LONG ISLAND COMMISSION ON AQUIFER PROTECTION

2015 ANNUAL REPORT



Long Island Commission on Aquifer Protection

MISSION STATEMENT

The Long Island Commission on Aquifer Protection (LICAP) is a bi-county entity formed to address both quality and quantity issues facing Long Island's aquifer system, and to advocate for a coordinated, regional approach to groundwater resources management.

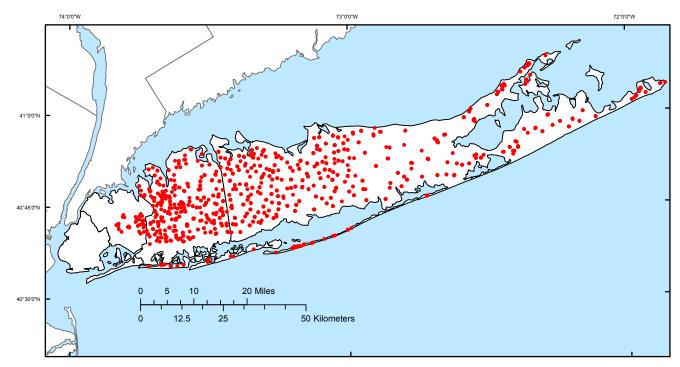




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LONG ISLAND WELL LOCATIONS



Generalized location of over 1,100 large capacity drinking water supply wells used since 2007





A MESSAGE FROM LICAP'S CHAIRMAN AND VICE CHAIRMAN

Since its creation by both the Nassau and Suffolk County Legislatures at the very end of 2013, the Long Island Commission on Aquifer Protection (LICAP) has been hard at work addressing the issues facing the quality and quantity of Long Island's drinking water.

The primary task of this landmark bi-county Commission is to report on the state of our aquifer and recommend additional proactive measures that should be taken to safeguard our aquifer system for future generations. In recognition of the enormity of this challenge, LICAP advocates for a coordinated regional approach to groundwater resource management.

LICAP is comprised of both voting and non-voting members of public water suppliers, health officials, elected officials, environmental officials, academia and the general public. Collectively, these individuals represent 3 million people who reside in Nassau and Suffolk counties and rely on the groundwater beneath each county as their sole source of drinking water.

The unwavering desire of these LICAP members to work in a nonpartisan regional fashion has resulted in a very productive year. The Commission has held five full Commission meetings, eight subcommittee meetings and two public hearings, one in Nassau and one in Suffolk.

The Commission's enabling resolution also called for the empanelling of two subcommittees, the 2040 Water Resource and Infrastructure Subcommittee and Water Resource Opportunities Subcommittee. Much of the work of these two important subcommittees will help develop the Commission's Groundwater Resources Management Plan.

A significant milestone will be reached in the very near future with the anticipated release of the Commission's inaugural State of the Aquifer Report. The Report is currently undergoing final editorial review and will be made public and available on this website within the next few months.

Sincerely,

Jeffrey Szabo Chairman, LICAP Michael Levy Vice Chairman, LICAP

LICAP LEGISLATIVE SPONSORS

Hon. William Spencer

Suffolk County Legislator, 18th District

Nassau County Legislature

VOTING MEMBERS OF LICAP

Jeffrey Szabo, Chairman Suffolk County Water Authority

Mike Levy, Vice Chairman Long Island Water Conference

Stan Carey
Nassau-Suffolk Water Commissioners Association

Walter Dawydiak Suffolk County Commissioner of Health

Don Irwin
Nassau County Commissioner of Health

Dorian Dale Suffolk County Executive

Brian Schneider Nassau County Executive

Chris Ostuni Nassau County Legislature Presiding Officer

Michael White Suffolk County Legislature Presiding Officer











EX-OFFICIO MEMBERS OF LICAP

Honorable Kevin J. McCaffrey Suffolk County Legislature Minority Leader

Sarah Meyland Nassau County Legislature Minority Leader

Jared Hershkowitz Suffolk County Legislature Presiding Officer

Gilbert Anderson, P.E.
Suffolk County Commissioner of Public Works

Brian Schneider Nassau County Commissioner of Public Works

Nick Gibbons Suffolk County Commissioner of Parks, Recreation and Conservation

Michael Comerford Nassau County Commissioner of Parks Dorian Dale

Suffolk County Department of Economic Development and Planning

Satish Sood Nassau County Planning Commission

> Paul TeNyenhuis Suffolk County Soil and Water Conservation District

Ajay Shah New York State Department of Environmental Conservation

Stephen Terracciano U.S. Geological Survey Long Island Program Office

Henry Bokuniewicz Long Island Groundwater Research Institute

LICAP LEGISLATION AND BY-LAWS

LEGISLATION

In 2013, the Nassau County Legislature and the Suffolk County Legislature passed legislation creating the Long Island Commission for Aquifer Protection.

Legislation Establishing LICAP Nassau County

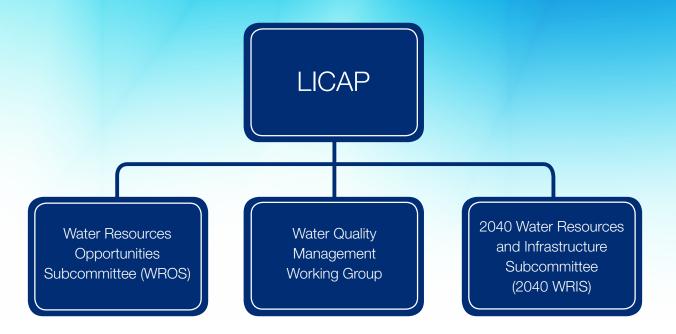
<u>Legislation Establishing LICAP Suffolk County</u>

BY-LAWS

LICAP adopted its by-laws in 2014 for the management and regulation of its affairs.

