



# 2013 drinking water quality report

CARLE PLACE WATER DISTRICT  
PUBLIC WATER SUPPLY IDENTIFICATION NO. 2902818

## ANNUAL WATER SUPPLY REPORT

May 2014

### Board of Commissioners

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Timothy J. Doyle

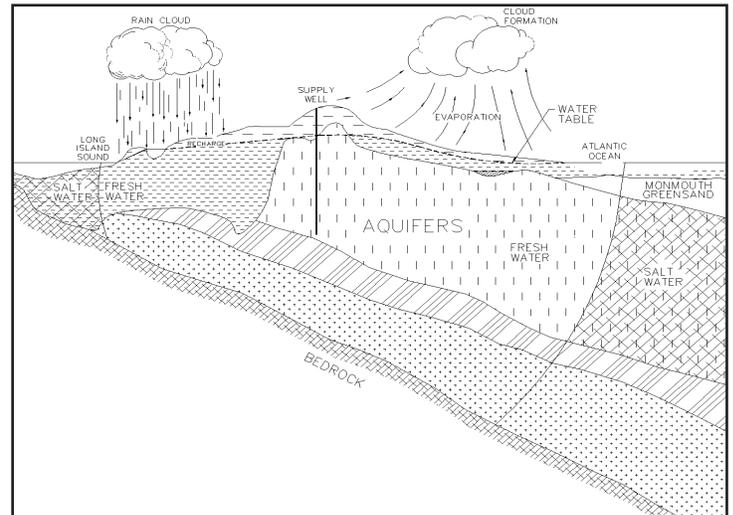
The Carle Place Water District is pleased to present this year's Water Quality Report. The report is required to be delivered to all residents of our District in compliance with Federal and State regulations. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We also want you to understand the efforts we make to continually improve the water treatment process and protect our water supply. The Board of Water Commissioners and the District employees are committed to ensuring that you and your family receive the highest quality water.

## SOURCE OF OUR WATER

The source of water for the District is groundwater pumped from the four (4) wells located throughout the District that are drilled into the Magothy aquifer beneath Long Island, as shown on the adjacent figure. Generally, the water quality of the aquifer 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 Carle Place Water District during 2013 was 8,965. The total amount of water withdrawn from the aquifer in 2013 was 580.1 million gallons, of which approximately 83 percent was billed directly to consumers. The remaining 17 percent is attributed to unaccountable demands such as water main and water service leaks, water main and hydrant flushing, fire fighting and training, road maintenance and aging water meters.



THE LONG ISLAND AQUIFER SYSTEM

## WATER TREATMENT

The Carle Place Water District provides treatment at all of its 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 the corrosive action between the water and water mains and in-house plumbing by the addition of sodium hydroxide. The District is required, by the Nassau County Department of Health, to add slight amounts of chlorine to the water for disinfection purposes.

## WATER CONSERVATION MEASURES

In 2013, the Carle Place Water District continued to implement a water conservation program in order to minimize any unnecessary water use. The pumpage for 2013 was 2.8 percent more than in 2012. This increase can be attributed to the slightly hotter and drier summer weather in 2013.

Residents of the District can also implement their own water conservation measures such as retrofitting plumbing fixtures with flow restrictors, repairing leaks in the home, installing water conservation fixtures/appliances and maintaining a daily awareness of water conservation in their personal habits. All underground sprinkler systems are required to include a rain sensor. 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).

It should be noted that the Carle Place Water District continues to enforce the Nassau County Lawn Sprinkling Restriction as follows:

- All water sprinkling is prohibited between 10 a.m. and 4 p.m.
- Even numbered addresses are allowed to sprinkle on even-numbered dates during the prescribed hours and odd-numbered addresses are allowed to sprinkle on odd-numbered dates during the prescribed hours.
- County law enforcement officers will assist water purveyors in enforcing the regulations through the issuance of summons which will result in a fine.

## COST OF WATER

The District utilizes a unit price billing rate with the residential consumer being billed at \$1.00 per 1,000 gallons used, with a \$20.00 minimum semi-annual bill. Commercial services are billed at \$2.00 per 1,000 gallons used, with a \$100.00 minimum semi-annual bill.

## CONTACTS FOR ADDITIONAL INFORMATION

We are pleased to report that our drinking water is safe and meets all Federal and State requirements. If you have any questions about this report or concerns about your water utility, please contact Water Superintendent Tim Doyle at (516) 333-0540 or the Nassau County Department of Health at (516) 227-9692. We want our valued customers to be informed about our water system. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second and fourth Tuesday of each month at 7:00 p.m. at the Water District office, unless otherwise posted.

The Carle Place Water District routinely monitors for different parameters and possible 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 impurities. It's important to remember that the presence of these impurities 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 (800-426-4791).

Some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immune-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 for 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 to infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

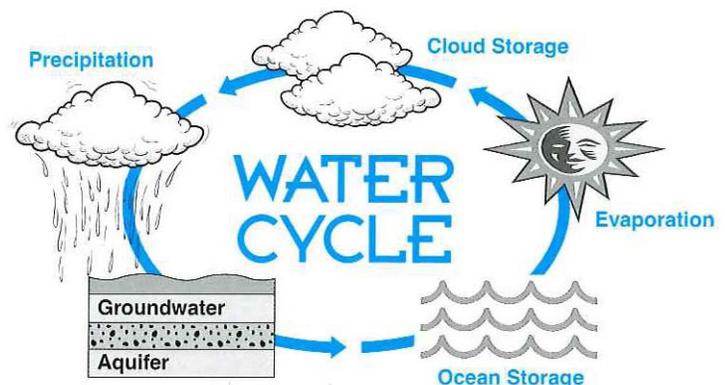
## NEW YORK STATE MANDATORY HEALTH ADVISORY

Water from the Carle Place Water District has a slightly elevated nitrate level, but well below the maximum contaminant level of 10.0 parts per million. Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. The source of the nitrates is the nitrogen in fertilizers and from on-site septic systems. If you are caring for an infant, you should seek advice from your health care provider.

