

**Annual Drinking Water Quality Report**  
**Lyndhurst Water Department**  
**For the Year 2020**  
**Public Water System ID # NJ0232001**

**2019 Consumer Confidence Report (CCR)**  
**This Report Contains Important Information about Your Water**

Dear Customer

This report contains important information about your drinking water. The Township of Lyndhurst is pleased to provide you with important information about your drinking water. The Lyndhurst Water Department owns, operates and maintains all the water related equipment within the Township. We purchase our water from Passaic Valley Water Commission (PVWC). Both the Township of Lyndhurst and PVWC strive to provide you with water that meets or surpasses all health and safety standard set by the United States Environmental Protection Agency (EPA) and the New Jersey Department of Environmental Protection. (NJDEP).

In 2019, the Lyndhurst Water Department took 240 samples to insure the safety of the water delivered to your tap. All these samples were within NJDEP guidelines/state standards. The Lyndhurst Water Department also tested for iron, manganese, copper and lead and were well within safe drinking water standards.

The Lyndhurst Water Department continues to replace the water mains and service lines to your homes. This will meet and maintain State regulations with regard to copper and lead. Lyndhurst and PVWC regularly test water samples to be sure that your water meets the safety standards. PVWC also tests for several other substances as noted on the Water Quality Table. All the test results are on file with the NJDEP, the agency that monitors and regulates drinking water quality in our state. The EPA and NJDEP establish these regulations. They also require water suppliers to mail the Consumer Confidence Report (CCR) to customers on an annual basis. Please read it carefully and contact the Lyndhurst Health Department at 201-804-2499 or the Lyndhurst Water Department at 201-804-2493 if you have questions about your water, your water service or public meetings relative to water service. Or, you can call the EPA Safe Drinking Water Hotline at 800-426-4791. If you have any question about drinking water as it relates to your personal health, we suggest that you contact your health care provider.

**General Information**

Rivers, lakes, streams, ponds, reservoirs, springs and wells are sources for both tap water and bottled water. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals and in some cases, radioactive material, and picks 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 the result from urban storm water runoff, and residential uses.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Organic, chemical contaminants, including synthetic and volatile organic chemicals, which are by-products 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, the 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. However, the presence of a contaminant does not necessarily indicate that the water poses a health risk.

#### **Health and Educational Information**

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 providers. EPA/CDC guidelines on the appropriate means to lessen the risk of infections by cryptosporidium and other microbial contaminants are available from the EPAs Safe Drinking Water Hotline at 800-426-4791.

#### **Special Considerations Regarding Children, Pregnant Women, Nursing Mothers, and Others**

Children may receive a slightly higher amount of a contaminant present in the water than do adults, on a body weight basis, because they may drink a greater amount of water per pound of body weight than do adults. For this reason reproductive or developmental effects are used for calculating a drinking water standard, especially if these effects occur at lower levels than other health effects of concern. If there is insufficient toxicity information for a chemical (for example, lack of data on reproductive or developmental effects), an extra uncertainty factor may be incorporated into the calculation of the drinking water standard, thus making the standard more stringent, to account for the additional uncertainties regarding these effects. In the case of lead and nitrate, effects on infants and children are the health endpoints upon which the standard is based.

"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. [Lyndhurst 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>."

"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 [201-438-5478]."

#### **Sources of Supply**

The Lyndhurst water supply obtains its entire water supply from the Passaic Valley Water Commission (PVWC). Sources of supply include the Passaic River, and treated water that is supplied by the North Jersey District Water Supply Commission (NJDWSC). NJDWSC obtains water its supply from the Wanaque Reservoir.

#### **Treatment**

Water produced by the PVWC is treated at their water treatment plant in Little Falls. The NJDWSC supply is treated at their water treatment plant in Wanaque. The treatment at these plants includes pretreatment, sedimentation, filtration and disinfection.

