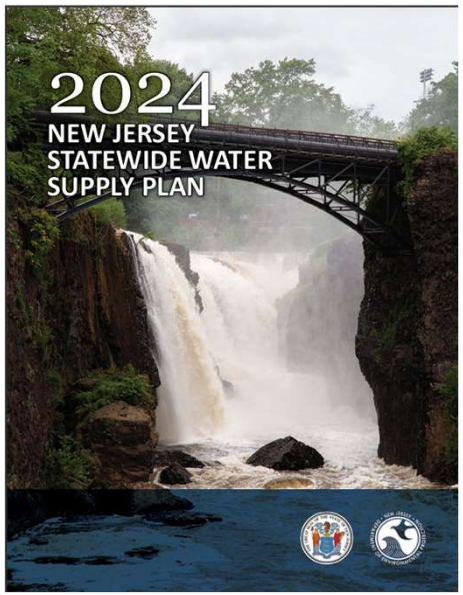
WATER RESOURCE MANAGEMENT

Drinking Water "101"

ANJEC Webinar June 9, 2026

How does NJDEP Oversee Water Supply?

Quantity



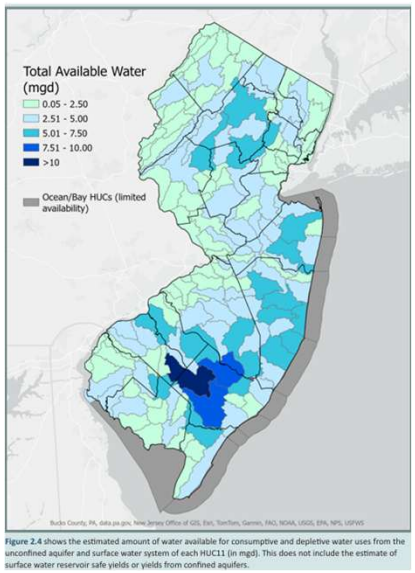
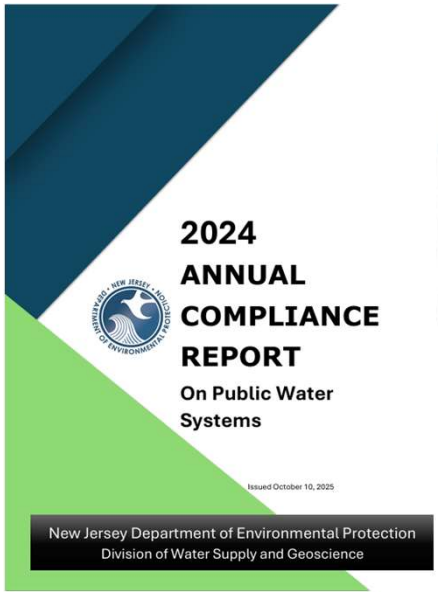
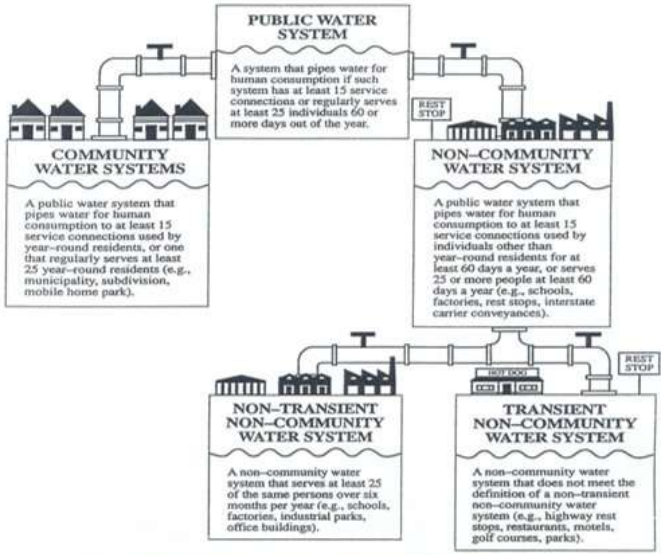


Figure 2.4 shows the estimated amount of water available for consumptive and depletive water uses from the unconfined aquifer and surface water system of each HUC11 (in mgd). This does not include the estimate of surface water reservoir safe yields or yields from confined aquifers.



