Nassau County – Nitrogen Reduction

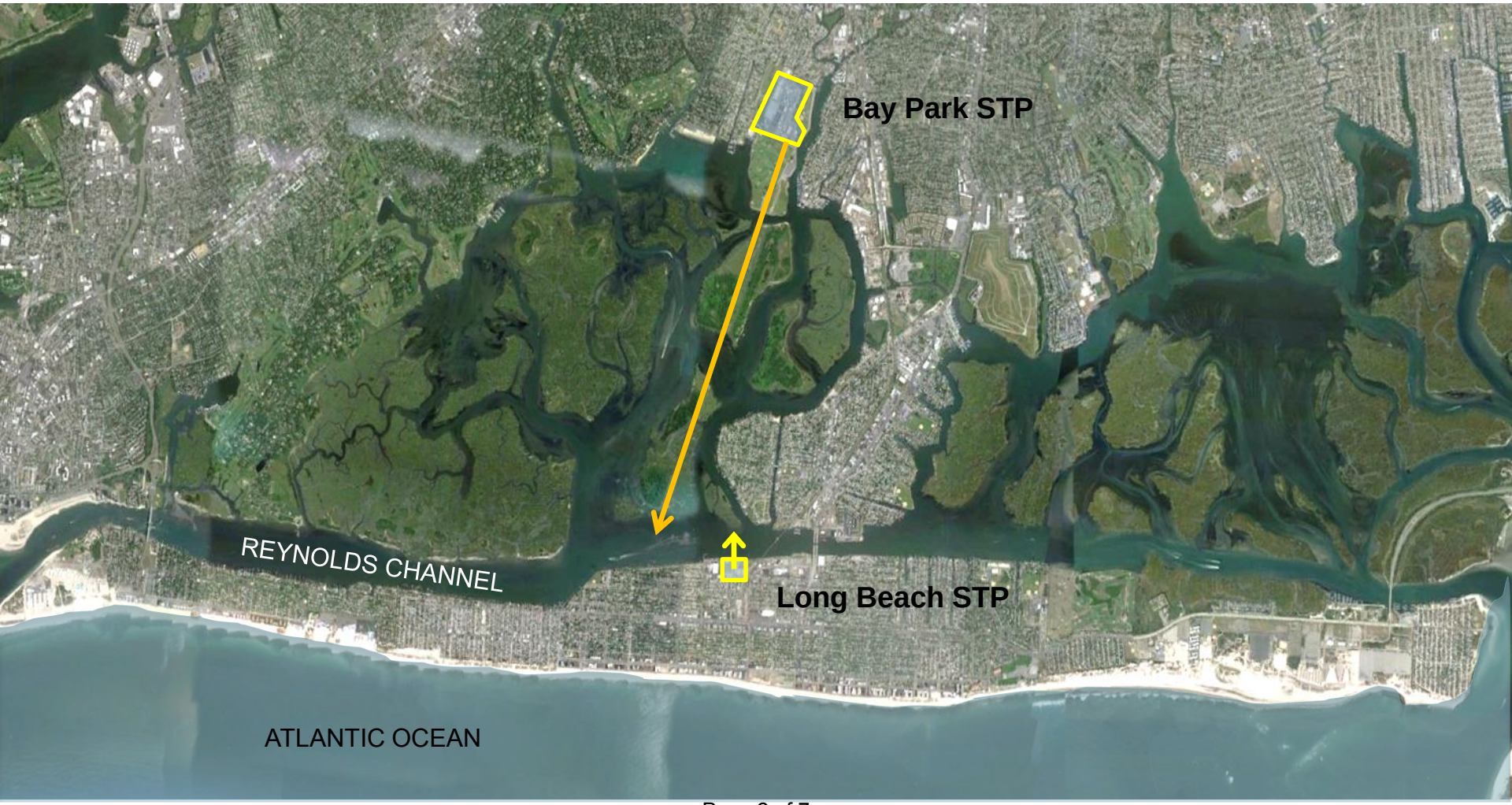
October 14, 2015

HAZEN AND SAWYER
Environmental Engineers & Scientists

ARCADIS

Existing Conditions for the Western Bays

Sewage Treatment Plant Discharges in Reynolds Channel



Proposed Resiliency Plan for the Western Bays

Eliminates Nitrogen Discharge from Two WWTPs

STP Operational Improvements

Seasonal BNR and Side Stream Treatment

Sidestream treatment reduces effluent nitrogen by 15 percent

Seasonal BNR reduces nitrogen from 35 mg/l to 20 mg/l during the summer (~4 months)

Additional Nitrogen Reduction Programs – Wastewater Initiatives

- *The County has been working with NYSDEC and other State and Federal Agencies to address the longstanding challenge of the in bay outfall associated with Bay park STP.*

- *Comprehensive Study associated with the expansion of sewering within the northshore communities that can take advantage of the excess capacity at the Glen Cove Plant*

- *Birches Pump Station is a recently completed project that removed failing septics that discharged into Oyster bay Harbor*

- *Cedarhurst/Lawrence Diversion will send wastewater from two STPs with old technology that can not address nitrogen to Bay Park.*

Additional Nitrogen Reduction Programs – Stormwater Initiatives

- *2007 adoption of the Nassau County Migratory Waterfowl Law*
- *2009 adoption of Nassau County Fertilizer Law*
- *2004 and 2006 Environmental Bond Act – 1,500 Catch Basin Inserts*
- *Installation of rain gardens, bioretention areas, vegetated swales, porous pavement and modular wetlands*
- *Open space acquisitions*
- *Onsite drainage requirements for new and redeveloped properties*

Thank You