The Township of Lyndhurst, PVWC and the NJDWSC Water Quality Tables below list all the drinking water contaminants that were detected during calendar year 2018. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from January 1, 2018 through December 31, 2018. The NJDEP requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, may be more than one year old.

## ADDITIONAL INFORMATION

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate monitoring requirements for asbestos, volatile organic chemicals and synthetic organic chemicals. Our system received monitoring waivers for asbestos and we are not required to monitor for synthetic organic chemicals.

**The MCL's listed in the following tables are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink two liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.**

**Table 1**  
**Lyndhurst Water Department - Water Quality Report**

### Microbiological Contaminants

Regulated Contaminant	Units	COMPLIANCE ACHIEVED	MCLG	MCL	Highest Level	Source of Contamination
Total Coliform Bacteria	NA	Yes	0	Not more than 1 positive sample per month	0*	Coliform are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present.

\*The Lyndhurst Water Department collects 20 routine total coliform samples per month. There were (2) positive samples for Total Coliform, but negative for E-Coli. All repeat samples were negative for Total Coliform and E-Coli. A level 1 Assessment was conducted.

### REGULATED DISINFECTANTS and DISINFECTION BYPRODUCTS

**Stage 2 Disinfection Byproducts, Note:** Stage 2 DBP compliance is based on the locational running average (LRAA) calculated at each monitoring location.

Regulated Contaminant	UNIT	COMPLIANCE ACHIEVED	LRAA Limit	Range Detected	Source of Contamination/ and Comments
Total Trihalomethanes (TTHM) Stage 1	PPB	Yes	80	33.875 - 52.75	Byproduct of water disinfection. / TTHM compliance is based on Locational Running Annual Average.
Haloacetic Acids (HAA5) Stage 1	PPB	Yes	60	20.6525 – 29.325	Byproduct of water disinfection. / HAA5 compliance is based on Locational Running Annual Average.

### Disinfectants

Regulated Contaminant	Units	COMPLIANCE ACHIEVED	MRDLG	MRDL	Highest Detected	Range Detected	Source of Contamination
Chlorine as CL2 (Running avg.)	PPM	Yes	4	4	1.68	.22 – 1.68	Chlorine is used as a drinking water disinfectant.

### Secondary Contaminants

Regulated Contaminant	Units	COMPLIANCE ACHIEVED	RUL	Highest Detected	Range Detected	Source of Contamination
Iron	PPM	Yes	.3	<0.2	NA	Erosion of natural deposits, discharge of drilling waste and discharge from metal refineries.
Manganese	PPM	Yes	0.05	<0.01	NA	Erosion of natural deposits.

### Lead and Copper: Lead and Copper, Triennial Sampling Schedule, Results below from 2016

Regulated Contaminant	Units	COMPLIANCE ACHIEVED	MCLG	Action Level	90 <sup>th</sup> Percentile Result	Source of Contamination
Copper	PPM	Yes	1.3	1.3	0.1367	Corrosion of household piping systems.
Lead	PPM	Yes	0	0.015	0.00519	Corrosion of household piping systems.

**Table 2**  
**Lyndhurst Water Department - Water Quality Report**  
**UCMR**  
**Unregulated Contaminant Monitoring Rule**

**Metals, Pesticides, Alcohols, and SVOCs**

Unregulated Contaminant	Units	Limits	Results	Source of Contamination
Germanium	PPB	.30	ND	<b>Germanium is not found as the free element in nature.</b> Germanium is found in germanite, argyrodite, and some zinc ores. It is also present in coal and its presence in coal insures reserves for many years.
Manganese	PPB	.40	3.6	Erosion of natural deposits