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 and was last conducted in 2011. All of our results were excellent indicating that the District'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 Carle Place Water District is required to collect lead and copper samples once every three years between the months of June and September. The next sampling session must be conducted again this year.

## WATER QUALITY

In accordance with State regulations, the Carle Place Water District 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 for in each of our wells numerous times per year. The table presented on page 3 depicts which parameters or contaminants were detected in the water supply. It should be noted that many of these parameters are naturally found in all Long Island drinking water and do not pose any adverse health effects.



# 2013 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	June/July 2011	0.02 - 0.07 <sup>(1)</sup>	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	No	June/July 2011	ND - 1.68 <sup>(1)</sup>	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits
Fluoride	No	05-03-13	ND - 0.1	mg/l	n/a	MCL = 2.2	Naturally occurring
Sodium	No	04-30-13	11.1 - 28.0	mg/l	n/a	No MCL <sup>(2)</sup>	Naturally occurring
Zinc	No	04-09-13	0.02 - 0.1	mg/l	n/a	MCL = 5	Naturally occurring
Chloride	No	04-09-13	17.6 - 29.6	mg/l	n/a	MCL = 250	Naturally occurring
Iron	No	05-03-13	ND - 90	mg/l	n/a	MCL = 300	Naturally occurring
Nitrate	No	08-06-13	4.9 - 7.3	mg/l	10	MCL = 10	Runoff from fertilizer and leaching from septic tanks and sewage
Sulfate	No	05-03-13	ND - 20.0	mg/l	n/a	MCL = 250	Naturally occurring
Magnesium	No	05-03-13	3.7 - 5.4	mg/l	n/a	NONE	Naturally occurring
Nickel	No	04-02-13	ND - 0.002	ug/l	n/a	NONE	Naturally occurring
Calcium	No	05-03-13	8.9 - 12.3	mg/l	n/a	NONE	Naturally occurring
Barium	No	04-02-13	ND - 0.01	mg/l	n/a	MCL = 2.0	Naturally occurring
<b>Volatile Organic Contaminants</b>							
1,1-Dichloroethane	No	09-24-13	ND - 2.0	ug/l	0	MCL = 5	Industrial/Commercial chemical discharge
Trichlorofluoromethane	No	03-05-13	ND - 1.0	ug/l	0	MCL = 5	Industrial/Commercial chemical discharge
1,1-Dichloroethene	No	12-03-13	ND - 1.0	ug/l	0	MCL = 5	Industrial/Commercial chemical discharge
Trichloroethene	No	09-24-13	ND - 0.7	ug/l	0	MCL = 5	Industrial/Commercial chemical discharge
1,1,1-Trichloroethane	No	06-04-13	ND - 0.7	ug/l	0	MCL = 5	Industrial/Commercial chemical discharge
Total Trihalomethanes (TTHMs)	No	05-03-13	ND - 6.0	ug/l	0	MCL = 80	Disinfection By-Products
<b>Synthetic Organic Contaminants Including Pesticides and Herbicides</b>							
None Detected	--	--	ND	--	--	--	--
<b>Radionuclides</b>							
Gross Alpha	No	05-13-13	1.4 - 2.49	pCi/L	n/a	MCL = 15	Naturally occurring
Radium 226	No	05-07-13	0.5 - 1.35	pCi/L	n/a	MCL = 5	Naturally occurring
Radium 228	No	05-13-13	0.06 - 1.33	pCi/L	n/a	MCL = 5	Naturally occurring
<b>Unregulated Contaminants</b>							
Perchlorate	No	04-02-13	ND - 2.0	ug/l	0	AL = 18 <sup>(3)</sup>	Fertilizer
<b>Bacteriologicals</b>							
Total Coliform	No	----	0 positive out of 244 samples	Positive or Negative	n/a	MCL = Positive results in more than 5% of the monthly samples	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.

<sup>(1)</sup> - During 2011, we collected and analyzed 20 samples for lead and copper. The 90% percentile level is presented in the table. The action levels for copper was not exceeded at any site tested. The action level for lead was exceeded at only one site. The District will conduct the next round of lead and copper samples in 2014.

<sup>(2)</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>(3)</sup> - Perchlorate is an unregulated contaminant. However, the NYS Dept. of Health has established an action level of 18.0 ug/l.

# SOURCE WATER ASSESSMENT

The NYSDOH, with assistance from the local health department, has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source were evaluated. The source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how rapidly 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. Please refer to section "Water Quality" for a list of the contaminants that have been detected, (if any). The source water assessments provide resource managers with additional information for protecting source waters into the future.

Drinking water is derived from four (4) wells. The source water assessment has rated all of the wells as having a high to very high susceptibility to industrial solvents and one (1) of the wells with a high susceptibility to nitrates. The very high susceptibility to industrial solvents is due primarily to point sources of contamination related to transportation routes and commercial/industrial activities in the assessment area. The high susceptibility to nitrate contamination is attributable to high density residential land use practices in the assessment area, such as fertilizing lawns.

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

Copies of the Supplemental Data Package, which includes the water quality data for each of our supply wells utilized during 2013, are available at the Carle Place Water District office located at 578 Mineola Avenue, Carle Place, New York and the Westbury Memorial Public Library located 445 Jefferson Street, Westbury, New York.

We, at the Carle Place Water District, 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.

The Carle Place Water District conducts over 3,000 water quality tests throughout the year, testing for over 130 different contaminants which have been undetected in our water supply including:

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