

# Annual Drinking Water Quality Report

## 2020 (2019 Data)

**Haddon Township Water Department**  
**PWSID# NJ0416001**



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 of our water and services we deliver to you every day. Our continuous goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts Haddon Township makes to improve the water treatment process along with protecting our water resources. We are committed to ensuring the quality of your drinking water.

For more information or questions, please call James Stevenson, Haddon Township's Public Works Director, at 856-833-6260. We encourage public participation at our regular commissioners meeting which are held every fourth Tuesday of each month at 7:00pm. The monthly meetings are located at the Haddon Township Municipal Building, 135 Haddon Avenue, Haddon Township NJ 08108.

### Where does my water come from?

The drinking water Haddon Township processes comes from four (4) ground water wells which are located in Haddon Township. These wells range from approximately 400 to 450 feet deep in the Potomac-Raritan-Magothy aquifer. Haddon Township owns the land around these wells and restricts any activity that could pose contamination of the underground water source.

The total water diversion allocated for Haddon Township cannot exceed the base allocation of 369 million gallons per year. The N.J. Department of Environmental Protection requires Haddon Township to purchase any additional water from N.J. American Water Company. Most of the water received from N.J. American Water comes from the Potomac-Raritan-Magothy Aquifer; however, some of this ground water may be mixed with surface water received from the Delaware River Regional Water Treatment Plant in Cinnaminson NJ.

Our Water Treatment Plant consists of:

**Aeration:** The process of bringing air into contact with the water in order to remove dissolved gases which may be corrosive to our water supply.

**Sedimentation:** The process of removing suspended solids by gravity settling.

**Filtration:** Removal of the remaining suspended solids by passing the water through a sand media supported by layers of crushed gravel.

**Corrosion Control:** The addition of a zinc phosphate is added to control scaling and deposits that form in the water lines.

**Disinfection:** Chlorine is added to the water prior to entering the water distribution system.

Haddon Township's water storage facilities have a total capacity of 2 million gallons. There are currently (3) storage facilities throughout Haddon Township's water system. The storage facilities consist of a 1 million gallon elevated tower, 750,000 gallon standpipe, and 250,000 gallon standpipe.

### Waived Requirements

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 has been granted a waiver for asbestos, volatile organic chemicals, and synthetic organic chemicals.

### NJ American Water

To comply with state and federal regulations, New Jersey American Water issues an annual Consumer Confidence Report describing the quality of the drinking water supplied to Haddon Township.

If you have any questions about the drinking water that New Jersey American Water supplies, please call their Customer Service Center toll-free at 1-800-NJ-AM-WTR (1-800-652-6987).

This report can also be viewed on the New Jersey American Water Co. Web Site at address:

<http://amwater.com/njaw/water-quality/water-quality-reports/delaware>

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### **How do drinking water sources become polluted?**

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

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.

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 stormwater 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 stormwater 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 stormwater runoff, and septic systems.

**Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

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### **Violations**

E. Coli

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### **Lead Notice**

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. Haddon Township 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 is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

### **People with Special Health Concerns**

**Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemo-therapy, 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).**

However, for those served by a lead service line, flushing times may vary based on the length of the service line and plumbing configuration in your home. If your home is set back further from the street a longer flushing time may be needed. To conserve

water, other household water usage activities such as showering, washing clothes, and running the dishwasher are effective methods of flushing out water from a service line. To determine if you have a lead service line, contact us at 856-833-6260.

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### Facts About Water Usage

The **water meter** is an important part of your water service. It measures the exact amount of water you use, and its readings serve as the basis for your water consumption charge.

These readings also allow us to compare total water use registered by all meters versus total water pumped from the wells. Variations in these figures could indicate underground leaks and unaccounted water usage.

You are billed for water consumption on a quarterly basis. The bill will reflect the previous three months of consumption and will include a quarterly service charge based on the size of your meter.

Have you ever wondered how much water you use in the appliances around your home? The following list reflects the average daily water use of certain appliances and fixtures within the home.