UnRegulated Contaminant		Units	Results	RDL	Source of Contamination
Chlorpyrifos		PPB	ND	.0283	Unregulated contaminants are those for which EPA requires monitoring but has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.
Dimethipin		PPB	ND	.189	
Ethoprp		PPB	ND	.0283	
Alpha-HCH (alpha-BHC)		PPB	ND	.00943	
Oxyfluorfen		PPB	ND	.0472	
Permethrin, Total		PPB	ND	.0377	
Profenophos		PPB	ND	.283	
Tebuconazole		PPB	ND	.189	
Tribufos		PPB	ND	.0660	
<i>Surrogate Recoveries</i>		<i>Units</i>	<i>Results</i>	<i>Limits</i>	
1,3-Dimethyl-2-Nitrobenzene		%	98.1	70-130	
<i>Surrogate Recoveries</i>		<i>Units</i>	<i>Results</i>	<i>Limits</i>	
Benzo(a)pyrene-d12(S)		%	114	70-130	
Triphenylphosphate		%	109	70-130	
<i>Parameter</i>		<i>Units</i>	<i>Result</i>	<i>RL</i>	
Butylated hydroxyanisole		PPM	<0.03	0.03	

(BHA)					
o-toluidine		PPM	<0.007	0.007	
Quinoline		PPM	<0.02	0.02	
2-propen-1-ol(allyl alcohol)		PPM)	<0.5	0.5	
1-butanol		PPM	<2.0	2.0	
2-methoxyethanol		PPM	<0.4	0.4	

### HAA's

Unregulated Contaminant	UNIT	Range Detected	Source of Contamination/ and Comments
HAA5 Group	PPB	13.7-35.1	Byproduct of water disinfection
HAA6br Group	PPB	5.9-11.5	Byproduct of water disinfection
HAA9 Group	PPB	19.1-45.2	Byproduct of water disinfection

PASSAIC VALLEY WATER COMMISSION (PVWC) PWS ID NJ1605002 - 2019 WATER QUALITY DATA

				Water Treatment Plant Results										
PRIMARY CONTAMINANTS	Compliance Achieved	MCLG	MCL	PVWC Little Falls WTP PWS ID NJ1605002	NJDWSC Wanaque WTP PWS ID NJ1613001	Jersey City MUA Jersey City WTP PWS ID NJ0906001	Newark Water Pequannock WTP PWS ID NJ0714001	TYPICAL SOURCE						
TURBIDITY AND TOTAL ORGANIC CARBON				Highest Result (Range of Results)										
Turbidity, NTU*	Yes for all but NJDWSC <sup>A</sup>	NA	TT = 1	0.34 (0.017 - 0.34)	2.1 <sup>A</sup> (0.09 average)	0.21 (0.054 - 0.21)	0.38 (0.01 - 0.38)	Soil runoff.						
	Yes	NA	TT = percentage of samples <0.3 NTU (min 95% required)	Lowest Monthly Percentage of Samples Meeting the Turbidity Limits										
<p><sup>A</sup>NJDWSC incurred a Combined Filter Effluent Turbidity violation in May 2019. There is nothing you need to do. You weren't being supplied with water from NJDWSC at the time of the turbidity violation. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.</p>														
<p>* Turbidity is a measure of the cloudiness of the water, and is monitored as an indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.</p>														
Total Organic Carbon, %	Yes	NA	TT = % removal; or removal ratio	Percent (%) Removal	Removal Ratio									
				58 - 100 (25 - 50 required)	1.1 (RAA) 1.0 - 1.3	1.08 (RAA) 1.0 - 1.3	NA	Naturally present in the environment.						
INORGANIC CONTAMINANTS				Highest Result (Range of Results)										
Arsenic, ppb	Yes	0	5	ND	ND	0.63	ND	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes						
Barium, ppm	Yes	2	2	Less than 0.10	0.0069	0.02	ND	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.						
Chromium, ppb	Yes	100	100	ND	ND	1	ND	Discharge from steel and pulp mills; erosion of natural deposits.						
Fluoride, ppm	Yes	4	4	0.050 (ND - 0.050)	ND	ND	ND	Erosion of natural deposits.						
Nickel, ppb	NA	NA	NA	2.53 (ND - 2.53)	ND	1.54	ND	Erosion of natural deposits.						
Nitrate, ppm	Yes	10	10	2.81 (ND - 2.81)	0.155	0.48 (0.14 - 0.48)	0.111	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.						
RADIOLOGICAL CONTAMINANTS				Highest Result										
Combined radium-226 + 228, pCi/L	Yes	0	5	ND (2014 Data)	ND (2014 Data)	0.14 (2014 Data)	1.5 (2017 Data)	Erosion of natural deposits.						

