

# Annual Water Quality Report 2005

## TOWN OF LINCOLN, MASSACHUSETTS

### Introduction

This Report describes Lincoln's drinking water sources, treated water quality, and how we maintain the high quality of your water.

This report is issued annually to you, the consumer, to keep you updated on your drinking water quality. The report also provides information on where your water comes from, how we treat it, and answers to questions you may have about Lincoln's water system.

We are proud to report that the water provided by the Lincoln Water Department meets or exceeds established water-quality standards.

### Sources of Drinking Water

The sources of drinking water generally include rivers, lakes, streams, ponds, reservoirs, springs and wells. Because water is the universal solvent, 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 activity as it travels over the surface of the land or through the ground.

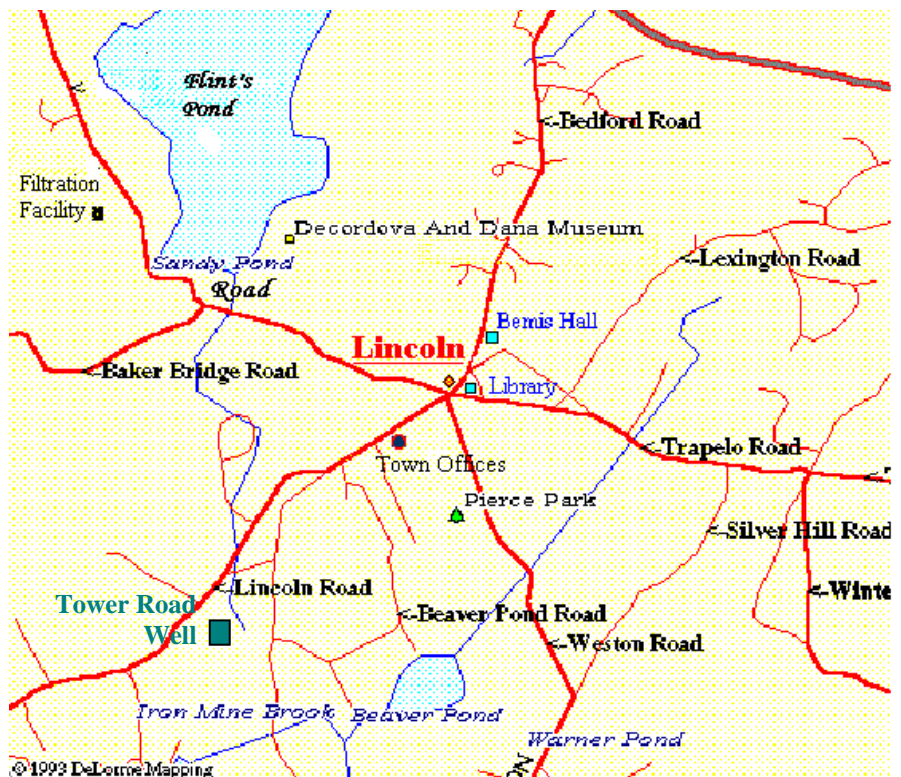
### Lincoln's Drinking Water - A Well-Protected Source

The Town of Lincoln is supplied by both surface water and groundwater wells. Flint's Pond, also known as Sandy Pond, is the primary year-round supply. Tower Road Well is a supplemental source used during peak periods and

when Flint's pond is off-line for servicing.

Since 1896, when the system was known as the Lincoln Water Works, the Town has recognized the need to protect its watershed. The watershed consists of 465 acres of land surrounding Flint's Pond, which is approximately 92 percent owned and/or controlled by the Town. The Town has in place a Watershed Protection Plan designed to limit access to the water and protect the land from any development that would endanger the water supply.

Lincoln buys and sells approximately 1 percent of its water to the Town of Weston. This arrangement accommodates the best interest of the respective distribution systems for Lincoln and Weston. We also have standby agreements with the Towns of Wayland and Lexington in the event of an emergency.



### How Can I Learn More?

The Lincoln Water Department's Superintendent, Patrick Allen, and staff are available **Monday - Friday**, from 7:00 A.M. - 3:30 P.M., to answer questions and provide assistance at the following addresses & telephone numbers: The **Sandy Pond Pump Station** is located at 77 Sandy Pond Road, (781) 259-8997 The **Filtration Plant** is located at 80 Sandy Pond Road, (781) 259-1329. You can also check the Town's website at [www.lincolntown.org](http://www.lincolntown.org).

## Source Water Assessment & Protection

The Source Water Assessment & Protection (SWAP) Program, established under the federal Safe Drinking Water Act, requires every state to: inventory land uses within the recharge areas of all public water supply sources; assess the susceptibility of drinking water sources to contamination from these land uses; and publicize the results to provide support for improved protection. You can download a copy of the Lincoln SWAP Report from the DEP web-site at [www.mass.gov/dep/brp/dws.swap](http://www.mass.gov/dep/brp/dws.swap) or call the Lincoln Water Department at (781) 259-1329.

## Cross Connection/Distribution System Protection

All backflow prevention devices were tested and approved in 2005.

## Water Rates

The Lincoln Water Department is in the final stages of resolving an Administrative Consent Order (N.E.-03-F00) with the D.E.P. In the fall of 2004, the Water Dept. implemented a two-tiered water rate structure as part of the A.C.O. The first 58,000 gallons of usage is billed at \$4.83 per 1000 gallons; usage over 58,000 gallons is billed at \$7.25 per 1000 gallons.

