:** Not applicable.
- ◆ **ND:** Non-Detection. Laboratory analysis indicates the contaminate is not present.
- ◆ **ppb:** Micrograms per liter or parts per million - or one ounce in 7,350 gallons of water.
- ◆ **ppm:** Milligrams per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
- ◆ **pCi/L:** picocuries per liter (a measure of radioactivity in water).
- ◆ **Secondary Maximum Contaminant Level (SMCL):** These levels represent reasonable goals for drinking water aesthetic quality and are not federally enforceable.
- ◆ **Treatment Technique (TT):** These levels represent reasonable goals for drinking water aesthetic quality and are not federally enforceable
- ◆ **Unregulated Contaminants:** Substances that do not pose a threat to public health or are under consideration for further study to determine if a health risk exists.

WATER QUALITY DATA – NSFII MD0080058

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	07/13/2016	1.3	1.3	0.26	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	07/13/2016	0	15	3.4	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2017	1.1	1 - 1.1	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Total Trihalomethanes (TTHM)	2017	1	0.61 - 0.61	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	03/22/2016	0.035	0.0062 - 0.035	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	03/22/2016	0.9	0.68 - 0.9	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Selenium	03/22/2016	13	0 - 13	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	2017	5.8	0 - 5.8	0	4	mrem/yr	N	Decay of natural and man-made deposits.
Combined Radium 226/228	2017	1.2	0 - 1.2	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	2017	1	0 - 15.1	0	15	pCi/L	N	Erosion of natural deposits.

WATER QUALITY DATA – NSFIIH Stump Neck MD1080039

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	07/13/2016	1.3	1.3	0.25	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	07/13/2016	0	15	4	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Disinfectants and Disinfecton By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2017	1.3	0.8 - 1.3	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2017	6.6	6.6 - 6.6	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2017	43.7	43.7 - 43.7	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Fluoride	04/17/2013	1.2	0.92 - 1.2	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2017	0.07	0.07 - 0.07	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	10/27/2016	4.7	4.7 - 4.7	0	4	mrem/yr	N	Decay of natural and man-made deposits.
Gross alpha excluding radon and uranium	10/27/2016	2.1	2.1 - 2.1	0	15	pCi/L	N	Erosion of natural deposits.

With just a few small changes, we can build a sustainable future together and protect our most precious resource- water.

TOTAL ANNUAL WATER SAVINGS:

157,200 gallons per year!

www.mwdoc.com/services/water-saving-tips

For more information on...

Utilities, water leaks, or related, please contact:

Water and Waste Water Branch Supervisor

Edward Hayden, Utilities

4120 Lloyd Road, Building 3162

Indian Head, MD 20640-5157

Phone: (301)744-4785

Email: edward.hayden@navy.mil

The Consumer Confidence Report, water quality, or related, please contact:

Drinking Water Program Manager

Lindsey Arndt, Environmental

3972 Ward Road, Building 289

Indian Head, MD 20640-5157

Phone: (301)744-2258

Email: lindsey.arndt@navy.mil

TIPS

How Can You Use Water More Efficiently Every Day?



Swap a 15 minute shower for a 5 minute shower. Saves 9,000 gallons a year!



Switch to high-efficiency. Saves nearly 7,000 gallons a year per person!



Use short blasts to rinse dishes instead of running water. Saves nearly 5,000 gallons a year!



Set your lawn mower to the highest setting. Saves over 2,000 gallons a year!



Turn off the water while brushing your teeth. Saves over 2,000 gallons a year!



Turn off the water while shaving. Saves over 3,000 gallons a year!



Run your clothes and dishwasher only when full. Save nearly 12,000 gallons each year!



Fix leaks right away. Saves 10,000 gallons each year!



Turn off water from the hose when not in use. Saves 10 gallons a minute!



Use a broom instead of a hose to clean your driveway. Saves over 7,000 gallons a year!



Install a "Smart" irrigation controller. Saves 15,000 gallons a year!



Cover your pool. Nearly 15,000 gallons are lost to evaporation each year!



Install rotating nozzles. Saves over 60,000 gallons a year!



Take your car to a carwash that recycles water. Saves over 5,000 gallons a year!