

Nassau County – Nitrogen Reduction

October 14, 2015



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 sewerage 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 septic tanks 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*

An aerial photograph of a large industrial or utility facility. The central part of the image shows several large, rectangular buildings with flat roofs, some of which appear to be solar panels. To the right, there are several large, circular tanks or storage containers. The facility is surrounded by parking lots, roads, and green spaces. In the background, there are residential areas and a baseball field. The text "Thank You" is overlaid in the center of the image.

Thank You