## For Your Health

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

## Information About Drinking Water

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. However, some people may be more vulnerable to contaminants 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 care provider. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791). Lincoln's Public Water System I.D. # is: **3157000**. Contaminants that can be present include:

- *Microbial contaminants*, such as viruses and bacteria, which may come from septic systems 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.
- *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*, may be naturally occurring or be the result of oil and gas production and mining activities.

## Lincoln Water Commission

- Andrew Hall III: Chairman
- Dr. Andrew Cole
- Buckner Creel

The Lincoln Water Commission meets at the Sandy Pond Pump Station on the second Tuesday of each month at 7:30 A.M.

## Water Conservation

The Town has increased its public education and awareness efforts to strengthen on-going efforts to conserve water. Typically, summer consumption is 1-1/2 times the winter consumption baseline. As we all prepare for the upcoming summer season, the Lincoln Water Department would like to remind everyone of the need for water conservation so we can preserve this natural resource and save you money at the same time.

## Treated Water Quality

Listed in the table below are substances detected in Lincoln's drinking water during 2005. There are more than 50 other substances for which we tested that were *not* detected in our water during 2005. The presence of contaminants in drinking water does not necessarily indicate that the water poses a health risk.

	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Highest Detected Level	Range of Detected Levels	Source of Contamination
<b>Regulated for Source Water or After Treatment</b>					
Nitrate (ppm) Tower Rd. Well	10	10	.66	.66-.66	Runoff from fertilizer use; septic systems
Nitrate (ppm) Flint's Pond	10	10	.40	.40-.40	
Nitrite (ppm) Tower Rd. Well	1	1	ND	ND	Runoff from fertilizer use; septic systems
Nitrite (ppm) Flint's Pond	1	1	ND	ND	
Turbidity (NTU)	.30	NA	.145	.023 - .145	Natural sediment; soil runoff
Barium (ppm)	2	2	SNR	SNR	Erosion of natural deposits (Source water)
<b>Regulated in the Distribution System (DS)</b>					
Total Trihalomethanes (TTHMs)(ppb)	80	0	69.8	38.0 – 69.8	By-product of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	60	0	33.4	33.4 – 42.4	By-product of drinking chlorination
Di (2-ethylhexyl) phthalate (ppb)	6	0	ND	ND	Discharge from rubber & chemical factories
Total Coliform (colonies/100 ml; number of positive samples in one month)	< 5% positive samples per month	0	0	0	Naturally present in the environment
<b>Regulated at the Consumer's Tap</b>					
Lead (ppb)	AL = 15	0	.001	0 - .001	Corrosion of household plumbing systems
Copper (ppm)	AL = 1.3	1	.05	.02 - .05	Corrosion of household plumbing systems
Fluoride (ppm)	4	4	1.30	0.82 – 1.30	Erosion of natural deposits; water additive that promotes strong teeth
Arsenic (ppb)	10	NA	<0.194	ND - <0.194	Erosion of natural deposits; runoff from orchards
Asbestos (MFL)	7	7	ND	ND	Decay of Asbestos Cement Water Mains; erosion of natural deposits
<b>Unregulated Contaminants</b>					
Chloroform (ppb)	NR	NR	64	ND - 64	By-product of drinking water chlorination
Bromodichloromethane (ppb)	NR	NR	9	ND - 9	By-product of drinking water chlorination
Dibromochloromethane (ppb)	NR	NR	0.8	ND - 0.8	By-product of drinking water chlorination
Sodium (ppm)	NR	NR	18.1	8.4 – 18.1	Widely present in natural waters (Source Water)

<p><b>Definitions:</b></p> <p><b>MCLG</b> (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.</p> <p><b>MCL</b> (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.</p> <p><b>AL</b> (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements, which a water system must follow.</p>	<p><b>Key:</b></p> <p>ppm One part per million  ppb One part per billion  &lt; Less than  &gt; Greater than  ml Milliliter  (one thousandth of a liter)  NR Not Regulated  NA Not Applicable  ND Not Detected  DS Distribution System  SNR Sampling not required during 2005  NTU Nephelometric Turbidity Units  MFL Million of Fibers per liter</p>
---	--

**IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER:**

*Monitoring Requirements Not Met for Lincoln Water Department*

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 01/01/05 – 12/31/05, we did not complete all of the monitoring for Lead and Copper, and therefore cannot be sure of the quality of our drinking water during that time.

What should I do?

There is nothing you need to do at this time.

The table below lists the contaminants we did not properly test for during the last year, how often we are supposed to sample for Lead & Copper and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

Contaminant	Required Sampling Frequency	# of samples taken	When all samples should have been taken	When samples were or will be taken
Lead & Copper	2 samples from 2 schools	0	1/1/05-12/31/05	6/1/06-9/30/06

Please note: According to the DEP Required Sampling Frequency Schedule, samples from 20 other DEP-approved tap locations were to be collected in the 3<sup>rd</sup> quarter of 2005. These samples were collected as scheduled and no violations were found. Currently, Lincoln Public Schools do not use tap water for drinking.

What happened? What is being done?

Samples will be collected between 6/1/06 – 9/30/06 in accordance with the DEP regulations. Results will be reported by 11/10/06 in accordance with the DEP regulations.

For more information, please contact Patrick Allen, Superintendent at (781) 259-8997 or Water Dept. P.O. Box 6353 Lincoln, MA 01773.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by the Lincoln Water Department.