Quality

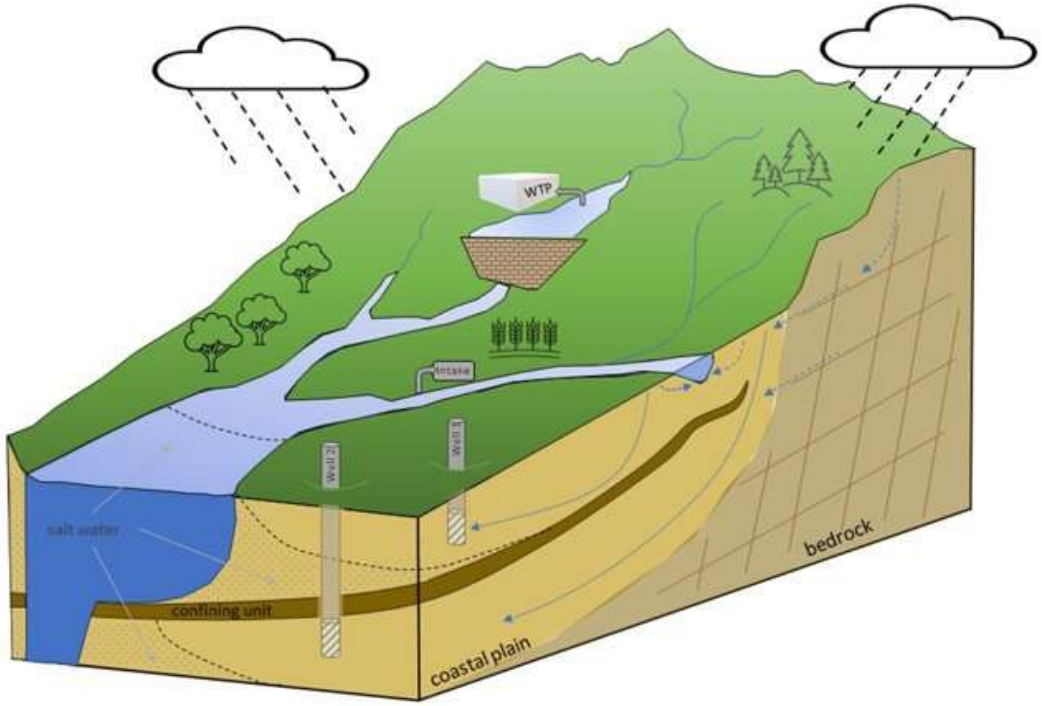


From: Public Notification Handbook for Public Water Systems, USEPA Office of Water, USEPA Publication 570/9-89-002 September 1989

