



Stakeholders Meeting for Proposed Changes to Suffolk County Sanitary Code and Construction Standards and Suffolk County Subwatersheds Wastewater Plan

When: 12:30 PM – 3:30 PM, May 16, 2016 (Registration Begins @ 12:00 PM)

Where: Suffolk County Community College, Ammerman Campus, Babylon Student Center - Montauk Point Room, Selden, N.Y. (*directions enclosed*)

Moderator: **Peter Scully, Suffolk County**

Purpose: To present stakeholders with the proposed scope of services for the Suffolk County Subwatersheds Wastewater Plan (SWP), proposed sanitary Code and Standard changes to authorize approval if Innovative/Alternative Onsite Wastewater Treatment Systems (I/A OWTS), and associated GEIS (NOTE: this is not the GEIS scoping session, which will occur at a future date)

Format: To optimize meeting efficiency and maximize stakeholder input, Suffolk County respectfully requests that all attendees retain their comments and questions until after all presentations have been made. Hand out cards will be provided during registration and sign in to attendees who would like to ask questions during the Q&A period. In addition, stakeholders may send their questions and comments in writing to Suffolk County by May 31, 2016

12:00 – 12:30 PM Registration and Sign In

12:30 – 1:00 PM Welcome, Introductions, and Overview

Peter Scully, Suffolk County – Reclaim Our Waters

Ken Kosinski, PE, NYSDEC – Long Island Nitrogen Action Plan

Mark Tedesco, USEPA– Long Island Sound Study and EPA Perspective

Walt Dawydiak, Jr., PE, JD, Suffolk County - Comp Resources Water Management Plan

1:00 – 1:30 PM Summary of Proposed Code and Standard Changes – **Justin Jobin, Suffolk County**

- Septic Demo Program
- Purpose, Proposed Changes, and Schedule for Code Changes
- Possible future changes (commercials, leaching, I/A OWTS in priority areas, transition from passive systems to I/A OWTS)

1:30 – 2:15 PM Summary of Suffolk County Subwatersheds Wastewater Plan - **Ken Zegel, PE, Suffolk County, Dan O'Rourke, PG and Mary Anne Taylor, PE, CDM Smith, Andy Thuman, HDR**

➤ Purpose

- Build on existing studies; update/unify County-wide GW contributing areas, nitrogen loads, and surface water sensitivity
- Establish first order nitrogen load reduction goals for tiered priority areas
- Identify recommended wastewater management alternatives
- Identify datagaps and recommendations for long-term LINAP
- Associated GEIS

➤ Proposed Scope

2:15 – 3:30 PM Q&A and Closing Remarks



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In accordance with Suffolk County's Reclaim Our Waters initiative and the Long Island Nitrogen Action Plan* (LI NAP), Suffolk County is pursuing proactive measures to reduce nitrogen pollution to our waters. The Suffolk County Comprehensive Water Resources Management Plan (2015; "Comp Water Plan") characterized negative trends in the quality of groundwater sources in the upper glacial and Magothy aquifers in recent decades. The Comp Water Plan linked groundwater not only to drinking water, but also to surface waters, including significant adverse impacts of nitrogen on dissolved oxygen, harmful algal blooms ("HABs"), eelgrass and other submerged aquatic vegetation, wetlands, shellfish, and, ultimately, coastal resiliency. For the first time, the Comp Water Plan established an integrated framework to address the legacy problem of onsite wastewater disposal systems in a meaningful manner; with acknowledgement that patchwork sewerage will not be sufficient to solve the problem.

The Subwatersheds Wastewater Plan (SWP) will be used to establish first order nitrogen load reduction goals generated based upon the need to obtain water quality improvements for all of the County's surface water, drinking water, and groundwater resources. Although several similar studies have been completed to evaluate the sources and impact of nitrogen pollution to the major estuaries of the County; an integrated, holistic, evaluation that delineates all of the County's subwatersheds and provides a common platform of assumptions and boundary conditions has not been completed. In response to this need, and the County's Reclaim Our Waters initiative, Suffolk County is embarking on preparation of the SWP. Initial efforts will concentrate on the establishment of a uniform and consistent set of subwatershed boundaries, development of receiving water residence times, and the generation of nitrogen loading rates through groundwater and surface water (hydrodynamic) analytical modeling. The modeling results will be keyed to baseline water quality for each receiving body and will be used to establish tiered priority areas for wastewater management upgrades. Following the establishment of tiered priority areas, preliminary load reduction goals will be developed using empirical data relationships, existing regulatory target guidelines, and other readily available data sources from related studies. Initial recommendations for wastewater management upgrades will be provided for each priority tier based upon the ability to meet nitrogen load reduction goals. Other nitrogen loads will be considered, along with reduction goal assumptions, but the focus will be sanitary nitrogen load reductions. LI NAP will further consider these loads and reductions, and will expand on alternate available management measures such as permeable reactive barriers and in-water aquaculture.

