



Our Environment



GOAL #10—NATURAL RESOURCE CONSERVATION

WE PROMOTE THE CONSERVATION AND EFFICIENT USE OF THE REGION'S NATURAL RESOURCES.

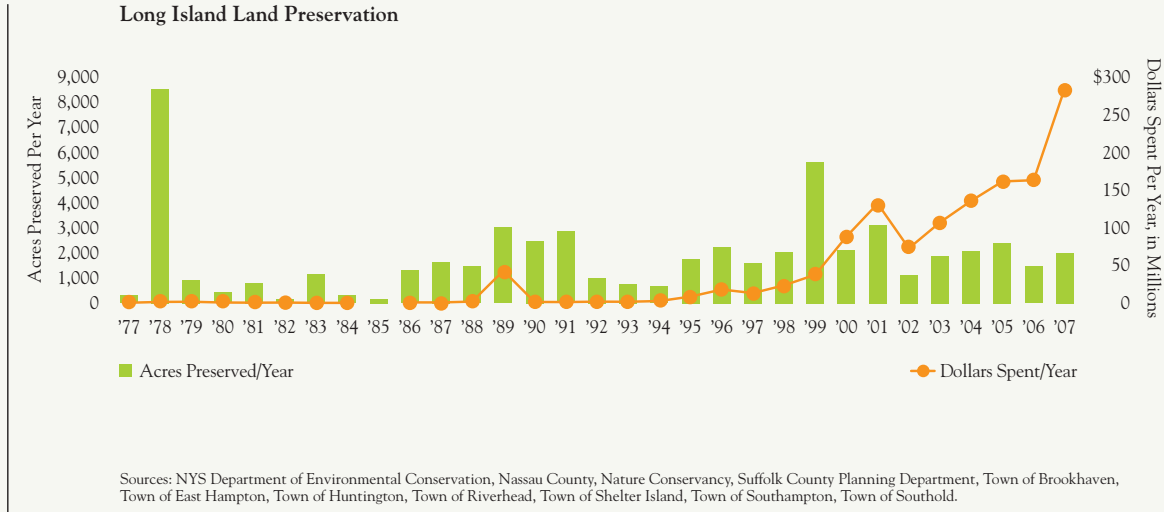
INDICATOR:

LAND PRESERVATION

Number of acres preserved improved slightly but the region is still falling behind its goals despite record spending.

WHY IS THIS IMPORTANT?

Land preservation is important on Long Island for reasons both environmental and economic. Preserved lands protect the Island's drinking water, provide critical habitat for wildlife, ensure the viability of the Island's farming industry and maintain the strength of its tourism sector.

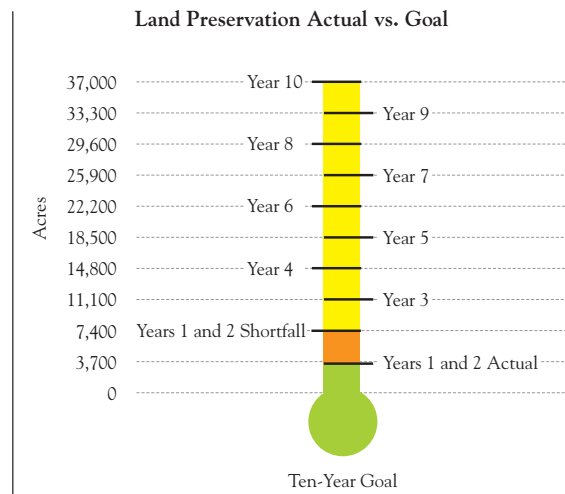


HOW ARE WE DOING?

Since 1977, New York State, both counties and numerous towns across the Island cumulatively expended over \$1.3 billion for the preservation of 57,535 of Long Island's approximately one million acres. With experts forecasting the Island's final build-out to take place within the next decade, the Department of Environmental Conservation's (DEC) 2006 plan calls for the additional preservation of 25,000 acres of environmentally open space and 12,000 acres of working farmland before that time. These goals would leave the Island with 92,147 acres of preserved land, nearly 1/10th of its total land mass, at the time of final build-out.

