

# 2014 drinking water quality report

FISHERS ISLAND WATER WORKS CORP.  
PUBLIC WATER SUPPLY IDENTIFICATION NO. 5103294

## ANNUAL WATER SUPPLY REPORT

MAY 2015

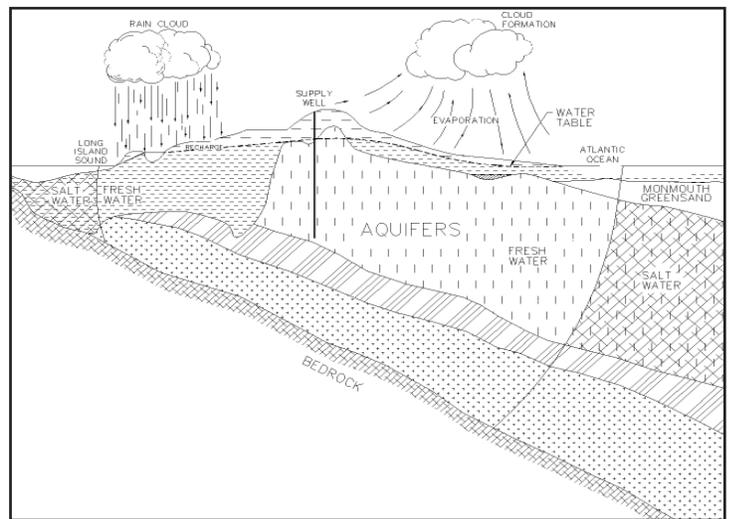
This report is required to be delivered to all residents of our Water Company in compliance with Federal and State regulations with the exception of manganese and a monitoring violation that is discussed within. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. The Fishers Island Water Works Company and its employees are committed to ensuring that you and your family receive the highest quality water. Please note that the information presented in this report is based on 2014 data.

## SOURCE OF OUR WATER

The source of water for the Water Company is groundwater pumped from two (2) wells located in the Middle Farms area that are drilled into the Glacial aquifer beneath Fishers Island, as shown on the adjacent figure. A backup water supply to the wells is surface water from Barlow Pond and Middle Farms and Treasure Ponds utilized during dry weather periods. Generally, the water quality supplied to the residents is good to excellent.

In order to ensure that our tap water is safe to drink, the State and the EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The population served by the Water Works Company during 2014 was 255 year round and up to 3,500 during the summer months. The total amount of water pumped in 2014 was 54.1 million gallons, of which approximately 73 percent was billed directly to the residents of the Water Company.



THE LONG ISLAND AQUIFER SYSTEM

## WATER TREATMENT

The Fishers Island Water Works Company provides treatment at all wells to improve the quality of the water pumped prior to distribution to the consumer. The pH of the pumped water is adjusted upward to reduce corrosive action between the water and water mains and in-house plumbing by the addition of soda ash. The water is also chlorinated with sodium hypochlorite to protect against the growth of bacteria in the distribution system. A polyphosphate AquaMag is added to the water for iron sequestering.

During July and August, we also supplement our water supply with surface water from Barlow, Middle Farms and Treasure Ponds. This water receives additional treatment that includes, chemical addition of aluminum sulfate for coagulation, sedimentation and sand filtering for the removal of solids.

## WATER CONSERVATION MEASURES

The underground water system of Fishers Island is a limited supply. Saving water will ensure that our future generations will always have a safe and abundant water supply.

In 2014, the Fishers Island Water Works Company continued to implement a water conservation program in order to minimize any unnecessary water use. Residents of the Water Company can also implement their own water conservation measures such as retrofitting plumbing fixtures with flow restrictors, modifying automatic lawn sprinklers to include rain sensors, repairing leaks in the home, installing water conservation fixtures/appliances and maintaining a daily awareness of water conservation in their personal habits. Besides protecting our precious underground water supply, water conservation will produce a cost savings to the consumer in terms of both water and energy bills (hot water).

