1.0 Introduction

This Final Scoping Document has been prepared to initiate the environmental review process for the approval and implementation of the Suffolk County Subwatersheds Wastewater Plan (SC SWP). The SC SWP will support the development of a County-wide wastewater management strategy through the establishment of ‘priority areas’ for nitrogen reduction, establishment of nitrogen load reduction goals for each priority area, and the development of a recommended wastewater upgrade strategy to meet nitrogen load reduction goals (See Attachment A for additional information on the SC SWP). Changes to the County Sanitary Code will enable the Suffolk County Department of Health Services (SCDHS) to work with United States Environmental Protection Agency (USEPA), New York State Department of Environmental Conservation (NYSDEC), Towns, Villages, residents, property owners and other stakeholders to implement the wastewater treatment technologies required to achieve the nitrogen reduction goals. This document presents an outline of the Generic Environmental Impact Statement (GEIS) and identifies the information that will be collected and evaluated to assess the potential environmental impacts that could result from implementation of the recommendations provided in the SC SWP.

This Scoping Document includes a:

- Description of the Proposed Action;
- An outline of the GEIS, which will address potentially significant environmental impacts of the proposed action and include preliminary identification of mitigating measures, reasonable alternatives to the proposed action, growth inducing, secondary and cumulative impacts, and
- Public Comment that has been received on the Draft Scoping Document.

The GEIS will be prepared using existing available data; no field studies or field data collection are anticipated. Site-specific data collection may be required to complete a project specific, or study-area specific draft/final EIS (D/FEIS).

The SCDHS Division of Environmental Quality (DEQ) is the project proposer. On August 31, 2016 SCDHS DEQ notified interested and involved agencies of its intent to assume Lead Agency status and as such in accordance with Title 6 NYCRR Part 617.6(a) and (b) classify this proposed action as a Type I Action under the New York State Environmental Quality Review Act (SEQRA). No objections were received within 30 days of the mailing. The Suffolk County Council on Environmental Quality (CEQ) addressed this proposed project at their September 21, 2016 meeting.
and the Suffolk County Legislature passed Resolution HSV #66-2016 at their October 5, 2016 meeting, identifying the proposed action as a Type I action under SEQRA and initiating the scoping process. SCDHS DEQ, as Lead Agency, is responsible for conducting the environmental review of this proposed action. The proposed action will undergo a coordinated environmental review whereby a SEQRA Draft GEIS will be prepared to comprehensively address requirements of both federal and state laws and regulations.

Working together with the SCDHS, the Suffolk County Department of Economic Development and Planning and the Suffolk County Legislature, CEQ convened two Public Scoping Hearings to provide opportunity for public comment on the Draft Scoping Document. The first Public Scoping Hearing was held on November 29, 2016 at the Suffolk County Water Authority (SCWA) Education Center in Hauppauge, New York and the second Public Scoping Hearing was held on December 1, 2016 at the Suffolk County Community College Culinary Arts and Hospitality Center in Riverhead, New York. In addition, the Draft Scoping Document was posted on both the Suffolk County Department of Economic Development and Planning and the SCDHS websites, and written comments were accepted through December 13, 2016.

The Final Scope summarized in this document reflects the addition of the relevant issues that were identified during the public scoping process, including all comments received through December 13, 2016, and also identifies issues that were identified that will not be included in the GEIS. This Final Scope will be the basis for the GEIS.

### 2.0 Purpose and Need

In Suffolk County, approximately 75 percent of homes are unsewered and discharge sanitary wastewater containing nitrogen to the underlying groundwater that provides both the only source of potable supply for County residents, and baseflow to the County's surface water features. For decades, the presence of elevated levels of nitrogen in groundwater has been of concern due to the potential health impacts associated with methemoglobinemia (blue baby syndrome). Nitrogen contamination associated with discharge of sanitary wastewater has been studied and documented in the *Long Island Comprehensive Waste Treatment Management Plan* (208 Plan, 1978), the *1987 Suffolk County Comprehensive Water Resources Management Plan* and the *2015 Suffolk County Comprehensive Water Resources Management Plan*. Article 6 of the Suffolk County Sanitary Code was enacted primarily to protect public health by limiting nitrogen loading from sanitary wastewater discharges to maintain groundwater nitrogen concentrations to levels of less than 4 mg/L in Groundwater Management Zones III, V and VI and to less than 6 mg/L everywhere else throughout the County. However, Article 6 did not consider the density or sanitary wastewater treatment levels necessary to protect downgradient groundwater-fed surface waters. Nitrogen concentrations associated with the eutrophic conditions that can trigger harmful algal blooms are generally significantly lower than the 10 mg/L drinking water maximum contaminant level (MCL) that is protective of human health.

Nitrogen conveyed to discharge in coastal receiving waters via groundwater baseflow has been linked to a number of issues in Suffolk County including fish kills due to hypoxic episodes, harmful algal blooms, and loss of eelgrass along shorelines. The impacts to the coastal communities of Suffolk County from SuperStorm Sandy in 2012 underscored the connection between nitrogen in groundwater baseflow discharging to surface water resources, loss of wetlands, and damage to
ecosystem health. Reduction in nitrogen loading is anticipated to support wetlands restoration and improve storm and flood protection and coastal resiliency provided by healthy wetlands. The County, recognizing the need for immediate action, updated the draft Suffolk County Comprehensive Water Resources Management Plan to include new chapters focusing on wastewater management, estuary programs, coastal resources, and alternative management and funding mechanisms.

The County found that approximately 80 percent of the unsewered residential properties fall within areas to be considered high priority for nitrogen removal based on at least one of the following:

- Close proximity to public supply wells or surface water bodies;
- Located in an area developed at higher density than permitted by Article 6 of the County's Sanitary Code and/or
- Located in an area with depth to groundwater less than ten feet below ground surface.

In accordance with Suffolk County's Reclaim Our Water initiative and the Long Island Nitrogen Action Plan (LINAP), Suffolk County is pursuing proactive measures to reduce nitrogen pollution to the County’s waters. The SC SWP will be prepared to provide early action recommendations for nitrogen load reduction goals and a recommended wastewater management strategy for priority subwatersheds within Suffolk County. The SC SWP will be used to establish first order nitrogen load reduction goals generated based on the need for water quality improvements for County surface water, drinking water and groundwater resources. The SC SWP will be an integrated, holistic approach to delineating the County’s subwatersheds based on a common platform of assumptions and boundary conditions. In concert with the SC SWP, modifications will be made to the Suffolk County Sanitary Code and Construction Standards to support the implementation of the SC SWP. Additionally, the County is pursuing the establishment of a County-wide Water Quality Protection District to facilitate financing options for the implementation of the SC SWP.

Ultimately the SC SWP aims to protect and restore both groundwater quality and the coastal ecosystems of Suffolk County by implementing a County-wide wastewater plan targeting the reduction of nitrogen loading from wastewater sources by using a combination of sewering, cluster/decentralized wastewater treatment, and I/A OWTS.

### 3.0 Proposed Action

The Draft GEIS is being prepared to address the SEQRA requirements for the implementation of the SC SWP. The proposed action is for the implementation of the SC SWP which will support the development of a County-wide wastewater management strategy to reduce nitrogen emanating from non-point wastewater sources. There are expected to be six major recommendations within the SC SWP as follows:

- A recommended wastewater management strategy to reduce nitrogen pollution emanating from non-point wastewater sources. The recommended wastewater management strategy will be developed using the methodology described in Attachment A;
- The establishment of a water quality protection district;
The use of innovative/alternative onsite wastewater treatment systems (I/A OWTS) in lieu of conventional septic systems;

The use of clustered/decentralized systems in select areas where individual onsite treatment systems are infeasible but where conventional sewage treatment plants (STPs) are not economically feasible;

The use of conventional STPs where existing studies confirm they are economically feasible; and,

The implementation of wastewater pilot areas to confirm the effectiveness of the proposed wastewater management nitrogen reduction approaches provided in the SC SWP.

The SC SWP will develop its recommendations through a sequenced, technical based, approach using groundwater modeling to establish subwatershed boundaries for all of the County’s priority waterbodies, nitrogen load modeling to estimate nitrogen loads to each subwatershed, surface water modeling to estimate surface water residence times, and the evaluation of existing water quality. The modeling results and water quality data will then be used to establish ‘priority areas’ for nitrogen reduction and to establish nitrogen load reduction goals for each priority area. Recommended wastewater upgrade alternatives capable of meeting the nitrogen load reduction goals that are established in the SC SWP will then be evaluated using cost-benefit techniques. Further description of the SC SWP scope is provided in Attachment A.

1.0 Recommended Wastewater Management Strategy

The evaluations provided in the SC SWP will be used to support the development of a County-wide wastewater management strategy. The SC SWP will evaluate nitrogen loading to groundwater and surface water and will evaluate the cost and benefits of wastewater management alternatives capable of achieving the recommended nitrogen load reduction goals assuming the following treatment methods:

- Evaluate surface water sensitivity;
- Establish tiered priority area boundaries for nitrogen reduction;
- Establish nitrogen load reduction goals for each priority area; and,
- Evaluate cost and benefits of wastewater management alternatives based primarily upon the following treatment methods:
  - Innovative/alternative onsite wastewater treatment systems (I/A OWTS);
  - Clustered/decentralized ("Appendix A") systems; and,
  - Sewage Treatment Plants (STPs) to include only currently proposed projects.

A description of the three treatment methods is provided below. Using the recommendations of the SC SWP, Suffolk County will work with policymakers and stakeholders to develop final recommended actions and establish a final recommended wastewater management strategy to reduce nitrogen within the priority areas of the County. The approach will be completed in phases
to focus resources at the County’s highest priority areas first (as defined in the SC SWP) and will consider activities that will prompt wastewater treatment upgrades under various scenarios including the following potential trigger points:

- Cesspool failure;
- New construction;
- Reconstruction;
- Property transfer;
- Grandfathered residential sites with legacy cesspools;
- Grandfathered residential sites with lot sizes below current Sanitary Code requirements;
- Grandfathered Other Than Single Family Residential sites including grandfathered SPDES and failed denitrification system sites;
- Large capacity cesspools, and
- Phased upgrades homes and businesses with conventional septic systems within the tiered priority area boundaries defined in the SC SWP.

Implementation of the scenarios identified above will require modification to Article V (General Sanitation) and Article VI (Realty Subdivisions, Developments and Other Construction Projects) of the Suffolk County Sanitary Code. Finally, Transfer of Development Rights (TDR) programs used for sanitary density transfer (including both as-of-right and non-as-of-right) will be evaluated based on the recommendations in the SC SWP. It should be noted that the proposed action and associated GEIS under the current environmental review will not be an all-inclusive/exhaustive evaluation of all TDR programs in Suffolk County; however, it will identify preliminary environmental concerns for individual programs based upon sanitary density transfer and identify the need for subsequent detailed TDR program reviews.

### 2.0 Water Quality Protection District and Responsible Management Entity

The SC SWP will likely recommend the establishment of a Water Quality Protection District and Responsible Management Entity (RME) to provide the administrative and financial structure for Suffolk County to protect the County’s ground and surface water resources from further impacts from nitrogen loading associated with septic systems and cesspools. The RME will oversee and manage the installation and long-term operation and maintenance of I/A OWTS. The SCDHS Office of Wastewater Management will serve as the RME. The Water Quality Protection District would provide both a means by which to assign the capital obligation as a benefit assessment plus the establishment of a recurring revenue source to support implementation of the recommended wastewater management strategy.

A water quality protection funding approach will be discussed which would be used to:

- Provide a funding mechanism, such as low interest loans or grants, for the replacement of existing on-site systems by I/A OWTS as identified in the SC SWP;
- Provide a funding mechanism, such as low interest loans, grants, or a combination for clustered/decentralized systems;
- Provide a funding mechanism, such as low interest loans, grants, or a combination, to provide enhanced nitrogen removal at Town and Village-owned wastewater treatment systems;
- Provide a funding mechanism to support the installation of new advanced STPs and/or expansion of STPs within priority areas; and
- Provide a funding mechanism for the RME.

### 3.0 Innovative/Onsite Wastewater Treatment Systems

I/A OWTS consist of individual onsite advanced nitrogen removal wastewater treatment units as currently defined in Article XIX of the Suffolk County Sanitary Code.

It is anticipated that up to 360,000 existing residential onsite sanitary systems will eventually be converted to I/A OWTS using a phased approach. The details of the final proposed approach are anticipated to be developed by Suffolk County policymakers and stakeholders with guidance provided from the recommendations in the SC SWP. The use of I/A OWTS is expected to be expanded to Other Than Single Family Residential properties that meet the allowable flow/design limitations of approved technologies.

As described previously, modification of Articles V and VI of the Sanitary Code will be required to define the conditions under which upgrade of existing cesspools or septic systems will be required. It should be noted that the adoption of Article XIX and associated I/A OWTS Construction Standards (both Residential and Commercial [i.e., Other than Residential]) has already undergone SEQRA environmental review.

### 4.0 Clustered/Decentralized Systems

Clustered/decentralized systems include small, pre-packaged STPs as defined in Appendix A of the Construction Standards for Sewage Disposal Systems Other Than Single Family Residences (e.g., the Commercial Standards) and Article VI of the Suffolk County Sanitary Code. The use of Appendix A systems is currently limited to design flows up to 15,000 gallons per day (gpd).

Clustered/decentralized systems may be required and/or cost-beneficial at locations where I/A OWTS and STPs are not technically feasible or cost effective such as at mobile home parks, new housing developments, and grandfathered sites. Modifications to Appendix A of the Commercial Standards and Article VI of the Sanitary Code are proposed to expand the application of clustered/decentralized systems in Suffolk County. Modifications currently under consideration include:

- Modification to allow treatment of flows up to 30,000 gpd;
- Modification of Appendix A to reduce required separation distances;
- Evaluation of the approval process to streamline retrofits (e.g., SCDHS approval only [proposed requirement] versus SCDHS and SCDPW approval [current requirement]); and,
Development and implementation of site-specific treatment standards for grandfathered sites with Appendix A systems. Site-specific treatment standards would conform with the proposed nitrogen limits for the priority areas defined by the SC SWP.

5. Sewage Treatment Plants
New STPs and/or the expansion of existing STPs will be completed within priority wastewater treatment areas for enhanced nitrogen removal. STPs will be implemented in accordance with existing sewer studies completed by Suffolk County and Town/Village studies to the extent information is readily available. Individual STP and/or related sewer infrastructure projects would require supplemental SEQRA environmental review.

6. Advanced Wastewater Treatment Pilot Areas
Pilot tests will be completed by Suffolk County under a variety of geographic, land use, and demographic conditions to confirm the effectiveness of the proposed wastewater management nitrogen reduction approaches described herein. Pilot testing will be completed for I/A OWTS and clustered/decentralized systems. Pilot test areas under consideration by the County include, but are not limited to:

- Sites with grandfathered flows that predate Article VI of the Sanitary Code or include failed sulfur denitrification systems (residential and commercial);
- Residential properties including lots with:
  - Small lot size
  - High groundwater table
  - Poor soils
- Commercial properties (various use);
- New York State and Suffolk County owned parks;
- Other New York State, Suffolk County or other municipally owned properties including parks, libraries or schools;
- Mobile home parks; and,
- Seasonal population locations.

In addition to the above, Suffolk County anticipates the installation of voluntary I/A OWTS at residential properties located throughout the County. An estimate of the number of voluntary installations anticipated over the next few years is currently under development.

The project area addressed by the GEIS is county-wide within the borders of Suffolk County.

4.0 Generic Environmental Impact Statement Outline
The Draft GEIS will evaluate the potential broad environmental issues resulting from implementation of the recommendations provided in the SC SWP. The GEIS will include discussions of the long-term environmental benefits and short-term construction-related impacts associated
with implementing the SC SWP recommendations. Site/parcel specific impacts such as change in individual lot development potential, zoning restrictions and demands on utility services will not be included in the GEIS as they are considered to be “site specific” and would be subject to supplemental SEQRA review.