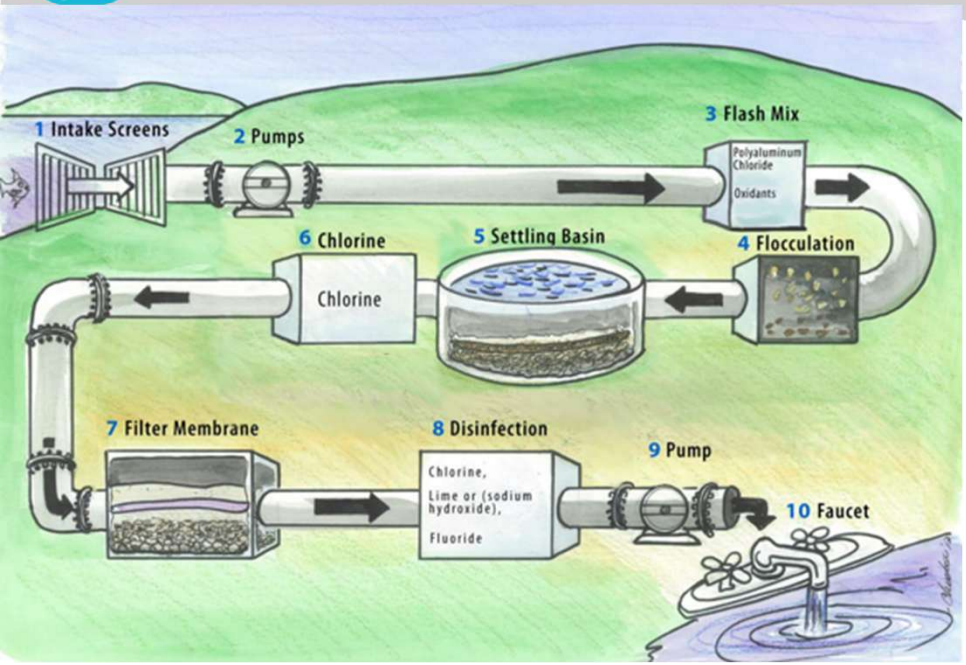
Our Mission Statement

"The Division of Water Supply & Geoscience (DWSG) works to ensure New Jersey's water supply is adequate, reliable, safe, and available for the future, based on sound science."

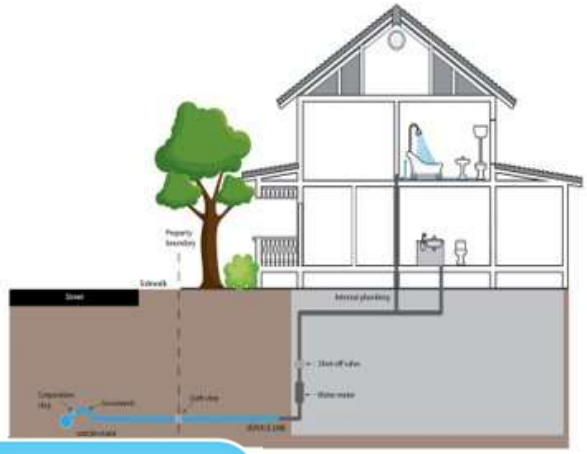
Where Does My Water Come From?

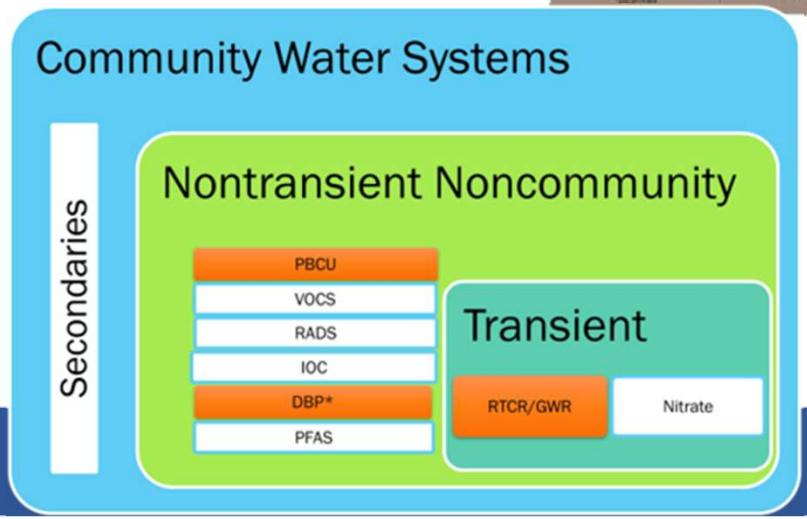


For Public Water System Customers



- Monitoring requirements for contaminants based on health risk, population, source water type.
- Public Notification issued based on contaminant type, and health risks.