## COST OF WATER

The Water Company utilizes a unit price billing schedule with the consumer being billed at a rate of \$7.00 per thousand gallons for year round residents and \$8.20 per thousand gallons for seasonal residents.

## CONTACTS FOR ADDITIONAL INFORMATION

We are pleased to report that our drinking water is safe and meets all Federal and State requirements with the exception of manganese. If you have any questions about this report or concerning your water utility, please contact the Water Company at (631) 788-7251 or the Suffolk County Department of Health Services at (631) 852-5778. Water Company issues are normally discussed at Fishers Island Utility Co.

The Fishers Island Water Works Company monitors for different parameters and contaminants in your drinking water as required by Federal and State laws. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk. For more information on contamination and potential health risks, please contact the USEPA Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to disease-causing microorganisms or pathogens 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 from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by microbial pathogens are available from the Safe Drinking Water Hotline (1-800-426-4791).

## WATER QUALITY

In accordance with State regulations, the Fishers Island Water Works Company routinely monitors your drinking water for numerous parameters. We test your drinking water for coliform bacteria, turbidity, inorganic contaminants, lead and copper, nitrate, volatile organic contaminants, total trihalomethanes and synthetic organic contaminants. Over 135 separate parameters are tested in each of our wells numerous times per year. The table presented on page 3 depicts the quality of your drinking water. It should be noted that many of these parameters are naturally found in all drinking water and do not pose any adverse health effects.

## NEW YORK STATE MANDATORY HEALTH ADVISORY

The USEPA established a Lead and Copper Rule that required all public water suppliers to sample and test for lead and copper at the tap. The first testing was required in 1992. All results were excellent indicating that the Water Company's corrosion control treatment program was effective in preventing the leaching of lead and copper from your home's plumbing into your drinking water. The same testing was last conducted in 2012 with the same excellent results. Resampling will be conducted in 2015.

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 activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure the tap water is safe to drink, the State and the EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

# 2014 DRINKING WATER QUALITY REPORT - TABLE OF DETECTED PARAMETERS

Contaminants	Violation (Yes/No)	Date of Sample	Level Detected (Maximum Range)	Unit Measurement	MCLG	Regulatory Limit (MCL or AL)	Likely Source of Contaminant
<b>Inorganic Contaminants</b>							
Copper	No	September 2012	ND - 0.73 0.54 <sup>(1)</sup>	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits
Lead <sup>(2)</sup>	No	September 2012	ND - 11.7 7.85 <sup>(1)</sup>	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits
Barium	No	07/21/14	ND - 0.01	mg/l	n/a	MCL = 2	Naturally occurring
Sodium	No	07/21/14	11.0 - 18.0	mg/l	n/a	No MCL <sup>(4)</sup>	Naturally occurring
Chloride	No	07/21/14	21.6 - 29.1	mg/l	n/a	MCL = 250	Naturally occurring
Iron	No <sup>(3)</sup>	07/21/14	160 - 220	ug/l	n/a	MCL = 300	Naturally occurring
Manganese	Yes <sup>(5)</sup>	07/21/14	300 - 470	ug/l	n/a	MCL = 300	Naturally occurring
Nitrate	No	07/21/14	0.3 - 0.62	mg/l	10	MCL = 10	Runoff from fertilizer and leaching from septic tanks and sewage
Nickel	No	07/21/14	ND - 1.0	ug/l	n/a	MCL = 100	Naturally occurring
Sulfate	No	07/21/14	7.0 - 8.7	mg/l	n/a	MCL = 250	Naturally occurring
Zinc	No	07/21/14	ND - 0.15	mg/l	n/a	MCL = 5	Naturally occurring
<b>Synthetic Organic Contaminants Including Pesticides and Herbicides</b>							
None Detected	--	--	--	--	--	--	--
<b>Volatile Organic Contaminants</b>							
Total Trihalomethanes	No	08/13/14	4.7 - 13.4	mg/l	0	MCL = 80	Disinfection By-Products
Haloacetic Acid	No	07/21/14	2.5 - 7.8	mg/l	n/a	MCL = 5	Disinfection By-Products
<b>Radionuclides</b>							
Gross Alpha	No	08/22/13	0.385	pCi/L	n/a	MCL = 15	Naturally occurring
Radium 228	No	08/22/13	0.376	pCi/L	n/a	MCL = 5	Naturally occurring
<b>Bacteriological</b>							
Total Coliform and E.coli Bacteria	No	---	No positive samples for Total Coliform or E.coli	positive or negative	n/a	Any Total Coliform positive sample that had a confirming resample	Commonly found in the environment