The sections that will be included in the GEIS as specified in 6 NYCRR Part 617.10 are outlined below. The list of relevant environmental areas that may be impacted by the implementation of the proposed action are those identified as potential project impacts in Part 2 of the Full Environmental Assessment Form.

1.0 Executive Summary – The Executive Summary will provide a succinct summary of the GEIS including the project description, major findings of the environmental analysis, mitigation recommendations, and topics requiring further site-specific study and assessment prior to implementation.

2.0 Description of the Proposed Action, Purpose and Need – The Description of the Proposed Action, Purpose and Need will provide a concise description of the SC SWP including the County’s proposed wastewater management strategy for the reduction of nitrogen loading from wastewater and associated changes to Suffolk County’s Sanitary Code including its purpose, public need and benefits, as well as social and economic considerations.

3.0 Existing Environmental Setting – The baseline environmental setting of the County will be described. The most current readily available data sources will be used. Characterization of priority subwatersheds and groundwater quality will be based on the data collected and compiled in the SC SWP. Existing data sources to provide information on the environmental setting may include:

- US Census Data and Suffolk County Planning Department reports
- Town/Village Land Use maps and Zoning maps
- County/Town/Village comprehensive plans and planning documents
- Natural Resource Conservation Service Web Soil Survey
- USGS Maps and available topographic surveys
- Suffolk County Groundwater Model mappings
- NYSDEC Natural Heritage Program consultation
- NYSDEC Wetland Maps & National Wetland Inventory Maps (online)
- NYSDEC Sea Level Rise Projections (online and reflected in proposed regulation 6NYCRR Part 490)
- USFWS Information, Planning, and Conservation System (online)
- NYSDEC 303(d) list and related Total Maximum Daily Load (TMDL) documentation
- FEMA floodplain mapping (online)
- State and National Registers of Historic Places (online)
• NYS OPRHP database (online)
• Long Island Regional Economic Development Council’s Economic Development Plan for the Long Island Region
• Suffolk County Department of Health Services (SCDHS) databases
• Aerial imagery
• Long Island Commission on Aquifer Protection
• Suffolk County Water Authority information, data, forecasts, etc. (SCWA data, etc.)
• Relevant data from related studies, including, but not limited to:
  o Watershed delineation studies
  o Nitrogen load studies
  o Hydrodynamic studies (surface water residence time)
  o Ecological endpoints and water quality studies

The existing data will be used to describe the following features within the County:

• Physical Environment
• Land Use
• Groundwater (including potable water supply) and Surface Water
• Natural Environment (threatened and endangered species, critical habitat, wetlands, floodplains)
• Historic and Archeological Resources
• Social Environment
• Noise/Odor
• Human Health (Contaminant Exposure/Hazardous Materials)
• Consistency with Community Plans and Character

4.0 Potential Impacts of Proposed Action – A statement and evaluation of potential significant adverse environmental impacts and the reasonable likelihood of their occurrence due to the proposed action will be included in this section of the GEIS. Based on a preliminary review of the proposed action, it is anticipated that implementation of the SC SWP and required County Sanitary Code changes could result in potential impacts to the following environmental parameters:

• Land Use, Community Plans & Character
The proposed action is an early action item that is consistent with the goals and objectives of LINAP. The proposed action will be assessed as to its consistency with the following regional and county water protection programs.

- **Long Island Pine Barrens Protection Act**
- **Central Pine Barrens Comprehensive Land Use Plan**
- **Special Groundwater Protection Area Plan**
- **Long Island Sound Study**
- **Peconic Estuary Program**
- **South Shore Estuary Reserve**
- **Suffolk County Comprehensive Master Plan 2035 - Framework for the Future**
- **Suffolk County Comprehensive Water Resources Management Plan**

There is no new development associated with this action, however, the implementation of this action may affect new development, zoning, and existing land uses. Potential growth inducing aspect of this action will be addressed in Section 6.0 – Cumulative Impacts. Site specific change are controlled by the current zoning and the policies and plans of the applicable Town or Village in Suffolk County. These site-specific changes would be subject to supplemental SEQRA environmental review(s).

- **Groundwater and Surface Water**

The purpose of the proposed action is to reduce nitrogen loading from onsite wastewater sources and thereby improve groundwater and surface water quality. This section will summarize the anticipated reductions in nitrogen loading to groundwater and to surface water bodies receiving groundwater baseflow as reported in the SC SWP. Potential groundwater impacts (e.g., reduction in nitrogen concentrations in the aquifer at public supply wells) will be assessed based on existing data and the analyses presented in the SC SWP. The potential benefits resulting from implementation of the SC SWP and revision to the Sanitary Code, such as reduced nitrate loading, will be presented. While the evaluation will focus upon nitrogen reduction, the potential presence/reduction of other wastewater constituents such as pharmaceuticals and personal care products (PPCPs) will also be acknowledged.

Surface water impacts will include potential impacts from changes to groundwater baseflow and nitrogen loading. The wetlands, streams, and other waterbodies located throughout Suffolk County will be listed in the GEIS. The potential impact associated with the implementation of the proposed action on these natural resources will be qualitatively evaluated. An evaluation of the potential impacts of wastewater management on groundwater levels and stream baseflows will be completed for two alternatives (e.g., the recommended wastewater management alternative and a hypothetical County-wide alternative providing sanitary sewers to all currently developed parcels) using the existing groundwater model. Potential salt water intrusion as a result of proposed sanitary sewer projects will be qualitatively evaluated. Detailed evaluations of potential impacts on
individual ecological communities and specific mitigation measures will not be addressed in the SC SWP DGEIS but may be required in future project-specific D/FEISs.

The need to consider the impact of projected increases in sea level elevation with respect to development along the coast will be noted.

• **Natural Environment**

Because the implementation of treatment options may result in the removal or disturbance of vegetation and/or habitat, and habitat for threatened or endangered species exists throughout the County, the potential for impact to threatened and endangered species and critical habitat as well as significant natural communities and critical habitat within Suffolk County will be identified based on available data using online resources such as the NYSDEC Environmental Resource Mapper and US Fish and Wildlife Service Information, Planning, and Conservation System (USFWS iPaC).

Floodplains or areas designated as 100-year and 500-year floodplain will be assessed for potential impact resulting from the SC SWP and associated code changes adopted as part of the proposed action. Reported results of the Sea, Lake and Overland Surges from Hurricanes (SLOSH) model from the National Hurricane Center may also be consulted to assess the potential for operational impacts during hurricanes.

• **Historic and Archaeological Resources**

Because construction of treatment systems would disturb soils, and because archaeological and historic resources are located throughout Suffolk County, the GEIS will contain a desktop assessment of potential impacts on historic and archaeological resources. Potential for impact will be assessed based on known resources. National Natural Landmarks such as the Orient State Park and Montauk State Park, historic districts and historical buildings and archaeological resources are located within Suffolk County. This section will note potential impacts to historic and archaeological resources, however specific assessments as may be required by NYS Office of Parks, Recreation and Historic Preservation for implementation of a specific component of the SC SWP will be subject to supplemental SEQRA review(s).

• **Noise/Odors**

Noise associated with operation of wastewater treatment systems will be identified. Wastewater treatment has been associated with the potential to emit odors that could be noticeable off site. Potential odors resulting from implementation of the recommended wastewater management alternative will be addressed generally. While no noise or odor data collection or studies will be conducted as part of this GEIS, noise and odor data available to characterize operating Appendix A, I/A OWTS or STPs available from Suffolk County or the Towns will be included.

• **Human Health** (Contaminant Exposure/Hazardous Materials)

Because of the breadth of the SC SWP, areas that may have been the subject of a remedial action or adjacent areas could be included. The GEIS will acknowledge that the County
encompasses areas where contamination spills and remediation have previously occurred. Information from the USEPA Human Health Impact Assessment will be incorporated into the assessment. New development is not part of the proposed action and an assessment of potential impacts would be subject to supplemental SEQRA review.

- **Environmental Justice Assessment**

The potential for the proposed action to impact people or communities unequally due to race, color, national origin, or income will be evaluated. The benefits will also be summarized.

**5.0 Short-term or Construction Impacts** - Construction-related impacts will be described in general in this section. Typical impacts related to construction that are identified in the EAF Part 2 include temporary impacts to:

- **Land**, which may include excavation, vegetation removal, erosion/sediment control;
- **Surface Water**, which may include new or expansion of treatment facilities;
- **Natural Environment**, as ground disturbance would be required;
- **Historic/Archeological Resources**, as ground disturbance would be required;
- **Noise**, as construction equipment may produce sound levels above local code established limits, and
- **Human Health** (Contaminant Exposure/Hazardous Materials), as construction may take place on parcels adjacent to land under remediation. No risk assessment will be included within the GEIS. However, a summary of potential human health benefits associated with nitrogen reduction in groundwater and surface water will be included.

Although no parcel-specific analyses will be completed, the potential need for modification to existing buildings and plumbing to facilitate installation of a new I/A OWTS or connection to an STP will be identified. Site-specific construction related impacts will be evaluated against the SEQRA triggers and may therefore be the subject of subsequent reviews under SEQRA.

**6.0 Cumulative Impacts** - A general overview of the cumulative impacts of SC SWP implementation on the environment, natural resources and cultural environment will be provided. This will include;

- **Water export/impact to water supply** - The cumulative impacts of water export (e.g., moving wastewater from one subwatershed to another as a result of wastewater treatment) upon the groundwater table and upon stream baseflows from SWP implementation will be evaluated using the existing groundwater model. The evaluation of water export will not include detailed evaluations on the ecology of estuarine or freshwater ecosystems; however, it will provide an initial understanding on the potential for sewering to impact these ecosystems in the context of the estimated decrease in groundwater levels.
• The cumulative impacts of SWP implementation upon the County’s water supply will consider potential impacts to both water quantity and water quality. Potential impacts to water quantity will be evaluated by incorporation of new or increased surface water discharges of treated wastewater effluent into the baseline water budgets presented in the Suffolk County Comprehensive Water Resources Management Plan and comparison of the baseline and post-SWP implementation water budgets. Cumulative impacts to water quality will be based on nitrogen concentrations and will be assessed using the groundwater model-simulated impacts to nitrogen concentrations after the SWP is implemented.

• Potential for growth inducement within the County – There is no new development associated with the proposed action; however, the implementation of the proposed action may affect future development potential, demand for utilities, and existing land uses. The GEIS will identify any subwatersheds where SWP implementation is anticipated to reduce nitrogen loading to levels that are lower than the nitrogen reduction targets. While site specific changes within these subwatersheds are controlled by the current zoning, policies and plans of the applicable Suffolk County Towns and Villages this section will consider the growth inducing aspects that SWP implementation could prompt. Site-specific and/or municipality specific growth options will be subject to supplemental SEQRA review.

• Energy Demand (Greenhouse Gas impact) – The cumulative impacts of SWP implementation upon energy demand will be estimated using the total estimated parcels connected to I/A OWTS, cluster systems, and new/expanded STPs and typical I/A OWTS energy requirements (using data available from Suffolk County’s existing I/A demonstration program, the Center for Clean Water Technology and/or manufacturers), typical cluster system energy requirements (using data available from the literature and manufacturers) and STP energy requirements (using existing data from Suffolk County Department of Public Works).

7.0 Unavoidable Adverse Impacts -This section will summarize those impacts that cannot be avoided or adequately mitigated if the SC SWP strategies and Sanitary Code changes are implemented.

8.0 Irreversible and Irretrievable Commitments of Resources -This section will discuss those nonrenewable natural resources that will be used in the implementation of the SC SWP. Trade-offs between short-term losses and long-term benefits will be addressed qualitatively in this section.

9.0 Mitigative Measures -Where significant project related impacts are identified based on the analysis conducted in the draft GEIS, measures to mitigate these potential impacts to the extent practicable will be suggested. This will include potential short-term construction as well as long-term operational impacts. For example, measures to reduce the potential for soil erosion during construction and traffic control measures (signage, flag persons, etc.) to avoid impacts on motorists and emergency vehicles will be identified. Potential operational mitigation measures would include I/A OWTS designs that incorporates good engineering practices and maintenance contracts and use of the RME to oversee design, construction, and
operation of I/A OWTS. Those impacts that cannot be mitigated will be reviewed under “Unavoidable Adverse Impacts.”

Site specific mitigation measures will be the subject of supplemental SEQRA review.

10.0 Alternatives Analysis – This section of the GEIS will include a description and evaluation of reasonable alternatives to the proposed action that consider the goals and objectives of the County. The following alternatives will be evaluated in the Draft GEIS:

- No Action Alternative: Continued use of septic systems and the patchwork of wastewater collection and treatment systems that currently exist within the County
- County-wide centralized wastewater collection and treatment systems (expansion of existing sewer districts and/or establishment of new sewer districts) to treat wastewater from existing developed parcels
- Limiting nitrogen loading by increasing minimum lot sizes county-wide
- County purchase of ‘priority areas’ through the use of Open Space funding
- Dual plumbing/dual water systems

11.0 Transfer of Development Rights (TDRs) - The County’s use of TDRs if included as an implementation strategy in the SC SWP will be discussed in general terms. Specific TDR Programs would be the subject of supplemental SEQRA review.

12.0 Project/Site-Specific D/FEIS Requirements - There is no new development associated with the proposed action, however, the implementation of the proposed action may affect future development potential, demand for utilities, and existing land uses. Potential impacts to the natural or physical environment as well as utilities and community services due to site specific projects will be addressed by subsequent SEQRA review. This section will provide a description of specific conditions or criteria under which a future action or actions that would require additional review under SEQR. Example thresholds or criteria that would trigger supplemental or site-specific EISs to address site specific or municipality specific actions will be provided.

List of References

Glossary of Terms

Technical Appendices:
- SEQRA documentation including Positive Declaration and Final Scoping Document
- Subwatershed Wastewater Plan, to be incorporated by reference
- Subwatershed Wastewater Plan Project Task Reports
5.0 SEQR Next Steps
Preparation of the GEIS will begin, based upon the outline of the content and evaluations identified in this Final Scoping Document.

6.0 Public Comments Received
Both verbal comments and written comments on the Draft Scoping Document were received. Transcripts of the public scoping meetings are included in this document as Attachment B. Written comments that were received by December 13, 2016 are included in this document as Attachment C.

Written comments were received from the following interested parties:

- Friends of Georgica Pond, December 2, 2016
- Peconic Baykeeper, December 12, 2016
- The Nature Conservancy, December 12, 2016
- Town of Brookhaven, December 13, 2016
- Central Pine Barrens, December 13, 2016

The location within this Final Scoping Document where the response to each comment may be found has been indicated within each comment letter and Public Scoping Hearing transcript.

6.1 Comments on the Suffolk County Subwatersheds Wastewater Plan (SC SWP) Scope
A number of public comments identified topics that will be evaluated in the Suffolk County Subwatersheds Wastewater Plan (SC SWP). As such, they will become part of the Proposed Action. The SC SWP will be included in the GEIS as an Appendix.

The following public comments will be incorporated into the scope of the GEIS in this manner:

**Central Pine Barrens 1(b):** Please explain the methodology used to “evaluate surface water sensitivity” and define the term “sensitivity” as it is used.

**Central Pine Barrens 1(c):** Please explain the methodology to be used in the plan to “evaluate nitrogen loading to groundwater and surface water.” For example, will the plan examine the existing and build out development potential of all communities in the County to evaluate the expected nitrogen loading to groundwater and surface water resources? What benchmark will be used to determine maximum nitrogen loading to water resources and what are the acceptable limits?

**Central Pine Barrens 1(d):** Please elaborate on how and for whom the costs and benefits of wastewater management alternatives will be evaluated. Will the analysis of benefits be in regard to those that accrue to property owners, Towns and developers or benefits to that accrue to ecological and water resources or a combination thereof?
Central Pine Barrens 2(a): Please identify the timeframe for and the triggers that will require installation of an alternative treatment system and modifications to a property such as when new construction is proposed or in application to build an expansion of 50% or more of a structure. Please also identify the application phase(s) when it will be required, such as site plan review, subdivision review, Zoning Board of Appeals variance application, building permit phase, etc.