Though Long Island cumulatively spent a record \$285 million on preservation efforts in 2007, the 1,999 acres preserved was still significantly less than would be needed to reach the Island's preservation goals. The 3,457 acres preserved in 2006 and 2007, combined, represents approximately 10% of the Island's total preservation goal. At current rates, it would take over 20 years to preserve the 37,000 targeted acres. If final build-out does occur within the next decade, Long Island is on course to fall far short of its goals.

One reason for the difficulty in achieving the Island's preservation goals has been the tremendous escalation in the cost of land. In 2007, preservation entities paid, on average, approximately \$143,000 per acre. That represents a 22% increase over the approximately \$112,000 per acre spent in 2006 and a staggering 71% increase over the \$41,579 spent per acre in 2000. The recent slow down in the real estate market may represent a reprieve from these escalations over the next few years.



INDICATOR:

BROWNFIELDS REDEVELOPMENT

Known sites of environmental contamination are located in more than 100 Long Island communities.

WHY IS THIS IMPORTANT?

New York State defines a brownfield as properties where the presence or potential presence of a hazardous substance, pollutant, or contaminant may complicate plans for expansion, redevelopment or reuse. These sites include buildings that were former factories, dry cleaners, warehouses, vacant commercial lots, shuttered gas stations and auto shops. In addition to frequently being an eyesore in a community, they may pose environmental threats to surrounding areas and may affect ground water and the air supply. Further, they can be obstacles in the way of downtown and community redevelopment. Revitalizing brownfields is critical both for environmental needs as well as to capture potential tax revenue and to fully utilize a community's assets.

HOW ARE WE DOING?

Long Island is home to an estimated 6,800 *potential* brownfield sites. This number is based on known sites of contamination due to historic land uses, and chemical or oil spills. New York State Department of Environmental Conservation has identified 1,837 *known* (as opposed to potential) brownfield and state superfund sites, of which Long Island has 231 sites, representing 11% of the total number of brownfields statewide.

The road to cleaning up these sites varies by the type, extent and location of contamination. There are three programs that New York State has created to facilitate brownfields redevelopment. In all three cases, Long Island is lagging behind in applying for and receiving state funding for redeveloping brownfields.

The first program, the Brownfield Cleanup Program, focuses on helping private property owners. In these situations the state provides guidance throughout the cleanup process, offers generous tax credits to help cover the cleanup and redevelopment costs, and issues Certificates of Completion at the end of the cleanup. Of the 15 Long Island sites that have enrolled in the program, none have finished the program.

The second, the Brownfield Opportunity Area Program, offers state funding for local governments and community organizations to work together and plan for the redevelopment of these sites. In 2004, the first year of the Brownfield Opportunity Area Program and the only year that data is available, 6 grants (12%) out of 46 statewide were given to Long Island which represents 8% of the total \$7 million allocated.

The third, the Environmental Restoration Program, funds the remediation of brownfield sites owned by municipalities. As a region, Long Island municipalities have received just over \$1.1 million dollars out of the \$200 million dollars allocated for the program.

In addition to the above programs, there are both federal and state Superfund programs where the goal is to ensure that the worst polluter pays for the cleanup. Nationwide about 70% of the cleanups regulated by the federal government are paid by polluters, while on Long Island, the polluters paid for only 50% of the cleanups. Under the state program 66% of the Superfund sites on Long Island are being cleaned by the polluter, which is consistent with the statewide average.



To see a map of brownfield sites on Long Island, go to www.longislandindex.org and launch the Interactive Maps.

