The background features a close-up of water splashing from a faucet, with a bowl of fresh fruit (raspberries, blackberries, and red grapes) in the lower-left corner. The overall color palette is dominated by blues and greens, with a dark teal curved shape framing the text on the right side.

# ANNUAL WATER QUALITY REPORT

WATER TESTING  
PERFORMED IN 2015

*Presented By*  
**Town of Bedford**

## Meeting the Challenge

Once again we are proud to present our annual drinking water report, covering all drinking water testing performed between January 1 and December 31, 2015. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best quality drinking water to your homes and businesses. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.

Please remember that we are always available to assist you, should you ever have any questions or concerns about your water.

## Important Health Information

Some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immunocompromised 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 from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium*, *Giardia* and other microbial pathogens are available from the Safe Drinking Water Hotline at (800) 426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. We are 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, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800) 426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).



## Substances That Could Be in 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 from human activities. Contaminants that may be present in source water include: **Microbial Contaminants**; **Inorganic Contaminants**; **Pesticides and Herbicides**; **Organic Chemical Contaminants**; and **Radioactive Contaminants**.

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. In order to ensure that tap water is safe to drink, the State and the U.S. EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the U.S. FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

## Water Conservation Tips

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

## Facts and Figures

### Consolidated Water District #1

This water system serves approximately 9,056 people through 2,158 service connections. The total amount of water produced in 2015 was 297 million gallons. The daily average of water treated and pumped into the distribution system was 814,000 gallons per day. Approximately 94% of the total was billed directly to the consumers. The balance of 18 million gallons of unaccounted-for water was used for firefighting, hydrant use for street sweeping, distribution system leaks, and unauthorized use. In 2015, water customers were charged a combined total of \$2,059,114. The annual water charge per user is based on a sliding scale of water rates. Based on average household metered consumption, the charge for the first 5,000 gallons used in a household is \$25. The rates increase as water use increases. The average quarterly bill in 2015 was \$142, which includes commercial accounts, but not the Department of Corrections.

### Cedar Downs Water District

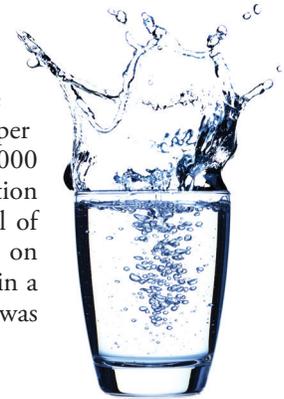
This water system serves approximately 175 people through 66 service connections. The total amount of water produced in 2015 was 3.0 million gallons. The daily average of water treated and pumped into the distribution system was 8,200 gallons per day. Approximately 99.9% of the total was billed directly to the consumers. The balance of 4,000 gallons of unaccounted-for water was used for firefighting, hydrant use for street sweeping, distribution system leaks, and unauthorized use. In 2015, water customers were charged a combined total of \$18,441. The annual water charge per user is based on a sliding scale of water rates. Based on average household metered consumption, the charge for the first 10,000 gallons of water used in a household is \$51.72. The rates increase as water use increases. The average quarterly bill in 2015 was \$70.

### The Bedford Farms Water District

The Bedford Farms water system serves approximately 300 people through 85 service connections. The total amount of water produced in 2015 was 8 million gallons. The daily average of water treated and pumped into the distribution system was 22,000 gallons per day. Approximately 94% of the total was billed directly to the consumers. The balance of 48,000 gallons of unaccounted-for water was from firefighting, hydrant use for street sweeping, distribution system leaks, and unauthorized use. In 2015, water customers were charged a combined total of \$21,100. The annual water charge per user is based on a sliding scale of water rates. Based on average household metered consumption, the charge for the first 10,000 gallons of water used in a household is \$21.55. The rates increase as water use increases. The average quarterly bill in 2015 was \$62.

### Old Post Road Water District

The Old Post Road water system serves approximately 1,500 people through 67 service connections. The total amount of water produced in 2015 was 12.5 million gallons. The daily average of water treated and pumped into the distribution system was 34,400 gallons per day. Approximately 94% of the total was billed directly to the consumers. The balance of 75,000 gallons of unaccounted-for water was from firefighting, hydrant use for street sweeping, distribution system leaks, and unauthorized use. In 2015, water customers were charged a combined total of \$48,196. The annual water charge per user is based on a sliding scale of water rates. Based on average household metered consumption, the charge for the first 10,000 gallons of water used in a household is \$26.08. The rates increase as water use increases. The average quarterly bill in 2015 was \$180, which includes commercial accounts.