Washing Machine	25-50 gallons
Bathtub	25-35 gallons
Dishwasher	15-30 gallons
Toilet	4-6 gallons
Shower	3-5 gallons (per minute)
Sink Faucet	2-3 gallons (per minute)
Outside Faucet	3-5 gallons (per minute)

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### Water Conservation Tips

- Fix leaking faucets & toilets: A single dripping faucet can waste hundreds or thousands of dollars per year
  - 50-70% of household water is used outdoors on average. Water lawns wisely & turn off the hose when washing the car
  - Install low flow shower heads
  - Turn off faucet when brushing your teeth
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### Security

In light of the events of the past years and in response to the State's Domestic Security Preparedness Act, we have reviewed the security of our facilities and our operations. We will continue to review these elements of our system and remain observant of our surroundings. We ask that all our customers help us protect our water resources which

are the heart of our community, our way of life, and our children's future.

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### Training and Safety

Haddon Township has developed and implemented a vulnerability assessment of our water system. Once the vulnerability assessment was submitted to the required government agencies, Haddon Township completed and submitted an Emergency Response Plan.

New requirement implemented by NJDEP will enhance supervisor and employee training.

Haddon Township strongly encourages our employees to attend various classes and seminars on water system operations. All licensed water operational personnel are required to continue training under the NJ Safe Drinking Water Act.

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### Source Water Assessments

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 <http://www.nj.gov/dep/watersupply/swap/index.html>, or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550 or [watersupply@dep.nj.gov](mailto:watersupply@dep.nj.gov). The table provides the number of wells that have either a high (H), medium (M), or low (L) susceptibility rating for each of eight contaminant categories.

If a water 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, the DEP may change existing monitoring schedules based upon susceptibility ratings.

**Pathogens:** Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.

**Nutrients:** Compounds, minerals and elements (both naturally occurring and man-made) that aid plant growth. Examples include nitrogen and phosphorus.

**Pesticides:** Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlorodane.

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

**Volatile Organic Compounds:** Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.

**Inorganics:** Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.

**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. Dis-infection byproducts are formed when the disinfectants used to kill pathogens (usually chlorine) react with dissolved organic material (leaves, etc.) in surface water.

Sources	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radionuclides			Radon			Disinfection Byproduct Precursors				
	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 - 5			5			5			5			5		5			5			5			5			5

### Frequently Asked Questions:

Drinking water often looks cloudy when first taken from a faucet and then it clears up. Why is that?

The cloudy water is caused by tiny air bubbles in the water similar to the gas bubbles in beer and carbonated soft drinks. After a while, the bubbles rise to the top and dissipate. This type of cloudiness occurs more often in the winter when the drinking water is cold. Cloudy water can also occur if an aerator is clogged.

- Does drinking water contain calories, fat, sugar, caffeine, or cholesterol?  
No!
- Should I be concerned about the chlorine in the water I use for bathing or showering?  
No!

Why does my water have a brownish color?

Iron in water is a secondary standard based on unpleasant taste of the water and staining of laundry. Iron is an essential nutrient and is a naturally occurring element in soil, groundwater, and some surface waters. During flushing of the water system, you may notice a discoloration in the water which may be attributed to iron.

There are two reasons: (1) it will not be absorbed into the skin and get into your body; and (2) the amount of chlorine in the water is too low to harm the skin itself. There are some people, however, who seem to be allergic to chlorine and related compounds. This has been a problem in swimming pools. Whether this problem is caused by chlorine or chlorine reaction products is not known. If you have any trouble in swimming pools, remember that the amount of chlorine in swimming pool water is much greater than in tap water.

## Definitions

<b>ppm</b>	<b>Parts Per Million:</b> equivalent of one second in 12 days	<b>MCLG</b>	<b>Maximum Contaminant Level Goal:</b> 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 disinfectant to control microbial contamination.
<b>ppb</b>	<b>Parts Per Billion:</b> equivalent of one second in 32 years		
<b>NA</b>	<b>Not Applicable</b>		
<b>RUL</b>	<b>Recommended Upper Limit</b>		
<b>ND</b>	<b>Not Detected</b>	<b>AL</b>	<b>Action Level</b> The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
<b>LRAA</b>	<b>Locational Running Annual Average</b>		
<b>MCL</b>	<b>Maximum Contaminant Level:</b> The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.	<b>TT</b>	<b>Treatment Technique:</b> A required process intended to reduce the level of a contaminant in drinking water.

