

Annual Drinking Water Quality Report

Brielle Water Department

For the Year 2023, results from the Year 2022

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 are pleased to report that our drinking water meets all federal and state safety requirements.**

If you are a landlord, you must distribute this Drinking Water Quality Report to every tenant as soon as practicable, but no later than three business days after receipt. Delivery must be done by hand, mail, or email, and by posting the information in a prominent location at the entrance of each rental premises, pursuant to section #3 of NJ P.L. 2021, c.82 (C.58:12A-12.4 et seq.).

The Brielle Water Department and the New Jersey Water Supply Authority - Manasquan Reservoir Water Supply System routinely monitor for over 80 contaminants in your drinking water according to Federal and State laws. The tables list only detected contaminants and show the results of our monitoring from January 1st to December 31st, 2022. We have learned through our monitoring and testing that some contaminants have been detected. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative is more than one year old.

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).

| Brielle Water Department Test Results PWS ID # NJ1308001 | | | | | | |
|--|------------------|--|------------------------------|----------|--------------|--|
| Contaminant: | Violation Y/N | Level Detected | Units of Measure- ment | MC LG | MCL | Likely Source of Contamination |
| Radioactive Contaminants: | | | | | | |
| Combined Radium 228 & 226 Test results Yr. 2021 | N | 1.5 | pCi/l | N/A | N/A | Erosion of natural deposits |
| Inorganic Contaminants: | | | | | | |
| Copper Test results Yr. 2020 Result at 90 th Percentile | N | 0.1 No samples exceed the action level | ppm | 1.3 | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits |
| Lead Test results Yr. 2020 Result at 90 th Percentile | N | ND No samples exceed the action level. | ppb | 0 | AL=15 | Corrosion of household plumbing systems; erosion of natural deposits |
| Nitrate (as Nitrogen) Test results Yr. 2022 | N | Range = ND – 0.2 Highest detect = 0.2 | ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Disinfection Byproducts: | | | | | | |
| TTHM Total Trihalomethanes Test Results Yr. 2022 | N | Range = 1 - 34 Highest LRAA = 25 | ppb | N/A | 80 | By-product of drinking water disinfection |
| HAA5 Haloacetic Acids Test Results Yr. 2022 | N | Range = 3 - 24 Highest LRAA = 14 | ppb | N/A | 60 | By-product of drinking water disinfection |
| Regulated Disinfectants | | Level Detected | MRDL | | MRDLG | |
| Chlorine Test results Yr. 2022 | | Range = 0.5 – 1.0 ppm Average = 0.8 ppm | 4.0 ppm | | 4.0 ppm | |

Chlorine: Water additive used to control microbes

HAA5 and TTHM compliance is based on a Locational Running Annual Average (LRAA), calculated at each monitoring location. The LRAA calculation is based on four completed quarters of monitoring results.

Our water source: We have two sources of drinking water: our wells and the New Jersey Water Supply Authority, Manasquan Reservoir Water Supply System. One well draws water from the Kirkwood Aquifer and the other two draw their water from the Englishtown Aquifer. The Manasquan Water Treatment Plant, located on Hospital Road in the, Allenwood section of Wall Township, is owned by the Monmouth County Improvement Authority and is operated by the New Jersey Water Supply Authority. The Manasquan Water Treatment Plant takes its water from the Manasquan River in Wall Township and the Manasquan Reservoir in Howell Township.

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for this public water system, which is available at WWW.state.nj.us/dep/swap or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550. You may also contact your public water system to obtain information regarding your water system's Source Water Assessment. Brielle Water Department's and the Manasquan Water Supply System's source water susceptibility ratings and a list of potential contaminant sources is included.

Potential sources of contamination: 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,

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 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.

Definitions:

In the "Test Results" tables you may 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.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

Total Organic Carbon - Total Organic Carbon (TOC) has no health effects. However, TOC provides a medium for the formation of disinfection byproducts.

The *Treatment Technique* for TOC requires that 35% - 45% of the TOC in the raw water is removed through a treatment process.

Turbidity - Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity is measured as an indication of the effectiveness of the filtration process. The *Treatment Technique* for turbidity requires that no individual sample exceeds 1 NTU and 95% of the samples collected during the month must be less than 0.3 NTU.

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.