## Community Participation

We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Town Board meetings. The meetings are generally held at 8:00 p.m. on the first and third Tuesdays of each month at the Town House, 321 Bedford Road, Bedford Hills, New York. Visit the Town Web site at [Bedfordny.gov](http://Bedfordny.gov) for meeting dates.

## QUESTIONS?

If you have any questions about this report or concerns about drinking water, please contact the DPW Water Division at (914) 666-7855 or the local Health Department at (914) 813-5148.

## Source Water Assessment

The New York State Department of Health (NYSDOH) has completed a Source Water Assessment Program (SWAP) Report for our systems based on available information. Possible and actual threats to the drinking water sources were evaluated. The assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants may be introduced into the water sources. Copies of the assessment can be obtained from the NYSDOH.

The susceptibility rating is an estimate of the potential for contamination of the source water; it does not mean that the water delivered to consumers is, or will become, contaminated. See the section of this report entitled Sampling Results for a list of the contaminants that have been detected, if any. The source water assessments provide resource managers with additional information to protect source waters into the future.

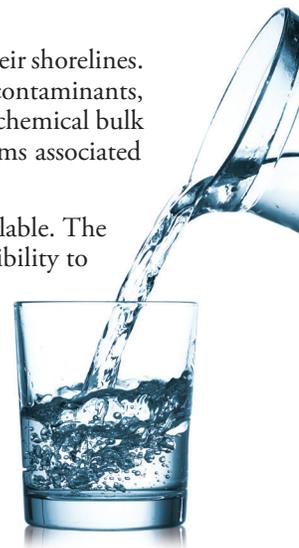
### Consolidated Water District #1

Our water is obtained from New York City's Delaware Aqueduct. Water in the Delaware Aqueduct comes from the Delaware Watersheds. The New York City Department of Environmental Protection (DEP) implements a series of programs to evaluate and protect source water quality within these watersheds. Their efforts focus on three important program areas: the enforcement of strengthened Watershed Rules and Regulations; the acquisition and protection of watershed lands; and implementation of partnership programs that target specific sources of pollution in the watersheds.

Because of these intensive efforts, the SWAP methodologies applied to the rest of the state were not applied for this public water supply. Additional information on the water quality and protection efforts in these New York City watersheds can be found at DEP's Web site <http://www.nyc.gov/html/dep/pdf/wsstate15.pdf>

The Delaware reservoirs are in a mountainous rural area and are relatively deep with little development along their shorelines. The main water quality concerns associated with land cover is agriculture, which can contribute microbial contaminants, pesticides, and algae producing nutrients. There are also a number of other discrete facilities, such as landfills, chemical bulk storages, etc., that have the potential to impact local water quality, but large significant water quality problems associated with these facilities are unlikely due to the size of the watershed and surveillance and management practices.

The Harris Road Well is our backup supply, to be used in the event that the water filtration plant is unavailable. The SWAP has rated our wells as having a very high susceptibility to microbial contamination and a high susceptibility to nitrates, pesticides, industrial solvents, and other industrial contaminants. These ratings are due primarily to the close proximity of the wells to permitted discharge facilities (industrial and commercial facilities that discharge wastewater into the environment and are regulated by the state or federal government) and hazardous waste sites; the fact that a large portion of the assessment area is categorized as an unsewered residential area; associated industrial activity; and low-intensity residential activities in the assessment area, such as fertilizing lawns. In addition, the wells draw greater than 100 gallons per minute from an unconfined aquifer. Although the Source Water Assessment rates our wells as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.