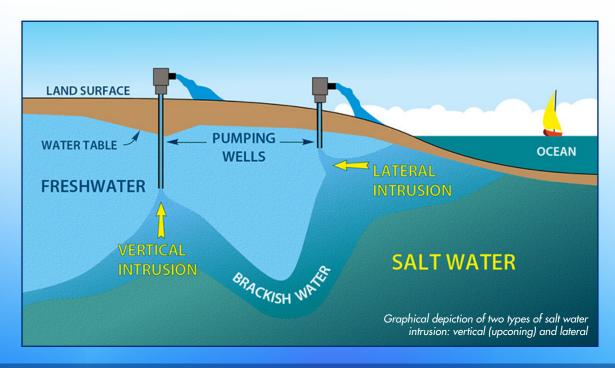
LICAP By-Laws

LICAP STRUCTURE



WROS – The Water Resources Opportunities Subcommittee was established as part of the original LICAP enabling legislation to identify and quantify short-term risks to groundwater. The WROS will look at potential short-term risks facing water suppliers, treatment and distribution of potable water from our sole source aquifer. Some short-term risks include pending water quality regulations, increasing demand for water during the peak season, plans for additional sewering throughout Suffolk County, and groundwater contamination specific to volatile organic compounds, nitrates, perchlorate, carcinogenic volatile organic compounds, pharmaceuticals and personal care products, and salt water intrusion.

The issues, risks, and recommended actions identified by the WROS will be incorporated into the Groundwater Resources Management Plan to be released in 2017.

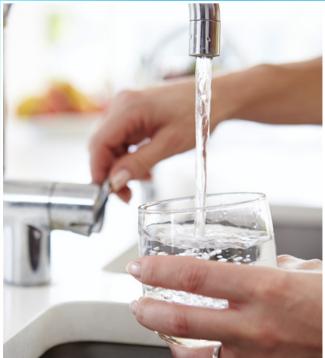


LICAP STRUCTURE

Water Quality Management Working Group – A common theme throughout the first year of LICAP meetings was the lack of a coordinated, regional water quality monitoring and reporting program. This ad hoc working group was created to address this concern. The primary objectives of this working group are (1) to determine which water quality parameters are most critical to monitor and report on annually through LICAP; (2) to develop a common/universal data reporting format; and (3) to identify the most appropriate platform for storing, analyzing and sharing the data.

2040 WRIS – The 2040 Water Resources and Infrastructure Subcommittee was established in the original LICAP enabling legislation to develop a 2040 WRIS Plan identifying long term risks to the water supply industry created by global climate change. The 2040 WRIS will also investigate ways that public water suppliers and other agencies involved in water supply in Nassau and Suffolk Counties can address these risks, by a combination of infrastructure and facilities management, regulatory changes, and alterations in consumer water usage.

The 2040 WRIS will identify three major criteria in its investigations. First, it will identify the specific environmental changes that are likely to occur, including sea level rise and the resulting changes to the aquifer system (i.e., salt water/freshwater interface and overall water availability), and projected alterations in weather patterns and resulting effects on both aquifer recharge and consumer demand. Second, the 2040 WRIS will determine what facility management responses will be needed to address environmental changes, such as long distance transmission of water, changes in well locations, and monitoring data requirements. The third investigative criteria will be to determine what consumer behavioral changes and regulatory requirements are necessary to achieve the responses mentioned above. The findings of the 2040 WRIS will be incorporated into the Groundwater Resources Management Plan that LICAP will issue in 2017.







LICAP MEETINGS

LICAP has held five full commission meetings, eight subcommittee meetings, and two public hearings, one each in Nassau and Suffolk County. The full commission meets quarterly, the subcommittees meet bimonthly, and at least one public hearing is held annually in each county.

All meetings of LICAP are open to the public.

GENERAL MEETINGS

March 27, 2014

June 25, 2014

August 13, 2014

November 18, 2014

February 11, 2015

SUBCOMMITTEE MEETINGS

2040 Water Resources and Infrastructure Subcommittee (2040 WRIS)

<u>September 11, 2014</u>

October 23, 2014

December 2, 2014

Water Resources Opportunities Subcommittee (WROS)

September 30, 2014

December 16, 2014

JOINT SUBCOMMITTEE MEETINGS

February 25, 2015

April 22, 2015

WATER QUALITY MANAGEMENT WORKING GROUP

March 31, 2015

PUBLIC HEARINGS

LICAP held public hearings in both counties and encouraged members of the public to attend, ask questions and offer suggestions about safeguarding our aquifer system.

Nassau County - September 15, 2014

Suffolk County - September 22, 2014

DELIVERABLES

- State of the Aquifer Website State of the Aquifer website created: http://ny.water.usgs.gov/projects/SOTA/
- LICAP Website

 LICAP website developed:

 www.liaguifercommission.com/home.html
- Virtual Reference Collection
 A Virtual Reference Collection (VRC) of published research and studies about the Long Island aquifer system compiled and available through the LICAP website:

 www.liaguifercommission.com/vrc.html
- State of the Aquifer Report Draft State of the Aquifer Report shared with the Commission. Revisions underway to incorporate the many helpful comments received.
- Groundwater Resources
 Management Plan
 Groundwater Resources Management Plan
 preparation has begun through the efforts
 of both subcommittees.



State of the Aquifer Website



LICAP Website