Central Pine Barrens 2(b): The installation of a new treatment system may require other potentially significant modifications to a property, other than the replacement of one system with another, including, but not limited to, plumbing and waste line realignment, rerouting and installation; shoring up structures; site disturbance; potential clearing on a property encumbered by covenants or easements and alterations to existing structures and property. Costs to a property owner may be a limiting factor. Therefore, please identify funding mechanisms and compliance and enforcement staffing, fees, and fines to implement the plan (Note: A range of costs will be provided in the SC SWP along with an estimate of staffing. Please see Section 6.2.2.)

Central Pine Barrens 3(c): Please explain how the goals and objective of the plan are met if new or expanded STPs are not designed and constructed.

Central Pine Barrens 5(a) “Groundwater and Surface water” Bullet 1: This section discusses improving groundwater and surface water quality. Please identify how “improvement” will be measured and what standard or standards will be applied to measure improvements including, but not limited to, drinking water quality standards, ecological standards, recreational activity standards, etc. Are public water suppliers involved in the project to measure potential “improvement”, if applicable, to drinking water supplies?

Central Pine Barrens 5(a) “Groundwater and Surface Water” Bullet 3: This section indicates the presence/reduction of other wastewater constituents such as pharmaceuticals and personal care products (PPCPs) will also be acknowledged. Please identify how PPCPs will be remedied and will new systems provide a remedy and to what extent, if any?

Central Pine Barrens 5(a)” Groundwater and Surface Water” Bullet 4: The scope states “surface water impacts will include potential impacts from changes to “groundwater baseflow.” Please identify or define “groundwater baseflow” and how it is impacted/ altered.

Central Pine Barrens 5 (a) “Plants and Animals” Bullet 1: Please identify proximity and disturbance to wetlands and travel time.

Central Pine Barrens 5(a) “Economics” Bullet 2: This section should describe in further detail the proposed “Water Quality District,” what it is, who is in it, where it is, how it will be funded, and compliance and enforcement procedures to be established in a Water Quality District

Central Pine Barrens 5 (c) (i) Alternatives: “.... Please clarify that although separate public and private entities may own and manage facilities in the County, the SCDHS is the regulatory authority responsible for implementing the Sanitary Code for approval and compliance of facilities....”

Central Pine Barrens 5 (c) (iii) Alternatives: Prior to implementing requirements for 360,000 properties to comply with new regulations, please consider a short-term alternative for voluntary
participation or potentially new development including new residential subdivisions and commercial and industrial site plans.

**Central Pine Barrens 5 (c) (v):** In the potential alternative for the County to acquire land through open space funding in the defined “priority area” please consider referring to recent amendments to the Community Preservation Fund (CPF) that allow a percentage of funds to be used toward water quality improvement initiatives. Clarify if funds in the CPF would be available for use in this project. In addition, please consider a recommendation to or alternative for municipalities, including Towns and Villages in the County where a CPF does not exist, to explore and consider establishing a CPF to manage the acquisition of priority areas. This may provide a revenue source to acquire land in priority areas and minimize financial impacts to residents in priority areas.

**The Nature Conservancy, Proposed Action, Section 2 Grandfathering, seventh paragraph:** Finally, the use of shallow, narrow drainfields should be included, in place of cesspits. (Note: Use of shallow, narrow drainfields will be an alternative evaluated in the SC SWP, which will be included in the GEIS as an Appendix).

**The Nature Conservancy, Advanced Wastewater Treatment Pilot Areas, Section 6:** In this section, we recommend adding other somewhat novel approaches to nitrogen reduction, including but not limited to, water re-use, resource recovery from wastewater (e.g., efforts to use macro-algae as fertilizer), urine-diversion and composting toilets, botanical treatment projects, wetland restoration, and buffers along water bodies, especially at agricultural sites.

**The Nature Conservancy, Potential Impacts of Proposed Action, Fifth bullet:** "Economics" is outlined in unjustifiably narrow terms. Water quality undergirds Long Island’s economy in many respects: some 40% of the island’s businesses are considered water-dependent—either freshwater or surface waters. Real estate values are influenced by water quality. That means property tax revenues depend on water quality, as does the multi-billion-dollar tourist industry of Long Island. If water quality deteriorates further, all of these economic indices will suffer. Accordingly, the costs of not acting to reduce nitrogen to necessary levels must be considered in addition to the "potential economic benefits" of improved water quality. (Note: Economic benefits associated with installation, maintenance and monitoring of the new I/A OWTS will also be identified in the SWP based upon literature reported estimates. The Economy sector of the USEPA 3VS model will estimate how changes in the water quality of coastal embayments will affect water-dependent elements of the local economy, including tourism and recreational and commercial fishing. Information from the USEPA Suffolk County 3VS model will be incorporated to the extent that it is available within the project timeframe. Likewise, information regarding the potential cost/benefit to the septic industry and potential cost/benefit to property values in Suffolk County will be referenced from available resources being produced through Stony Brook University, to the extent that they are available within the project timeframe.

**Kevin McDonald, The Nature Conservancy,** December 1st, verbal comment, page 43 of transcript: “.... Getting those targets with a measure of safety ...”

**Kevin McAllister, Defend H2O,** December 1st, verbal comment, page 51 of transcript: “At below 10 mg/L I think we need to flesh out the commercial vs residential input.”
**Kevin McAllister, Defend H2O**, December 1st, verbal comment, page 52 of transcript: “The science has to be de-coupled from the cost benefit analysis ... define the loading and the various scenarios, the various remedies. Put aside the cost benefit and then ultimately bring that in obviously ...”

**Kevin McAllister, Defend H2O**, December 1st, verbal comment, page 53 of transcript: “… Triggers for the upgrades; mandates, time of property transfer …. And I think it should go a step further actually identifying what the reductions would be based on what the reasonable timeframes are. We probably have an idea of what the property transfer is ... What is that in Suffolk County and how quickly do we ... achieve the goals in nitrogen reduction?”

**Kevin McAllister, Defend H2O**, December 1st, verbal comment, page 54 of transcript: “This may be an omission, perhaps not, sea level rise and coastal inundation. That has to be factored into the analysis ...”

**Kevin McAllister, Defend H2O**, December 1st, verbal comment, pages 54-55 of transcript: “What are the build-out scenarios? ... here’s our reduction ... what does that mean for ultimate build out for potential increased density?”

**Barbara Blass**, December 1st, verbal comment, page 56 of transcript: “… Each of the five east end towns has a loose plan where they have identified priority areas and projects which would be eligible to receive monies through the CPF. And I’m just wondering how they are going to interface with your priority areas and just a general understanding of how it’s going to work together.”
(Note: Suffolk County is making efforts to coordinate the SC SWP with Town CPF programs.)

**Friends of Georgica Pond**, Our preliminary thinking is that we want to advocate for voluntary upgrade of septic systems (+/- 75) around the pond in the coming year and the look for partnerships with the Town CPF and County within critical areas of the watershed, especially the commercial district of Wainscott. (Note: Suffolk County will continue to coordinate with the Friends of Georgica Pond to identify opportunities for aligning efforts; any projects that are aligned with the SC SWP objectives that are identified during SC SWP development will be included.)

**6.2 Issues Identified during Scoping that Have Not Been Incorporated into the Final Scope**

Not all of the comments that were received on the Draft Scoping Document can be fully addressed within the Scope of this GEIS, for a variety of reasons. Some identify issues that are not within the control of the project sponsor (e.g., future growth and development), and some will be more appropriately considered by a D/FEIS for a specific project. The comments that have not been incorporated into the final scope of the GEIS are identified in the following pages.

**6.2.1 Comments that Would Best be Addressed in a Project-Specific D/FEIS or Supplemental GEIS**

**Central Pine Barrens 1(a):** What impact, if any, will the Plan have on the Pine Barrens Credit (PBC) program, specifically the standards allowing redemption of PBCs to increase sanitary flow in a typical septic system?

**Central Pine Barrens 3(a):** Although this section states “New STPs and/or expansion of existing STPs will be completed ... “it is not clear how facilities will be funded and where they will be sited. It
is worth noting in the Central Pine Barrens Comprehensive Land Use Plan, Standard 5.3.3.1.2, Sewage treatment plant discharge states, "Where deemed practical by the County or State, sewage treatment plant discharge shall be outside and downgradient of the Central Pine Barrens. Denitrification systems that are approved by the New York State Department of Environmental Conservation of the Suffolk County Department of Health Services may be used in lieu of a sewage treatment plant." It would be helpful to review preliminary plans or assessments of potential new sewage treatment plants (STPs) or upgrades, if any, that are proposed to occur in the Central Pine Barrens region.

Central Pine Barrens 5 (c) (ii): The scope should identify alternatives and existing conditions and processes that may not be capturing opportunities for improvements and identify potential modifications in practices or review processes that could occur to improve environmental conditions. Will the plan make recommendations to other involved agencies regarding zoning or changes to development standards that may improve conditions? Will the plan recommend changes that would require the retirement of Development Rights or Pine Barrens Credits or land preservation in instances of nonconforming subdivision or increases in land use density or intensity to offset potential environmental impacts?

Kevin McAllister, Defend H2O, December 1st, verbal comment, page 53 of transcript: "Grandfathering … ultimately the goal has to be to eliminate grandfathering …" (Note: Suffolk County is currently evaluating changes to Article 5 and 6 to address grandfathering. Changes that fall outside of the project timeframe would be subject to supplemental GEIS.)

6.2.2 Comments That Are Beyond the Scope of the SC SWP/GEIS
Town of Brookhaven, Comment 1. On page 2, Section 2.0, #1 Recommended Wastewater Management Strategy an additional point should be added that states: "Identify surface water numeric nutrient standard for nitrogen". The NYSDEC has this authority, and is in the process of developing numeric nutrient standards for New York surface waters.

Town of Brookhaven Comment 2. On page 2, Section 2.0 #1 There is a list indicating activities that will prompt wastewater treatment upgrades. Consider adding a category of “Illegal Rental Properties”. These properties often house a disproportionately large number of people and so may have substantially higher nitrogen loading than similarly sized non-rental properties. There may be an opportunity to work with the Towns to require installation of I/A systems at these properties as part of legal settlements.

Kevin McDonald, TNC, December 1st; verbal comment, page 42-43, transcript: "... ask them where they want to have growth centers and tell everybody up front ... "

Central Pine Barrens 1(e): The scope of the plan's consideration of activities that will prompt wastewater treatment upgrades under various scenarios should include financial and other costs incurred by property owners, including the expenditure of time when properties are sold and purchased by new owners. The potential costs that will be passed onto new owners or included in sales should be assessed. A timeframe for compliance and enforcement provisions should be provided.
Central Pine Barrens 2(b): The installation of a new treatment system may require other potentially significant modifications to a property, other than the replacement of one system with another, including, but not limited to, plumbing and waste line realignment, rerouting and installation; shoring up structures; site disturbance; potential clearing on a property encumbered by covenants or easements and alterations to existing structures and property. Costs to a property owner may be a limiting factor. Therefore, please identify funding mechanisms and compliance and enforcement staffing, fees, and fines to implement the plan. (Note: Please see Section 6.1 as much of this comment will be addressed in the SC SWP. Fees and Fines will not be determined in the SC SWP or GEIS.)

Central Pine Barrens 5 (c) (iv): An alternative that requires retirement of a development right, flow credit, or Pine Barrens Credit, in cases of substandard subdivisions, increases in density or land use intensity, should be considered prior to implementing regulations that require alternative treatment systems. (Note: The intent of this comment as it relates to the scope of the GEIS is not clear)

The Nature Conservancy: Proposed Action: A project should be considered “proposed” if it has been seriously discussed, including for example, the proposed expansion of the Oakdale STP and Greenport STP. (Note: STP projects that are proposed for incorporation into the SC WP do not necessarily include “all” STP studies that have been proposed or discussed historically. As an early action LI NAP element intended to build upon readily available data, the SC SWP will only consider STPs that have existing sufficient information that can be used for the SC SWP [for example, existing feasibility studies]. Note also that as identified in the Scoping Document, all STP projects will be subject to individual SEQRA review.)

The Nature Conservancy, Proposed Action, Grandfathering, Paragraph 6: Regarding the phrase "failed denitrification system sites" requires elaboration in the bullet point “Grandfathered Other Than Single Family Residential sites including grandfathered SPDES and failed denitrification system sites.” The GEIS should say where these sites are and how they have been measured. (Note: Suffolk County is evaluating options for scanning existing Office of Wastewater Management records and indexing them to individual parcels. If this project comes to fruition the identification of grandfathered SPDES and failed denitrification system sites would be evaluated during the scanning and indexing process.)

The Nature Conservancy – Existing Environmental Setting, Physical Environment: – Add to bullet points: Sediment characteristics. (Note: Sediment characteristics was not identified as a potential area of impact during EAF preparation).

The Nature Conservancy – Alternatives Analysis: As referenced in our introductory paragraph, the "no action alternative" does not really exist. It implies that if the County does not act, no one else will-and that is simply incorrect. The County has already approved Section 19 of the sanitary code and has authorized new I/A technology, such that towns may require use of these systems, and individuals may install them voluntarily. Further, the Long Island Nitrogen Action Plan will propose certain actions, if not require them, and the same can be said with the Long Island Sound and Peconic Estuaries TMDLs.
And additional TMDLs may be created in Suffolk County related to nitrogen on the basis of the State’s compliance with the federal Clean Water Act. Accordingly, "no action" is not really possible. The "no action" alternative here is no action of the sort proposed, or no additional action at this time, but what exactly does that mean? No subwatersheds delineated, no goals set, no amendment to Articles 5 and 6, no attempts at uniform implementation, etc.-or the undertaking of these tasks by other entities? The absence of active County involvement while others act is a separate alternative that must be addressed in the GEIS. (Note: SEQRA requires consideration of the No Action alternative. The No Action alternative will, however, recognize the potential roles of other stakeholders.)

**Peconic Baykeeper:** SEQRA mandates that a lead agency identify the relevant areas of environmental concern, take a “hard look” at any potential impacts and provide a reasoned elaboration for its conclusions. In the process, the lead agency is obligated to consider a variety of potential impacts including short-term, long-term, primary, secondary and cumulative impacts. Cumulative impacts include any potential impacts associated with “reasonably related” actions. In this case, there are a host of reasonably related actions that should be considered in conjunction with the GEIS for the subwatersheds wastewater plan. In addition to the County’s water resources management plan, this should include as a minimum the following:

Reclaim Our Waters Initiative - The Subwatersheds Study was described as a "sub-component" of the County Executive’s Reclaim Our Waters Initiative. As such, the potential impacts assessed in the GEIS should include all reasonably related actions contained within the broader policy document referred to as the Reclaim Our Waters Initiative.

Comprehensive Water Resources Management Plan - The County has recently released a “Comprehensive Water Resources Management Plan” which has served as the foundation for initiatives like the Subwatersheds study. However, the Water Resources Management Plan has never been adopted by the County, nor have the potential environmental impacts of its recommendations been reviewed under the State Environmental Quality Review Act (SEQRA). Resource management plans are defined as Type I Actions under SEQRA. As such, if the County’s water resources management plan is to be used to support amendments to the sanitary code or studies such as the subwatersheds wastewater plan, it should be analyzed under SEQRA in conjunction with the subwatersheds study.

The Sanitary Code - Recent and ongoing updates to the Suffolk County Sanitary Code are a direct result of the information prepared and analyzed as a part of the comprehensive water resources management plan. Segmentation is inconsistent with SEQRA and the division of reasonably related actions like the update of the sanitary code, the release of the water resources management plan and the subwatersheds wastewater plan represents an impermissible segmentation of these reasonably related actions.

Sewer Capacity Study - The County has previously prepared a sewer capacity study that analyzed the expansion of existing sewage treatment plants and the potential development of new systems. Sewer capacity and the permitting of innovative alternative on-site wastewater systems are also reasonably related actions to the subwatersheds study. Accordingly, the impacts of these plans should be considered in conjunction with the subwatersheds study.
County Comprehensive Plan - The County recently adopted a new comprehensive plan. Land use plans are Type I Actions under SEQRA. Despite this fact, the County deemed the adoption of the plan a Type II Action. Since resource management is a necessary component of a properly prepared comprehensive plan, the recently released water resources management plan should be considered a component of the County’s Comprehensive Plan. The potential environmental impacts of the comprehensive plan should be considered in conjunction with the GEIS for the subwatersheds study.