Regulated contaminants in Drinking Water

Federal and NJ State Primary and Secondary Drinking Water Standards as of June 2020

Volatile Organic Compounds

Contaminants	Maximum Contaminant Levels [MCL] [µg/l or ppb]
Benzene	1* (5)
Carbon Tetrachloride	2* (5)
Chlorobenzene	50* (100)
1,2-Dichlorobenzene	600
1,3-Dichlorobenzene	600*
1,4-Dichlorobenzene	75
1,1-Dichloroethane	50*
1,2-Dichloroethane	2* (5)
1,1-Dichloroethylene	2* (7)
cis-1,2-Dichloroethylene	70
trans-1,2-Dichloroethylene	100
1,2-Dichloropropane	5
Ethylbenzene	700
Methyl tertiary Butyl Ether	70*
Methylene Chloride	3*
Naphthalene	300*
Styrene	100
1,1,2,2-Tetrachloroethane	1*
Tetrachloroethylene	1* (5)
Toluene	1,000
1,2,4-Trichlorobenzene	9* (70)
1,1,1-Trichloroethane	30* (200)
1,1,2-Trichloroethane	3* (5)
Trichloroethylene	1* (5)
Vinyl Chloride	2
Xylenes [Total]	1,000* (10,000)

* N.J. MCL [A-280], (_) Federal standard, if applicable

Radionuclides

Contaminants	Maximum Contaminant Levels [MCL]
Combined radium 226/228	5 pCi/L
Gross alpha particles	15 pCi/L
Beta/photon emitters	4 mrem/year
Uranium	30 µg/L

Other Contaminants

Turbidity No more than 5% of the samples may exceed 0.3 NTU, nor any sample exceed 1 NTU.
Coliform bacteria standards are based on an MCL for E. coli, and uses E. coli and total coliforms to initiate a "find and fix" approach to address fecal contamination that could enter into the distribution system. It requires public water systems to perform assessments to identify sanitary defects and subsequently take action to correct them.

Inorganics

Contaminants	Maximum Contaminant Levels [MCL] [µg/l or ppb]
Antimony	6
Arsenic	5 *(10)
Asbestos	7 x 10^6 fibers/l >10 µm
Barium	2,000
Beryllium	4
Cadmium	5
Chromium	100
Copper	1,300**[AL]
Cyanide	200
Fluoride	4,000
Lead	15**[AL]
Mercury	2
Nickel	+
Nitrate [as nitrogen]	10,000
Nitrite	1,000
[combined nitrate/nitrite]	10,000
Selenium	50
Thallium	2

** An [AL] action level is not an MCL. It is a trigger point at which remedial action is to take place
+ No MCL – Monitoring Required
* N.J. MCL [A-280]

Disinfection Byproducts

Contaminants	Maximum Contaminant Levels [MCL] µg/L or ppb (as running annual averages per group)
Dichlorobromomethane	80 (TTHM)
Chlorodibromomethane	80 (TTHM)
Bromofrom	80 (TTHM)
Chloroform	80 (TTHM)
Monochloroacetic acid	60 (HAA5)
Dichloroacetic acid	60 (HAA5)
Trichloroacetic acid	60 (HAA5)
Bromoacetic acid	60 (HAA5)
Dibromoacetic acid	60 (HAA5)
Bromate	10
Chlorite	1,000

TTHM- Trihalomethanes
HAA5- Haloacetic Acids
Bromate (only for treatment plants using ozone)
Chlorite (only for treatment plants using chlorine dioxide), requires daily/follow-up monitoring, not annual