Sources of Lead in Drinking Water

The Brielle Water Department and the Manasquan Water Supply System are 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.

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>.

Steps You Can Take to Reduce Exposure to Lead in Drinking Water

For a full list of steps visit: <https://www.state.nj.us/dep/watersupply/dwc-lead-consumer.html>

Run the cold water to flush out lead. Let the water run from the tap before using it for drinking or cooking any time the water in the faucet has gone

faucet. Let the water run from the cold-water tap based on the length of the lead service line and the plumbing configuration in your home. In other words, the larger the home or building and the greater the distance to the water main (in the street), the more water it will take to flush properly. Although toilet flushing or showering flushes water through a portion of the plumbing system, you still need to flush the water in each faucet before using it for drinking or cooking. Flushing tap water is a simple and inexpensive measure you can take to protect your health. It usually uses less than one gallon of water.

Use cold, flushed water for cooking and preparing baby formula. Because lead from lead-containing plumbing materials and pipes can dissolve into hot water more easily than cold water, never drink, cook, or prepare beverages including baby formula using hot water from the tap. If you have not had your water sampled or if you know, it is recommended that bottled or filtered water be used for drinking and preparing baby formula. If you need hot water, draw water from the cold tap and then heat it.

Do not boil water to remove lead. Boiling water will not reduce lead; however, it is still safe to wash dishes and do laundry. Lead will not soak into dishware or most clothes.

Use alternative sources or treatment of water. You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact NSF International at 800-NSF-8010 or www.nsf.org for information on performance standards for water filters.

Determine if you have interior lead plumbing or solder. If your home/building was constructed prior to 1987, it is important to determine if interior lead solder or lead pipes are present. You can check yourself, hire a licensed plumber, or check with your landlord.

Replace plumbing fixtures and service lines containing lead. Replace brass faucets, fittings, and valves that do not meet the current definition of "lead free" from 2014 (as explained above). Visit the NSF website at www.nsf.org to learn more about lead-containing plumbing fixtures.

Remove and clean aerators/screens on plumbing fixtures. Over time, particles and sediment can collect in the aerator screen. Regularly remove and clean aerators screens located at the tip of faucets and remove any particles.

Test your water for lead. Please call 732-528-5210 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.

Get your child tested. 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. New Jersey law requires that children be tested for lead in their blood at both 1 and 2 years of age and before they are 6 years old if they have never been tested before or if they have been exposed to a known source of lead.

Have an electrician check your wiring. If grounding wires from the electrical system are attached to your pipes, corrosion may be greater. Check with a licensed electrician or your local electrical code to determine if your wiring can be grounded elsewhere. DO NOT attempt to change the wiring yourself because improper grounding can cause electrical shock and fire hazards.

Water softeners and reverse osmosis units will remove lead from water but can also make the water more corrosive to lead solder and plumbing by removing certain minerals; therefore, the installation of these treatment units at the point of entry into homes with lead plumbing should only be done under supervision of a qualified water treatment professional.

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, the Brielle Water Department 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.

Waivers: 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 systems received monitoring waivers for asbestos and synthetic organic chemicals. The Manasquan Water Supply System received a monitoring waiver for synthetic organic contaminants.

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](https://www.state.nj.us/dep/wms/bears/docs/2019-4-15-FAQs_PFOS-PFOA-websites-OLA%204-24-19SDM-(003).pdf)

Special Notice:

In July 2022, an Updated Drinking Water Service Line Inventory, a Lead Service Line Replacement Plan and an Annual Lead Service Line Replacement Progress Report was to be submitted to the New Jersey Department of Environmental Protection (NJDEP). We were inadvertently late in submitting our Annual Lead Service Line Replacement Progress Report and received a reporting violation. Once this information was received by NJDEP, the violation was returned to compliance on 1/6/2023.

Please note: The New Jersey Water Supply Authority is not responsible for lead testing within the customer communities. Consult the Consumer Confidence Report of your community water system for lead results. The lead results in the table above are from faucets at the buildings on the Water Treatment facilities property. Lead and copper levels were detected in some samples taken at the water treatment plant and tested in 2021. The NJWSA adds a corrosion control chemical and adjusts the pH of the water leaving the Water Treatment plant in order to improve the corrosivity of the water and to achieve the regulatory level for these chemical elements.