County Regional Transportation and Development Plan - The County recently released a “Regional Transportation and Development Plan” which details infrastructure needs and potential economic development opportunities. This study, the comprehensive plan, the updates to the sanitary code and the sewer capacity study are all reasonably related actions under SEQRA. Accordingly, all associated potential impacts including cumulative impacts, should be considered at this time.

Bergen Point Expansion - The County recently approved a 10 million gallon per day expansion of the Bergen Point STP. In addition, the County is currently considering a 7-mile main extension from the Bergen Point Plant to the project known as the Ronkonkoma Hub. This project also includes a second main for the connection of both existing and proposed development along Veterans Memorial Highway. These are also reasonably related actions under SEQRA, the cumulative impact of which has never been assessed. Accordingly, the GEIS for the subwatersheds study should incorporate these actions as well.

In summary, the County is in the process of expanding sewering, implementing innovative on-site wastewater systems and updating the sanitary code. All of these reasonably related actions will impact water resources throughout the County. The County has an obligation to assess the cumulative impact of these reasonably related actions and development-related impacts resulting from increased wastewater capacity. To date, it has failed to do so. The subwatersheds wastewater plan represents an opportunity to secure compliance with SEQRA. We recommend that the scope of the GEIS be expanded to consider the full range of potential environmental impacts consistent with SEQRA.
Attachment A – Suffolk County Subwatersheds Wastewater Plan Methodology Summary

In accordance with Suffolk County’s Reclaim Our Water initiative and the Long Island Nitrogen Action Plan* (LINAP – see note 4), 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 in the upper glacial and Magothy aquifers in recent decades. The Comp Water Plan linked increasing nitrogen levels in 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 sewering will not be sufficient to solve the problem.

The Suffolk County Subwatersheds Wastewater Plan (SC SWP) will provide a recommended wastewater management strategy to reduce nitrogen pollution from non-point wastewater sources. To support development of the recommended wastewater management strategy, a sequenced, technically driven series of evaluations will be completed as follows:

- Delineation of the County’s priority subwatersheds (~189 individual surface water receiving bodies) using the existing Suffolk County Groundwater Model. The groundwater model provides a common platform of assumptions and boundary conditions to ensure a uniform and consistent set of subwatersheds boundaries (see note 1).

- The generation of land use based annual nitrogen loading rates for each of the subwatersheds using the existing Suffolk County Groundwater Model mass transport module (see notes 1, 2 and 3).

- The development of surface water residence times for each of the 189 surface water bodies using the Environmental Fluids Dynamic Code (EFDC) modeling software.

- The establishment of baseline water quality using existing readily available surface water data from available studies and monitoring programs completed within Suffolk County.

- Using the results of the modeling efforts and baseline water quality, tiered priority areas will be established for wastewater management upgrades. The objective of establishing tiered priority areas is to provide a framework for implementing the recommended wastewater alternative in a phased approach which would focus the allocation of funding and resources on the highest priority areas (see note 1).

- Following the establishment of tiered priority areas, preliminary load reduction goals will be developed for each surface water body using empirical data relationships, existing regulatory target guidelines, and other readily available data sources from related studies (see note 1).

- Finally, recommendations for wastewater management upgrades will be provided for each priority tier based upon the ability to meet nitrogen load reduction goals (see notes 1, 5, and 6).

* 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)
Notes:

1. A parallel evaluation will be completed for the protection of groundwater and public and private supply wells. The evaluation will use the Suffolk County Groundwater Model to estimate predicted nitrogen concentrations in public supply wells and groundwater and required load reduction through wastewater management to reduce nitrogen concentrations to agreed upon endpoints.

2. The SC SWP will calculate the total nitrogen loads from all major sources (e.g., wastewater, residential fertilizer, agriculture, deposition, and pet wastes). While these loads will be considered in the determination of an overall first order reduction goal for a water body, the focus of the SC SWP will be assigning nitrogen load reduction goals for non-point wastewater sources to support achievement of the overall load reduction goals. LINAP and/or other related future initiatives will further consider these loads and reductions, and will expand on alternate available management measures such as permeable reactive barriers and in-water aquaculture.

3. The Suffolk County Groundwater Model will be used to support the identification of areas where legacy nitrogen may be of concern. However, the SC SWP evaluations will not include legacy nitrogen in its evaluations. LINAP and/or other related future initiatives will further consider these loads and will expand on alternate available management measures such as permeable reactive barriers and in-water aquaculture.

4. The SC SWP is considered an early action/initial step of the overall long-term LINAP program. In addition to being a guide for establishing County wastewater policy, the primary objective of the SC 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 LINAP scope refinement and focus and other related initiatives ongoing throughout Suffolk County (e.g., Long Island Sound Study, Peconic Estuary Program, South Shore Estuary Reserve, and related Town/Village initiatives). In alignment with these objectives, the SC 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.

5. Recommended wastewater upgrades will focus on the use of I/A OWTS, the use of sewering at locations where existing sewer feasibility studies indicate sewering is cost effective, and the use of decentralized/clustered systems (e.g., small pre-packaged treatment plants or I/A OWTS that connect multiple tax lots or buildings together). The SC SWP cost benefit analysis will, amongst other evaluations, identify the criteria and locations where the use of decentralized/clustered systems represent the most cost-beneficial wastewater management approach. In addition, the SC SWP will evaluate and provide preliminary recommendations on how to overcome some of the potential challenges associated with implementing these systems (e.g., existing setback constraints, long-term O&M responsibility, approval process, etc.). Finally, increase of the minimum lot size may be considered in select subwatersheds where sufficient undeveloped land exists to provide a meaningful environmental benefit.

6. The SC SWP will include a recommended implementation plan. The recommended implementation plan will balance the need for providing a program acclimation period (e.g., hire staff for Responsible Management Entity, training of industry, industry market preparation, and funding source identification) with providing an aggressive implementation approach that provides meaningful environmental benefit.
SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
OFFICE OF ECOLOGY

ENVIRONMENTAL IMPACT PUBLIC SCOPING HEARING.

20 East Main Street
Riverhead, New York
December 1, 2016
6:07 p.m.

HEARING of as described above held at the above-noted time and place, before Janice L. Antos, a Stenotype Reporter and Notary Public within and for the State of New York.
APPEARANCES:

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
OFFICE OF ECOLOGY
360 Yaphank Avenue
Yaphank, New York 11980

BY: KENNETH ZEGEL,
ASSOCIATE PUBLIC HEALTH ENGINEER

ALSO PRESENT:

Michael Kaufman, CEQ Vice Chairman
Peter Scully, Deputy County Executive
Maryanne Taylor, CDM
MR. KAUFMAN: I going to call the
meeting to order. My name is Michael
Kaufman Vice Chair of CEQ. I will be
running the meeting today. You are right
now at the Public Hearing regarding the
Scoping of the Draft Generic Environmental
Impact Statement for the Suffolk County
Sub-watershed's Wastewater Management Plan
which will be described in greater detail
in a couple of minutes.

The public hearing is being held so
that Suffolk County can receive comments
from the public on the development of the
environmental impact statement for the
Suffolk County and Sub-watersheds
Wastewater Plan. I don't see a flag so we
can't do a Pledge of Allegiance.

MS. TAYLOR: Behind you.

MR. KAUFMAN: Wait, I have a choice
of four. Which one do I do? All right,
this one. We'll let Dick Amper start us
off.

[AFTER RECITATION OF THE PLEDGE OF
ALLEGIANCE, THE PUBLIC SCOPING HEARING]
REGARDING THE ENVIRONMENTAL IMPACT STATEMENT OF THE COUNTY OF SUFFOLK WAS CALLED TO ORDER BY MICHAEL KAUFMAN AT 6:07 P.M.]

MR. KAUFMAN: Okay. Let's see, CEQ is the manager of SEQRA issues for this Environmental Impact Statement and we will be reviewing the entire EIS for the legislature. We are not employees of the County. We are not paid, rather we are citizen appointees with SEQRA experience. The project initiator and sponsor is the Suffolk County Department of Health. DOH, along with a consultant, CDM Smith, Camp Dresser McKee. Smith will be preparing the DGEIS. We're doing it as an GEIS, a global look at the County as opposed to specific areas.

The Suffolk County Legislature is the SEQRA lead agency, it makes all the final determinations about the GEIS process, now once it is completed and turned over by CEQ. The scope is the initial part of preparation of an EIS, it is mandated by
State Law and by the Suffolk County Code. Again, it is the public's chance as citizens to review and comment.

Now, the way we will be handling this is public comments are being taken today, we have a stenographer. Written comments may also be submitted to the Suffolk County Department of Health and to CEQ until December 13, 2016.

To give everyone a chance to speak, we're going to hold everyone to three minutes or 180 seconds depending on how I feel, and we'll ask that everyone please fill out cards to speak and write legibly, because sometimes it's hard to read this stuff.

Okay, housekeeping, in connection with this Public Hearing, Notice has been served in the official papers of Suffolk County as well as posted on the New York State DEC Environmental Notice Bulletin and the Suffolk County CEQ website. In addition, this Public Hearing Notice has been sent to all known involved agencies.
as well as the Suffolk County Department of Health Services' list of interested agencies and parties.

Okay, we have asked you again to sign in today. I believe cards were distributed. We will be keeping the cards. We will do our best to keep you informed as actions proceed both on the Suffolk County DOH website and also the CEQ website and most relevant SEQRA documents as they are brought fourth.

Basically, the concept with that is there will be final scopes and there will be approvals of final scopes and there will probably be several drafts of the draft DGEIS. And then eventually there will be a final GEIS and then eventually after that, a finding statement.

It's a complex process but it gives everyone a chance to review and to comment. Now, CEQ and Suffolk County Health Staff will not be doing any Q and A today. We are engaging in explanations.

If you have questions or want to submit
more testimony or anything like that, written comments, et cetera, again you have until December 13.

We want to hear from you. We don't want to try to engage and discuss the program that either can twist things around, et cetera. We want the public's comments and the public's input on all of this.

The project will be introduced by Peter Scully, Deputy Suffolk County Executive. After that, Suffolk County Department of Health will give a short presentation and then Maryanne Taylor of CDM Smith will present the main plan. As you can see it's -- part of it is up here. It's a little bit of a lengthy presentation. It's very very detailed. It will give you a pretty good flavor as to what is occurring and where the County wants to go.

And hopefully you will be able to understand what the County's objectives are and to be able to submit cogent
comments. So without any further ado, I would like to introduce Peter Scully, Deputy County Exec.

MR. SCULLY: Thank you, Mike. And on behalf of Suffolk County Executive Steve Ballone, welcome to all of you. Thanks for joining us. I would like to acknowledge the presence of two Suffolk County Legislators, Al Krupski District Number One and Bridgette Fleming from District Number Two who are strong supporters of our efforts to address nitrogen pollution in Suffolk County, we appreciate their presence.

I believe we have two members of CEQ with us also, Frank Arubius (phonetic) and Robert Carpenter, and of course Mr. Kaufman who introduced himself previously.

This is an important opportunity for folks to comment on this important document, the Wastewater Plan and Environmental Impact Statement. We weren't sure what to anticipate in terms
of attendance tonight. I have a few slides that are really intended for folks who are not at all familiar with our overall effort. I'll run through them I think briefly, if I can figure out how to use the technology.

So just briefly comment, so, for those of you who have reviewed the Scope, and I hope most of you have at this point. You understand the both the breadth and the depth of this effort and the significance of its components. The Plan and GEIS are going to serve as the framework for septic load reduction goals, for individual onsite wastewater treatment systems, and small package sewage treatment plants, which we call pendic (phonetic) day systems for vast areas of the County where sewering will not be feasible.

And the Plan GEIS will provide a bridge from our septic demo program, which I'll talk about in a little bit, to wider scale limitation. Project also is
intended to provide the first consistent unified evaluation of our three major estuary system watersheds nitrogen loads, impact and reduction goals since the 208 study in the 1970s and will also deal with freshwater lakes and streams.

The plan will review alternatives and make recommendations based on analysis and cost and benefits and will provide support for the County's policy goal or creating a county wide wastewater district and key recommendation in both our comprehensive water resources management plan and the IBM Smarter Cities Challenge Report which was generated by the IBM Corporation after a team of experts visited Suffolk County in 2014 to assess our nitrogen problem.

So why the fuss? This is a generic slide we use to explain our setting who are not familiar with Suffolk County. We have a very large amount of people living in a very small area on what is essentially a sandbar served by a sole source aquifer and most of it is
unsewered. We have a diffuse public water supply well network. As most of you know, we still have a lot of people relying on private wells. Our wetlands and surface waters are a major feature of the Island. It drew people to Suffolk County but when people look around these days, many seem to understand that we do have a problem.

The beaches are closed, they are not allowed to take shellfish and eat them and there are warnings from the Health Department about how many servings of fin fish they can eat a month or should eat a month. And every day it seems we're reading a story about an algae bloom, a fish kill, a neurotoxin or blue green algae and somebody's dog being impacted by the toxic nature of that. And our bathing beaches increasingly are facing closures during summer months.

A little bit about setting, the shellfish industry obviously and the economic impact of the loss of that resource is obvious. Loss of coastal
vegetation as a result of nitrogen impacts and there's a harmful algae bloom map on the top left side. All three estuary systems are considered impaired.

This is a photo we use to grab people's attention but for people out of the east end, this is nothing new. This is a fish kill that occurred in the Peconic in 2015, very large one. And those of you in the room mostly are familiar with the fact that fish kills do occur as a result of natural conditions with predator fish chasing the smaller fish into areas where they deplete the oxygen and then suffocate.

This particular kill which is a high profile kill was attributed, at least in part to increased nitrogen, in surface water in a report that was generated by DEC in cooperation with Suffolk County Department of Health Services in the wake of this kill. And that bar graph -- I'm sorry, the circle pie graph in the center, that's data that was drawn from the study
of the south shore estuary that just gives
an idea of the magnitude of the impact of
the septic and cesspool systems as a
nitrogen source compared to other sources.

The difference between the cesspools
and septic obviously is that sewage
treatment plants actually treat effluent
and the septic and cess pools are not
really designed to do that. So I
mentioned briefly the Suffolk County
Comprehensive Board of Resources
Management Plan which was issued in March
of 2015, I tell people who aren't familiar
with the process that it's kind of a good
news and bad news document. The bad news
is that it documented continued
degradation of water quality in Suffolk
County over the last 10 years. The good
news is that it offers a series of
recommendations aimed at addressing that
problem. It's kind of a guide for moving
forward and it has some key
recommendations that are the subject of
this Sub-watersheds Plan and Draft
Environmental Impact Statement.

Another illustrative map that shows the impact of the 360,000 onsite sewage disposal systems. It's a residential number only. There's a whole other universe of unsewered commercial parcels that we need to address. 209,000 of these systems are what staff preliminary have identified as priority areas pending results of Sub-watershed work that we're doing with the line app project and the Sub-watersheds Plan, and approximately 253, just a little under that, predate the 1973 requirement that was added that requires a septic tank in addition to just a cesspool but it's not really a meaningful difference since neither of those systems is designed to treat for nitrogen.

So we have a multifaceted effort under way on parallel tracks preparing for this evolution towards active treatment in Suffolk County, and this is part of that. On the left side following me from left to
right, we're moving forward with the use of innovative onsite systems in Suffolk County. We have the second phase of a pilot program underway now. The first phase has been under way for over a year. Originally the staff went to the community of manufacturers who create these new technologies and indicated that Suffolk County is planning to move away from nonperforming systems, that there's potentially a major market out here, and asked whether they would be interested in donating some of their systems and put them in the ground and test them to see whether or not they would work as advertised.