Synthetic Organic Compounds

Contaminants	Maximum Contaminant Levels [MCL] [µg/l or ppb]
Alachlor	2
Aldicarb	+
Aldicarb Sulfone	+
Aldicarb Sulfoxide	+
Atrazine	3
Benzo[a]pyrene	0.2
Carbofuran	40
Chlordane	0.5* (2)
Dalapon	200
Dibromochloropropane [DBCP]	0.2
Di[2-ethylhexyl]adipate	400
Di[2-ethylhexyl]phthalate	6
Dinoseb	7
Diquat	20
Endothall	100
Endrin	2
Ethylene dibromide [EDB]	0.05
Glyphosate	700
Heptachlor	0.4
Heptachlor Epoxide	0.2
Hexachlorobenzene	1
Hexachloroclyclopentadiene	50
Lindane (BHC-Gamma)	0.2
Methoxychlor	40
Oxamyl	200
PCBs	0.5
Pentachlorophenol	1
Perfluorononanoic Acid (PFNA)	0.013*
Perfluorooctanoic acid (PFOA)	0.014*
Perfluorooctane sulfonic acid (PFOS)	0.013*
Picloram	500
Simazine	4
Toxaphene	3
2,3,7,8—TCDD [Dioxin]	$3x10^{-5}$
2,4-D	70
2,4,5-TP [Silvex]	50
1,2,3-Trichloropropane (1,2,3-TCP)	0.030*

* N.J. MCL [A-280]
+No MCL – Monitoring Required
(_) Federal standard, if applicable
Per- and Polyfluoroalkyl Substances (such as PFNA) are considered to be Synthetic Organic Compounds due to their chemical makeup, however, their regulatory framework follows that of Volatile Organic Compounds

Secondary Standards

Physical Characteristics	Recommended Upper Limit or Optimum Range
Color	10 color units (standard cobalt scale)
pH	6.5 to 8.5 (optimum range)
Odor	3 Threshold odor number
Taste	No objectionable taste

Chemical Characteristics	Recommended Upper Limit [mg/l or ppm]
ABS/L.A.S. (Foaming Agents/Surfactants)	0.5
Aluminum	0.2
Chloride	250
Fluoride	2
Hardness (as $CaCO_3$)	250
Iron	0.3
Manganese	0.05
Silver	0.1
Sodium	50
Sulfate	250
Total Dissolved Solids (TDS)	500
Zinc	5

New Jersey Department of Environmental Protection

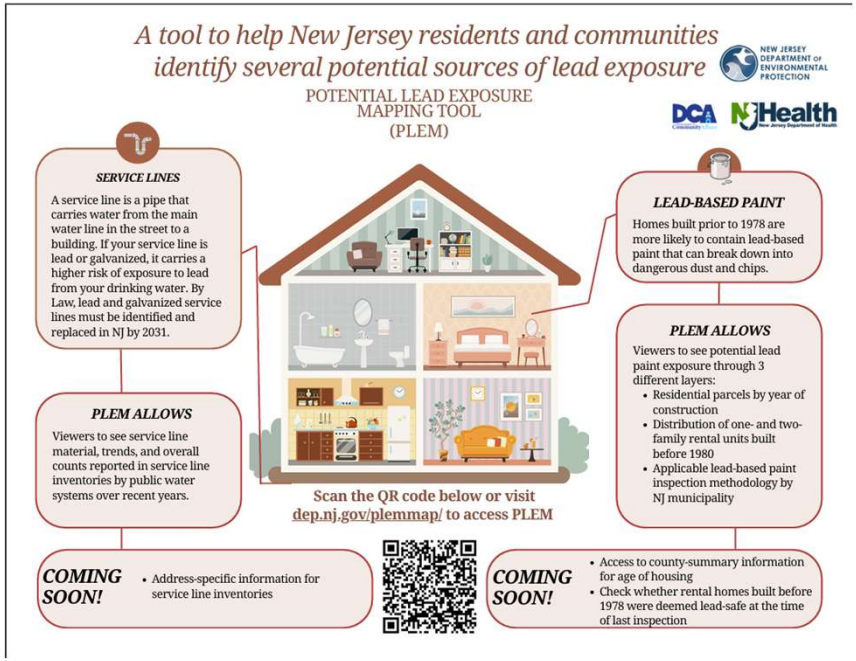
Division of Water Supply and Geoscience

Bureau of Safe Drinking Water

For a detailed explanation of the Safe Drinking Water Program, refer to the Federal Safe Drinking Water Act regulations [40 CFR Parts 141, 142, 143] and the New Jersey Safe Drinking Water regulations [N.J.A.C. 7:10-1 et seq.].

