**PWS ID# NJ1920001**

# Annual Drinking Water Quality Report
# Stillwater Township, Water District #1

### For the Year 2022, Results from the Year 2021

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. 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.

**This report shows our water quality and what it means.**

**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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).**

## TEST RESULTS

| Contaminant | Violation Y/N | Level Detected | Units of Measurement | MCLG | MCL | Likely Source of Contamination |
|---|---|---|---|---|---|---|
| **Radioactive Contaminants:** | | | | | | |
| | | | | | | |
| Gross Alpha<br>Test results Yr. 2021 | N | Range = ND – 18.4<br>Highest detect = 18.4 Highest Average = 8.4 | pCi/1 | 0 | 15 | Erosion of natural deposits |
| Combined Radium 228 & 226<br>Test results Yr. 2021 | N | Range = ND – 3.4<br>Highest detect = 3.4 Highest Average = 2.0 | pCi/1 | 0 | 5 | Erosion of natural deposits |
| **Inorganic Contaminants:** | | | | | | |
| Barium<br>Test Results Yr. 2021 | N | Range = ND – 0.74<br>Highest detect = 0.74 | Ppm | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Copper<br>Test results Yr. 2021<br>Result at 90th Percentile | N | 0.02<br>No samples exceeded the action level | Ppm | 1.3 | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits |
| Cyanide<br>Test results Yr. 2021 | N | Range = ND – 5.2<br>Highest detect = 5.2 | Ppb | 200 | 200 | Discharge from steel/metal factories; discharge from plastic and fertilizer factories |
| Fluoride<br>Test results Yr. 2021 | N | Range = ND – 0.095 Highest detect = 0.095 | Ppm | 4 | 4 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Lead<br>Test results Yr. 2021<br>Result at 90th Percentile | N | 10.6<br>No samples exceeded the action level | Ppb | 0 | AL=15 | Corrosion of household plumbing systems, erosion of natural deposits |
| Nitrate (as Nitrogen)<br>Test results Yr. 2021 | N | Range = ND – 2.14<br>Highest detect = 2.14 | Ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| **Disinfection Byproducts:** | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| HAA5<br>Haloacetic Acids<br>Test results Yr. 2021 | N | ND | Ppb | N/A | 60 | By-product of drinking water disinfection |
| TTHM<br>Total Trihalomethanes Test results Yr. 2021 | N | 5 | Ppb | N/A | 80 | By-product of drinking water disinfection |
| **PFAS Per- and Polyfluoroalkyl Substances:** | | | | | | |
| PFOS<br>Perfluorooctane Sulfonic Acid<br>Test results Yr. 2021 | N | Range = ND – 4.4<br>Highest detect = 4.4 | ppt | N/A | 13 | Used in the manufacture of fluoropolymers |
| PFOA<br>Perfluorooctane Acid Test results Yr. 2021 | N | Range = 3.9 – 5.8<br>Highest detect = 5.8 | ppt | N/A | 14 | Used in the manufacture of fluoropolymers |

| **Regulated Disinfectants** | **Level Detected** | **MRDL** | **MRDLG** |
|---|---|---|---|
| Chlorine<br>Test results Yr. 2021 | Range = 1.0 – 1. ppm<br>Average = 1.2 Ppm | 4.0 ppm | 4.0 ppm |

**Chlorine:** Water additive used to control microbes.

| **Secondary Contaminant** | **Level Detected** | **Units of Measurement** | **RUL** |
|---|---|---|---|
| Sodium<br>Test results Yr. 2021 | Range = 9 - 85 | ppm | 50 |

**We**

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 projection, 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 byproducts 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 which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration 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 indicate that the 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 at 1-800-426-4791. http:www.epa.gov/safewater/lead.

**DEFINITIONS**

In the "Test Results" table you will find some terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

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 - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Parts per trillion (ppt) or nanogram per liter - one part per trillion corresponds to one minute in 20,000 years, or a single penny in $100,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

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

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is 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 -The "Goal"(MCLG) is 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.

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 contamination.

**In July 2021, P.L.2021, Ch.183 (Law) was enacted, requiring all community water systems to replace lead service lines in their service area within 10 years. Under the law, Stillwater Township, Water District #1 is required to notify customers, non-paying consumers, and any off-site owner of a property (e.g., landlord) when it is known they are served by a lead service line*. Our service line inventory is available upon request.**

**Sources of Lead in Drinking Water**

Stillwater Township, Water District #1 is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. Although most lead exposure occurs from inhaling dust or from contaminated soil, or when children eat paint chips, the U.S. Environmental Protection Agency (USEPA) estimates that 10 to 20 percent of human exposure to lead may come from lead in drinking

water. Infants who consume mostly mixed formula can receive 40 percent to 60 percent of their exposure to lead from drinking water. Lead is rarely found in the source of your drinking water but enters tap water through corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing materials. These materials include lead-based solder used to join copper pipes, brass, and chrome-brass faucets, and in some cases, service lines made of or lined with lead. New brass faucets, fittings, and valves, including those advertised as "lead-free", may still contain a small percentage of lead, and contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to 0.25 percent lead to be labeled as "lead free". However, prior to January 4, 2014, "lead free" allowed up to 8 percent lead content of the wetted surfaces of plumbing products including those labeled National Sanitation Foundation (NSF) certified. Visit the NSF website at www.nsf.org to learn more about lead-containing plumbing fixtures. Consumers should be aware of this when choosing fixtures and take appropriate precautions. When water stands in lead service lines, lead pipes, or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means the first water drawn from the tap in the morning, or later in the afternoon if the water has not been used all day, can contain fairly high levels of lead. Please call at 973-579-7740 to find out how to get your water tested for lead. Testing is essential because you cannot see, taste, or smell lead in drinking water**.**