It's an important part of the process for us. Those 19 systems are in the ground. What the County is looking for is six months of steady state data, operating data showing systems capable of removing nitrogen down to a level of below 19 milligrams per liter. Once we see that, Health Department is comfortable providing
a provisional certification for the use of that technology in Suffolk County. Two systems have been certified for use here. One of the parallel tracks is the technology itself. The second track is preparing the industry, because unlike the cesspools and septic systems, these systems are operational. And it's not a matter of just showing up at a house with a backhoe digging a hole, throwing a ring in and piping into the house, these systems need to be maintained.

And to the County's credit long before I got there, they were engaged in a discussion with the wastewater industry on Long Island telling them that we're going to prepare for a change, that we needed people who were trained and certified to install and maintain these systems. And well before we certified the first systems, we had the industry ready. Suffolk County Legislature in December of 2015 enacted a licensing law that was developed by the County in
consultation with the industry. It took
effect in June of 2015 and shortly
thereafter we began offering training for
the industry to make sure that they were
prepared for this evolution.

And as we certify these new
technologies, the licensing law requires
that each manufacturer offer a training in
the County at least once a year for the
industry, so we have that prepared.

State public health regulations
require that we have a designated
responsible management entity in Suffolk
County to regulate the installation and
maintenance of these systems. And the
Suffolk County Legislature earlier this
year enacted Article 19, a new article in
our sanitary code. That piece is in
place.

We are working on code amendments.
Suffolk County sanitary code as it relates
to residential properties has not been
updated significantly in decades.

Portions of it are woefully outdated. And
we're involved now in a process with a working group on an update to articles five and six which has benefitted from participation by both Legislature Fleming and Legislator Krupski. And we're hopeful to have some draft updates of those regulations for people to review early next year.

And then the issue of getting these technologies working in Suffolk County. Initially, I guess we'll be looking towards requiring these technologies be used with new development, respective development. Hopefully that will be the easiest step for policy makers to take. But then we'll be looking at in what situations it makes sense to require people to change out the systems that they already have even if they have not failed, to replace them with these new systems.

Two things going on right now. One is, we are to working identify through sub-watershed delineation what areas of the County it would be most important for
these systems to be put in place where the most benefit for the cost would be derived, and that's the subject of the work that we're doing here tonight. And as both our Comprehensive Water Resources Management Plan and the IBM Smarter Cities Challenge Report made clear, the cost of these systems is such that it's not realistic to expect the individual property owner if you implement the requirement that they change it out to simply reach into their pocket and pull out the $15,000 or $16,000 required to do the retrofit.

You need to provide a funding mechanism, both to assist with the evolution towards the use of these IA systems and, on the other side of the equation, an issue that is not so important on the east end but maybe on the west end, in situations where it does make sense to connect people to an existing sewer system, the economics of that are just as significant.
It's not a one time expense of $16,000 but it very often could be if you connect a home to a sewer system, I'm thinking about Oakdale, West Sayville, Sayville, areas that are right on the Great South Bay and clearly require advanced treatment, those homes could face a charge of 3500 or $4,000 a year over 30 years which is not an acceptable burden, so finding a mechanism to fund these improvements is an important part of the overall plan.

Some policy decisions that are upcoming. We'll be taking in the months ahead about banning cesspools and septic. Something that was initially broached in Suffolk County in the late 1960s and early 1970s that never did happen. A phaseout law. Will we take it a step further and require upon failure to replace, things of that nature. Potentially retrofit requirements as I mentioned earlier. And finally, where will the resources come from to assist us in making all this hard
work payoff with the actual installation
of these systems in the ground.

At this point I think I'll turn it
over to the staff. And thank you again on
behalf of the County Executive for being
with us. We have made a lot of progress
over the past three years in creating
momentum and preparing a plan to address a
problem which historically has evaded
policy makers, but make no mistake we have
a tremendous amount of work left to do.

Thanks for being here tonight. I look
forward to hearing your comments. I would
like to introduce Ken Zegel.

MR. ZEGEL: Thank you, Peter. I am
going to keep things very short and sweet.

We had a few slides prepared for
everybody. I think most of the audience
has seen the information that I had
prepared already from previous stakeholder
meetings. Maryanne has an excellent
presentation pulled together that's going
to talk about the Sub-watersheds Plan, the
proposed action, and the draft scoping
document. So I'm going to skip some of these background ones.

I'll introduce myself to those who don't know me. I'm Ken Zegel, Suffolk County Department of Health Project Manager for the Sub-watersheds Plan. I always encourage everyone if you have questions specifically on a plan, you're welcome to contact me directly at any time for questions on status or some of the elements of the plan.

I also wanted to mention Walter Widiak (phonetic) who I was hoping to come down tonight, our director, but he couldn't make it due to a family emergency. So he also wanted to thank everybody for coming down on behalf of the Health Services Division of Environmental Quality. Couple of highlights and there's a lot of things going on right now, Peter mentioned some of them before.

It's an exciting time for me, it's an exciting time for anybody that is here. Change is finally coming. Peter mentioned
the Comprehensive Water Resources Management Plan before. We also recently received five and a half million dollar grant from the New York State DEC to help support our Reclaim our Waters initiative. That's in a big part what's funding the Sub-watersheds Plan and this Generic Environmental Impact Statement.

Peter mentioned the innovative alternative onsite treatment demonstration programs that we have going right now, we have two of them going right now. He also mentioned that we established Article 19 which gives us the right to and gives everybody in the County the right to install these systems and sets up the responsible management entity within the County.

So some things that are actually happening right now are the Sub-watersheds mapping and Wastewater Plan, that's why we're all here. We're evaluating our Phase One Demo Systems. Peter mentioned before we actually have two systems that
are approved right now for professional
use in the County, that's the hydro action
and the repro singular systems.

We're also starting our Phase Two
Program right now. I believe we started
construction of some of Phase Two systems
and we're going to continue that through
the winter and next spring. We also have
some experimental systems that are in the
works right now. We're working in can
tandem with the Stony University Center
for Clean Water Technology.

And we're starting to look at shower
and drain fields as an alternative
leeching mechanism for leeching pools. We
have established our residential standards
and adopted residential standards for
innovative alternative systems that define
the requirements for design, installation
of those systems.

We're also working on upgrading our
data base and digitizing all of the
wastewater files that we have in our
office. It's a lot of files, goes back
for a lot of years. But that's going to help us identify these grandfathered sites. That's going to help us identify the ole denite (phonetic) systems that failed back in the 89s and help us identify other priority areas for commercial sites.

So I'm not going to spend much more time. Most of you have heard this already. The primary goal of the Sub-watersheds Plan is to help provide us a blueprint for wastewater in the County. Help us describe where, when, what methods to implement for actually mitigating nitrogen from wastewater sources. Peter mentioned before, this is actually going to be -- there's been a lot of great work done in the County, in individual estuary programs identifying nitrogen sources and load distributions for different estuary programs.

This will be the first time that actually we're doing a comprehensive look County wide establishing a uniform set of
consistent assumptions, boundary
conditions for the different models that
we're going to be using. So this will be
the first time we're doing that since the
208 study in the 1970s. This is going to
help us, again, as Peter mentioned before,
bridge the gap from our septic demo
program.

How do we go from pilot testing these
innovative systems to implementing
something full scale? This is going to
help us provide us some answers into the
best way to do that, including identifying
trigger points for upgrade, sensitive
areas, where these systems should go from
a cost benefit perspective. And to that
side, it's also going to give us some cost
estimating information on the County's
goal of creating a County wide wastewater
district to help us support the financing
for these programs.

And we're going to look at different
-- as part of the cost benefit analysis,
look at different ways to implement things
in terms of funding, streaming and the best way to implement things to get the most bang for our buck in terms of nitrogen removal when the program moves forward.

And really that's all I had to say other than, again, thank everybody again for coming out and supporting the programs. It's very much appreciated. It helps the process, makes it a better process from I want this and everybody wants to be all of our plan.

So, with that, I'm going to pass things over to our consultant Maryanne who has the meeting of our summary today.

MS. TAYLOR: Thank you. Thanks, Ken. Okay. So, I have about 20 slides here. I'm just going to review the proposed action, provide and overview of the Wastewater Plan and go over the proposed GEIS scope and the project schedule.

The proposed action is an implementation of the Wastewater Management Plan. The idea is that we are
going to be identifying the priority areas where nitrogen reduction is required, establishing the goals, the nitrogen reduction goals for each of the priority areas, and then identifying a recommended approach in terms of wastewater management to achieve those goals.

There's a number or components of that. The first is the innovative onsite wastewater treatment systems that Peter and Ken were speaking about for the residential applications. The appendix A, cluster decentralized systems, the advanced pilot study that the County is doing and then establishment of the water quality protection district to establish the funding source and the responsible management entity that's going to evaluate the systems, approve them, establish the construction requirements, overseeing the installation, oversee the monitoring, make sure that they are maintained and that data is collected and maintain and reviewed to make sure that they are
functioning properly.

Ken Zegel has put together this graphic that kind of pulls all the pieces of the Sub-watersheds Plan together and shows how it ties in. It's just one component of the County's Reclaim Our Water Initiative and the State's Long Island Nitrogen Action Plan.

So we have the innovative onsite systems, the Appendix A systems, and we're going to be looking and things like maybe increasing those flows up to 30,000 gallons per day. Possibly changing the separation distances, streamlining the approval process. Things like that are all incorporated as part of the Plan.

You know what, I should mention too, the sewage plant component is limited just to those sewage treatment plants, either new ones or expansions that DPW is currently looking at. There's no new sewage treatment plants that are being introduced as part of this project.

Ken has also put together this
graphic that kind of pulls -- shows you
the breadth of the expertise that we're
tapping to help develop the plan. It's an
early action element of a Long Island
Nitrogen Action Plan and there's a number
of stakeholders that are all contributing
their expertise and their experience and
their guidance along the way.

So it's not just us and County
working together, it's a much broader
collaboration of groups. So we speak
regularly with the State, the EPA,
Department of State, the estuary programs
are involved in lending their data and
information. Stony Brook, Chris Gobler
from Marine and Atmospheric Sciences and
then the Center for Clean Water Technology
are lending their information.

The idea is, this is supposed to be
an early action element using existing
tools and existing data and moving forward
as fast as we can to move the project, the
process, forward. And so to that end, we
really need everybody's best advice and
everybody's input and help to move forward.

I want to mention the Advisory Committee as stakeholders because so far they have been really useful and very helpful in advancing the process. The Wastewater Plan Advisory Committee and then a number of focus area work groups that are comprised of experts from the regulatory agencies, the estuary programs, Stony Brook, the Nature Conservancy is involved, the USGS.

And we speak to them regularly. They review the work products as we are going along and are helping to guide the assumptions and information that are being used to develop the models and apply them. These are the tasks comprising the scope of the Sub-watershed wastewater plan itself. People have recognized for years and years and years of the need to protect our groundwater supply, our sole source of potable water, these little blue ares are the source water areas for our community.
supply wells.

We also recognize the need to protect our estuaries as well. And as Ken was talking about before, this is kind of integrating them together. In recent decades, it's become more apparent that we really can't improve surface water quality unless we improve groundwater quality. Because groundwater provides the base flow or the end flow to many of our surface -- our fresh and marine surface water resources.

So this is just a figure that probably most of you have seen before. The County delineated the areas contributing groundwater base flow or underflow to our surface waters. Now we're doing this on a very discreet basis. Starting with the State's priority water body list, we have 189 Sub-watershed we're delineating the contributing area and travel time each of those sub-watersheds specifically.

I also want a mention that there's a
number of fresh water ponds, not just marine water bodies. Most of those were actually identified by the advisory committee. I guess Towns, right, town representation on the advisory committee.

As we're getting all of those done, then we're overlying planning criteria such as land use, areas where the depth of water is less than 10 feet. Criteria that are going to be important from a prioritization process and understanding where advanced wastewater treatment is most required.

We're doing a similar process for the potable water supplies. We're using the exist framework of the County's ground water model but we have added considerable discretization. And the reason why I mention that, there's almost a million elements here in the main body flow alone, is that we need that discretization to support parcel specific nitrogen load estimates that are going to be used to estimate the nitrogen load contributing to
each of the sub-water sheds.

This is also probably a good spot to mention the participation of one of the focus area work groups that the County has established. We have been working with Cornell Cooperative Extension, the Nature Conservancy, the USGS, EPA, DEC. Have I left anybody out of this focus area work group?

We have been having workshops, conference calls. Every assumption along the way is being vetted. Everybody is sharing information and it's not like we're doing this in a vacuum. So the components of nitrogen loading that are incorporated into parcel specific County wide models right now are sanitary wastewater, nitrogen load from fertilizer both residential and agriculture, atmospheric deposition, and pet waste and avian contributions.

So we are compiling the nitrogen loading and the pieces of the nitrogen loading to each sub-water shed. And it's
kind of -- surface waters are more challenging to assess the impact of nitrogen loading than groundwater.

So concurrently what we're doing is assembling a lot of surface water quality data, dissolved oxygen, chlorophyll A, clarity, presence or absence of harmful algal blooms or submerged aquatic vegetation. We're compiling that along with the nitrogen loading and then one of the characteristics of the surface water that's important to consider is residence time or flushing time.

So to that end, New York State has retained the services of HDR who is using the FDC, THE environmental fluids dynamics code to model the residents time of each sub-watershed individually. This is just one of their example grids. As we're doing that and we're going to be relating nitrogen loads to the desired endpoint, this is just one of the draft work products that Ken had mentioned, or maybe it was Peter, that the County had put
together back actually before we started, in terms of identifying priority areas. But the stream -- the sub-watersheds are all going to be ranked and priorities for nitrogen reduction assigned. Meanwhile, on yet another track, we're going to be looking at the different treatment alternatives to see how we can achieve those nitrogen load reductions. While the presumptive approach is the innovative alternative system, we'll also be looking at the Appendix As. And we'll be doing a batch of cost benefit analyses to see would it be more beneficial to require a higher level of treatment in a smaller area, perhaps in coastal zones, or maybe a less stringent level of nitrogen reduction or treatment over a broader area.

All of that will be summarized in the Sub-watersheds Plan. We'll have a section that will identify each step along the way and describe the approach that was used. We have estuary specific sections within
say the section four, we'll identify all
the sub-watersheds within the Long Island
Sound estuary, the nitrogen loads
contributing to each, the priority water
bodies and the proposed approach will all
be how summarized in the plan.

There will be a section describing
implementation and that will include the
funding and the phasing, whether it be
grandfathered sites or new developments or
priority areas yet to be determined. And
then remember we said that is this is all
based on existing information? We're sure
there's going to be areas where further
study is required or more data is
requires.

So we'll be identifying where
additional evaluation or assessments are
needed as part of the State's Long Island
Nitrogen Action Plan. And here we have
the draft scope of the GEIS. This is
based on the environmental assessment form
or the topics that were identified in the
environmental assessment form. So we'll
start with an executive summary that will provide a concise description of the proposed action and the impacts. We'll have an existing environmental setting that will include land use, ground and surface water resources, plant and animal communities, historic and archeological resources, noise, odors, human health and consistency with community plans and character.

We'll identify impacts of the proposed action on each of those categories, on each of those topics that we just identified as well as environmental justice. Short term construction impacts. Cumulative impacts. We identified three cumulative impacts for evaluation. One is water export, it's the recommended alternative to transport water out of one sub-watershed into another, what would that do on water levels, on down gradient surface water resources as well as water supply? Potential for growth inducement and because most of
these systems are not passive systems, there's some energy required, the greenhouse gas impact. Unavoidable adverse impacts. Irreversible and achievable commitment of resources, mitigation measures, the alternative analysis. We have identified five.

One is the no action alternative. That is if we do nothing and leave things the way they are. The second is looking to our neighbors to the west, the Nassau County and New York City models, County wide, centralized sewer districts and collection and treatment systems. County wide increase in lot size. Purchase of priority area parcels for preservation and then dual plumbing, dual water systems. Let's see, transfer of development rights. And then there are a number of -- let's see, I'm sorry I'm jumping around here. There are a number of individual projects that would not be covered by this GEIS. They would be triggered by if
somebody proposed a new or expansion of an existing sewer district. So a new sewage treatment plant, additional sanitary code changes that aren't identified here. And individual TDR programs, things like that.