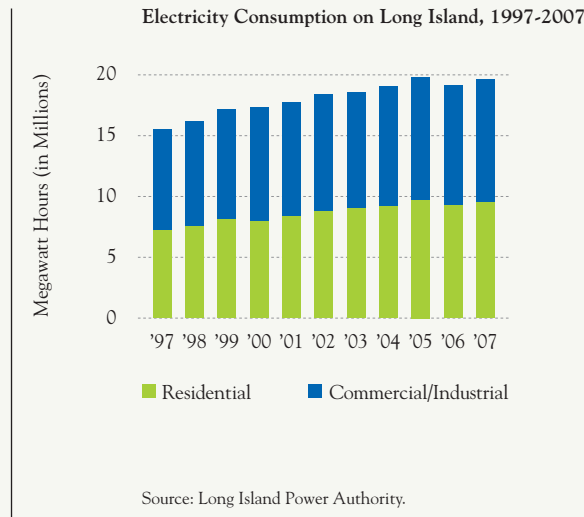
Brownfield Sites by Community

Community	Number of Sites*	Known State and Federal Funding for Selected Sites and Communities**
Babylon	4	\$137,929.27
Baldwin	3	\$94,000.00
Bay Shore	5	\$4,919,961.21
Bayville	1	
Bethpage	3	
Blue Point	1	
Bohemia	1	\$2,000,000.00
Brentwood	1	\$1,095,835.74
Carle Place	1	
Central Islip	2	
Copiague	1	\$1,000,000.00
Copiague	2	
Coram	1	
Deer Park	6	\$15,803.16
East Farmingdale	11	\$17,650,333.84
East Massapequa	1	
East Northport	2	\$600,000.00
East Patchogue	2	\$3,274.26
East Rockaway	1	
Eastport	2	
Elmont	3	
Farmingdale	8	\$3,008,474.72
Floral Park	1	
Franklin Square	3	\$11,000,000.00
Freeport	3	
Garden City	8	\$3,000,000.00
Garden City Park	2	\$574,497.62
Glen Cove	16	\$70,850,000.00
Glen Head	2	
Glenwood Landing	5	
Great Neck	7	\$6,388,796.75
Greenlawn	1	
Greenport	1	\$60,000.00
Hauppauge	5	\$5,954,567.53
Hempstead	7	\$249,544.23
Hewlett	4	\$1,000,000.00
Hicksville	14	\$20,800.00
Holbrook	2	
Huntington	3	\$617.21
Huntington Station	2	\$225,000.00
Inwood	4	
Island Park	2	
Islip	1	
Lake Success	2	
Levittown	2	\$967,351.38
Lindenhurst	4	
Long Beach	1	
Manhasset	1	
Manorhaven	1	
Manorville	1	

Community	Number of Sites*	Known State and Federal Funding for Selected Sites and Communities**
Massapequa	3	
Medford	1	
Melville	2	
Merrick	3	
Mineola	4	\$8,000,000.00
New Cassel	8	\$380,000.00
New Hyde Park	3	\$99,468.90
North Bellmore	1	
North Hempstead	2	
North Hempstead/Westbury	1	
North Merrick	1	
North Park	1	\$65,000.00
North Sea	1	
Noyack/Sag Harbor	1	
Oceanside	5	
Old Bethpage	6	\$38,000,000.00
Oyster Bay	1	
Oyster Bay/Glen Head	1	
Patchogue	2	
Plainview	2	
Port Jefferson Station	1	\$7,000,000.00
Port Jefferson Station	1	
Port Washington	6	\$4,000,000.00
Riverhead	2	
Rockville Centre	2	
Rocky Point	1	
Ronkonkoma	1	
Roosevelt	3	\$1,225,874.42
Roslyn	1	
Sag Harbor	4	
Seaford	1	
Shirley	1	
Shoreham	1	
Smithtown	2	\$3,000,000.00
Southampton	1	
Southampton/Westhampton	1	
Southold	1	
Speonk	1	\$1,236,421.55
Syosset	2	
Upton	2	
Valley Stream	3	
Wantagh	1	
West Babylon	4	\$1,250,818.54
West Brentwood	1	
West Islip	1	\$6,403,924.36
West Sayville	1	
Westbury	8	\$271,591.51
Westhampton Beach	3	
Wyandanch	4	\$808,170.00
Yaphank	1	
Grand Total	278	\$202,558,056.20

*Sites counted include: New York State Brownfield Cleanup Program, NYS Environmental Restoration Program, NYS Voluntary Cleanup Program, Federal and State Superfund sites, and communities that have received Federal and State funding for Brownfields redevelopment sites may be duplicated if both on the National and State Superfund List.

**Funding includes EPA Assessment and Clean Up Grants, Federal Superfund for remediation activities, NYS Superfund for remediation Activities, Environmental Restoration Program Grants Including Pre-2003 Funding.