### Cedar Downs Water District

This district's water is derived from two drilled wells. The Source Water Assessment has rated these wells as having a medium-high susceptibility to microbial contamination and nitrates. These ratings are due primarily to the close proximity of the wells to a permitted discharge facility (industrial and commercial facilities that discharge wastewater into the environment and are regulated by the state or federal government) and the fact that a large portion of the assessment area is categorized as an unsewered residential area. In addition, the wells draw from an unconfined aquifer of unknown hydraulic conductivity. Although the Source Water Assessment rates our wells as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

### Bedford Farms and Old Post Road Water Districts

As mentioned before, the water for these districts is derived from two drilled wells. The Source Water Assessment has rated these wells as having a very high susceptibility to microbials and a high susceptibility to nitrates and industrial solvents. These ratings are due primarily to the close proximity of the wells to permitted discharge facilities (industrial and commercial facilities that discharge wastewater into the environment and are regulated by the state or federal government); the fact that a large portion of the assessment area is categorized as an unsewered residential area; and low-intensity residential activities in the assessment area, such as fertilizing lawns. The high industrial solvent rating is due to hazardous waste sites located in the assessment area. In addition, the wells draw from an unconfined aquifer of high hydraulic conductivity. Although the Source Water Assessment rates our wells as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

## Where Does My Water Come From?

### Consolidated Water District #1

Drinking water is supplied to the Consolidated Water District #1 from one primary source, the Bedford Water Filtration Plant on Route 35, which draws water from New York City's Delaware Aqueduct with a backup supply from the Cross River Reservoir. The Delaware Aqueduct is supplied by New York City's upstate Catskill/Delaware Watershed reservoirs. Water is drawn from the aqueduct at Shaft 13 located on the south side of Route 35 near the Cross River Reservoir and is treated nearby at the Town's water filtration plant. New York City has also produced an Annual Supply and Quality Statement, which is available at the New York City Department of Environmental Protection Web site at [http://www.nyc.gov/html/dep/html/drinking\\_water/wsstate.shtml](http://www.nyc.gov/html/dep/html/drinking_water/wsstate.shtml). The Harris Road Well, which is located along Harris Road near the Bedford Hills Correctional Facility, is a backup supply and is no longer routinely used.

These water supplies are disinfected with calcium and sodium hypochlorite, chemicals that kills bacteria but are harmless to humans in the concentrations in your water supply. The water is then pumped into the distribution system.

### Cedar Downs Water District

Cedar Downs Water District has two deep-rock ground water sources (wells) to supply drinking water to the District. Well #1 has a daily capacity of 50,000 gallons and Well #2 has a daily capacity of 30,000 gallons. There is also a connection to the adjacent New Castle/Stanwood water supply system that is used during emergencies and when repair work is performed on the Cedar Downs system. The New Castle/Stanwood water is treated, processed, and disinfected with chlorine gas before distribution. The Cedar Downs water supply is disinfected with sodium hypochlorite, a chemical that kills bacteria but is harmless to humans in the concentrations in your water supply.

### Bedford Farms and Old Post Road Water Districts

The Bedford Farms Water District has ground water sources (wells) that supply drinking water to the district. They consist of one shallow gravel-packed well and one rock well. These water supplies are disinfected with sodium hypochlorite, a chemical that kills bacteria but is harmless to humans in the concentrations in your water supply. This water supply was rehabilitated in 1996 and an air stripper was installed in 1998. The air stripper treats the water before disinfection. After disinfection water is pumped to distribution. The Old Post Road Water District is considered a consecutive water system and obtains treated water from the Farms Water District.

## Non-detected Contaminants

The following are some of the contaminants tested for but not found in the drinking water. A more extensive list of contaminants tested for but not detected is available at the Bedford Water Department.

### Consolidated Water District #1

Coliform bacteria, nitrites, pesticides, and herbicides. Volatile organic compounds include tetrachloroethane, trichloroethane, dichloroethane, dichloropropane, trichlorobenzene, trichloropropane, trimethylbenzene, dichlorobenzene, dichloropropane, butanone (MEK), chlorotoluene, benzene, bromobenzene, bromochloromethane, bromomethane, carbon tetrachloride, chlorobenzene, chloroethane, chloromethane, dichloropropene, dibromoethane, dichlorodifluoromethane, ethylbenzene, hexachlorobutadiene, isopropylbenzene, methyl tert-butyl ether (MTBE), methylene chloride, n-butylbenzene, n-propylbenzene, naphthalene, o-xylene, p & m-xylene, p-isopropyltoluene, SEC-butylbenzene, styrene, TERT-butylbenzene, toluene, trans-1,2-dichloroethene, trans-1,3-dichloropropene, trichlorofluoromethane, and vinyl chloride.

### Cedar Downs Water District

Includes the contaminants listed above for Consolidated Water District #1.

### Bedford Farms Water District

Includes the contaminants listed above for Consolidated Water District #1 and asbestos.

