

# Annual Water Quality Report 2003

## 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.

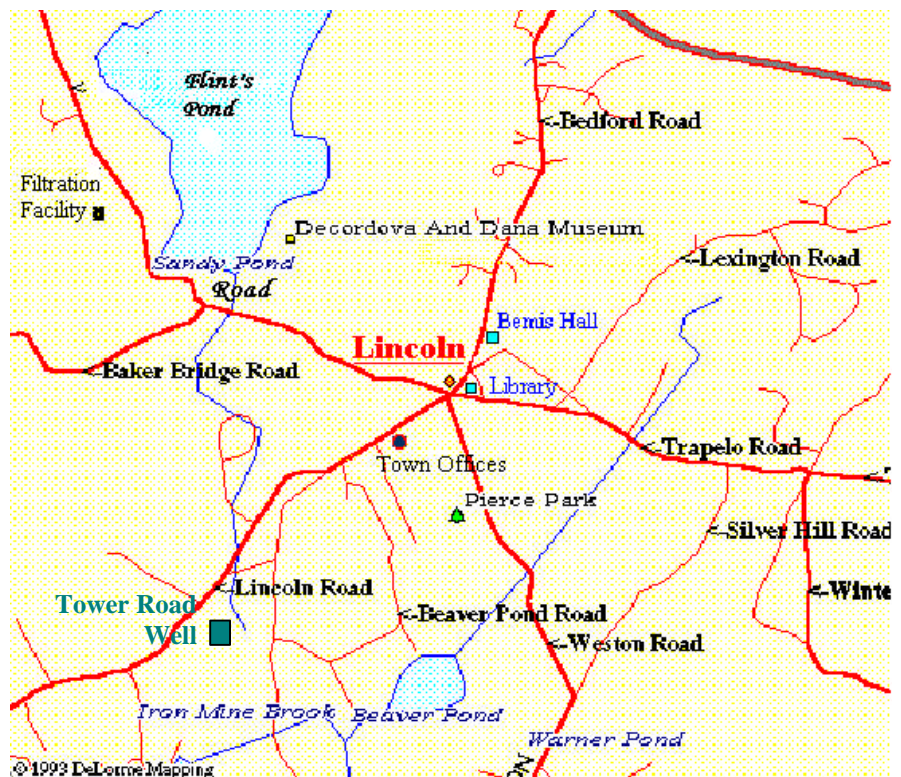
### Lincoln's Drinking Water – A Well-Protected Source

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?

If you are interested in learning more about Lincoln's water supply or have questions about your drinking water or about this report please contact Pat Allen at the Water Department at 259-8997. You can also check the Town's website at [www.lincolntown.org](http://www.lincolntown.org)

In addition, drinking water issues are addressed at monthly Water Commission meetings held on the second Tuesday of every month at 7:30 a.m. at the Water Department.

## What's New in Lincoln?

The Massachusetts Department of Environmental Protection (DEP) granted final start-up approval to the Flint's Pond Microfiltration Plant on June 27, 2003. The treatment plant is designed using a state-of-the-art continuous microfiltration technology from US Filter. This filtration process removes solids larger than approximately 0.2 microns. The Water Department is proud of our new facility and is happy to offer tours of the Water Treatment plant to residents, school groups etc.

## Cross Connection/Distribution System Protection

All backflow prevention devices were tested and approved in 2003.

## Water Conservation Tips

**Water is the lifeblood of our planet**, yet it is being depleted at a much greater rate than it is being replenished. The Lincoln Water Department encourages all of its consumers to do their part to conserve our precious supply through small, thoughtful changes in their lifestyles & activities.

Here are just a few tips:

- fix leaking faucets, pipes, toilets, etc.
- install water-saving devices in faucets, toilets and appliances
- take shorter showers
- don't use the toilet for trash disposal
- run the dishwasher when fully loaded
- water lawn and garden as needed in the early morning hours (lawn watering may consume more than 50% of summer residential water use)
- irrigation systems should be equipped with moisture sensing devices
- aerate lawns regularly and use mulch around plants to reduce evaporation

## 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. Food and Drug Administration 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 Identification Number 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.

## Treated Water Quality

Listed in the table below are substances detected in Lincoln's drinking water during 2003. There are more than 50 other substances for which we tested that were **not** detected in our water during 2003. 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)	10	10	0.82	ND-0.82	Runoff from fertilizer use; septic systems
Turbidity (NTU) Before Microfiltration Jan.2003-Jun.2003	TT	NA	0.80	0.28-0.80	Natural sediment; soil Runoff
Turbidity (NTU) With Microfiltration Plant on-line July 2003-Dec.2003	TT	NA	0.23	0.03-0.23	Natural sediment; soil runoff
Barium (ppm)	2	2	0.05	ND-0.05	Erosion of natural deposits (Source water)
<b>Regulated in the Distribution System (DS)</b>					
Total Trihalomethanes (ppb)	80	0	27.99 <sup>2</sup>	ND-102.6	By-product of drinking water chlorination
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	1.39	0.9-1.39	Erosion of natural deposits; water additive that promotes strong teeth.
<b>Unregulated Contaminants</b>					
Chloroform (ppb)	NR	NR	7.0	ND-7.0	Component of total trihalomethanes (DS)
Bromodichloromethane (ppb)	NR	NR	2.0	ND-2.0	Component of total trihalomethanes (DS)
Sodium (ppm)	NR	NR	18.6	5.5-18.6	Widely present in natural waters (Source Water)
<b>Footnotes:</b> 1. Highest monthly average value. 2. Highest detected level is based on average of 4 quarterly samples as required by regulation.		<b>Key:</b> ppm One part per million ppb One part per billion < Less than > Greater than ml Milliliter (one thousandth of a liter)			
<b>Definitions:</b>  <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.  <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.  <b>AL</b> (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements, which a water system must follow.  <b>TT</b> (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.					

