

**ANNUAL DRINKING WATER QUALITY REPORT 2023  
2022 YEAR DATA  
UPPER DEERFIELD TOWNSHIP WATER UTILITY  
PWSID # NJ0613004**

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.

**Where does my water come from?**

The Upper Deerfield Water Utility utilizes four wells that are all drilled into the Kirkwood-Cohansey aquifer. The water is drawn from depths ranging from 120 to 160 feet in the aquifer. The treatment plants adjust pH, chlorinate, remove or suspend iron and remove radionuclides before the water enters the distribution system or storage tanks. The system has a storage capacity of 750,000 gallons and the ability to produce 1.8 million gallons of water per day.

**Treatment Update:**

**The newly constructed nitrate removal treatment facility at Love Lane became operational on January 12, 2023. The equipment continuously monitors nitrate levels in the water and automatically adjusts treatment to comply with safe drinking water regulations.**

**Source water assessment and its availability:**

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued a Source Water Assessment. This study was conducted to identify potential sources of contamination near public water supplies. You can obtain a copy of this report by contacting the Township Water Utility at 609-381-6443.

Seven Contaminant categories (and radon) were used to determine the system's susceptibility, and rating of high (H), medium (M), and low (L) were assigned. The categories are listed below.

<b>Category</b>	<b>Well 3</b>	<b>Well 4</b>	<b>Well 15</b>	<b>Well 17</b>
<b>Pathogens:</b> Bacteria and Viruses	L	L	L	L
<b>Nutrients:</b> Compounds, Minerals, Elements	H	H	H	H
<b>Pesticides:</b> Man-made chemicals, herbicides, insecticides	M	M	M	M
<b>Volatile:</b> Organic Compounds: Chemicals and Solvents	L	L	M	M
<b>Inorganics:</b> Natural and man-made minerals	L	L	M	M
<b>Radionuclides:</b> Radioactive substances-natural and man-made	H	H	H	H
<b>Radon:</b> Naturally occurring gas	M	M	M	M
<b>Disinfectant By-product Precursors:</b> Disinfection reaction with organic material.	M	M	M	M

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any are detected at frequencies and concentrations above allowable levels.

**Potential Contaminated Sources:**

Nitrates- Agricultural land use

Nutrients: Agricultural land use

Pesticides: Agricultural land use

Radio Nuclides and Radon: Naturally occurring

If you have any questions regarding the source water assessment report or summary contact the Bureau of Safe Drinking Water at [swap@dep.state.nj.us](mailto:swap@dep.state.nj.us) or 609-292-5550

### **Why are there contaminants in my drinking 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 Environmental Protection Agency's (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, radioactive material, and 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 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; 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 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.

### **How can I get involved?**

If you have any questions about this report or any other concerns, please feel free to contact John Hoogendorn at 609-381-6443. We want our consumers to be informed about their water. You can also attend any of our regularly scheduled Township Committee meetings which are held on the first and third Thursday of every month at 7 pm at the Upper Deerfield Municipal Building located at 1325 Highway 77.

### **Water Conservation Tips**

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers - a 5minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit [www.epa.gov/watersense](http://www.epa.gov/watersense) for more information.

## Source Water Protection Tips

Protection of drinking 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.
- 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; take used motor oil to a recycling center.
- 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.
- 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.

## Monitoring and reporting of compliance violations in 2022

Our system received a violation notice for failure to report regulated PFAS sampling results on time. The testing was done but the results were submitted late by the lab.

## Sample Testing Waivers

The Safe Drinking Water Act regulations allow for monitoring waivers to reduce or eliminate the monitoring requirements for some contaminants. Our system received waivers for the following: Asbestos and SOCs in the past. We currently have a waiver for Asbestos and are anticipating receiving one for SOCs as we have in the past.

## Health Effects:

**Sodium:** For healthy individuals the sodium intake from water is not important, because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the Recommended Upper Limit (RUL) may be of concern to individuals on a sodium restricted diet.

**Alpha Emitters:** Certain minerals are radioactive and may emit a form of radiation known as Alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer. \*\*Water containing Combined radium 226/228 levels over the MCL may also increase the risks of getting cancer.

**Lead:** 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. Upper Deerfield Water Department 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>.

**Nitrate:** Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

## Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. 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. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

### Do I need to take special precautions?

**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/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).**

Contaminants	MCLG or MRDL G	MCL, TT, or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
<b>Disinfectants &amp; Disinfection By-Products</b>								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (as Cl <sub>2</sub> ) (ppm)	4	4	.85	.71	1.1	2022	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	1.75	1.7	1.8	2022	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	14.5	14	15	2022	No	By-product of drinking water disinfection
<b>Inorganic Contaminants</b>								
Barium (ppm)	2	2	.13	.006	.13	2021	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate [measured as Nitrogen] (ppm)	10	10	4.6	<1	9.1	2022	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nickel (ug/l)	NA	NA	4.6	3.9	4.6	2021	No	Sources include rock and minerals in groundwater, nickel plated pipe.

Contaminants	MCLG or MRDL G	MCL, TT, or MRDL L	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
<b>Radioactive Contaminants</b>								
Alpha emitters (pCi/L)	0	15	7.3	2.5	14.8	2022	No	Erosion of natural deposits
Radium (combined 226/228) (pCi/L)	0	5	3	1.82	5.35	2022	No	Erosion of natural deposits
<b>Synthetic organic contaminants including pesticides and herbicides</b>								
Dibromochloropropane (DBCP) (ppt)	0	200	34	10.8	50.4	2022	No	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards

Contaminants	MCL G	A L	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
<b>Inorganic Contaminants</b>							
Copper - action level at consumer taps (ppm)	1.3	1.3	0	2020	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	0	2020	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

### Secondary Contaminants

In an effort to insure the safest water possible the State has required us to monitor some contaminants not required by Federal regulations. Of those contaminants only the ones listed below were found in your water.

Contaminants	State MCL	Your Water	Violation	Explanation and Comment
Sodium	50 ppm	7.7	No	Erosion of natural deposits, road salt

### Additional Monitoring

As part of an on-going evaluation program the EPA has required us to monitor some additional contaminants/chemicals. Information collected through the monitoring of these contaminants/chemicals will help to ensure that future decisions on drinking water standards are based on sound science.

Name	Reported Level	Range		Typical Source
		Low	High	
perfluorooctanoic acid (PFOA) (ppb) (MCL 0.014)	.0023	.00049	.0041	Industrial releases to water and soil.

<b>Unit Descriptions</b>	
<b>Term</b>	<b>Definition</b>
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
ppt	ppt: parts per trillion, or nanograms per liter
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

<b>Important Drinking Water Definitions</b>	
<b>Term</b>	<b>Definition</b>
MCLG	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.
MCL	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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection 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.
MRDL	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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

**For more information please contact:**

Contact Name: John Hoogendorn      Phone: 609-381-6443  
Address: 1325 Highway 77              Date: 3//15/23  
Seabrook, NJ 08302