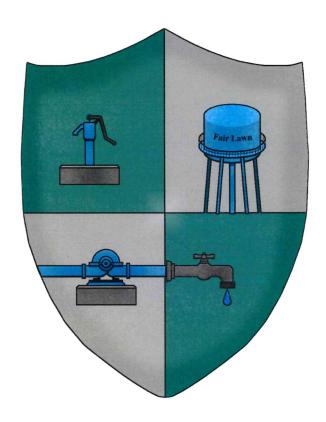
Fair Lawn Water Department

"Shielding you since the 1920s."



Report 2023

Message from the Operator:

Dear Customer:

Here is your 2023 Water Quality Report. In it you will find sample results, infrastructure improvements, and future plans.

As you know, our mission is to provide safe drinking water. We are very attentive in this, carefully contributing our experience, skills, credentials, and overall hard work.

These attributes serve you well, and you can be confident in your water. Still, we are required to evaluate our data annually.

We did, and the evaluation is as usual: Mission accomplished.

Please enjoy the report below.

Yours truly,

John Williams
Licensed Water Operator of Record
201-794-5374

BOROUGH OF FAIR LAWN

Mayor: Gail Rottenstrich

Deputy Mayor: Cristina Cutrone

Deputy Mayor of Community Affairs: Josh Reinitz

Council Member: Kris Krause

Council Member: Nathalie Salinas

www.fairlawn.org





Your water is safe to drink. Here's how you know:

We gathered 1,177 samples in 2023. These included our raw and finished water. The results met the safety standards required by the Safe Drinking Water Act (SDWA).

The SDWA is a federal and state law which ensures public health and safety in drinking water supplies. It is written by the US Environmental Protection Agency and enforced by the NJ Department of Environmental Protection. It requires us to issue an annual report. The purpose is to share how well we are doing.

You can also view this report on Fair Lawn's website:

www.fairlawn.org.

If you have any questions about your water, please call us at (201) 794-5374.

You may also call the EPA safe drinking water hotline at (800) 426-4791 or find it on EPA's website: www.epa.gov/safewater/hfacts

Where is your water from?

Fair Lawn has 16 wells, sunk about 400 feet into the New Brunswick Aquifer. On average, the production wells provide fifty-five percent of the Borough's water.

Also, we supplement your supply with the Passaic Valley Water Commission (PVWC) and Veolia interconnections. About thirty-five percent of our water comes from the PVWC, which sources are the Pompton and Passaic Rivers. About ten percent of our water comes from Veolia, which sources are the Oradell and Woodcliff Lake reservoirs in New Jersey and Lake Tappan and Lake Deforest reservoirs in New York. Through a vast regional network of interconnected pipelines, we receive water from Wanaque, Monksville and Boonton reservoirs.

How do we operate?

We operate 24/7, maintaining 4 pumping stations, 4 chlorination facilities, 2 packed column VOC treatment facilities, and 1 GAC facility. Our combined treatment capacity of 4 million gallons per day (mgd), and our combined pumping capacity is 17.6 mgd. Our distribution system contains 105 miles of distribution main, 1200 fire hydrants, and 4 storage tanks. Its combined storage capacity is 4.5 million gallons. Average daily water consumption is 3.6 million gallons per day, with peak day demands as high as 6.3 million gallons per day.

How did we improve last year?

We will explain below, site by site.

Starting with the Cadmus facility, we replaced three pumps and one pipe set. We also rehabilitated Tank #1, inspected the column tower, and improved our sequestrant injection.

At our wells, we inspected and resealed them all. We also mechanically improved four.

In our distribution system, we digitally located 3,000 valves and inspected 400. We flushed the piping grid, both multi-directionally and unidirectionally. We repaired/replaced 123 meters, 22 hydants, 11 valves, 15 main pipes, and 95 service pipes.

Looking ahead, we will install treatment facilities at our inactive wells. Once their safety is established, we will reactivate them.

Bottled water or tap?

Both are safe to drink. Still, let's compare and contrast.

To compare, both use rivers, lakes, reservoirs, springs and wells as their sources. They have impurities such as minerals, salts, metals, viruses, bacteria, organics, and other material. These impurities originate from natural, animal, or human activity. Their presence, if not removed, might create a health risk. Thus, they must be removed from both bottled water and tap. Simply, both bottled water and tap are safe.