And someone thought it would be important to just to call out what's not going to be included in this GEIS specifically. And there's a batch of other nitrogen reduction or mitigation measures that are not associated with wastewater that are being evaluated as part of the State's Long Island Nitrogen Action Plan.

So we don't have information on those yet. So fertilizer reduction, BMPs, agriculture, those are not topics that are going to be specifically addressed in this GEIS. Schedule, we're in the middle of public scoping right now. We're planning to complete a draft of the Sub-watershed Wastewater Plan by the end of June with the draft GEIS to follow shortly thereafter, we're preparing them kind of
concurrently.

There's a 60 day review period with a public meeting in the middle at that end of next summer. Final GEIS will be prepared and posted. There will be an approximately 15 day comment period on the final document. And the finding statement will be prepared sometime next November. And with that, I think we are at up to public comments.

MR. KAUFMAN: Okay. We're going to ask for the public scoping part of the presentation. I have two cards and one legislator, so maybe I'll give everybody a few more minutes. The first gentleman to be called up is Kevin McDonald from the Nature Conservancy.

MR. MCDONALD: Kevin McDonald. I'm with the Nature Conservancy. We'll be submitting formal comments before the 13th. A couple of general observations. Obviously we support the general strategy over sub-watershed by sub-watershed nitrogen reduction strategies. Before you
can do that, you have to know, you know, what your load is, where they are coming from and your alternatives. So a couple of general comments. There is a fair amount of detail committed to the term grandfathering and the terms for legacy contamination. And in an effort to simplify this, it's the very existence of onsite base disposal systems and their current technology that is responsible for the problem we have.

Making distinctions between all these technologies is probably a distinction without a difference. So, simplify this a little bit and just say all these things cause all these problems and now they need to be mitigated, that's one. The second is, I was pleased to see that the scoping document has a couple of areas where you will be doing existing conditions and potential build out.

And the other thing I would ask you consider in the context of your plan while you're doing this with the municipalities
is ask them where they want to have growth centers and tell everybody that up front so that everybody else going forward should assume that the zoning in their communities is in fact what it should be going forward and you can build a model for the present zoning that maybe there. I understand that's a loaded question to ask, but I think the public has a right to know that.

And then a final major comment is for the, you know, the ecological standards that you have identified we fully support that. I know there's a series of different people having conversations about how to articulate that based on work in other parts of the county which is great. But getting those targets with a measure of safety or a measure -- an additional measure of safety in case you -- you can't measure right up to one pound per acre applied and be comfortable knowing that's right. So the EPA typically has an error bar that you need
to have in there to assure success and it would be great to have some discussion on that.

And I wish you all well in your pursuit. This is really important. This is something the Peconic Estuary Program has been looking to do for a while. I understand this is being integrated and that's great. And I look forward to working with everybody here and the good product that we hope will be produced at the end of the day. Thank you.

MR. KAUFMAN: Thank you, Kevin. We appreciate your comments. I have a Cy Consella (phonetic), Wainscott Citizens.

MR. CONSELLA: I'm representing a number of residents from Wainscott. Wainscott has two important areas of environmental significance; namely, Georgica Pond and Wainscott Pond. You may have read a lot about Georgica Pond in the press over the last year or so. Sarah Davis, who is a colleague of mine that sits on the environmental subcommittee of
the Wainscott Citizens Advisory Committee, is also here. Sarah has been president of the Friends of Georgica Pond.

Where we are in Wainscott, the cesspool system is incredibly important to us. Give you an idea, my home was built 225 years ago and last year we had to replace our cesspool system. I don't believe it was built 225 years ago, it was probably built 100 years ago. But it was pretty close to collapse. Cost quite a bit of money for us to put in. And when we did it, we wanted to put in a nitrogen reducing system because we were fully aware of all the problems that were happening with nitrogen load in Wainscott an Georgica Pond, and also around the broader area, you know, the massive fish kills due to hypoxia, the turtles that have died through toxins, et cetera.

So what we're talking about is incredibly important. I don't know whether any of you can see that map there, but that's water flow district of
Wainscott. There's Georgica Pond and that's Wainscott Pond there.

There's a lot of fishing that goes on, especially crabbing, in Georgica Pond. The last two years Georgica Pond has been closed to that activity. When I first moved up to this part of the world 10 years ago, we used to go fishing for white perch and ate it straight out of the pond, it was delicious, and the crabs of course, but you can't do that anymore due to saxitoxin.

Wainscott Pond, the smaller pond here is a wildlife refuge. Nobody goes there, it's just given over to the birds and things. There are otters there, snapping turtles, terrapins, all sorts of migrating birds et cetera. All of that is at risk because there too much nitrogen in the system. But it's worst than that because there's also the evidence of cyanobacteria in the groundwater for the first time that I have known, first time that I think Dr. Gobler knows of as well.
So that's creating a new dynamic. We don't know whether that's a result from salt water intrusion or too much irrigation or too much phosphorus or whatever it results from. But what we do know is that we need to study it further to find out exactly what's happening in the pond, exactly the impact of what we're putting into the ponds.

We use to have a saying in Australia where I grew up, don't shit in your own backyard. And I hate to say it, but that's what we're doing too much of.

MR. KAUFMAN: I thought you were from Brooklyn.

MR. CONSELLA: We have got to think of a way to live in our environment in a more friendly way because there are more of us that live there. The only other -- I won't talk too much, but the only other thing that I'll bring to your attention is this graph here. I know you won't be able to read it but hopefully see some of the lines. I just want to point out two lines
on this graph.

You can see down at the bottom of this graph there's a red line down the bottom. That red line is the New York State DEC threshold for cyanobacteria in the water for recreational activities, 20 parts, 20 micrograms per liter. This line here goes up to here. That's the cyanobacteria that's being detected in Wainscott Pond just this last summer.

It's peaked at about 500 micrograms per liter which is 25 times the New York State DEC limit for recreational activities. What I was worried about and what Dr. Gobler and myself and Sarah's group have been working on, is trying to avoid a massive die off in the ponds, especially Wainscott Pond.

Georgica Pond is suffering but I think it will come back. Wainscott Pond, I simply don't know what's going to happen next year. The wild life I believe is in a desperate state. Also the quality of our drinking water because the ground
water ponds are a lot of private wells. And whatever we doing to the surface, whatever all the residents are doing around the ponds, it makes its way into the private wells.

MR. KAUFMAN: Sir, you time just about up.

MR. CONSELLA: I would like to thank very much the Suffolk County Executive for taking this so seriously and putting together those plans. And if there's anything that we can do to help, we will. But we also need your help to solve the problem.


MR. KRUPSKI: Thank you. I just want to compliment everybody who is involved in this and putting it together. It's really, I think it's very comprehensive and it shows a lot of work and a lot of acknowledgement of the input that you have
received so far and I think that's really important.

If you could add under Section, though, if I could suggest adding under Section Two, there's a place here where it says recommended wastewater management strategy. And I think if you add reconstruction to that list I think it would be appropriate. Under cesspool failure, infrastructure, property transfer, I think that wouldn't be such a bad thing.

And then just to urge you when you -- it does say using all the under existing environmental settings make sure that you use the most current data. That's really important. I know there's a lot of reference to different modelling. But, you know, if you put bad information in the model, it's going to be very inaccurate and misleading. So it's really important to use the most recent testing and data for that. Thank you. Thank you for your efforts though, it's a very nice draft.
MR. KAUFMAN: I have one more card unless anyone else has any other cards. I have a Mr. Kevin McCallister, Defend H20.

MR. MCCALLISTER: Good evening, everyone. Let me start by saying I'm very pleased with the scope. I think it's extremely comprehensive. I know obviously the capability of the consultant on looking at the sub-watershed analysis. Very likely you have covered this and in looking at the scope document, I know you have. But I would like to fill in some blanks or at least emphasize a few points.

The evaluation of the end loading, you have covered all the inputs, fertilizer, wastewater of course. I think it's important to look at various scenarios of the current conditions, what is that load? With Article 19 we have the striving for the 19 milligram per liter threshold. You know, what does that mean across the board? A below 10 milligram per liter, I think we need to flesh out the commercial input versus the...
residential input.

So, you know, to have all these scenarios laid out with respect to what the various loads. Surface water sensitivity, you have covered it but I am a strong proponent of numeric nutrient standards. I know that is State driven. Back in 1987 there was an EPA directive to the states to move away from a narrative standard which is very subjective to a numeric standard.

Unfortunately that is not part of this. I realize that is a State directive that has to happen. We know what those numbers are. I believe they need to be assigned and promulgated into law.

Cost benefit analysis; I know this factors into the IA systems, sewering, et cetera. But I do think that you really -- the science has to be at least initially de-coupled from the cost benefit analysis. You know, let's define the loading and the various scenarios, the various remedies. Put aside the cost benefit and then
ultimately bring that in obviously as we're developing policy and what the meaningful actions would be.

Triggers for the upgrades; mandates, time of property transfer. You know, all these scenarios, of course, will be considered. And I think it should go a step further actually identifying what the reductions would be based on what the reasonable timelines are. We probably have an idea of what the property transfer is. I recall some years ago and I don't know if it's a national level, but every serve years was a property transfer.

What is that in Suffolk County and how quickly do we, I guess, achieve the goals in nitrogen reduction?

Grandfathering, you know, this is in my opinion a, you know, the 500 pound gorilla in the room. We really need to address it. I know it's being discussed. The County is examining it. But ultimately, you know, goal has to be to eliminate grandfathering to ensure that, again, we
are striving for the greatest reduction possible.

This maybe an omission, perhaps not, sea level rise and coastal inundation. That has to be factored in into these areas. Using the various projections from the State, they have these in place. They have not been promulgated into law, there's been a delay unfortunately. But, you know, ultimately as we're dealing with, you know, particularly that zero to two year travel time, what does mean in 20 years does?

It make sense to be really installing these various systems? What type of systems need to go into those zones? So I think that's a really important element that needs to be incorporated. And lastly sewering. And I know that's, again, one of the strategies with IA systems.

What are the build out scenarios? And I know, Maryanne, you did disclose that as part of it. But let's not look at a static system and say, well, we
incorporated sewer district in this particular watershed, here's our reduction. Well, what does what mean for ultimate build out for potential increased density? So that has to be factored in when we are considering, you know, what the appropriate approach is for nitrogen reduction in these various watersheds.

And lastly I would say an excellent job, I'm very pleased and I'm pleased that there is a tight timeline that this is moving along and that's wonderful news. And I realize there's, you know, a great deal of work here, great deal of expertise is contributing to this process and I'm very optimistic that, you know, when we reach the final product we'll have a real strategy to reclaim our waters. Thank you.

MR. KAUFMAN: Right under the deadline. Okay, anybody else?

MS. GLASS: My name is Barbara Blass, B-L-A-S-S. I'm a resident of Jamesport and I'm much less technical. Just a very
brief comment, as you know, the five east end towns recently adopted the Community Preservation Fund and part of that amendment or an amendment to it, part of the amendment was an authorization to allow up to 20 percent for water quality improvement projects. And as a result of that, each of the Towns adopted their local law and part had to identify projects within their towns and Action Plans for priority areas. And the project themselves involved with nitrogen reduction.

And I guess my comment is loosely related to consistency with local adopted plans. Each of the five east end towns has a loose plan where they have identified priority areas and projects which would be eligible to receive monies through the CPF. And I'm just wondering how they are going to interface with your priority areas and just a general understanding of how it's going to work together.
MR. KAUFMAN: We can't answer that question at this point in time, but it is something that will be answered in the Scope when it's finally prepared after the Health Department and the consultant go over it and try and figure out the answer.

MS. BLASS: Thank you so much.

MR. KAUFMAN: Okay. Anybody else?

Going once, going twice, sold. Okay. My duty now is to officially close the public scoping on behalf of the Council on Environmental Quality. And we're closed, we're finished. Thank you. Thank you everyone for coming.

(Time noted: 7:04 p.m.)

o0o
CERTIFICATION

STATE OF NEW YORK )
         ) ss
COUNTY OF SUFFOLK )

I, JANICE L. ANTOS, a Shorthand Reporter and Notary Public within and for the State of New York, do hereby certify:

THAT the foregoing transcript is a true and accurate transcript of my original stenographic notes.

IN WITNESS WHEREOF, I have hereunto set my hand this 3rd day of January, 2017.

JANICE L. ANTOS
SEQRA PUBLIC SCOPING HEARING

re:

DRAFT GENERIC ENVIRONMENTAL IMPACT STATEMENT

SUFFOLK COUNTY SUBWATERSHEDS WASTEWATER PLAN

260 Motor Parkway
Hauppauge, New York

November 29, 2016
5:57 p.m.

Stenographically recorded and transcribed by Donna C. Gilmore, a Notary Public within and for the State of New York.
APPARENCES:

Michael Kaufman, Vice Chairman
Suffolk County Council on Environmental Quality

Rob Carpenter, Council Member
Suffolk County Council on Environmental Quality

John Corral, Senior Planner
Suffolk County Planning Department

Peter Scully, Deputy Suffolk County Executive

Walter Dawydiak, Director
Suffolk County Division of Environmental Quality

Maryanne Taylor
CDM Smith

AUDIENCE PARTICIPANTS:

Jefferson Murphree

Dan Gulizio
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MR. KAUFMAN: We are going to start off with the Pledge of Allegiance to the Flag, led by Mr. Carpenter.

(FOLLOWING THE PLEDGE OF ALLEGIANCE, THE DRAFT GENERIC ENVIRONMENTAL IMPACT PUBLIC SCOPING HEARING WAS CALLED TO ORDER BY MICHAEL KAUFMAN AT 5:57 P.M.)

MR. KAUFMAN: This is a public hearing regarding the scoping of the Draft Generic Environmental Impact Statement for the Suffolk County Subwatersheds Wastewater Plan, which will be described in greater detail in a few minutes.

This public hearing is being held so that Suffolk County can receive comments on the development of the EIS for the plan.

My name is Michael Kaufman. I'm vice chairman of the Council on Environmental Quality. We're the manager of the SEQRA issues in the EIS and we review the EIS once it's finished, for the Legislature. We're not, as it
11/29/2016 Public Scoping Hearing happens, employees of Suffolk County, we're not paid, we're citizen appointees with SEQRA experience.

The project initiator and sponsor is the Suffolk County Department of Health. They, along with a consultant, CDM, Camp Dresser McGee, will be preparing the DGEIS for our review. The Suffolk County Legislature is the SEQRA lead agency. They will be making all final determinations once the GEIS process is completed.

Let's see. The scope. The scope is the initial part of preparation of an EIS. It's mandated by state law and Suffolk County regulations. It is the public's chance, as citizens, to review and comment. Public comments will be taken today and again on Thursday, December 1st, at 6 p.m., at Suffolk County Community College Culinary Arts and Hospitality Center in Riverhead.

Written comments may be submitted to the Suffolk County Department of Health Services and CEQ until December 13, 2016.
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Now, to give everyone a chance to speak, we will ask each speaker to keep their comments to three minutes, and we would ask that you fill out cards with names and addresses so that we can respond properly.

Let's see. There's a little bit of housekeeping that goes along with this. Public notices. In connection with this public hearing, notice has been served with the official papers of Suffolk County, as well as posted on the New York State DEC Environmental Notice Bulletin and the Suffolk County CEQ website. In addition, this public hearing notice has been sent to all known involved agencies, as well as the Suffolk County Department of Health Services list of interested agencies and parties.

We're asking you, again, to, whoever is going to be speaking, sign in, and we will do our best to keep you informed as actions proceed. The Suffolk County CEQ web page will continue to post relevant
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SEQRA documents related to this review as they become available.

The procedure that we're going to be undertaking today is that there's going to be an introduction by Peter Scully, the Deputy Suffolk County Executive, of this particular plan, so that everyone will sort of have an idea of where we're going. Suffolk County Department of Health will be giving a presentation, and also I believe Maryanne Taylor of CDM will also do a presentation, and that will be stuff up on the screen up there.