## WAIVER INFORMATION

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. A monitoring waiver for synthetic organic chemicals for the 2017-2019 monitoring period was granted to the Jersey City, Newark, and NJDWSC water systems. PVWC received a monitoring waiver for all of the synthetic organic contaminants except for Di(2-Ethylhexyl)Phthalate for the 2017-2019 monitoring period.

## SOURCE WATER ASSESSMENT

NJDEP has prepared Source Water Assessment reports and summaries for all public water systems. The Source Water Assessment for the PVWC system (PWS ID 1605002), NJDWSC system (PWS ID 1613001), Jersey City system (PWS ID 0906001), and Newark system (PWS ID 0714001) can be obtained by accessing NJDEP's source water assessment web site at <http://www.nj.gov/dep/watersupply/swap/index.html> or by contacting NJDEP's Bureau of Safe Drinking Water at 609-292-5550. If a system is rated highly susceptible for a contamination category, it does not mean a customer is – or will be – consuming contaminated water. The rating reflects the potential for contamination of a source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any of those contaminants are detected at frequencies and concentrations above allowable levels. The source water assessments performed on the intakes for each system list the following susceptibility ratings for a variety of contaminants that may be present in source waters:

Intake Susceptibility Ratings	Pathogens	Nutrients	Pesticides	Volatile Organic Compounds	Inorganic Contaminants	Radionuclides	Radon	Disinfection Byproduct Precursors
PVWC 4 Surface Water	4-High	4-High	1-Medium, 3-Low	4-Medium	4-High	4-Low	4-Low	4-High
NJDWSC 5 Surface Water	5-High	5-High	2-Medium, 3-Low	5-Medium	5-High	5-Low	5-Low	5-High
Jersey City 1 Surface Water	High	Medium	Low	Medium	Medium	Low	Low	High
Newark 1 Surface Water	High	Low	Low	Low	High	Low	Low	High

## CRYPTOSPORIDIUM

*Cryptosporidium* is a microbial pathogen found in surface water throughout the United States. Although filtration removes *Cryptosporidium*, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water. Current test methods do not allow us to determine if the organisms are viable or capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may spread through means other than drinking water.

PVWC conducted special source water *Cryptosporidium* and *Giardia* monitoring in 2019. The data collected in 2019 is presented in the table below.

## SOURCE WATER PATHOGEN MONITORING

Contaminant	PVWC Plant Intake	Typical Source
<i>Cryptosporidium</i> , Oocysts/L	0 - 0.57	Microbial pathogens found in surface waters throughout the United States.
<i>Giardia</i> , Cysts/L	0 - 1.23	

## UNREGULATED CONTAMINANTS FOR WHICH EPA REQUIRES MONITORING

Contaminant	PVWC Intake Average (Range of Results)	PVWC Little Falls WTP Average (Range of Results)	Jersey City Jersey City WTP (Range of Results)	Newark Pequannock Intake (Range of Results)	Newark Pequannock WTP (Range of Results)
Bromide, ppb	44 (33 - 69)				
Total Organic Carbon, mg/L	6 (4 - 7)			(3 - 4)	
Manganese (Total), ppb		8 (2 - 14)	(0.89 - 2.17)		(3 - 53)

Unregulated contaminants are those for which EPA requires monitoring but has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