For additional information: If you have any questions about this report or concerning your water utility, please call 732-528-5210. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Borough Council meetings at Borough Hall, 601 Union Lane. Meetings are held on the second and fourth Monday of each month at 7:30 p.m.

Cryptosporidium

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Cryptosporidium is usually removed through the filtration process and inactivated by other treatment processes such as ozonation. In order to check for the presence of Cryptosporidium, the USEPA issued the Long-Term Enhanced Surface Water Treatment Rule in January 2006. As part of this rule, the Manasquan System began monthly sampling and testing for Cryptosporidium in October 2016 and this testing continued through its completion in September 2018. The sample results did not show any presence of Cryptosporidium.

| Manasquan Water Supply 2022 Test Results PWSID # NJ1352005 | | | | | | |
|---|------------------|--|------------------------------|----------|--|--|
| Contaminant | Violation Y/N | Level Detected | Units of Measure- ment | MC LG | MCL | Likely Source of Contamination |
| Microbiological Contaminants: | | | | | | |
| Turbidity | N | Range = 0.03 – 0.20 100% < 0.3 NTU | NTU | N/A | TT 95% of monthly samples < 0.3 NTU | Soil runoff |
| Total Organ Carbon (TOC) | N | Range = 21 % - 48% Avg. Removal = 33% | % | N/A | TT 35% - 45% removal | Soil runoff |
| Inorganic Contaminants: | | | | | | |
| Barium | N | 0.035 | ppm | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Nitrate (as Nitrogen) | N | 0.33 | ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| PFAS Per- and Polyfluoroalkyl Substances: | | | | | | |
| PFOS Perfluorooctane Sulfonic Acid | N | 3.2 | ppt | N/A | 13 | Discharge from industrial, chemical, and manufacturing factories, release of aqueous film forming foam. |
| PFOA Perfluorooctane Acid | N | 5.3 | ppt | N/A | 14 | Discharge from industrial, chemical, and manufacturing factories, release of aqueous film forming foam. |
| PFNA Perfluorononanoic Acid | N | 2.0 | ppt | N/A | 13 | Discharge from industrial, chemical, and manufacturing factories, release of aqueous film forming foam. |
| Regulated Disinfectants | | | | | | |
| | | Level Detected | | MRDL | | MRDLG |
| Chlorine | | Range = 1.0 – 1.7 | | 4.0 ppm | | 4.0 ppm |

Chlorine: Water additive used to control microbes

Brielle Water Department-PWSID # NJ1308001

Brielle Water Department is a public community water system consisting of 3 wells and 1 purchased surface water source.

This system's source water comes from the following aquifers: Atlantic City "800-foot" Sand Aquifer System, Englishtown Aquifer System

This system purchases water from the following water system: NJ Water Supply – Manasquan System

Susceptibility Ratings for Brielle Water Department 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 the 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 - 3 | | | 3 | | | 3 | | | 3 | | | 3 | | 2 | 1 | | | 3 | | | 3 | 1 | 2 | |

NJ Water Supply Authority - Manasquan System - PWSID # NJ352005

NJ Water Supply Authority - Manasquan System is a public community water system consisting of 2 surface water intakes.

This system's source water comes from the following surface water bodies: Manasquan Reservoir, Manasquan River

Susceptibility Ratings for NJ Water Supply Authority - Manasquan System 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 |
| Surface water intakes - 2 | 2 | | | | 2 | | | 2 | | | 2 | | | 2 | | | | 2 | | | 2 | | | |

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.

We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please call our office if you have questions.

Solutions to Stormwater Pollution

Easy Things You Can Do Every Day To Protect Our Water

A Guide to Healthy Habits for Cleaner Water

Pollution on streets, parking lots and lawns is washed by rain into storm drains, then directly to our drinking water supplies and the ocean and lakes our children play in. Fertilizer, oil, pesticides, detergents, pet waste, grass clippings: You name it and it ends up in our water.

Stormwater pollution is one of New Jersey's greatest threats to clean and plentiful water, and that's why we're all doing something about it.

By sharing the responsibility and making small, easy changes in our daily lives, we can keep common pollutants out of stormwater. It all adds up to cleaner water, and it saves the high cost of cleaning up once it's dirty.