As part of the scoping, because we like to hear from the public as to their concerns, their comments, et cetera, CEQ and the Suffolk County Health staff will not be taking any questions and answers or engaging in explanations or anything like that. You get three minutes, you talk, whatever is on your mind about this particular plan you bring forth. If you have questions or if you want to submit more testimony or further written
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comments, you have until December 13th to do so.

So that pretty much completes what I have to say.

This is Rob Carpenter. He is also a member of CEQ. This is John Corral. He's one of the staffers for CEQ out of the Suffolk County Planning Department.

That's basically what I have to say.

Now to the main event. I'd like to introduce Peter Scully, Deputy County Executive.

DEPUTY EXECUTIVE SCULLY: Thanks.

I'll be very brief. We had prepared a PowerPoint. The first two slides were to be utilized by me to provide some context, but given who I see out here, I think I'm going to rely instead on some knowledge I have regarding the process, just to say that this is an important step in an overall effort that we have in place in Suffolk County to set the stage for a movement away from the use of nonconforming cesspools and septic
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systems to systems that are capable of reducing nitrogen pollution, which is our number one goal.

This subwatersheds GEIS will serve as a basis for a move away from a pilot testing program that we have underway to make sure that these systems work as they're advertised before we certify them for use in Suffolk County to a broader effort, to see them used across the county. It's going to provide important information to allow policymakers to make science-based decisions about priority areas where the systems will have the most beneficial effect. And we see this as a great opportunity for folks to both learn more about the process and to provide information that's going to be of use to the county as we move forward in that regard.

So on behalf of County Executive Steve Bellone, I want to thank each and every one of you for turning out tonight, and I think I'll turn it over to Walt for
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the purpose of making a presentation.

MR. DAWYDIAK: Walter Dawydiak, Director of Environmental Quality, Suffolk County Health Department.

It's great to be here today. I'll go over a few key points very, very quickly, just to give a little bit of background. We're going to be going over the proposed action, the scope, and Maryanne Taylor will be giving you more detail about the scope of the action and looking for public comments.

Again, this place is like no other place that we've found on the East Coast or anywhere else in America; a million and a half people, over 900 square miles, 74 percent unsewered, legacy problem with nitrogen that nobody has come to terms with until recently with the Comprehensive Water Resources Management Plan, the IBM Smarter Cities Plan, the Department of Economic Development Planning, working with public works and health to come up with a cooperative...
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approach to deal with the problem of nitrogen pollution as an early action, the Long Island Nitrogen Action Plan.

We're very excited. This is the first time that all three estuary programs have had a synoptic, integrated, comprehensive look at the groundwater contributing areas, at the loads in a consistent uniform manner and impacts and points and reduction goals and means of implementation. So we think that we've scoped out a really solid plan for a first early action LINAP plan, Long Island Nitrogen Action Plan. Our consultant, CDM, has done a wonderful job carrying the ball forward to getting this set up. If anybody wants more information about the plan itself or on the process, contact Ken Zegel. His contact information is out there on the handout materials. He's here in the audience, and feel free to reach out to us any time with questions or comments.

I don't want to take up any more of
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CDM's time on this. Again, it's great that we've gotten to this point. The Generic Environmental Impact Statement is going to set a framework for future actions. It's really unprecedented and historic in the county under the county executive's leadership.

Mary?

MS. TAYLOR: Thank you.

I'm going to jump ahead there.

All right. Can you hear me if I don't use the microphone in the back? Can you hear me?

AUDIENCE MEMBERS: Yes.

MS. TAYLOR: Good. Okay. So I'm going to talk about these three, the proposed action. I'm going to give you an overview of the Subwatersheds Wastewater Plan scope, and follow that with the proposed GEIS scope and also the project schedule before we turn it over to the reason why everybody came, really, to provide comments.

So the proposed action is
implementation of the county Subwatersheds Wastewater Plan. The subwatersheds plan has a number of parts; identification of a wastewater management strategy to reduce nitrogen loading, identifying the priority areas where nitrogen reduction needs to happen, establishing the goals, the nitrogen reduction goals for those priority areas, and identifying appropriate means of wastewater treatment to achieve those goals.

The strategy has a number of components, focused on innovative onsite wastewater treatment systems for the approximately 360,000 residences that are not sewered at this point in time, Appendix A systems, clustered/decentralized systems, sewage treatment plants at only, these are limited to those that are currently being evaluated by the Department of Public Works, as part of their ongoing projects. The scope includes a number of advanced
wastewater treatment pilot areas that the county is evaluating, establishment of a water quality protection district to provide a mechanism for funding these upgrades, and establishment of a responsible management entity, the Department of Health Services, to evaluate the alternative technologies, to approve them, to supervise their installation, to register them, and to make sure that they're maintained and monitored and functioning as intended.

Ken Zegel has put together all of this information into a single graphic here, kind of showing how the Subwatershed Wastewater Plan is a subset of the county's Reclaim Our Water Initiative, and it's also an early action light on from the Long Island Nitrogen Action Plan.

This graphic illustrates all the parts, the innovative alternative onsite systems, the decentralized systems. We'll be looking at the potential to
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increase the flows for those systems up
to 30,000 gallons per day, maybe
different separation distances, maybe
under some situations modifying the
approval process to streamline it a
little bit, the existing sewage treatment
plant studies that are being implemented
by DPW, and the innovative alternative
onsite systems.

Ken has been, in the spirit of a
picture is worth a thousand words here,
Ken has summarized, again, a lot of the
information onto this graphic, and
there's only a couple of key points that
I want to make.

Number one is that the Subwatersheds
Wastewater Plan is an early action plan
using existing information, existing
tools, existing data, and as such, we
really have to bring in the expertise and
the experience and the information that
all these collaborators can provide. So
it's not something that Ken and Walt and
I and Annette are sitting together doing
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in a room by ourselves. We're integrated with the Long Island Nitrogen Action Plan, DEC and the Long Island Regional Planning Commission is involved on pretty much a weekly basis. We're working with EPA, Department of State, the three estuary programs are sharing their information and data and expertise. Stony Brook University School of Marine and Atmospheric Sciences and the Center for Clean Water Technology are sharing their expertise and information. And what I really kind of wanted to highlight here is the role of the advisory committees and the stakeholders. The county has assembled a wastewater plan advisory committee, who has been very helpful so far, and a couple of the towns in particular, you see the overlap here, have been very generous in sharing information and their thoughts and guidance, and it's been very helpful as we go through.

In order to build this plan and make
it as robust and as implementable and as useful as possible, if everybody comes together and kind of shares what they know and what they have, we're going to end up with a much better plan.

So here's a scope of work on the subwatersheds management plan. I'm not going to go through each of the tasks, I'm just going to hit a few of the highlights of how we're going to accomplish the goals. We've known, seems like forever, right, that we need to protect our groundwater quality, our sole source aquifer, our source of potable supply. We also know we need to protect our surface waters, the Sound, Peconic, the South Shore Estuary Reserve, but in this study we're kind of integrating them all together. It's become increasingly apparent that in order to protect and improve surface water quality, we really have to start with the groundwater quality, because the groundwater provides the base flow or the underflow for our
surface water resources.

So to that end, we're starting on, this is a regional depiction that the county developed of areas contributing groundwater base flow or underflow to our surface waters. Working together with the state and the EPA and a whole batch of stakeholders and starting with the state's priority water body lists, we've identified 189 subwatersheds that are going to be specifically delineated so that the contributing area and travel times to those subwatersheds are being developed right now.

Once we have those, we're overlaying some planning criteria, including land use areas where the depth to groundwater is less than 10 feet, because that's going to be really important, right, in terms of identifying an appropriate wastewater treatment technology to have that saturated zone -- unsaturated zone,

Similarly, we're taking the same
approach with groundwater protection and supply well protection, so these are the areas contributing, these are the source water areas for our community supply wells. We're using the existing Suffolk County model frameworks, but on a much more highly dispertized [phonetic] basis. This main body flow model now has almost a million elements. And the reason why I say that is because we need that level of detail to support the parcel specific nitrogen loading estimates that we're going to be doing on a county-wide basis. This is a good, probably a good opportunity to mention the contributions of the focus area workgroups that the county has established. So we're not doing this in a vacuum, we're working with members of EPA, DEC, The Nature Conservancy, Stony Brook, USDA -- I'm sure I'm forgetting some people. But they are all contributing their information, their data, their ideas, their expertise, and the whole process is
very transparent and collaborative, so that it's not just us sitting in a room coming up with these. Everybody is reviewing, vetting and approving the decisions that we make.

So the nitrogen loads include nitrogen loading from sanitary wastewater, fertilizer, atmospheric deposition, pets, birds. And so we're identifying the nitrogen loads to each of those subwatersheds and the percent contributions from each of these components.

Simultaneously, we're assembling a batch of water quality data so we know what our endpoints look like; dissolved oxygen, chlorophyll a, presence or absence of harmful aquatic blooms or submerged aquatic vegetation. And we're compiling all of this, we're looking at it with respect to the nitrogen load and the subwatershed characteristics to kind of define how nitrogen load results in our endpoints that we want to see. One
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of the most important factors we think is
the residence time or the flushing rate
of these surface waters. Some of the
subwatersheds can assimilate a lot more
nitrogen load because they're
well-flushed. To that end, HDR is
working under contract to New York State,
they're simulating using EFDC, the
Environmental Fluid Dynamics Code, to
estimate the residence time or the
flushing time for each of these
subwatersheds. So that work is ongoing
as we speak.

All that information is going to be
compiled to help us prioritize, we're
going to identify the nitrogen loads
pretty much on a unit basis, and then
we'll be able to prioritize the areas
where the nitrogen loads have to be
reduced, and also hopefully to give some
first-order estimates of by how much they
have to be reduced in order to achieve
the ecological endpoints that we want to
see.
Meanwhile, on the third tract, we've started looking at the different treatment alternatives that can help us to achieve those target nitrogen load reductions. This is just one of the innovative alternative systems that the county has recently approved. We're going to be looking at pilot data that the county is developing and we're going to be doing a series of cost benefit type analyses to see does it make more sense to require a higher level of treatment in an area maybe along the coastline, a smaller area, or maybe a lesser level of treatment more widespread across the county. We'll be looking at areas in particular where the depth to water is relatively shallow, where you have a shallow water table, where the soils may not be good. There's a whole host of factors that we'll be considering there.

Finally, it will all be documented in final report. We'll have a section that identifies how we accomplished each
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of the evaluations, we'll have estuary specific chapters that will identify the subwatersheds, the nitrogen loads, the nitrogen load reductions that are required and the recommended approaches. The same for drinking water and aquifer protection. All of it will be summarized in one section documenting a plan. There will be a chapter talking about implementation, and that will probably address the phasing, whether these are implemented when a property is sold, when a septic system fails, maybe it will be priority areas, we'll talk about funding. And then because, remember we said that this is a first-order evaluation based on existing information, we'll have a section identifying recommendations for further evaluation.

And then finally, we get to the environmental impact statement on this plan. This scope, the outline of the EIS is based on the environmental assessment form that was submitted. So we'll start
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with an executive summary, a concise
description of the overall project.

There will be a description of the
proposed action purpose and need, and
then -- I'm not going to read this whole
thing to you, but these italicized
sections kind of prompt me where I want
to go into a little bit more detail.

So the existing environmental
setting, the physical environment will
include land use, ground and surface
water resources, plant and animal
communities, historic and archeological
resources, noise, odors, human health,
consistency with community plans and
character. Potential impacts of the
proposed action will include all those
topics, as well as environmental justice.

We'll have short-term construction
related impacts, cumulative impacts.
We've identified three that we think need
to be evaluated in detail: So there's
water export, if we move water from one
subwatershed to another, what is that
Let's go back for a second. We have the unavoidable adverse impacts, mitigation measures, the alternatives analysis. So we've identified five alternatives: There's the no action alternative, things just moving along as they are today; looking further to our neighbors to the west, Nassau County and New York City, centralized county-wide sewer districts; increase in lot size county wide; purchase of priority area properties for preservation; and then dual plumbing, dual water systems.

There's a few things that are not specifically addressed in this GEIS. This GEIS is focused on nitrogen reduction by way of wastewater management. The long-term nitrogen --
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sorry -- the Long Island Nitrogen Action
Plan that the planning commission and the
state are implementing are looking at
fertilizer reduction, BMPs, aquaculture,
things like that. So if you wanted to
check on some of those things you could
look at the Long Island Nitrogen Action
Plan scope of work online and you'll get
a better idea of what's going to be
handled there.

We'll also have a section
identifying triggers for projects or
actions that would require their own
draft or final environmental impact
statement, or supplemental, and those
would include things like siting a new
sewage treatment plant or establishing a
new sewer district.

The schedule for this GEIS, we are
right in the middle of scoping here. We
have a two-month scoping period. As Mike
mentioned, the comment period will close
December 13th. We're working on the
draft subwatershed management plan right
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now, plan to finish that up the end of
June with the draft GEIS to follow.

There's an approximately 60-day review
time of the draft GEIS late in the
summer, including another public meeting.
The final GEIS will be posted for public
review. There's an approximately 15-day
comment period after that, findings
statement prepared, and the SEQRA
concluded sometime next fall.

And that's pretty much what I have.

So Mike, you want to take over for me?

MR. KAUFMAN: Okay. So we'll start
taking public comment now. Basically the
lectern is up here, there is a
microphone, your comments will be
recorded so that we can have them
analyzed by the consultant and by the
Department of Health, and we're here to
basically listen to the public and hear
what they have to say.

So if anyone has any cards?

The silence is deafening.

Come on, public, say something.
MR. MURPHREE: My comments have nothing to do with the questions specific to the document or the process, it's a separate -- you've got a lot of information on this PowerPoint. Is this PowerPoint available online or as a handout?

MR. KAUFMAN: I think it's on CEQ's website.

MR. CARROL: We can make it available.

MR. KAUFMAN: Yeah, we'll try to make it available and put it on the CEQ website.

MR. MURPHREE: Okay. And then, because you've got a couple of really good maps, one was the subwatershed map, one was a nitrogen load estimates map. Are those available to the public?

MR. KAUFMAN: They should be.

MS. TAYLOR: They're a work in progress, but they will be when they're completed. Right?

MR. KAUFMAN: Preliminary data, I'm
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guessing, is not, if it's working data
it's not going to be released until we
have a firmer handle on everything.

MR. MURPHREE: Okay.

MR. KAUFMAN: Does anyone want to
say anything?

I've really scared all of you off.
Okay.

AUDIENCE MEMBER: This is a lot of
information and a lot to digest for all
of us, so it's a little education for us
to hear all of it when it goes forward.

MR. KAUFMAN: Well, what I'm going
to do in about a minute is close the
public hearing at this point in time. We
will be reconvening in Riverhead, where
hopefully people will actually speak and
give us further information as to what
they think about all of this, and that
will be on Thursday, December 1st,
6 p.m., at Suffolk County Community
College Culinary Arts Center, 20 Main
Street, I believe it is.

If we've scared you off, you can
provide, as I stated earlier, you can provide written comments based upon what you've seen here, you can provide them until December 13th.

AUDIENCE MEMBER: Who do we send them to?

MR. KAUFMAN: Officially, comments can come into CEQ and they'll be forwarded on to the consultant and to Ken, but technically, it should go, most of them should go to Ken. He's the direct point of contact at this point in time. And he happens to be here today, raising his hands, several times. And if you have other comments that you want to give to him right now, that's okay.

Going once, going twice.

I recognize Dan Gulizio.

MR. GULIZIO: I just have one question. You said this was a subcomponent of the County's Reclaim Our Waters initiative, and there are ongoing amendments to the Sanitary Code right now, Article 5 and 6, and 19 just
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occurred. How is that all being assessed cumulatively in terms of the environmental review? Is there one document that's going to be looking at all that?

MR. KAUFMAN: Really, what you should do is come up and provide public comment. I don't know at this point in time, because the meeting's still not been fully closed at this point in time, I don't know that we really want to as part of the scoping get into that. You can ask, if you want to, when the meeting is closed, you can have those technical questions. You can talk to Ken or Maryanne, or make your comment, if you want to, and then talk afterwards. Again, we're not supposed to engage in conversation at this point in time and answer questions, et cetera.