The SWP is considered an early action/initial step of the overall long-term LI NAP program. In addition to being a guide for establishing County wastewater policy, the primary objective of the SWP will be to provide critical information regarding data gaps, areas requiring further detailed study, and ultimately to provide data that can support long-term LI NAP scope refinement and focus and other related initiatives ongoing throughout Suffolk County (e.g., LISS, PEP, SSER, and related Town/Village initiatives). In alignment with these objectives, the SWP will be executed on an accelerated timetable and will not include the generation of new, sophisticated models that are typically used for Total Maximum Daily Load (TMDL) studies. Rather, the SWP will build, expand, and unify existing individual models and studies from the wealth of resources that already exist.

Suffolk County is excited to move forward with this important initiative and believes the input and collaboration of our stakeholders is critical to the success of this project.

** The New York State Department of Environmental Conservation (DEC) and the Long Island Regional Planning Council (LIRPC) are, in partnership with numerous local governments and interested organizations on Long Island, embarking on development of the Long Island Nitrogen Action Plan (LINAP)*



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Task 1 – Wastewater Plan Advisory Committee and Meetings

- *Establish advisory committee to guide the program and generate agreed upon methods and assumptions*

Task 2 – Subwatersheds Delineation

- *Delineate up to 200 subwatersheds using existing Suffolk County groundwater model*

Task 3 - Data Inventory

- *Identify, gather, and build upon wealth of existing data and studies*

Task 4 – Develop Nitrogen Load Estimates

- *Use Nitrogen Load Model (Valiela, 1997) and leverage existing studies for LIS, PEP, and SSER*
- *Generate agreed upon assumptions for concurrence by local and national experts*

Task 5 – Surface Water Hydrodynamic Modeling

- *Provide residence time/flushing rates using EFDC and construct model to be compatible with long-term LINAP*

Task 6 – Develop Tiered Priority Areas

- *Develop a tiered ranking system (e.g., black, red, yellow, green) to rank waterbodies based upon existing water quality, flushing rates, nitrogen loads, presence of HABs, eelgrass recovery, etc.*

Task 7 – Develop Endpoints and Load Reduction Goals for Surface Water

- *Establish endpoint goals for the restoration and protection of surface water (e.g., water clarity, DO, eelgrass protection, etc.)*
- *Tie endpoints to required nitrogen loads to surface water and determine required reductions to meet endpoints*
- *Generate agreed upon assumptions for concurrence by local and national experts*



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Task 8 – Evaluate Wastewater Alternatives for Surface Water

- *Primary focus on use of I/A OWTS, sewers at existing study locations, and decentralized (Appendix A) systems*
- *Will consider alternate/experimental systems and methods such as shallow narrow drain fields, constructed wetlands, sand-carbon layered systems, waste segregation, composting/incineration toilets, etc.*

Task 9 – Develop Load Reduction Goals and Wastewater Alternatives for Public Water Supply

- *Companion evaluation to be completed for the protection of public supply wells*
- *Build upon findings of Suffolk County Comprehensive Water Resources Management Plan*
- *Primary focus on well fields with current or predicted TN concentrations of >4 mg/l*

Task 10 – Cost and Benefit Analysis

- *Companion evaluation to support development of recommended wastewater alternative for surface water and drinking water protection*
- *Will evaluate a multitude of pilot area scenarios (e.g., low density residential, high density residential, seasonal, commercial, small lot size, high groundwater table, etc.) that can be used for similar conditions throughout Suffolk County*

Task 11 – Groundwater Model and Performance Standards

- *Will provide predictions and mapping of nitrogen concentrations in groundwater throughout Suffolk County at current conditions, full build out, and the recommended wastewater alternative*
- *Will evaluate the development of a groundwater performance standard*

Task 12 – Subwatersheds Wastewater Plan

- *Will present the methodology and findings of all evaluations completed including the recommended wastewater management alternative*
- *Draft priority area map, load reduction goals, and recommended wastewater management map targeted for September 30, 2016*
- *Final SWP to be issued in 2017*



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DRAFT SANITARY CODE TO BE ATTACHED