## SECONDARY PARAMETERS – TREATMENT PLANT EFFLUENT

Contaminant	N.J. Recommended Upper Limit (RUL)	PVWC Little Falls WTP PWSID NJ1605002		NJDWSC Wanaque WTP PWSID NJ1613001		Jersey City Jersey City WTP PWSID NJ0906001		Newark Pequannock WTP PWS ID NJ0714001	
		Range of Results	RUL Achieved	Result	RUL Achieved	Range of Results	RUL Achieved	Result	RUL Achieved
ABS/LAS, ppb	500	ND - 60	Yes	ND	Yes	ND	Yes	ND (2017)^	Yes

Alkalinity, ppm	NA	28 - 80	NA	40	NA	30 - 59	NA	27	NA
Aluminum, ppb	200	20 - 42	Yes	28	Yes	ND - 60	Yes	83 (2017)^	Yes
Chloride, ppm	250	48 - 161	Yes	44	Yes	64 - 142	Yes	37	Yes
Color, CU	10	Less than 5	Yes	2	Yes	ND	Yes	2	Yes
Hardness (as CaCO <sub>3</sub> ), ppm	250	58 - 172	Yes	43	Yes	62 - 93	Yes	46	Yes
Hardness (as CaCO <sub>3</sub> ), grains/gallon	15	3 - 10	Yes	3	Yes	4 - 5	Yes	3	Yes
Iron, ppb	300	Less than 100	Yes	17	Yes	ND - 40	Yes	10	Yes
Manganese, ppb	50	ND - 211	No	18	Yes	ND	Yes	39	Yes
Odor, TON	3	2 - 9	No	ND	Yes	ND	Yes	1 (2017)^	Yes
pH	6.5 to 8.5 (optimum range)	8.1 - 8.4	Yes	8.09	Yes	6.99 – 7.6	Yes	7.28	Yes
Sodium, ppm	50	28 - 115	No*	23	Yes	35 - 74	No*	29	Yes
Sulfate, ppm	250	9 - 82	Yes	6	Yes	8	Yes	10	Yes
Total Dissolved Solids, ppm	500	190 - 561	No	118	Yes	149 - 300	Yes	105	Yes
Zinc, ppb	5,000	Less than 40	Yes	10	Yes	ND - 50	Yes	ND	Yes

<sup>^</sup>2017 Data.

At times during 2019 the level of manganese leaving the LFWTP was higher than the 50 ppb Recommended Upper Limit. The Recommended Upper Limit (RUL) for manganese is based on staining of laundry. Manganese is an essential nutrient, and toxicity is not expected from high levels which would be encountered in drinking water.

#### \* PVWC AND JERSEY CITY FINISHED WATER EXCEEDS SODIUM RUL

PVWC and Jersey City's finished water was above New Jersey's Recommended Upper Limit (RUL) of 50 ppm for sodium in 2019. Possible sources of sodium include natural soil runoff, roadway salt runoff, upstream wastewater treatment plants, and a contribution coming from chemicals used in the water treatment process. For healthy individuals the sodium intake from water is not important, because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be a concern to individuals on a sodium-restricted diet. If you have any concerns please contact your health care provider.

#### ADDITIONAL PVWC TREATMENT PLANT MONITORING RESULTS

Detected Contaminants, ppb	Little Falls WTP Effluent Range of Results	
Chlorate	(35 - 413)	Test results presented in this table were collected in 2019 as part of a study to determine the general occurrence of these contaminants. PVWC continues to participate in, and support these types of regulatory and research efforts to maintain a position of leadership in drinking water supply.
1,4-Dioxane	(ND - 0.09)	
Perfluorobutanesulfonic acid (PFBS)	(ND - 0.0021)	There are currently no EPA drinking water standards in effect for these contaminants although EPA has established health advisory levels for some of these to provide an estimate of acceptable drinking water levels based on health effects information.
Perfluoroheptanoic acid (PFHpA)	(ND - 0.0027)	
Perfluorohexanesulfonic acid (PFHxS)	(ND - 0.0029)	EPA has published Health Advisory levels for Perfluorooctanoic acid, (PFOA) and Perfluorooctanesulfonic acid, (PFOS), of 0.070 parts per billion (ppb) combined.
Perfluorohexanoic acid (PFHxA)	(ND - 0.0054)	Health advisory levels are non-enforceable and non-regulatory and provide technical information to state agencies and other public health officials on health effects, analytical methodologies, and treatment technologies associated with drinking water contamination.
Perfluorooctanesulfonic acid (PFOS)	(ND - 0.0086)	
Perfluorooctanoic acid (PFOA)	(0.0039 - 0.010)	The results observed in 2019 were below EPA established health advisory levels.