**Health Effects of Lead**

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development. Contact your local health department or healthcare provider to find out how you can get your child tested for lead if you are concerned about lead exposure. You can find out more about how to get your child tested and how to pay for it at https://www.state.nj.us/health/childhoodlead/testing.shtml.

**What are PFOA and PFOS?**

Perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) are per- and polyfluoroalkyl substances (PFAS), previously referred to as perfluorinated compounds, or PFCs, that are man-made and used in industrial and commercial applications. PFOA was used as a processing aid in the manufacture of fluoropolymers used in non-stick cookware and other products, as well as other commercial and industrial uses based on its resistance to harsh chemicals and high temperatures. PFOS is used in metal plating and finishing as well as in various commercial products. PFOS was previously used as a major ingredient in aqueous film forming foams for firefighting and training, and PFOA and PFOS are found in consumer products such as stain resistant coatings for upholstery and carpets, water resistant outdoor clothing, and grease proof food packaging. Although the use of PFOA and PFOS has decreased substantially, contamination is expected to continue indefinitely because these substances are extremely persistent in the environment and are soluble and mobile in water. More information can be found at: https://www.state.nj.us/dep/wms/bears/docs/2019-4-15-FAQs_PFOS-PFOA-websites-OLA%204-24-19SDM-(003).pdf

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals and synthetic organic chemicals. Our system received monitoring waivers for all of these types of contaminants. Water from our wells is treated (where required) with a disinfectant to protect you against microbiological contaminants.

## Stillwater Township Water District 1- PWSID # NJ1920001

Stillwater Township Water District 1 is a public community water system consisting of 7 wells.

This system's source water comes from the following aquifers: glacial sand and gravel, Jacksonburg limestone, Kittatinny Supergroup and H, Martinsburg Formation.

## Susceptibility Ratings for Stillwater Township Water District 1 Sources

The table below illustrates the susceptibility ratings for the seven contaminant categories (and radon) for each source in the system. The table provides the number of wells and intakes that rated high (H), medium (M), or low (L) for each contaminant category. For susceptibility ratings of purchased water, refer to the specific water system's source water assessment report.

The seven contaminant categories are defined at the bottom of this page. DEP considered all surface water highly susceptible to pathogens, therefore all intakes received a high rating for the pathogen category. For the purpose of Source Water Assessment Program, radionuclides are more of a concern for ground water than surface water. As a result, surface water intakes' susceptibility to radionuclides was not determined and they all received a low rating.

**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 contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessments, DEP may customize (change existing) monitoring schedules based on the susceptibility ratings.

| | **Pathogens** | | | **Nutrients** | | | **Pesticides** | | | **Volatile Organic Compounds** | | | **Inorganics** | | | **Radionuclides** | | | **Radon** | | | **Disinfection Byproduct Precursors** | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sources | H | M | L | H | M | L | H | M | L | H | M | L | H | M | L | H | M | L | H | M | L | H | M | L |
| Wells - 7 | **2** | **3** | **2** | **6** | **1** | | | **4** | **3** | | | **7** | | **1** | **6** | **1** | **6** | | **7** | | | | **7** | |

**Pathogens:** Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.
**Nutrients:** Compounds, minerals and elements that aid growth, that are both naturally occurring and man-made. Examples include nitrogen and phosphorus.
**Volatile Organic Compounds:** Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.
**Pesticides**: Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and

manufacturing centers of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlordane. **Inorganics:** Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.

**Radionuclides:** Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.

**Radon:** Colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information: go to http://www.nj.gov/dep/rpp/radon/index.htm or call (800) 648-0394

**Disinfection Byproduct Precursors**: A common source is naturally occurring organic matter in surface water.

Disinfection byproducts are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.

**Special Notice:**
All water systems must provide a notice of the individual tap results from Lead Tap Monitoring to the persons served by the water system at the specific sampling site from which the sample was taken. This notice must be provided no later than 30 days after learning of the tap monitoring results. We were late with these notices.

**Special Notice:**
Public community water systems must comply with the Consumer Confidence Rule, which requires community water systems to prepare a Consumer Confidence Report (CCR) / Water Quality Report annually, containing the previous year's drinking water monitoring data, and submit to both their customers and New Jersey Department of Environmental Protection (NJDEP) by July 1st and a CCR Certification Form to NJDEP by October 1st of each year. For the year 2021 we inadvertently submitted this water system's CCR and CCR Certification late to NJDEP.

## IMPORTANT INFORMATION ABOUT OUR DRINKING WATER

Stillwater Township Water District #1 Missed Monitoring Violations

The Stillwater Township Water District #1 is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether, or not your drinking water meets health standards.

We were required to monitor for these new regulated contaminants in all four quarters of 2021. We inadvertently missed the 3