**Primary Standards:** Federal drinking water regulations for substances that are health-related. Water suppliers must meet all primary drinking water standards.

**Secondary Standards:** Federal drinking water measurements for substances that do not have an impact on health. These reflect aesthetic qualities such as taste, odor and appearance. Secondary standards are recommendations, not mandates.

2019 Water Quality Results					
Radioactive Contaminants	MCLG	MCL	Level Detected	Violation	Likely Source
Combined Radium 226 & 228 Test Results Year 2017	0 pCi/L	5 pCi/L	1.5	N	Erosion of natural deposits
Alpha Emitters <sup>+</sup> Test Results Year 2018	0 pCi/L	15 pCi/L	Range: 3.78-4.8 Highest LRAA: 5.1	N	Erosion of natural deposits
Copper & Lead	MCLG	AL	Level Detected	Violation	Likely Source
Copper Test Results Year 2018	1.3 ppm	1.3 ppm	90th Percentile: 0.401 Samples > AL: 0	N	Corrosion of household plumbing systems and erosion of natural deposits
Lead Test Results Year 2018	0 ppb	15 ppb	90th Percentile: 3.4 Samples > AL: 0	N	Corrosion of household plumbing systems and erosion of natural deposits
Inorganics	MCLG	MCL	Level Detected	Violation	Likely Source
Barium <sup>+</sup> Test Results Year 2017	2 ppm	2 ppm	Range: ND-0.1 Highest: 0.1	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nickel <sup>+</sup> Test Results Year 2019	n/a	n/a	Range: ND-64 Highest: 64	N	Erosion of natural deposits
Nitrate <sup>+</sup> Test Results Year 2019	10 ppm	10 ppm	Range: ND-1.62 Highest: 1.62	N	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits
Regulated Disinfectants		RUL	Level Detected	Violation	Likely Source
Chlorine		4.0 ppm	Range: ppm Highest: ppm	N	Treatment process

Volatile Organic Compounds / Disinfection By-products	MCLG	MCL	Level Detected	Violation	Likely Source
HAA5 Haloacetic Acids Test Results Year 2019	n/a	60 ppb	Range: 1.05-14.3 Highest LRAA: 5.0	N	Byproduct of drinking water disinfection
TTHM Total Trihalomethanes Test Results Year 2019	n/a	80 ppb	Range: 0-4.2 Highest LRAA: 4.0	N	Byproduct of drinking water disinfection
HAA5 Haloacetic Acids <sup>+</sup> Test Results Year 2019	n/a	60 ppb	Range: 0-22.8 Highest LRAA: 12.0	N	Byproduct of drinking water disinfection
TTHM Total Trihalomethanes <sup>+</sup> Test Results Year 2019	n/a	80 ppb	Range: 1.4-45.8 Highest LRAA: 34.0	N	Byproduct of drinking water disinfection
Secondary Contaminants		RUL	Level Found	Violation	Likely Source
Iron Test Results Year 2019		0.3 ppm	Highest: ND	N	Erosion of natural deposits
Chloride Test Results Year 2017		250 ppm	Highest: 9.1 ppm	N	Erosion of natural deposits
Sodium Test Results Year 2017		50 ppm	Highest: 3.54 ppm	N	Naturally present in the environment
pH Test Results Year 2019		6.5-8.5 Units	Highest: 7.2	N	Naturally present in the environment
Sulfate Test Results Year 2017		250 ppm	Highest: 5.1 ppm	N	Erosion from natural deposits; Industrial wastes
Hardness, Carbonate Test Results Year 2019		250 ppm	Highest: 119 ppm	N	Naturally present in the environment
Total Dissolved Solids (TDS) Test Results Year 2017		500 ppm	Highest: 125 ppm	N	Erosion from natural deposits