#### DEFINITIONS of TERMS and ACRONYMS

**ABS/LAS:** Alkylbenzene Sulfonate and Linear Alkylbenzene Sulfonate (surfactants)

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

**CU:** Color unit

**Disinfection By-product Precursors:** A common source is naturally-occurring organic material in surface water. Disinfection by-products are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (DBP precursors) present in surface water.

**EPA:** United States Environmental Protection Agency

**MCL:** Maximum Contaminant Level; 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.

**MCLG:** Maximum Contaminant Level Goal; 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.

**Microbial Contaminants/Pathogens:** Disease-causing organisms such as bacteria, protozoa, and viruses, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife. Common sources are animal and human fecal wastes. These contaminants may be present in source water.

**MRDL:** Maximum Residual Disinfectant Level; 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.

**MRDLG:** Maximum Residual Disinfectant Level Goal; the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination.

**NA:** Not applicable

**ND:** Not detected above the minimum reporting level.

**NJDEP:** New Jersey Department of Environmental Protection

**NJDWSC:** North Jersey District Water Supply Commission

**NTU:** Nephelometric Turbidity Unit

**Nutrients:** Compounds, minerals and elements that aid growth, which can be either naturally occurring or man-made. Examples include nitrogen and phosphorus.

**ppb:** parts per billion (approximately equal to micrograms per liter)

**ppm:** parts per million (approximately equal to milligrams per liter)

**PWS ID:** Public Water System Identification

**PVWC:** Passaic Valley Water Commission

**RAA:** Running Annual Average

**Radon:** Colorless, odorless, cancer-causing gas that occurs naturally in the environment.

**RUL:** Recommended Upper Limit; the highest level of a constituent of drinking water that is recommended in order to protect aesthetic quality.

**RUL Achieved:** A "YES" entry indicates the State-recommended upper limit was not exceeded. A "NO" entry indicates the State-recommended upper limit was exceeded.

**TON:** Threshold Odor Number

**TT:** Treatment Technique; a required process intended to reduce the level of a contaminant in drinking water.

**WTP:** Water Treatment Plant

## **ADDITIONAL INFORMATIONAL RESOURCES**

EPA Drinking Water website: [www.epa.gov/safewater](http://www.epa.gov/safewater)

NJDEP Water Supply website: [www.nj.gov/dep/watersupply](http://www.nj.gov/dep/watersupply)

American Water Works Association (AWWA) website: [www.awwa.org](http://www.awwa.org)

EPA Safe Drinking Water Hotline: 800-426-4791

NJDEP Bureau of Safe Drinking Water: 609-292-5550

AWWA New Jersey Section website: [www.njawwa.org](http://www.njawwa.org)

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## Health Note

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 EPA Safe Drinking Water Hotline at 800-426-4791.

### Bottled Water or Tap Water?

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 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 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. So, what's the bottom line? If bottled and tap water meet the federal standards, they are both safe to drink. However, your tap water is substantially less expensive than bottled water

# Lyndhurst Water Department

## Source Water Assessment Summary

### A State Review of Potential Contamination Sources Near Your Drinking Water

The Department of Environmental Protection (DEP) has conducted an assessment of the water sources that supply each public water system in the state, including yours. The goal of this assessment was to measure each system's susceptibility to contamination, not actual (if any) contamination measured in a water supply system.