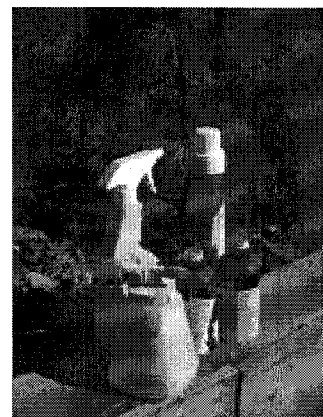
As part of New Jersey's initiative to keep our water clean and plentiful and to meet federal requirements, many municipalities and other public agencies including colleges and military bases must adopt ordinances or other rules prohibiting various activities that contribute to stormwater pollution. Breaking these rules can result in fines or other penalties.



As a resident, business, or other member of the New Jersey community, it is important to know these easy things you can do every day to protect our water.

Limit your use of fertilizers and pesticides

- Do a soil test to see if you need a fertilizer.
- Do not apply fertilizers if heavy rain is predicted.
- Look into alternatives for pesticides.
- Maintain a small lawn and keep the rest of your property or yard in a natural state with trees and other native vegetation that requires little or no fertilizer.
- If you use fertilizers and pesticides, follow the instructions on the label on how to correctly apply it.



Make sure you properly store or discard any unused portions.

Properly use and dispose of hazardous products

- Hazardous products include some household or commercial cleaning products, lawn and garden care products, motor oil, antifreeze, and paints.
- Do not pour any hazardous products down a storm drain because storm drains are usually connected to local waterbodies and the water is not treated.

- If you have hazardous products in your home or workplace, make sure you store or dispose of them properly. Read the label for guidance.

- Use natural or less toxic alternatives when possible.

- Recycle used motor oil.

- Contact your municipality, county or facility management office for the locations of hazardous-waste disposal facilities.



Keep pollution out of storm drains

- Municipalities and many other public agencies are required to mark certain storm drain inlets with messages reminding people that storm drains are connected to local waterbodies.

- Do not let sewage or other wastes flow into a stormwater system.

Clean up after your pet

- Many municipalities and public agencies must enact and enforce local pet-waste rules.

- An example is requiring pet owners or their keepers to pick up and properly dispose of pet waste dropped on public or other people's property.

- Make sure you know your town's or agency's requirements and comply with them. It's the law. And remember to:

- Use newspaper, bags or pooper-scoopers to pick up wastes.

- Dispose of the wrapped pet waste in the trash or unwrapped in a toilet.

- Never discard pet waste in a storm drain.



Don't litter

- Place litter in trash receptacles.

- Recycle. Recycle. Recycle.

- Participate in community cleanups.

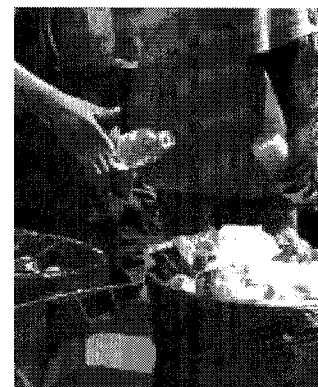
Dispose of yard waste properly

- Keep leaves and grass out of storm drains.

- If your municipality or agency has yard waste collection rules, follow them.

- Use leaves and grass clippings as a resource for compost.

- Use a mulching mower that recycles grass clippings into the lawn.



Don't feed wildlife

- Do not feed wildlife, such as ducks and geese, in public areas.

- Many municipalities and other public agencies must enact and enforce a rule that prohibits wildlife feeding in these areas.

Contact information

For more information on stormwater related topics, visit www.njstormwater.org or www.nonpointsource.org

Additional information is also available at U. S. Environmental Protection Agency Web sites www.epa.gov/npdes/stormwater or www.epa.gov/nps

New Jersey Department of Environmental Protection
Division of Water Quality
Bureau of Nonpoint Pollution Control
Municipal Stormwater Regulation Program
(609) 633-7021



www.cleanwater.nj.org



Simple Tips to Help You Conserve Water INSIDE Your Home

[View Video of simple tips to help you conserve water inside your home](#)

Here are some tips for saving water and money in the bathroom ...

