Long Island’s Water Supply Needs Help

Time is running out to protect and manage the aquifers and water supply of Long Island. The Long Island water supply, the groundwater stored beneath all of Long Island, continues to be polluted, wasted, and depleted.

Seventy percent of New York State is served by one of the three professional management compacts (river basin/watershed commissions) created to oversee and protect water quality and quantity. Long Island is the largest community in New York State without comprehensive, professional water management and oversight. This allows the water supply in the aquifers to be wasted and ruined through negligence and inaction. It is time to change this by creating a professional entity that will act to protect, manage, and conserve the sole source of drinking water, the groundwater, of Long Island.

Water Use on Long Island Continues to Increase

While water use in many parts of the U.S. is decreasing due to higher prices, the loss of available water and the need to conserve, water use on Long Island continues to grow. With an increasing population, larger homes, in-ground lawn watering systems and more water-using features in our homes, at least 100 additional water supply wells will be needed in the next 20 years.

Today, we appreciate the value of the natural resources that support life and improve the quality of life. However, unlike oil or natural gas deposits, water is the only resource we extract from nature for which there is no substitute.
Many Water Suppliers, No Water Managers

Long Island’s water supply is under the jurisdiction of the NYS Department of Environmental Conservation (DEC) which has been crippled by budget cuts of over 20% and the loss of nearly 1,000 employees. Further, DEC’s Water Program focuses on surface water, not groundwater.

OF ALL THE NATURAL RESOURCES THAT LONG ISLANDERS RELY ON, THE WATER SUPPLY IS THE ONLY RESOURCE THAT ORIGINATES EXCLUSIVELY ON LONG ISLAND.

Long Island relies totally on water pumped from wells to meet the needs of 3 million residents. This well water, known as groundwater, originates as rain that falls on Long Island. There is no other source of freshwater for Long Islanders to use.

If the groundwater supply is ruined by pollution, depletion or both, there is no other water source for Long Island. New York City does not provide any water to Long Island and it does not have extra water to share with Nassau or Suffolk Counties. In fact, New York City wants to purchase water from Long Island.

WATER QUALITY IS AFFECTED BY MANY POLLUTANTS

The list of pollutants found in the groundwater includes:

- Nitrates and Perchlorate (from sewage & fertilizer)
- Toxic chemicals such as Volatile Organic Compounds
- Pesticides (for lawns, gardens and homes)
- Gasoline products and additives (MTBE & BTEX)
- Radioactive materials
- Personal care products (shampoo, DEET)
- Pharmaceutical products (human drugs)

WATER QUANTITY IS DECLINING IN PARTS OF LONG ISLAND

We live on an island surrounded by sea water. If too much water is pumped from the aquifers, seawater will move in making drinking water undrinkable. This problem already affects or threatens south and north shore communities in Nassau County, such as Great Neck, Port Washington, Sands Point, Kings Point, Bayville, and the City of Long Beach. It is also an issue for the North and South Forks, and slender coastal features such as Asharoken in Suffolk County.
A model for Long Island aquifer management already exists

There are over 40 river basin management agencies and many aquifer management districts that oversee and manage regional water resources in the U.S. Three water basin compacts are currently operating in New York State. Even the New York City water supply is within the jurisdiction of a major compact, the Delaware River Basin Commission.

What benefits would an aquifer management compact provide?

AQUIFER MANAGEMENT COMPACT BENEFITS:

- A professional staff of water experts to develop and implement a comprehensive water management plan.
- A water well permit program based on detailed studies of the aquifers, that allocates water and assures a sustainable level of water withdrawals.
- Strategies to protect the aquifers as rising sea level threatens to make some drinking water too salty to drink.
- Programs designed to protect water quality, hasten contamination cleanup and report on aquifer conditions and trends to the public.
- Long-term and short-term studies to increase understanding of the aquifer processes, characteristics, water quality, groundwater flow, saltwater intrusion and impacts due to human activities and climate change.
- Education programs and reports to increase public awareness of the aquifer system and the fragility of the water supply.
- A partnership with the U.S. Geological Survey and other agencies for water data collection and research programs.
- A team of water professionals ready to defend and protect our water against outside threats.

THERE ARE OVER 75 WATER UTILITIES ON LONG ISLAND, BUT NOT ONE WATER MANAGEMENT AGENCY. IT IS TIME TO ADD THE MISSING PIECE:

THE LONG ISLAND AQUIFER MANAGEMENT COMPACT (LIAMC).

THE LONG ISLAND AQUIFER MANAGEMENT COMPACT WOULD BE A LEGALLY BINDING AGREEMENT, ADOPTED THROUGH STATE LEGISLATION, ESTABLISHING THE ORGANIZATION'S OBLIGATIONS AND DUTIES UNDER THE DIRECTION OF A HYDROLOGICALLY KNOWLEDGABLE BOARD OF DIRECTORS FROM LONG ISLAND.
LONG ISLAND NEEDS A DEDICATED WATER OVERSIGHT AGENCY, THE LONG ISLAND AQUIFER MANAGEMENT COMPACT, TO PROVIDE THE SAME PROFESSIONAL SERVICES THAT BENEFIT MOST OF NEW YORK STATE AND THE NATION. THE CREATION OF OUR OWN AQUIFER MANAGEMENT COMPACT WILL REQUIRE STATE LEGISLATION.

DID YOU KNOW?

1. About one-half of the rainfall on Long Island trickles down to replenish the aquifers in a process known as "recharge."

2. Most recharge occurs during the late fall, winter, and early spring (October—April).

3. Rain in the spring and summer often does not reach the aquifers because it is used by vegetation or evaporates in the warm weather.

4. All the streams, ponds, and rivers on Long Island are fed by groundwater. Where the streams have dried up, the local groundwater has been depleted by human use.

5. When you water your lawn in summer, the excess water you use is lost due to evaporation and does not sink back into the aquifers.

6. The ground does not filter out pollutants if they are dissolved in water or rainfall.

7. An average of 150 billion gallons of water or more is pumped from the aquifers in a typical year.

8. Water use in the summer increases by 200% to 400% over winter water use.

9. Average per person water use on Long Island is much higher than the national average of 100 gallons per person per day. We use about 140 gallons per person per day.

10. Tap water is one of the cheapest commodities we buy today.

11. The annual cost per person of a L.I. Aquifer Management Compact would be about the cost of one cup of premium coffee per year.

This information was prepared by Water for Long Island.  
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