

# South Huntington Water District

## 2005 Drinking Water Quality Report

Public Water Supply Identification No.: 5103263

### Board of Commissioners

George Kopp, Chairman  
 Anthony R. Kropp, Treasurer  
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### Superintendent

Kevin Carroll

**ANNUAL WATER SUPPLY REPORT**

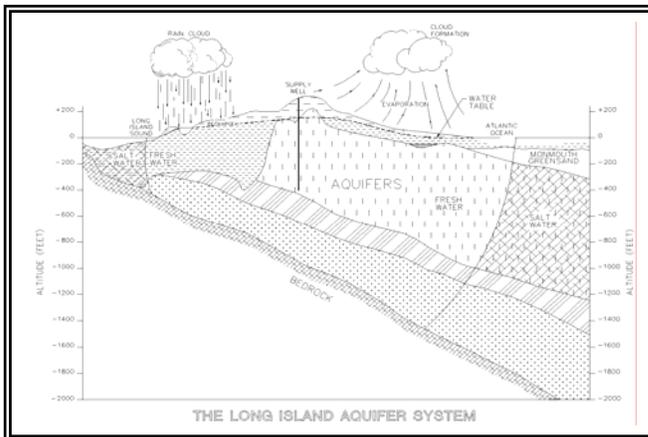
**May 2006**

The South Huntington Water District is pleased to present to you this year's Water Quality Report. **The Board of Commissioners is happy to report that our water meets or exceeds all Federal, State and County drinking water standards.** This report is required to be delivered to all residents of our District in compliance with Federal and State regulations. Our constant goal is to provide you with a safe and dependable supply of drinking water every day. We also want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. 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 21 wells located throughout the community that are drilled into the Glacial and Magothy aquifers beneath Long Island, as shown on the adjacent figure. Generally, the water quality of the aquifer is good to excellent, although there are localized areas of contamination.

The population served by the South Huntington Water District during 2005 was 81,760. The total amount of water withdrawn from the aquifer in 2005 was 3.82 billion gallons, of which approximately 91.1 percent was billed directly to consumers.



### COST OF WATER

During 2005, the District billed each customer based on metered water use at a rate of \$0.40 per 1,000 gallons. Effective 2004, the new water use rate is as follows:

0 – 100,000 gallons	\$0.40 per 1,000 gallons
100,001 – 200,000 gallons	\$0.65 per 1,000 gallons
Over 200,001 gallons	\$0.85 per 1,000 gallons

**We are proud to state that these are still the lowest water rates on Long Island!**

### 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 concerning your water utility, please contact Water District Superintendent Kevin Carroll at (631) 427-8190 or the Suffolk County Department of Health Services at (631) 853-2258. 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 normally held every Tuesday at 3:30 p.m. at the Water District office.

The South Huntington Water District routinely monitors for different parameters and contaminants in your drinking water as required by Federal and State laws. All sources of drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents or contaminants. It's important to remember that the presence of these constituents does not necessarily pose a health risk. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which 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. For more information on contamination and potential health risks, please contact the USEPA Safe Drinking Water Hotline at 1-800-426-4791.

Water from the South Huntington Water District has elevated levels of nitrates, 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 ask advice from your health care provider.

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 (800-426-4791).

#### **WATER CONSERVATION MEASURES**

The underground water system of Long Island has more than enough water for present water demands. However, saving water will ensure that our future generations will always have a safe and abundant water supply.

In 2005, the South Huntington Water District continued to implement a water conservation program in order to minimize any unnecessary water use. The pumpage for 2005 was 16 percent more than 2004. This increase can be attributable to hotter and drier weather that occurred during the Summer of 2005 compared to 2004. In addition, we have added a significant number of new customers due to new construction.

Residents of the District 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).

#### **WATER TREATMENT**

The South Huntington Water District 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 small amounts of sodium hydroxide.

The District also adds small amounts of calcium hypochlorite (chlorine) as a disinfection agent and to prevent the growth of bacteria in the distribution system.

Air stripping facilities are located at Well Nos. 1, 2, 5-1 and 5-2 for the removal of volatile organic chemicals. The new air stripping facility at Plant No. 10 has been completed and is now fully in service for the 2006 pumping season. A granular activated carbon filter is installed at Well Nos. 6 and 8 for the removal of volatile organic chemicals.