## Definitions:

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

**Maximum Contaminant Level Goal (MCLG)** - 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.

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

**Milligrams per liter (mg/l)** - Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

**Micrograms per liter (ug/l)** - Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

**Non-Detects (ND)** - Laboratory analysis indicates that the constituent is not present.

**pCi/L** - pico Curies per Liter is a measure of radioactivity in water.

<sup>(1)</sup> - During 2012, we collected and analyzed 10 samples for lead and copper. The 90% percentile is presented as the maximum result. The Action Levels for both lead and copper were not exceeded at any site tested. The next round of sampling will be conducted in 2015.

<sup>(2)</sup> - 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. Fishers Island Water Works 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, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

<sup>(3)</sup> - Iron is only a secondary water standard. Iron has no health effects. Therefore, exceeding the MCL represents a level at which adverse aesthetics effects start to occur.

<sup>(4)</sup> - No MCL has been established for sodium. However, 20 mg/l is a recommended guideline for people on high restricted sodium diets and 270 mg/l for those on moderate sodium diets.

<sup>(5)</sup> - The Food and Nutrition Board of the National Research Council determined an estimated safe and adequate daily dietary intake of manganese to be 2,000-5,000 micrograms for adults. However, many peoples diets lead them to consume even higher amounts of manganese, especially those who consume high amounts of vegetables or are vegetarian. The infant population is of the greatest concern. It would be better if the drinking water were not used to make infant formula since it already contains iron and manganese. Excess manganese produces a brownish color in laundered good and impairs the taste of tea, coffee and other beverages. Concentrations may cause a dark brown or black stain on porcelain plumbing fixtures. Manganese may form a coating on distribution pipes. These may slough off, causing brown blotches on laundered clothing or black particles in the water.

# SOURCE WATER ASSESSMENT

The NYSDOH has completed a source water assessment for this system, based on available information. Known and possible contamination sources to this drinking water source were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. The susceptibility of a water supply well to contamination is dependent upon both the presence of potential sources of contamination within the well's contributing area and the likelihood that the contaminant can travel through the environment to reach the well. 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 section "Water Quality" for a list of contaminants that have been detected.) The source water assessments provide resource managers with additional information for protecting source waters into the future.

As mentioned before, our water is derived from two (2) wells. The source water assessment has rated the wells as having a medium susceptibility to pesticides and nitrates and microbial contamination. The elevated susceptibility ratings are due primarily to the various land uses and their related point sources of contamination in the assessment area. The land uses include unsewered commercial, industrial and residential, as well as agricultural land use. While the source water assessment rates our well 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.

A copy of the assessment, including a map of the assessment area, can be obtained by contacting the Water Company.

The Fishers Island Water Works Company conducts over 1,000 water quality tests throughout the year, testing for over 130 different contaminants which have been undetected in our water supply including:

