



May 17, 2017

AGENDA

1. Welcome and Introductions;
2. Adopt minutes from March 8, 2017 meeting (on LICAP website);
3. Discussion – Groundwater Management Plan;
4. Discussion – Proposed Allocation of LICAP’s New York State Funding:

a) Irrigation Consultation – Nassau and Suffolk Counties	\$ 50,000.00
b) Additional Monitoring Wells – Nassau and Suffolk Counties	\$110,000.00
c) License Agreements with ESRI – Water Data	\$ 10,000.00
c) Consultants	\$ 70,000.00
d) Server	<u>\$ 10,000.00</u>
	\$250,000.00
5. Other Business; and
6. Public Comment

Next full LICAP meeting scheduled for June 7, 2017

Monitoring Well Program

With a population of roughly three million living atop the sole-source aquifer system for Long Island, the water supply of Nassau and Suffolk Counties is prone to contamination from past and current land uses, including certain practices related to agriculture, industry, and residential development. Increased demands on the aquifer system have accelerated the downward flow of younger groundwater into the deeper parts of the system from which most wells withdraw water. It is essential that contaminants introduced at land surface and saline groundwater be detected before they are drawn into supply wells. The proposed monitoring of groundwater at key locations throughout the two Counties would provide concerned parties with advanced warning of potential contamination before it reaches supply wells.

The primary objective of this proposed project is to build on existing water-resources programs in developing and monitoring a network of 100 monitor wells for the purpose of detecting contaminants in groundwater before they are captured by critical supply wells. Secondary objectives of the project are to (1) maintain a publicly-accessible database of contaminants detected across Nassau and Suffolk Counties at monitor locations in WaterTraq, in order to visualize selected contaminants of concern in the aquifer system; and (2) analyze for and track trends in impaired groundwater quality over time, considering how different land-use practices affect water quality. These objectives will ultimately provide the Long Island Commission for Aquifer Protection (LICAP) the information necessary to carry out its mission by identifying priorities for research related to Long Island's sole-source aquifer system.

Irrigation Consultation

EPA reports have estimated that more than 50 percent of commercial and residential irrigation water use goes to waste due to evaporation, improper system design or overwatering. Since irrigation represents the most significant water use on Long Island, reducing watering inefficiencies will reduce water waste and further conservation efforts. The purpose of an Irrigation Audit is to measure the efficiency of an irrigation system. An Irrigation Audit is typically performed during the summer months when the conditions of the irrigated landscape can be evaluated. The data from the audit is used to help maintain a sustainable, healthy landscape while reducing the water usage. Irrigation audits take into account water use over several years in order to determine base irrigation water use. The auditors also create a log of the existing watering schedule settings on the irrigation controller. In addition, they check the functionality of the irrigation system in order to identify broken heads, seeping valves and leaks in lines. Once the system is evaluated, an audit is performed for a representative zone of approximately 2,000 – 3,000 sq. ft. for rotary head zone(s), or approximately 1,000 sq. ft for spray head zone(s). Based upon the finding of the steps above, the auditors will determine if additional areas should be audited, including micro-climates on the property. A report is generated from the audit, which provides recommendations for proper irrigation schedules, system renovations and updates and a projection of water savings.

Consultants

LICAP is seeking to RFP, via the Suffolk County Water Authority, for consultant services to perform the following:

Impacts of Nitrogen on Drinking Water Quality

Over the past few years, there has been much discussion related to nitrogen's harmful impacts on surface waters. However, nitrogen impacts only a small portion of public drinking water wells in Suffolk County. Therefore, an RFP will be issued to review nitrogen's impacts across the Island on public drinking water wells including public suppliers and private wells.

Assistance on Subcommittee Reports

LICAP has two subcommittees, the 2040 Water Resources and Infrastructure Report and the Water Resource Opportunities Subcommittee. The 2040 WRIS is required to develop a 2040 WRIS Plan to identify long-term risks to the water supply industry created by global climate change. The Plan is to contain recommendations on short term measures to strengthen public water distribution systems against these long term risks, including, but not limited to, the development of well placement criteria, mechanism for hardening water distribution system infrastructure in coastal areas and loss mitigation strategies, including methods for isolating vulnerable portions of the distribution system during an event. The Water Resource Opportunities Subcommittee is required to identify and quantify short term risks, if any, to groundwater resources, specifically known contamination impacts.

The consultant will assist in completing these two assignments.