Microbiologicals-Revised Total Coliform Rule (RTCR)	Number Required	Number Completed	Corrective Actions Required	Corrective Actions Completed	
Level 1 Assessment - Total Coliform	120	165	0	0	
Total coliform bacteria are generally not harmful themselves. Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present.					
Turbidity	MCLG	MCL	Level Detected	Violation	Likely Source
Turbidity <sup>+</sup> Test Results Year 2018	n/a	TT=1 NTU TT=95% <0.3 NTU	Range: 0.04-0.08 Highest: 0.08 % > 0.3: 100%	N	Soil Runoff
Treatment Byproducts Precursor Removal	MCLG	MCL	Level Detected	Violation	Likely Source
Total Organic Carbon (TOC) <sup>+</sup>	n/a	TT ≥ 35% Removal	Range: 41%-69% Highest: 69%	N	Naturally present in the environment
Ratio of Actual/Required TOC Removal <sup>+</sup>	n/a	TT: RAA ≥ 1.0	Range: 1.16-1.96 Highest: 1.96	N	Naturally present in the environment
<sup>+</sup> Results provided from NJAW Western System (NJ0327001)					

## Water-Quality Footnotes:

1. Haddon Township is required by the NJDEP to test for a minimum of (10) Coliform Bacteria per month. A new revised total coliform plan has been developed per NJDEP regulations designating selective sampling sites throughout Haddon Township's water distribution system. A total of 165 Coliform bacteria samples were tested by our certified lab in 2019. All coliform samples tested negative.
2. Haddon Township tested Thirty (30) lead and copper samples at selective locations throughout the Haddon Township water distribution system in 2018. Haddon Township met the Action Level which is set at the 90th percentile of the sample pool. The next round of sampling for lead and copper will be in 2021.
3. Haddon Township does not add fluoride to the Water Supply. Parents of young children may want to consult with their dentist about their needs for Fluoride treatments.
4. Haddon Township was required to test for (1) set of Radionuclide compounds in 2017 at the water plant point of entry to the water system. The test results were below the limit set by the New Jersey DEP. The next round of sampling will be in 2020.
5. Haddon Township is required to test for one nitrate annually. The results were ND (non detected) for Nitrate.
6. Haddon Township is required by NJDEP to continue testing for Disinfectant Byproduct Compounds which were tested in 2018.
7. Haddon Township is required by the USEPA to test for a series of Unregulated Contaminants known as UCMR4. The analysis is sampled at various locations throughout the water system. The results will be posted on the EPA web site and submitted to NJDEP.
8. Haddon Township tested a full scan of volatile organic compounds in 2017. All results were non-detected. The next round of sampling will be in 2020.
9. Haddon Township was required to take one sample for Asbestos in the water system in 2013. The result of the analysis was non-detected.
10. Haddon Township was issued a waiver for Pesticides and Synthetic Organic Compounds for the 2016-2018 sampling cycle. The waiver was granted from information submitted to NJDEP on potential health risk assessment of these contaminants. NJDEP is in the process of review to determine a new updated waiver for these compounds.

### A Guide to Healthy Habits for Cleaner Water

**P**ollution 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.



# Solutions to Stormwater Pollution

## Easy Things You Can Do Every Day To Protect Our Water

**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.

**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.



Make sure you properly store or discard any unused portions.

**Haddon Township Water Dept.**  
**504 Oneida Avenue**  
**Haddon Township, NJ 08108**

PRSR STD  
U.S. Postage  
**PAID**  
Bellmawr, NJ 08031  
Permit No. 1138

- 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 un-wrapped in a toilet.
  - Never discard pet waste in a storm drain.

### **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.



### **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.



### **Contact information**

For more information on stormwater related topics, visit [www.njstormwater.org](http://www.njstormwater.org) or [www.nonpointsource.org](http://www.nonpointsource.org)

Additional information is also available at U. S. Environmental Protection Agency Web sites [www.epa.gov/npdes/stormwater](http://www.epa.gov/npdes/stormwater) or [www.epa.gov/nps](http://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.cleanwaternj.org](http://www.cleanwaternj.org)