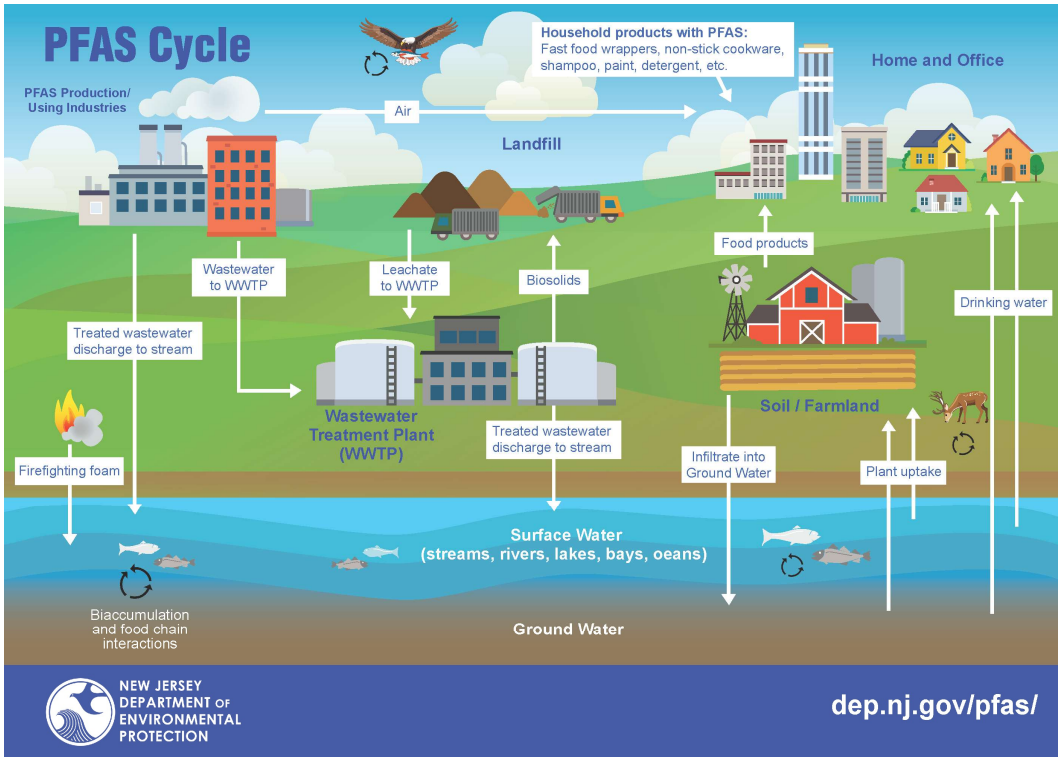
Lead in Drinking Water

- Lead service lines are the dominant source of lead in drinking water.
- Public water systems must monitor, and treat water to minimize risk of corrosion.
- Community Water systems must identify and replace all lead or galvanized service lines by 2031.
  - Replacement may have a cost share component for the homeowner, but the system must coordinate the replacement.
- Residents can use a number of strategies, such as flushing, using filters, removing other lead fixtures to reduce the risk of exposure.