The assessment of your water system, the *Lyndhurst Water Department*, involved:

- Identifying the area (known as the source water assessment area) that supplies water to your public drinking water system;
- Inventorying any significant potential sources of contamination in the area; and
- Analyzing how susceptible the drinking water source is to the potential sources of contamination.

DEP evaluated the susceptibility of all public water systems to eight categories of contaminants. These contaminant categories are explained, along with a summary of the results for your water system, on page 3. Page 4 contains a map of your water system's source water assessment area.

A public water system's susceptibility rating (L for low, M for medium or H for high) is a combination of two factors. H, M, and L ratings are based on the potential for a contaminant to be at or above 50% of the Drinking Water Standard or MCL (H), between 10 and 50% of the standard (M) and less than 10% of the standard (L).

- How "sensitive" the water supply is to contamination. For example, a shallow well or surface water source, like a reservoir, would be more exposed to contamination from the surface or above ground than a very deep well.
- How frequently a contaminant is used or exists near the source. This is known as "intensity of use." For example, the types of activities (such as industry or agriculture) surrounding the source.

The susceptibility rating does not tell you if the water source is actually contaminated. The Consumer Confidence Report annually issued by your water utility contains important information on the results of your drinking water quality tests, as required by the federal Safe Drinking Water Act.

### Where does drinking water come from?

There are two basic sources of drinking water: ground water and surface water.

Ground water is water found beneath the Earth's surface. Ground water comes from rain and snow seeping into rock and soil. Ground water is stored in underground areas called aquifers. Aquifers supply wells and springs. Wells in New Jersey range from about 15 feet to 2,000 feet deep.

Surface water is the water naturally open to the atmosphere, such as rivers, lakes, streams and reservoirs. Precipitation that does not infiltrate the ground or evaporate into the sky runs off into surface water bodies.

Ground water can seep into a stream, river or other surface water body, recharging surface water bodies. Likewise, under some circumstances, surface water can seep into an adjacent aquifer.

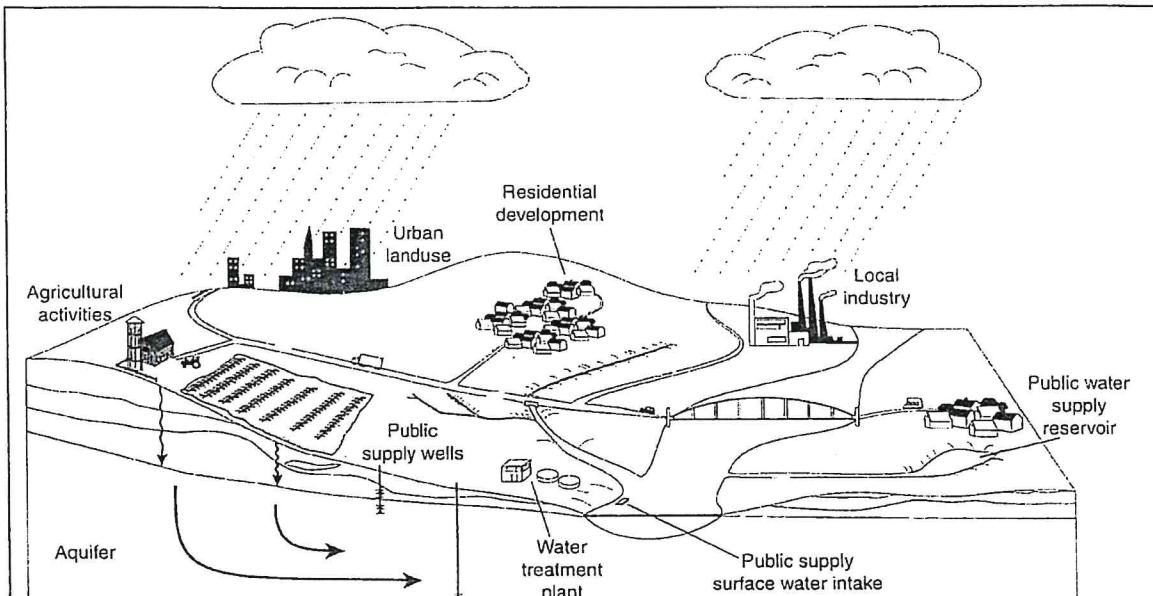
A water system obtains its water from 1) wells drilled into the ground that pump out ground water; 2) devices called surface water intakes placed on a river, stream, reservoir; or 3) both.