To contrast, they are regulated differently. The Food and Drug Administration (FDA) regulates bottled water, while the USEPA and NJDEP regulate tap water.

These contaminants might be present in source water:

(Be assured we do not supply plain source water.)

- Microbials; from sewage treatment plants, septic systems, agricultural livestock, and wildlife
- Inorganics; from natural sources, runoff, industrial or domestic wastewater, oil and gas production, mining, and farming
- Pesticides and herbicides; from agriculture, runoff, and residences
- Organics; from industrial processes, petroleum production, gas stations, runoff, and septic systems
- Others; from natural origins, oil and gas production, and mining

Water Quality Data Table

These primary (health-related) contaminants were detected in your drinking water:

		EDA MICI C	EDA MCI	NII NACI	Veolia	DV blob out	Fi blabasa	D	* !!		
		EPA MCLG	EPA MCL	NJ MCL	highest	PV highest	FL highest	Range	Typical source Erosion of natural		
l	Arsenic (ug/L)	0.0	6.0	5.0	ND	ND	1.4	ND-1.4	deposits		
									Erosion of natural		
	Barium (mg/L)	2.0	2.0	2.0	0.1	0.0	0.1	ND-0.1	deposits		
	Chromium (ug/L)	100.0	100.0	100.0	0.8	ND	0.6	ND-0.8	natural or industrial		
	Mercury (ug/L)	2.0	2.0	2.0	ND	ND	0.4	ND-0.4	natural or industrial		
	Lead (ug/L) 90th percentile	0.0	15.0	15.0	NA NA	NA NA	4.3 0.0	ND-4.3	household plumbing		
	Copper (mg/L) 90th percentile	0.0	1.3	1.3	NA NA	NA NA	0.2 0.1	0.0-0.2			
	Nickel (ug/L)	NA	100.0	100.0	ND	2.6	5.0	ND-5.0	Erosion of natural deposits		
	Nitrate (ug/L)	10.0	10.0	10.0	2.3	1.8	3.1	1.8-3.1	Fertilizers, natural deposits		
physical	Turbidity (ntu)	NA	1.0	1.0	0.2	0.7	NA	ND-0.7	natural silt		
microbial		0% monthly samples (TT)	5% monthly samples (TT)	5% monthly samples (TT)	NA	NA	6% Aug 7% Sep	0% -7%	intestinal tracts of animals		
lides	Gross alpha (pCi/l) Uranium (30 ug/L) Radium 226/228 (pCi/l)	0.0	15.0	15.0	ND	ND	2.3	ND-2.3			
ionuc	Uranium (30 ug/L)	0.0	30.0	30.0	ND	ND	1.3	ND-1.3	Erosion of natural deposits		
rad	Radium 226/228 (pCi/l)	0.0	5.0	5.0	ND	1.5	0.4	ND-1.5			
voc	Toulene (ug/L)	1000.0	1000.0	1000.0	0.6	ND	ND	ND-0.6	industrial		
Disinfection byproducts ¹	Haloacetic acids (ug/L)	NA	60.0 60.0	60.0 60.0	NA	NA	47.7 29.5	7.8-47.7	organic precursors		
Disinf	Trihalomethanes (ug/L) LRAA	NA	80.0 80.0	80.0 80.0	NA	NA	112.0 39.4	17.1-112.0	organic precursors		
	PFOS (ng/L)	0.0	NA	13.0	4.0	7.0	ND	ND-7.0	manufacturing		
PFAS	PFOA (ng/L)	0.0	NA	14.0	10.4	10.0	4.4	ND-10.4	manufacturing		
Chlorine	Chlorine/Chloramines as Cl ₂ (mg/L)	4.0	4.0	4.0	NA	NA	3.3	0.0-3.3	Water disinfection.		

Footnotes:

^{1.} Compliance is based on locational running annual average. Health effects include cancer, anemia, and kidney/liver/nervous system problems.