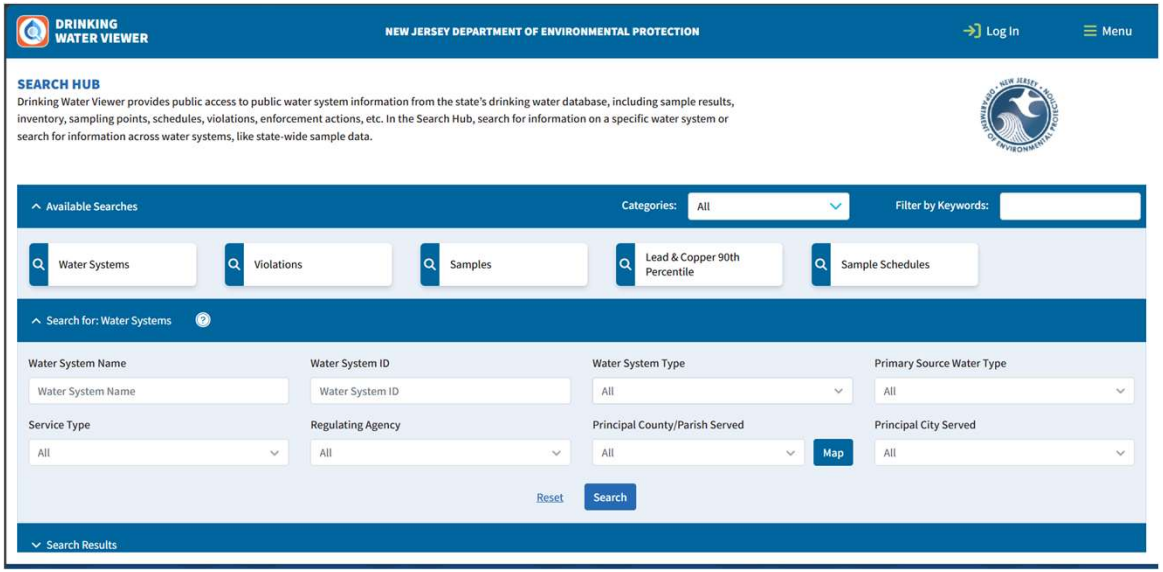
PFAS

- Often referred to as “Forever chemicals” due to environmental persistence.
- NJ was the first to establish a standard in drinking water (PFNA in 2019)
- In 2024, EPA established Federal standards for 6 PFAS.
- In 2026, EPA proposed extending compliance timeframe, and recission of 4 of the PFAS.
- NJDEP is evaluating EPA’s proposals.



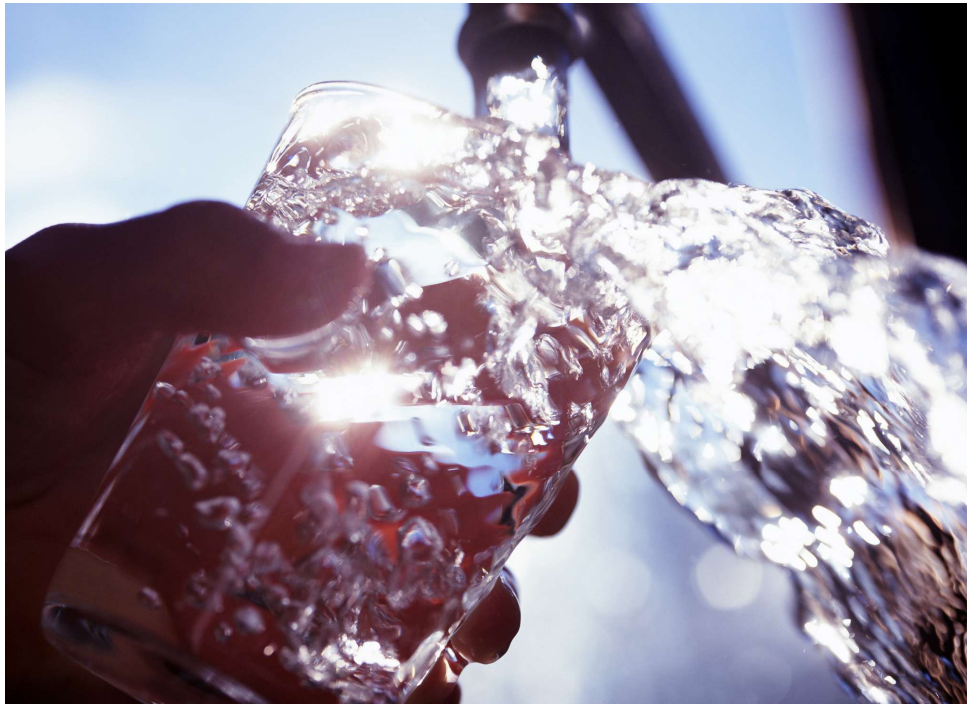
How can I Learn About My Water Quality?