INDICATOR:

ENERGY CONSUMPTION

Long Island’s electricity and natural gas consumption keeps growing as well as our carbon emissions.

WHY IS THIS IMPORTANT?

Data from the U.S. Energy Information Administration shows that buildings, commercial and residential, are responsible for almost half (48%) of all energy consumption and greenhouse gas (GHG) emissions in the United States. Greenhouse gas emissions, particularly carbon dioxide (CO₂), are widely accepted as the main contributing factors in global climate change. With 1,180 miles of shoreline, Long Island is uniquely disposed to sea level rise and other impacts of climate change. Recent modeling released by Architecture 2030, a leading organization studying the potential impacts of climate change, shows that a sea level rise of even one meter would have serious consequences for the U.S., leaving it vulnerable to catastrophic property and infrastructure loss with large population disruptions and economic hardships.

To help mitigate the potential impacts of climate change, New York State mandates are to:

- Reduce energy consumption 15% by 2015
- Reduce CO₂ emissions 25% by 2025
- Generate 25% of the state’s energy from renewable sources by 2013

HOW ARE WE DOING?

The world’s leading climate scientists have issued warnings that we need to drastically reduce greenhouse gas emissions in order to avoid catastrophic and irreversible effects of climate change. Many now believe that reductions of 80% below 1990 levels are needed by 2050 or even earlier.

New York State has several stated policy goals to reduce energy consumption and CO₂ emissions, among them the Renewable Portfolio Standard requiring 25% of the state’s electricity to come from renewable fuels like solar and wind by 2013 and the 15 x 15 initiative with the goal to reduce electricity consumption 15% by 2015.

Unfortunately, we are neither on track to achieving such goals nor have we formulated clear and binding plans to do so.

ELECTRICITY CONSUMPTION

Data from the Long Island Power Authority shows that residential, commercial and industrial electricity consumption in 2007 increased 2.5% over the previous year, continuing its steady upward trend of 21% over the preceding ten years. Residential electricity use has grown 27% while population grew less than 9% during the same time.

In order to achieve the state's 15 x 15 goals, Long Island would need to curtail its annual electric consumption growth to less than 4/10 of one percent instead of the present 2.5%.

GREENHOUSE GAS EMISSIONS

To satisfy this growing hunger for electricity, the Island's fossil fueled power plants pumped millions of tons of climate changing greenhouse gas emissions into the global atmosphere. According to U.S. Environmental Protection Agency (EPA) data, despite reducing the rate of carbon dioxide emissions per kilowatt-hour slightly (4%), total CO₂ emissions from Long Island's power plants in 2005 (the most recent data available) increased by almost 90,000 tons to more than ten million (10,201,971) tons.

Instead of reducing CO₂ emissions by about 2% a year to reach an 80% reduction by mid-century, Long Island's power plants increased emissions of this greenhouse gas by about 1% from 2004 to 2005 and there is no plan in place that would allow us to reach the needed reductions.

POWER SOURCES

While most of Long Island's electricity is still produced on Long Island, a growing share of it is purchased and transported through long-distance transmission lines and undersea cables from off-Island power sources. In 2005, LIPA imported 37% of our electricity from off-Island sources; in 2007 imports made up 41% of our electric diet.

Long Island's power plants are antiquated and inefficient in converting fuel into electricity but many have the capability to switch from oil to natural gas depending on fuel prices and other factors. In 2005 Long Island's generators produced 59% of the electricity by burning oil, 35% came from natural gas, and 6% from waste-to-energy incinerators and other fossil sources.

NATURAL GAS

Long Island's residential, commercial and industrial users bought almost 14% more natural gas (90,898,704 dekatherms) from National Grid in 2007 than in the prior year which resulted in 5,317,574 tons of carbon dioxide emissions. However, a considerable portion of that increase resulted from converting space heating equipment from oil to natural gas which reduces carbon dioxide emissions by almost a third based on the same energy input.

RENEWABLE ENERGY

On the renewable energy front, there are about 1,400 solar roofs on Long Island with a total of about 10 MW of capacity. LIPA recently issued a request for proposals for 50 MW of solar electric panels. However, despite this step, total solar generation output over the next few years would amount to less than 1/2 of one percent of fossil-generated electricity, nowhere near state goals.