Water Quality Data Table

These secondary (aesthetic-only) contaminants were detected in your drinking water:

	EPA or NJ		PV	FL	Combined			
	Guideline	Veolia highest	highest	range	range	Typical source		
Aluminum, mg/L	0.2	0.1	0.0	0.0-0.1	0.0-0.1	treatment process		
Chloride, mg/L	250	138	104	71-140	71-140	natural mineral, road salt		
Color, CU	10	3	2	ND-40	ND-40	natural mineral		
Hardness, mg/L	250	156	100	67-358	67-358	natural mineral		
Hardness, gpg	15	9	6	4-21	4-21	natural mineral		
Iron, mg/L	0.3	ND	ND	ND-ND	ND-ND	natural mineral		
Manganese, ug/L	50	ND	18	ND-0.1	ND-18	natural mineral		
Odor, TON	3	ND	14	ND-ND	ND-14	natural characteristics		
рН	6.5-8.5	8.2	8.2	6.6-8.6	6.6-8.6	treatment process		
Sodium, mg/L	50	75	81	39-71	39-81	natural mineral		
Sulfate, mg/L	250	12	59	ND-62	ND-62	natural mineral		
Zinc, mg/L	5.0	.58	.023	ND-0.6	ND-0.6	natural mineral		

Water quality table, explained:

Maximum Contaminate Level Goal (MCLG) – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

Maximum Contaminate Level (MCL) – The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Treatment Technique – A required process intended to reduce the level of a contaminant in drinking water.

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

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 <u>not</u> have an impact on health. These reflect aesthetic qualities such as taste, odor, and appearance. Secondary Standards are recommendations, not mandates.

Unregulated Contaminant Monitoring Rule (UCMR) - A contaminant with no set standards. Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

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 contaminates.

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

Key to Tables:

mg/l - milligrams per liter or parts per million.

TU - Turbidity Units

ug/l - micrograms per liter or parts per billion.

MFL - Million fibers per liter

pCi/l - Picocuries per liter.

CU - Color Unit

TON - Threshhold odor number

ND - not detected

NA – not applicable

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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791)

PFOA and **PFAS** explained:

Perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) are per- and polyfluoroalkyl substances (PFAS). They 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.

Fair Lawn operates and maintains a granular activated carbon (GAC) filter system which removes these contaminants from our wells. Thus, the water provided by the Borough sources meet the standards established by the USEPA and the NJDEP.

Additional Info:

The Safe Water Drinking Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals and synthetic organic chemicals (SOC). Our system received monitoring waivers for asbestos and SOC. The NJDEP issued the waivers after we conducted a vulnerability analyses. Este informe contiene información muy importante sobre su agua beber. Traduzcalo o hable con alguine que lo entienda bien.

Source Assessment:

The NJDEP has completed and issued the Source Water Assessment report and summary for this public water system, which is available at www.nj.gov/dep/watersupply/swap/index.html contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550. The Borough also augments our water supply from two other sources as defined on page one of this report. Additional information on these contributory suppliers can be found at the same NJDEP web page.

Susceptibility of 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 <u>potential</u> 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		Voc			Inorganics			Radio- nuclides			Radon			DBP precursors					
	Н	М	L	Н	М	L	Н	М	L	Н	М	L	Н	М	L	Н	М	Ĺ	Н	М	L	Н	М	L
Sources																								
Wells - 16		12	4	4	12			4	12	16			14	2		12	4		16				16	
GUDI - 0																								
Surface - 0																								

Terms:

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.

Health Facts:

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 Hotlien (1-800-426-4791).

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

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. Fair Lawn 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. Call us at 201-794-5374 to find out how to get your water tested for lead. Testing is essential because you cannot see, taste, or smell lead in your drinking water. Information on lead in drinking water is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead. Landlords must distribute this information 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 P.L. 2021, c. 82 (C.58:12A-12.4 et seq.).

We exceeded the 5% allowable total coliform positive samples in August and September. These triggered Level 1 and Level 2 assessments, respectively. The assessments were completed. Defects were found and corrected.

We also exceeded the recommended upper limit for sodium. For healthy individuals, the sodium intake from water is not important. Their dietary sodium is far more. However, individuals on a low-sodium diet should consult their doctor.

The State of NJ issued us waivers for SOC and Asbestos. This was based on determinations of unlikely vulnerabilities.

How Your Water Gets To You!