### What factors may affect the quality of your drinking water source?

A variety of conditions and activities may affect the quality of drinking water source. These include geology (rock and soil types); depth of a well or location of a surface water intake; how the land surrounding the source is used (for industry, agriculture or development); the use of pesticides and fertilizers; and the presence of contaminated sites, leaking underground storage tanks, and landfills.

## What steps are being taken now to ensure my drinking water quality?

The DEP has numerous programs in place to maintain and protect the quality of our State's water resources. For example, the Safe Drinking Water Program is designed to ensure that water delivered for human consumption meets DEP's stringent health-based drinking water standards. Additionally, DEP has permitting, waste management, and clean up programs in place to avoid and control potential contamination. Key DEP drinking water protection initiatives will be phased-in over time in Source Water Assessment areas to advance existing program protections.



*Illustration courtesy of USGS*

Among the factors that may affect the quality of drinking water are the type of rock and soil and how the land is used. While some rain and snow evaporates into the sky, most of it runs off into nearby rivers and streams or seeps into the ground. Drinking water comes from underground aquifers or surface water bodies.

## What can you and others do to help?

Federal law requires each state to establish and implement a Source Water Assessment Program. While government at the state and local levels can do their part, there are actions that you and your neighbors in homes and businesses can take now to help protect our precious and shared natural resource.

Here's just a few ways you and others can help ensure clean and plentiful water for New Jersey – now and in the future. Join us today for a clean water future.

### In your home or business:

- Dispose of waste properly. Some materials such as motor oil, paint, flea collars, and household cleaners have the potential to contaminate source water. Contact your local Department of Public Works for proper household hazardous waste disposal.
- Limit your use of fertilizer, pesticides, and herbicides.

Here are some actions that municipal and county officials/local and county planners can take and you can help encourage and support.

- Manage and work with owners of existing potential contaminant sources to minimize potential contamination.
- Establish regulations prohibiting or restricting certain activities or land uses within the source water assessment area. Take appropriate enforcement action when necessary.
- Update municipal master plans to ensure greater protection.
- Purchase lands or create conservation easements within the source water assessment area.

## Lyndhurst Water Department- PWSID # 0232001

Lyndhurst Water Department is a public community water system consisting of 0 well(s), 0 wells under the influence of surface water, 0 surface water intake(s), 0 purchased ground water source(s), and 2 purchased surface water source(s).

This system's source water comes from the following aquifer(s) and/or surface water body(s) (if applicable):

This system purchases water from the following water system(s) (if applicable): JERSEY CITY WATER DEPARTMENT,NORTH ARLINGTON WATER DEPARTMENT

### Susceptibility Ratings for Lyndhurst 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 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			Radio-nuclides			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
Sources																								
Wells - 0																								
GUDI - 0																								
Surface water intakes - 0																								

- **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.

*Lyndhurst Water Department obtains its drinking water entirely from another public water system; therefore, this specific information is not available. Please refer to the public water system's Source Water Assessment Report from which Lyndhurst Water Department purchases its water, as indicated on page 3 in this Summary or in Table 7 of the Source Water Assessment Report.*

DEP program used in efforts to improve environment regulatory actions, such as cleanup decisions in the hazardous and solid waste programs. For more information on DEP's Source Water Protection Strategy please see the Statewide Summary Document available at [www.state.nj.us/dep/swap](http://www.state.nj.us/dep/swap).

For further information please refer to the detailed information in the Source Water Assessment Report or go to [www.state.nj.us/dep/swap](http://www.state.nj.us/dep/swap).