Arsenic	Pentachlorophenol	Bromochloromethane
Cadmium	Hexachlorocyclopentadiene	1,1,1-Trichloroethane
Chromium	bis(2-Ethylhexyl)adipate	Carbon Tetrachloride
Mercury	bis(2-Ethylhexyl)phthalate	1,1-Dichloropropene
Selenium	Hexachlorobenzene	1,2-Dichloroethane
Silver	Benzo(A)Pyrene	Trichloroethene
Zinc	Aldicarb Sulfone	1,2-Dichloropropane
Color	Aldicarb sulfoxide	Dibromomethane
Turbidity	Aldicarb	Trans-1,3-Dichloropropene
Ammonia	Total Aldicarb	cis-1,3-Dichloropropene
Nitrite	Oxamyl	1,1,2-Trichloroethane
Total Hardness	Methomyl	Tetrachloroethene
Total Alkalinity	3-Hydroxycarbofuran	1,3-Dichloropropane
Total Dissolved Solids	Carbofuran	Chlorobenzene
Detergents (MBAS)	Carbaryl	1,1,1,2-Tetrachloroethane
Free Cyanide	Glyphosate	Bromobenzene
Antimony	Diquat	1,1,2,2-Tetrachloroethane
Beryllium	Endothall	1,2,3-Trichloropropane
Calcium	1,2-Dibromoethane (EDB)	2-Chlorotoluene
Magnesium	1,2-Dibromo-3-Chl.Propane	4-Chlorotoluene
Thallium	Dioxin	1,2-Dichlorobenzene
Perchlorate	Chloroacetic Acid	1,3-Dichlorobenzene
Lindane	Bromoacetic Acid	1,4-Dichlorobenzene
Heptachlor	Dichloroacetic Acid	1,2,4-Trichlorobenzene
Aldrin	Trichloroacetic Acid	Hexachlorobutadiene
Heptachloro Epoxide	Dibromoacetic Acid	1,2,3-Trichlorobenzene
Dieldrin	Total Haloacetic Acid	Benzene
Endrin	Chloroform	Toluene
Methoxychlor	Bromodichloromethane	Ethylbenzene
Toxaphene	Dibromochloromethane	M,P-Xylene
Chlordane	Bromoform	O-Xylene
Total PCBs	Total Trihalomethanes	Styrene
Propachlor	Dichlorodifluoromethane	Isopropylbenzene (Cumene)
Alachlor	Chloromethane	N-Propylbenzene
Simazine	Vinyl Chloride	1,3,5-Trimethylbenzene
Atrazine	Bromomethane	Tert-Butylbenzene
Metolachlor	Chloroethane	1,2,4-Trimethylbenzene
Metribuzin	Trichlorofluoromethane	Sec-Butylbenzene
Butachlor	Chlorodifluoromethane	4-Isopropyltoluene (P-Cumene)
2,4-D	1,1-Dichloroethene	N-Butylbenzene
2,4,5-TP (Silvex)	Methylene Chloride	Methyl Tert. Butyl Ether (MTBE)
Dinoseb	Trans-1,2-Dichloroethene	
Dalapon	1,1-Dichloroethane	
Picloram	cis-1,2-Dichloroethene	
Dicamba	2,2-Dichloropropane	

## NOTICE OF VIOLATION

We are required to monitor the quality of our water on a regular basis. Samples taken from our blended well supply and distribution system exceeded the maximum contaminant level (MCL) for manganese. The New York State Sanitary Code requires us to notify you of this exceedance and provide you with the following health effect language.

*The Food and Nutrition Board of the National Research Council determined an estimated safe and adequate daily dietary intake of manganese to be 2,000-5,000 micrograms for adults. However, many peoples diets lead them to consume even higher amounts of manganese, especially those who consume high amounts of vegetables or are vegetarians. The infant population is of the greatest concern. It would be better if the drinking water were not used to make infant formula since it already contains iron and manganese. Excess manganese produces a brownish color in laundered goods and impairs the taste of tea, coffee and other beverages. Concentrations may cause a dark brown or black stain on porcelain plumbing fixtures. As with iron, manganese may form a coating on distribution pipes. These may slough off, causing brown blotches on laundered clothing or black particles in the water.*

Copies of a Supplemental Data Package, which includes the water quality data for each of our supply wells utilized during 2014, are available at the Fishers Island Water Utility Company office or on our website.

We, at the Fishers Island Water Works Company, work around the clock to provide top quality water to every tap throughout the community. We ask that all our customers help us protect our water supply, which will improve our way of life and our children's future.