### Old Post Road Water District

Includes the contaminants listed above for Consolidated Water District #1.

## Sampling Results

During the past year, we have taken hundreds of water samples to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES										
			Consolidated Water District #1			Cedar Downs Water District				
SUBSTANCE (UNIT OF MEASURE)	MCL [MRDL]	MCLG [MRDLG]	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2	2	3/23/15	0.022	0.021–0.022	4/23/15	0.007	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta Particle/Photon Activity [from manmade radionuclides] <sup>1</sup> (pCi/L)	50	0	2014	2.04	1.53–4.94	4/28/15	10.7	NA	No	Decay of natural deposits and man-made emissions
cis-1,2-Dichloroethylene (ppb)	5	NA	NA	NA	NA	NA	NA	NA	No	Discharge from industrial chemical factories
Chloride (ppm)	250	NA	3/23/2015	15.2	14.6–15.2	4/23/15	57.1	NA	No	Naturally occurring or indicative of road salt contamination
Chromium (ppb)	100	100	NA	NA	NA	4/23/15	1.9	NA	No	Discharge from steel and pulp mills; Erosion of natural deposits
Combined Radium [226 and 228] (pCi/L)	5	0	2014	1.44	0.96–1.80	4/28/15	3.55	NA	No	Erosion of natural deposits
Cyanide [as free cyanide] (ppb)	200	200	3/23/15	6	5–6	NA	NA	NA	No	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Fluoride (ppm)	2.2	NA	NA	NA	NA	4/23/15	0.18	NA	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Gross Alpha Activity [including radium 226 but excluding radon and uranium] (pCi/L)	15	0	2014	2.04	1.25–2.97	4/28/15	2.28	NA	No	Erosion of natural deposits
Haloacetic Acids (ppb)	60	NA	2/11/15	28.9	19.7–28.9	8/13/15	4.76	1.55–4.76	No	By-product of drinking water disinfection needed to kill harmful organisms
Iron (ppb)	300	NA	NA	NA	NA	NA	NA	NA	No	Naturally occurring
Manganese (ppb)	300	NA	2015	10	2.1–10	4/20/15	36.7	NA	No	Naturally occurring; Indicative of landfill contamination
Nitrate (ppm)	10	10	NA	NA	NA	3/24/15	0.11	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (ppm)	1	1	2015	0.29	0.27–0.29	NA	NA	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm)	(see footnote #2)	NA	3/23/15	10	9.9–10	4/20/15	21	NA	No	Naturally occurring; Road salt; Water softeners; Animal waste
Sulfate (ppm)	250	NA	2015	5.0	4.9–5.0	4/20/15	29.4	NA	No	Naturally occurring
TTHMs [Total Trihalomethanes] (ppb)	80	NA	2/11/15	25.58	18.73–25.58	8/13/15	13.32	4.07–13.32	No	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter
Tetrachloroethylene [PCE] <sup>3</sup> (ppb)	5	NA	NA	NA	NA	NA	NA	NA	No	Discharge from factories and dry cleaners; Waste sites; Spills
Turbidity <sup>4</sup> (NTU)	TT	NA	NA	NA	NA	NA	NA	NA	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	TT = 95% of samples < 0.3 NTU	NA	NA	NA	NA	NA	NA	NA	No	Soil runoff
Uranium (ppb)	30	0	NA	NA	NA	NA	NA	NA	No	Erosion of natural deposits
Zinc (ppm)	5	NA	3/23/15	0.073	0.032–0.073	4/20/15	0.060	NA	No	Naturally occurring; Mining waste

