

# Annual Water Quality Report 2004

## 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.

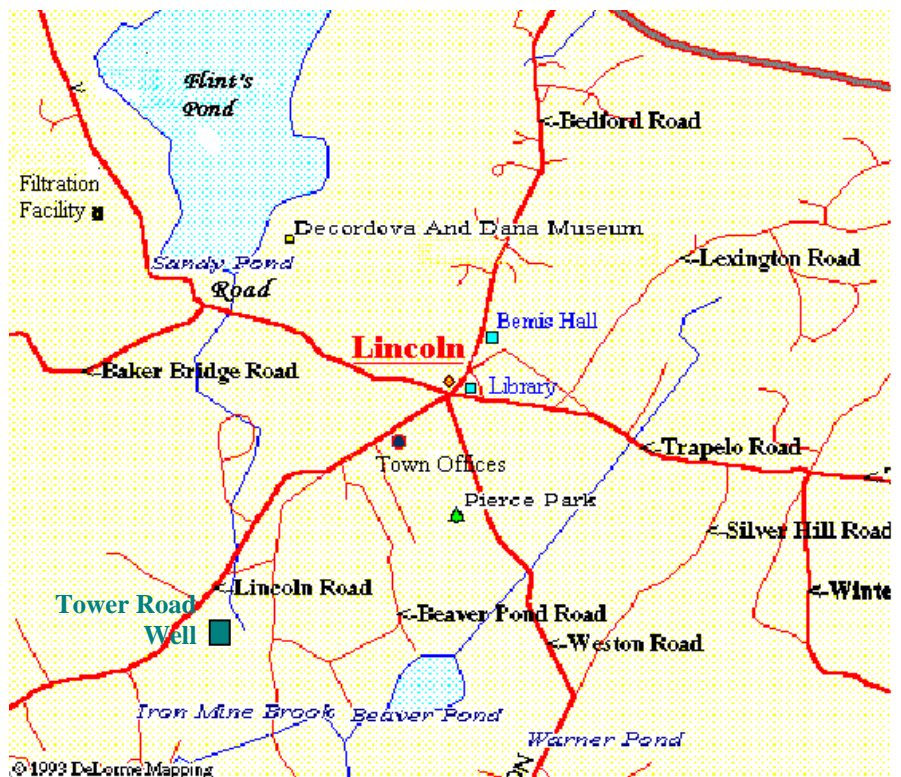
### Lincoln's Drinking Water - A Well-Protected Source

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 2004.

## 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. With the last water bills, the Water Department included a pamphlet on tips for conserving water, and a flyer to help residents compare their water usage with others in Town. The Selectmen appointed a Natural Resources Conservation Committee to help develop policies for conserving water, among the other resources.

## Treated Water Quality

Listed in the table below are substances detected in Lincoln's drinking water during 2004. There are more than 50 other substances for which we tested that were *not* detected in our water during 2004. 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	ND	ND	Runoff from fertilizer use; septic systems
Nitrate (ppm) Flint's Pond	10	10	.70	n/a	Runoff from fertilizer use; septic systems
Turbidity (NTU)	.30	NA	.069	.027 - .069	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	59.7	14.5 – 59.7	By-product of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	60	0	39	19.6 – 39	By-product of drinking water disinfection
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	SNR	SNR	Corrosion of household plumbing systems
Copper (ppm)	AL = 1.3	1	SNR	SNR	Corrosion of household plumbing systems
Fluoride (ppm)	4	4	1.28	.82 - 1.28	Erosion of natural deposits; water additive that promotes strong teeth.
<b>Unregulated Contaminants</b>					
Chloroform (ppb)	NR	NR	15	15	Component of total trihalomethanes (DS)
Bromodichloromethane (ppb)	NR	NR	3.2	3.2	Component of total trihalomethanes (DS)
Perchlorate (ppb)	NR	NR	<MDL	n/a	Rocket propellants, flares, fireworks, munitions
Sodium (ppm)	NR	NR	SNR	SNR	Widely present in natural waters (Source Water)

**Definitions:**

**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.

**MCL** (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.

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

**Key:**

- ppm One part per million
- ppb One part per billion
- < Less than
- > 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 2004
- NTU Nephelometric Turbidity Units

**The Lincoln Water System had no violations in 2004. We're proud that your drinking water meets or exceeds all Federal and State Requirements.**