- Consumer Confidence Reports
  - A.k.a. Annual Drinking Water Quality Reports
- NJ Drinking Water Viewer
  - Shows near-live monitoring requirements, analytical results, violations
- Public Notification
  - Direct delivery to customers required for water quality violations.
- Contact your water system directly for specific questions.



Should I buy an in-home water filter?

- NJDEP does not provide specific recommendations from individual manufacturers, but any filter should meet appropriate NSF standards.
- Using a filter as a customer of a public water system is a personal choice.
- Before purchasing, consider what objectives you want the filter to meet.
  - Simply addressing taste and odor issues?
  - Particular contaminants of concern?
  - What filter configuration do you want?
- **Maintain the treatment device in accordance with manufacturer's recommendations**



Considerations for Private Well Owners

You are your own "water company"	• You are responsible for your well's maintenance, testing.
Private Well Testing Act	• Must be conducted during real estate transactions, or once every five years for leased properties
Only hire properly licensed individuals for work on the well or pump	• NJDEP licenses well drillers and pump installers for technical expertise

Private Well Sampling Guidance

At least one time per year:

- Sample for Total Coliform bacteria
- Nitrate

At least once every five years:

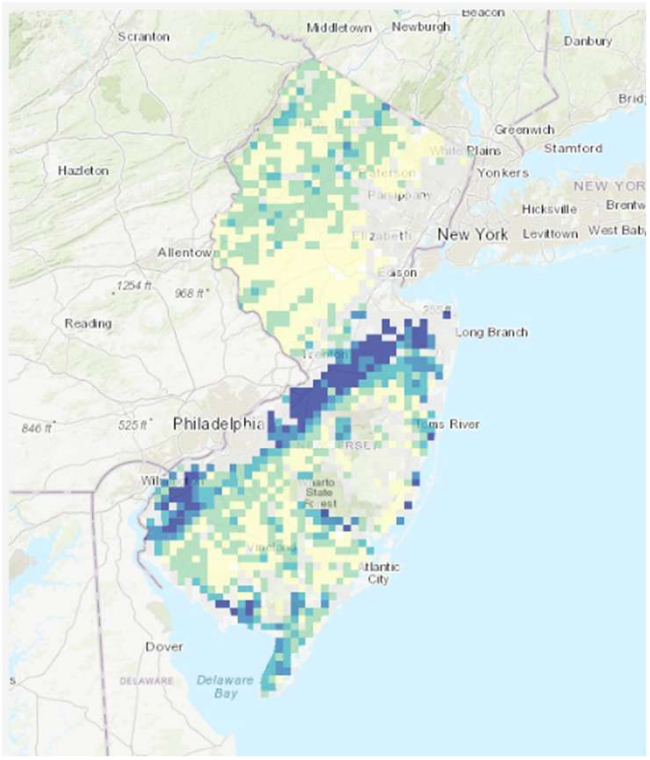
- Volatile Organic Compounds
- Lead
- Synthetic Organic Compounds
- PFAS
- Iron
- Manganese

At least once:

- Arsenic*
- Mercury
- Gross Alpha
- Uranium

What if my well exceeds a standard?

- Contact your local/county health department.
- Funding may be available if certain criteria are met
  - NJ Spill Fund
  - New Jersey Housing and Mortgage Finance Agency
- Consider what treatment may be appropriate given water quality conditions.



Useful Links

For public water system customers

- Violations Reports
- Drinking Water Viewer
  - User Guide
- Lead in Drinking Water
- PFAS
- NJ Statewide Water Supply Plan
- NSF Certified Treatment Devices

For Private Well Owners

- Private Well Testing, Treatment Information
- Well Driller and Pump Installer Information
- Spill Fund Information
- NJHMFA Potable Water Loan Program
- Local Health Departments

Contact

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