REGULATED SUBSTANCES										
			Farms Water District			Old Post Road Water District				
SUBSTANCE (UNIT OF MEASURE)	MCL [MRDL]	MCLG [MRDLG]	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2	2	3/30/15	0.229	NA	3/30/15	0.229	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta Particle/Photon Activity [from manmade radionuclides] <sup>1</sup> (pCi/L)	50	0	2/22/10	3.65	NA	2/22/10	3.65	3.29–4.0	No	Decay of natural deposits and man-made emissions
cis-1,2-Dichloroethylene (ppb)	5	NA	2/13	0.42	ND–0.42	NA	NA	NA	No	Discharge from industrial chemical factories
Chloride (ppm)	250	NA	2015	226	151–300	2015	226	151–300	No	Naturally occurring or indicative of road salt contamination
Chromium (ppb)	100	100	NA	NA	NA	NA	NA	NA	No	Discharge from steel and pulp mills; Erosion of natural deposits
Combined Radium [226 and 228] (pCi/L)	5	0	2/22/10	0.65	0.27–1.03	2/22/10	0.65	0.27–1.03	No	Erosion of natural deposits
Cyanide [as free cyanide] (ppb)	200	200	NA	NA	NA	NA	NA	NA	No	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Fluoride (ppm)	2.2	NA	NA	NA	NA	NA	NA	NA	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Gross Alpha Activity [including radium 226 but excluding radon and uranium] (pCi/L)	15	0	2/22/10	2.66	1.35–3.97	2/22/10	2.66	1.35–3.97	No	Erosion of natural deposits
Haloacetic Acids (ppb)	60	NA	8/13/15	5.94	5.93–5.94	8/11/15	3.9	1.41–3.9	No	By-product of drinking water disinfection needed to kill harmful organisms
Iron (ppb)	300	NA	3/30/15	20.9	NA	3/30/15	20.9	NA	No	Naturally occurring
Manganese (ppb)	300	NA	3/30/15	2.1	NA	3/30/15	2.1	NA	No	Naturally occurring; Indicative of landfill contamination
Nitrate (ppm)	10	10	2015	3.02	2.64–3.02	2015	3.02	2.64–3.02	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (ppm)	1	1	NA	NA	NA	NA	NA	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm)	(see footnote #2)	NA	3/30/15	147	NA	3/30/15	147	NA	No	Naturally occurring; Road salt; Water softeners; Animal waste
Sulfate (ppm)	250	NA	3/30/15	30.7	NA	3/30/15	30.7	NA	No	Naturally occurring
TTHMs [Total Trihalomethanes] (ppb)	80	NA	8/13/15	16	9–16	8/11/15	22.38	8.7–22.38	No	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter
Tetrachloroethylene [PCE] <sup>3</sup> (ppb)	5	NA	3/30/15	2.58	2.11–2.58	3/30/15	2.58	2.11–2.58	No	Discharge from factories and dry cleaners; Waste sites; Spills
Turbidity <sup>4</sup> (NTU)	TT	NA	NA	NA	NA	2015	0.27	0.01–0.27	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	TT = 95% of samples < 0.3 NTU	NA	NA	NA	NA	2015	100	NA	No	Soil runoff
Uranium (ppb)	30	0	2/22/10	2.5	2.0–3.0	2/22/10	2.5	2.0–3.0	No	Erosion of natural deposits
Zinc (ppm)	5	NA	3/30/15	0.008	NA	3/30/15	0.008	NA	No	Naturally occurring; Mining waste

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

			Consolidated Water District #1				Cedar Downs Water District					
SUBSTANCE (UNIT OF MEASURE)	AL	MCLG	DATE SAMPLED	AMOUNT DETECTED (90TH%TILE)	RANGE LOW-HIGH	SITES ABOVE AL/ TOTAL SITES	DATE SAMPLED	AMOUNT DETECTED (90TH%TILE)	RANGE LOW-HIGH	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	1.3	1.3	2015	0.09	ND–0.19	0/20	2014	0.1	0.08–0.16	0/5	No	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives
Lead (ppb) *	15	0	2015	19	ND–203	4/20	2014	8.15	1.2–8.7	0/5	Yes <sup>5</sup>	Corrosion of household plumbing systems; Erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

			Farms Water District				Old Post Road Water District					
SUBSTANCE (UNIT OF MEASURE)	AL	MCLG	DATE SAMPLED	AMOUNT DETECTED (90TH%TILE)	RANGE LOW-HIGH	SITES ABOVE AL/ TOTAL SITES	DATE SAMPLED	AMOUNT DETECTED (90TH%TILE)	RANGE LOW-HIGH	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	1.3	1.3	2014	0.08	0.04–0.10	0/5	2014	0.2	0.03–0.20	0/10	No	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives
Lead (ppb) *	15	0	2014	2	ND–2	0/5	2014	5	ND–11	0/10	No	Corrosion of household plumbing systems; Erosion of natural deposits

<sup>1</sup>The State considers 50 pCi/L to be the level of concern for beta particles.

<sup>2</sup>Water containing more than 20 ppm of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 ppm of sodium should not be used for drinking by people on moderately restricted sodium diets.