#### **WATER QUALITY**

In accordance with State regulations, the South Huntington 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

# SOUTH HUNTINGTON WATER DISTRICT

## 2005 WATER QUALITY REPORT

### TABLE OF DETECTED PARAMETERS

Parameters or 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>							
Lead	No	09/03	4.1 <sup>(1)</sup> ND-13.1	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	No	09/03	0.03 <sup>(1)</sup> ND - 0.04	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits
Sodium	No	09/27/05	20.9 2.6 - 20.9	mg/l	n/a	No MCL <sup>(2)</sup>	Naturally occurring
Zinc	No	08/10/05	0.03 ND - 0.03	mg/l	n/a	MCL = 5	Naturally occurring
Chloride	No	09/16/05	32.8 3.5 - 32.8	mg/l	n/a	MCL = 250	Naturally occurring
Iron	No	08/10/05	224 ND - 224	ug/l	n/a	MCL = 300	Naturally occurring
Nitrate	No	09/16/05	5.7 0.2 - 5.7	mg/l	10	MCL = 10	Runoff from fertilizer and leaching from septic tanks and sewage
Sulfate	No	09/27/05	17.5 ND - 17.5	mg/l	n/a	MCL = 250	Naturally occurring
Perchlorate	No	09/16/05	3.6 ND - 3.6	ug/l	n/a	AL = 18 <sup>(3)</sup>	Fertilizer
<b>Synthetic Organic Contaminants Including Pesticides and Herbicides</b>							
None Detected	--	--	ND	--	--	--	--
<b>Volatile Organic Contaminants</b>							
1,1,1-Trichloroethane	No	08/10/05	0.9 ND - 0.9	ug/l	0	MCL = 5	Industrial chemical discharge
Trichloroethene	No	08/10/05	2.5 ND - 2.5	ug/l	0	MCL = 5	Industrial chemical discharge
1,1-Dichloroethane	No	07/20/05	0.5 ND - 0.5	ug/l	0	MCL = 5	Industrial chemical discharge
Tetrachloroethene	No	08/10/05	1.0 ND - 1.0	ug/l	0	MCL = 5	Industrial chemical discharge
1,2-Dichloropropane	No	08/10/05	0.6 ND - 0.6	ug/l	0	MCL = 5	Industrial chemical discharge
<i>cis</i> -1,2-Trichloroethene	No	08/10/05	0.67 ND - 0.67	ug/l	0	MCL = 5	Industrial chemical discharge
Total Trihalomethanes	No	09/27/05	5.5 ND - 5.5	ug/l	n/a	MCL = 50	Disinfection by-product

**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> - The District sampled for lead and copper under the guidelines of the USEPA requirements in 2003. Results indicated are from this special sampling program. The maximum result represents the 90th percentile. Of the 30 samples collected, only one exceeded the action level for lead. None of the samples exceeded the action level for copper. The District will resample in 2006.

<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 State Health Dept. has established an action level of 18 ug/l.

numerous times per year. The Water District conducts more testing than required by the State Health Department to ensure your water is safe to drink. The enclosed table depicts which parameters or contaminants were detected in your drinking water. 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 affects. All of our water meets the drinking water standards after treatment. In addition to the table of detected parameters, the District tested for over 100 contaminants that were not detected in our water, including pesticides, herbicides, organic chemicals and radioactive contaminants.

#### **SOURCE WATER ASSESSMENT**

The NYSDOH 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 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 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 the 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 21 drilled wells. The source water assessment has rated most of the wells as having a high susceptibility to industrial solvents and nitrates. The susceptibility to nitrates is due primarily to point sources of permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the State and/or Federal government), agricultural practices and activities associated to high density land use, such as fertilizing lawns. The susceptibility to industrial solvents is primarily due to point sources of contamination related to industrialized activities in the assessment area. In addition, one well is rated as having a very high susceptibility to microbial contamination due primarily to its proximity to medium intensity residential unsewered landuse. While the source

water assessment rates one of 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.

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

#### **WATER SYSTEM IMPROVEMENT**

With the increase in water demand throughout the District along with the additional development of new homes and businesses, the Board of Commissioners has approved a Capital Improvement Program that provides for the construction of new water supply facilities. The air stripping system, well rehabilitation and building modernizations at Plant No. 10 are now complete and this key facility is once again fully operational. We are pleased to announce that the new No. 19-2 supply well on Mount Misery Road has been completed and is now on-line providing additional capacity for the West Hills area. The construction of Plant No. 20 in The Villages continues ahead of schedule with completion currently slated for early Fall of 2006. The District will continue with this Capital Improvement Program of constructing new facilities and rehabilitating the older facilities and equipment to ensure that the District will be able to provide a reliable and safe water supply to our consumers.

Copies of a Supplemental Data Package, which includes the water quality data for each of our supply wells utilized during 2005, are available at the South Huntington Water District office located at 75 5<sup>th</sup> Avenue South, Huntington Station, New York and the local public library.

We at South Huntington Water District work around the clock to provide top quality water to every tap throughout the community. We ask that all our consumers help us protect our water resources, which are the heart of our community, our way of life and our children's future.