- Update your shower with a low-flow showerhead and **save up to 7,665 gallons and up to \$50 per year.**
- Cut down the time you spend in the shower to 5 minutes ... and remember the suggestion of switching from baths to 5-minute showers and **save 76,650 gallons and up to \$498 per year.**
- Replace that old water guzzling toilet with a WaterSense low-flow version and **save 10,986 gallons and up to \$70 per year.**
- Get your family to turn the water off while brushing their teeth and **save up to 11,680 gallons and up to \$75 per year.**
- Update your faucet or attach an inexpensive faucet aerator to your existing one and **save 15,622 gallons and up to \$100 per year.**
- Fix a constantly running toilet and **save up to \$480 per year**
- Install a [Gate Tube Toilet Water Saver](#) in your toilet tank and **save up to 7,300 gallons and up to \$144 per year off your water and sewer bill...** homes with wells and septic systems may significantly reduce the load and demand of the well and septic field.

For the kitchen ...

- Only wash dishes when the dishwasher is full and **save up to 2,920 gallons and up to \$19 per year.**
- Replace the old dishwasher with a new high-efficiency model and **save up to 1,314 gallons and up to \$8 per year.**
- Use a faucet aerator and change to a low-flow faucet when possible and **save up to 15,622 gallons and up to \$100.**
- Store drinking water in the refrigerator instead of running the faucet until the water is cold.

And in the laundry room ...

- Upgrade to a high efficiency clothes washer and **save up to 14,585 gallons and up to \$94 per year.**
- Wash only full loads of clothing by adding until the washer is full and **save up to 10,534 gallons and up to \$68 per year.**
- Adjust the water-setting level to correspond with the size of the wash load.

These few tips add up to more than 167,000 gallons and up to approximately \$1,500 a year for the family to save,

and enjoy.

**Calculations for water and money savings are based on estimated water use for a family of four with a water rate of \$6.50 per 1,000 gallons. Note: Water rates vary around the State.*

More Indoor Water Saving Tips:

- Wash fruits and vegetables in a basin and not under running water
- Do not defrost frozen food under running water; instead thaw in the refrigerator overnight
- Add food wastes to your compost pile instead of using the garbage disposal
- Take care of household leaks and save up to 10% on your water bill
- To detect leaks, check your water meter before and after two hours of no water use

Simple Tips to Help You Conserve Water OUTSIDE Your Home

[Video of simple tips to help you conserve water outside your home](#)

Here are some tips for saving water and money while watering lawns and landscapes...

- Only water when needed, New Jersey landscapes need approximately one inch of water a week ... most of which often comes from natural rainfall
- Water flowers with rain collected from your roof with a barrel connected to your gutter downspout
- Use 30-50% less water with drip irrigation and micro-sprays compared to sprinklers
- If you have an irrigation system, get a system audit done by an irrigation specialist who is certified as a USEPA WaterSense Partner

Here are some tips for saving water and money in the Garden:

- Use native plants that survive best in local conditions, and group plants together based on water need
- Choose drought-tolerant grass varieties such as tall fescues
- Mulch around trees and plants to reduce evaporation and water-consuming weeds
- Cut back on lawn areas and increase the size of low water using and native plant garden beds.

Here are some tips for saving water and money while doing household chores:

- Wash the car with a bucket, or use a commercial car wash that recycles water
- When using a hose, control the flow with an automatic shut-off nozzle
- Raise your lawn mower blade to at least 3 inches to promote deeper roots and root system shade that holds soil moisture best
- Don't over fertilize lawns as they need more water to survive
- Sweep driveways, sidewalks and steps rather than hosing them off

Here are some tips for saving water and money during recreational times:

- Avoid recreational toys that require a constant stream of water
- If you have a pool, remember to purchase a water-saving filter
- Cover your pool to reduce evaporation when not in use

More Outdoor Water Saving Tips:

- You are over watering when puddles are forming on the landscape or in the street
- Do not water during the heat of the day - water in the early morning hours or early evening hours to reduce evaporation
- Save water and reduce diseases by watering the root zone instead of the foliage
- Water deeply, less frequently for a deeper, healthier root systems
- Refer to these manuals for more ideas:
 - [Conserving Water on Home Lawns and Landscapes in New Jersey](#)
 - [Landscaping for Water Conservation](#)
 - [Low Maintenance Landscaping \(pdf\)](#)
- Add organic matter to the soil to improve water and nutrient-holding capacity for healthier plants
- Use dehumidifier and air-conditioner condensation to water your plants