<sup>3</sup>Results include samples taken from untreated (raw) water. The volatile organic compounds tetrachloroethylene at the Farms wells are removed by air stripping and are not detected in the treated drinking water. Air stripping only removes VOCs.

<sup>4</sup>Turbidity is a measure of the cloudiness of the water. It is tested because it is a good indicator of the effectiveness of the filtration system. Our highest single turbidity measurement for the year occurred as indicated in the table above. State regulations require that turbidity must always be below 1 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU. (Note that TT is dependent upon filtration method: conventional, 0.3 NTU; slow sand, 1.0 NTU; or diatomaceous earth filtration, 1.0 NTU.) Although the month as indicated in the Date column above was the month when we had the fewest measurements meeting the treatment technique for turbidity, the levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation.

<sup>5</sup>This is a Consolidated Water District #1 violation only.

## Definitions

**90th percentile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system.

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

**LRAA (Locational Running Annual Average):** The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as LRAAs.

**MCL (Maximum Contaminant Level):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as possible.

**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.

**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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**NA:** Not applicable

**ND (Not detected):** Indicates that the substance was not found by laboratory analysis.

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**pCi/L (picocuries per liter):** A measure of radioactivity.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

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

## About Our Action Level Exceedance\*

The Town of Bedford Consolidated Water District monitors its water system for many parameters in compliance with the requirements of the New York State Health Department (DOH). One of these parameters is the concentration of lead in drinking water. The District has obtained sample results below the required DOH action level since the regulations were put in place in the 1990s. However, in the most recent round of samples our results were slightly higher than the DOH action level. Our results were 19 parts per billion, compared with an action level of 15 parts per billion.

Although most homes have very low levels of lead in their drinking water, some homes in the District have lead levels above the action level of 15 parts per billion, or 0.015 milligrams of lead per liter of water. Of the 20 samples that were collected in 2015, 4 exceeded the action level. Per DOH requirements, these samples are collected by the property owner after the water sits in the pipes for greater than 6 hours. The District does not have lead pipes or high lead solder in our supply or distribution system, the source of lead is leaching from customer owned pipes.

Switching to our new surface water supply from NYCDEP has likely contributed to this issue. Although the new water supply has many benefits, including eliminating scale buildup on plumbing fixtures, it is more corrosive to pipes when compared with the hard well water that was our previous source. Our design engineers anticipated this and included the use of food grade water treatment chemicals to reduce corrosion, including sodium hydroxide and orthophosphate. Our operators have been applying these chemicals at the recommended dosages as approved by the DOH. We have discussed our treatment dosages with our design engineers as a result of this problem, have slightly increased the dose of sodium hydroxide and orthophosphate in order to reduce the corrosivity of the water.

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

## Tip Top Tap

The most common signs that your faucet or sink is affecting the quality of your drinking water are discolored water, sink or faucet stains, a buildup of particles, unusual odors or tastes, and a reduced flow of water. The solutions to these problems may be in your hands.

### **Kitchen Sink and Drain**

Hand washing, soap scum buildup, and the handling of raw meats and vegetables can contaminate your sink. Clogged drains can lead to unclean sinks and backed up water in which bacteria (e.g., pink and black slime) can grow and contaminate the sink area and faucet, causing a rotten egg odor. Disinfect and clean the sink and drain area regularly. Also, flush regularly with hot water.

### **Faucets, Screens, and Aerators**

Chemicals and bacteria can splash and accumulate on the faucet screen and aerator, which are located on the tip of faucets and can collect particles like sediment and minerals resulting in a decreased flow from the faucet. Clean and disinfect the aerators or screens on a regular basis.

Check with your plumber if you find particles in the faucet screen as they could be pieces of plastic from the hot water heater dip tube. Faucet gaskets can break down and cause black, oily slime. If you find this slime, replace the faucet gasket with a higher-quality product. White scaling or hard deposits on faucets and shower heads may be caused by hard water or water with high levels of calcium carbonate. Clean these fixtures with vinegar or use water softening to reduce the calcium carbonate levels for the hot water system.

### **Water Filtration and Treatment Devices**

A smell of rotten eggs can be a sign of bacteria on the filters or in the treatment system. The system can also become clogged over time so regular filter replacement is important. (Remember to replace your refrigerator filter!)