I'm going to close the meeting then. So let the record reflect that the scoping meeting is now closed, and we will reconvene in Riverhead in two days'
11/29/2016 Public Scoping Hearing time.

Thank you, very much, for coming, we appreciate it. And show up in Riverhead.

(Time Noted: 6:28 p.m.)
CERTIFICATION

STATE OF NEW YORK  )
) ss
COUNTY OF SUFFOLK  )

I, DONNA C. GILMORE, a Shorthand Reporter and Notary Public within and for the State of New York, do hereby certify:

THAT the foregoing transcript is a true and accurate transcript of my original stenographic notes.

IN WITNESS WHEREOF, I have hereunto set my hand this 29th day of December, 2016.

__________________________
DONNA C. GILMORE
December 13, 2016

Dear Mr. Zegel:

I commend the County on moving ahead with the Suffolk County Subwatersheds Wastewater Plan. The Town agrees with the approach to SEQRA compliance of the completion of a Generic Environmental Impact Statement. Below please find comments on the Draft Scoping Document for the Generic Environmental Impact Statement being completed for the Suffolk County Subwatersheds Wastewater Plan.

Comment 1. On page 2, Section 2.0, #1 Recommended Wastewater Management Strategy an additional point should be added that states: "Identify surface water numeric nutrient standard for nitrogen". Numeric nutrient standards for surface waters vary depending on a variety of factors (freshwater, salt water, nutrient poor ecosystem). The NYSDEC is in the process of developing numeric nutrient standards for New York surface waters.

Comment 2. On page 2, Section 2.0 #1 There is a list indicating activities that will prompt wastewater treatment upgrades. Consider adding a category of "Illegal Rental Properties". These properties often house a disproportionately large number of people and so may have substantially higher nitrogen loading than similarly sized non-rental properties. There may be an opportunity to work with the Towns to require installation of I/A systems at these properties as part of legal settlements.

Comment 3. On page 5, Section 3.0 Purpose and Need – Consider adding a sentence noting that reducing nitrogen loading is necessary to enhance coastal resiliency including storm and flood protection offered by marshes.

Comment 4. On page 6, Section 4.0, #3 Existing Environmental Setting – consider adding official New York State projections for sea level rise to the list of data sources to be consulted.
Comment 5. On page 7, Section 4.0, #4 – Consider adding Long Island Regional Economic Development Council’s Strategic Economic Development Plan for the Long Island Region to the list. In general this document makes a strong case for Long Island’s economy being directly tied to maintaining high water quality.

Comment 6. Page 8, Section 4.0 Item Plants and Animals – the potential for water tables to be affected by sewering should be identified. Data from Nassau County should be used to identify potential impacts to ecological communities from sewering. In addition the potential for salt water intrusion to the aquifer should be examined.

Sincerely,

Anthony Graves
Chief Environmental Analyst

Edward P. Romaine
Supervisor
December 13, 2016

Ken Zegel, PE, Associate Public Health Engineer
Suffolk County Department of Health Services
Office of Ecology
360 Yaphank Avenue, Suite 2B
Yaphank, NY 11980

Re: Draft Scope for the Draft Generic Environmental Impact Statement for the Suffolk County Subwatersheds Wastewater Plan

Dear Mr. Zegel:

On November 14, 2016, the Central Pine Barrens Commission office received an email notification of the public hearings scheduled to receive comments on the Draft Scoping Document for the preparation of a Draft Generic Environmental Impact Statement (DGEIS) for the County’s Subwatersheds Wastewater Plan.

Comments are offered on the Draft Scoping document dated November 2016 as they relate to the goals and objectives of the Central Pine Barrens Comprehensive Land Use Plan and Environmental Conservation Law Article 57.


(a) What impact, if any, will the Plan have on the Pine Barrens Credit (PBC) program, specifically the standards allowing the redemption of PBCs to increase sanitary flow treated in a typical septic system?

(b) Please explain the methodology used to “evaluate surface water sensitivity,” and define the term “sensitivity” as it is used.

(c) Please explain the methodology to be used in the plan to “evaluate nitrogen loading to groundwater and surface water.” For example, will the plan examine the existing and build out development potential of all communities in the County to evaluate the expected nitrogen loading to groundwater and surface water resources? What benchmark will be used to determine maximum nitrogen loading to water resources and what are the acceptable limits?

(d) Please elaborate on how and for whom the costs and benefits of wastewater management alternatives will be evaluated. Will the analysis of benefits be in regard to those that accrue to property owners, Towns, and developers or benefits to that accrue to ecological and water resources or a combination thereof?
(e) The scope of the plan’s consideration of activities that will prompt wastewater treatment upgrades under various scenarios should include financial and other costs incurred by property owners, including the expenditure of time when properties are sold and purchased by new owners. The potential cost that will be passed on to new owners or included in sales should be assessed. A timeframe for compliance and enforcement provisions should be provided.


(a) Please identify the timeframe for and the triggers that will require installation of an alternative treatment system and modifications to a property, such as when new construction is proposed or in an application to build an expansion of 50% or more of a structure. Please also identify the application phase(s) when it will be required, such as site plan review, subdivision review, Zoning Board of Appeal variance application, building permit phase, etc.

(b) The installation of a new treatment system may require other potentially significant modifications to a property, other than the replacement of one system with another, including, but not limited to, plumbing and waste line realignment, rerouting and installation; shoring up of structures; site disturbance; potential clearing on a property encumbered by covenants or easements and alterations to existing structures and property. Costs to a property owner may be a limiting factor. Therefore, please identify funding mechanisms and compliance and enforcement staffing, fees, and fines to implement the plan.


(a) Although this section states “New STPs and/or expansion of existing STPs will be completed...,” it is not clear how facilities will be funded and where they will be sited. It is worth noting in the Central Pine Barrens Comprehensive Land Use Plan, Standard 5.3.1.2, Sewage treatment plant discharge states, “Where deemed practical by the County or State, sewage treatment plant discharge shall be outside and downgradient of the Central Pine Barrens. Denitrification systems that are approved by the New York State Department of Environmental Conservation or the Suffolk County Department of Health Services may be used in lieu of a sewage treatment plant.” It would be helpful to review preliminary plans or assessments of potential new sewage treatment plants (STPs) or upgrades, if any, that are proposed to occur in the Central Pine Barrens region.

(b) Please examine the feasibility of and cost to develop a STP to connect existing properties without increases in land use density or intensity. If new or expanded STPs were developed with capacity to support increases in development beyond current zoning and health department standards and limitations it would defeat the purpose and goal of reducing nitrogen loading in water resources.

(c) Please explain how the goals and objectives of the plan are met if new or expanded STPs are not designed and constructed.
4. Part 3.0 Purpose and Need.

Please identify the Long Island Commission on Aquifer Protection (LICAP) as another recent initiative to review and assess groundwater quality and quantity in Long Island including Suffolk County.

5. Part 4.0 Generic Environmental Impact Statement Outline

(a) Subsection 4.0 Potential Impacts of the Proposed Action

Land Use, Community Plans and Character

This section identifies the Long Island Pine Barrens Protection Act. Please add the Central Pine Barrens Comprehensive Land Use Plan to this section as well.

Groundwater and Surface Water

- This section discusses improving groundwater and surface water quality. Please identify how “improvement” will be measured and what standard or standards will be applied to measure improvement including, but not limited to, drinking water quality standards, ecological standards, recreational activity standards, etc. Are public water suppliers involved in the project to measure potential “improvement”, if applicable, to drinking water supplies?

- This section discusses assessing “groundwater impacts.” Please identify the type of impacts to which the plan is referring to and how the impacts will be alleviated or mitigated.

- This section indicates the potential presence/reduction of other wastewater constituents such as pharmaceuticals and personal care products (PPCPs) will also be acknowledged. Please identify how PPCPs will be remedied and will new systems provide a remedy and to what extent, if any?

- The scope states “surface water impacts will include potential impacts from changes to groundwater baseflow.” Please identify or define “groundwater baseflow” and how it is impacted and altered.

Plants and Animals

- Please identify proximity and disturbance to wetlands and travel time.

- How and in what context will ecological habitats and species be analyzed? Will they be impacted by installation, and to what extent? And if not, why study? Or are they studying to monitor how environment will improve after the system installation?
Historic and Archaeological Resources

Please elaborate on the reasoning to include this section. Please identify specific elements or sites, if any, that may be examined and potentially impacted by the plan to give purpose for including this section.

Noise and Odors

Provide information and analysis on the levels of noise and odor from existing facilities to compare with the proposed facilities and indicate if the proposed facilities will improve noise and odor levels, worsen them or result in no change.

Economics

- The scope should refer to the results of the recent Health Impact Assessment (HIA) conducted by the County and the U.S. Environmental Protection Agency to examine various pathways and impacts of potential wastewater treatment and code modifications.

- This section should define in greater detail the proposed "Water Quality District," what it is, who is in it, where it is, how it will be funded, and compliance and enforcement procedures to be established in a Water Quality District.

(b) Subsection 5. Short-term or Construction Impacts

Please identify impacts that are expected to occur from new installations including redesign costs and assessment, reorientation of dwellings and facilities for pipes and other infrastructure to facilitate new systems and/or to connect to sewage treatment plants where applicable.

(c) Subsection 10.0 Alternatives

i. The No Action Alternative refers to a "patchwork of wastewater collection and treatment systems that currently exist within the County." The Suffolk County Department of Health Services regulates and approves sanitary wastewater treatment facilities and oversees their construction and installation and conformance to discharge standards. Although privately and publicly owned and operated plants, facilities, and sewer districts exist throughout the County, ultimately, systems are required to conform to State and Federal laws delegated to the County to implement standards and discharge concentrations. Therefore, please clarify that although separate public and private entities may own and manage facilities in the County, the SCDHS is the regulatory authority responsible for implementing the Sanitary Code for approval and compliance of facilities. It may also be the case or the scope may state that recently it has come to light that system designs are being examined to improve conditions, effectiveness, and protection of public health, safety, and environmental resources.
ii. The scope should identify alternatives and existing conditions and processes that may not be capturing opportunities for improvement and identify potential modifications in practices or review processes that could occur to improve environmental conditions. Will the plan make recommendations to other involved agencies regarding zoning or changes to development standards that may improve conditions? Will the plan recommend changes that would require the retirement of Development Rights or Pine Barrens Credits, or land preservation in instances of nonconforming subdivisions or increases in land use density or intensity to offset potential environmental impacts?

iii. Prior to implementing requirements for 360,000 properties to comply with new regulations, please consider a short term alternative for voluntary participation or potentially entirely new development including new residential subdivisions and commercial and industrial site plans.

iv. An alternative that requires retirement of a development right, flow credit, or Pine Barrens Credit, in cases of substandard subdivisions, increases in density or land use intensity, should be considered prior to implementing regulations that require alternative treatment systems.

v. In the potential alternative for the County to acquire land through open space funding in the defined “priority area,” please consider referring to recent amendments to the Community Preservation Fund (CPF) that allow a percentage of funds to be used toward water quality improvement initiatives. Clarify if funds in the CPF would be available for use in this project. In addition, please consider a recommendation to or alternative for municipalities, including Towns and Villages in the County where a CPF does not exist, to explore and consider establishing a CPF to manage the acquisition of priority areas. This may provide a revenue source to acquire land in priority areas and minimize financial impacts to residents in priority areas.

(d) Subsection 12.0 Project/Site-Specific D/FEIS Requirements

The DGEIS should develop thresholds for potential impacts that may trigger site specific SEQRA analyses.

Thank you for the opportunity to comment on the Draft Scope. If you have any questions, please do not hesitate to contact me at (631) 218-1192.

Sincerely,

Julie Hargrave
Principal Environmental Planner

cc: John W. Pavacic, Executive Director, CPBJP & Policy Commission
Judith Jakobsen, Policy and Planning Manager, CPBJP & Policy Commission
John Milazzo, Counsel to the Commission
December 12, 2016

Ken Zegel, PE, Associate Public Health Engineer
Suffolk County Department of Health Services, Office of Ecology
360 Yaphank Avenue, Suite 2B
Yaphank, NY 11980

Re: Draft Scoping Document, Suffolk County Subwatersheds Wastewater Plan

Dear Ken:

The Draft Scoping Document for the pending Subwatersheds Wastewater Plan GEIS is continued evidence of Suffolk County’s recognition that reduction of nitrogen-loading to groundwater and surface waters is imperative for economic, public health, environmental, and quality of life reasons. The Nature Conservancy applauds the investments that Suffolk County has committed to solving this issue. We appreciate the work that has gone into preparing the Draft Scoping Document. This letter represents The Nature Conservancy’s comments on the draft document; we hope that you will incorporate these comments concerning the draft scoping document. We look forward to continuing our collaborative efforts with Suffolk County as this work continues to progress.

Introduction, Section 1.0

The Draft Scoping Document (DSD) states that “Changes to the County Sanitary Code will enable the Suffolk County Department of Health Services (SCDHS) to implement the wastewater treatment technologies required to achieve the nitrogen reduction goals.”

This should be rephrased. It is important for the County to acknowledge that it alone does not bear either the full responsibility or full ability to “achieve the nitrogen reduction goals” that will be necessary to end the scourge of harmful algae blooms and other water quality problems caused by excess nitrogen.

While action by the County is necessary “to achieve the nitrogen reduction goals,” it will not be sufficient, because 1) the needed reductions are so great that they exceed the reductions that can be achieved through wastewater technology upgrades subject to County jurisdiction (e.g., wastewater reductions by state and federal entities not subject to the County’s jurisdiction; fertilizer reductions by farmers, landscapers, homeowners, and businesses; water reuse projects; wetland restoration; greater use of buffers; Nassau County and CT actions; etc.); 2) for the County’s proposed technology upgrades to be effective, community and stakeholder input and cooperation will be essential; and 3) whether or not the County creates the proposed Subwatersheds Plan, there will be independent actions taken by other governmental entities such as Suffolk’s ten towns, especially now that five of those towns have an independent source of funding for water quality improvement projects (the Community Preservation Fund), not to mention EPA-driven efforts such as the Long Island Sound and Peconic Estuary TMDLs.
Once again, thank you for the opportunity to provide public comments on these draft reports. Since the days just prior to Sandy the Department of Interior staff from several agencies have done fantastic work in both managing the park during challenging times, as well as compiling a pool of multi-agency monitoring and assessment data that has been critical in this process. We thank you for your efforts and look forward to working with you moving forward.

While we realize that the Scoping Document applies in the first instance to proposed County action, it is important to place this action in the broader context because that context gives distinctive meaning to the alternatives that the GEIS must address. Jumping ahead to that point, while the County may take “no action,” other governments and private entities certainly will take action, which is a factual situation that must be taken into account in the GEIS. Key roles the County can play are to inspire and coordinate other actions, make them more efficient, and reduce conflicts among jurisdictions that would present burdens for technology suppliers and maintenance providers, businesses, and homeowners. There is really no such thing as a “no action” alternative. It should more accurately be termed an “action by others without County leadership” alternative.

In sum, the Introduction should recognize that County action is but a part of a comprehensive, multi-level nitrogen reduction effort that will go on in some form whether or not the County creates the proposed Subwatersheds Plan.

Proposed Action, Section 2.0
Recommended Wastewater Management Strategy, Section 1

All of the discussions to date concerning the need for a Subwatersheds Plan have stressed that it is part of a broad strategy to bring about significant and meaningful nitrogen reductions throughout the County, beginning with priority zones. The ultimate goal, however, is for the use of I/A technology including shallow drainfields to be the new norm everywhere in Suffolk County. The DSD and GEIS should make this clear.

While we understand that the main focus is on the three wastewater management alternatives mentioned in this section – “Innovative/alternative onsite wastewater treatment systems (I/A OWTS); Clustered/decentralized ("Appendix A") systems; and, Sewage Treatment Plants (STPs), to include only currently proposed projects,” we urge a broad construction of the phrase "currently proposed projects." A project should be considered "proposed" if it has been seriously discussed, including, for example, the proposed expansion of the Oakdale STP and Greenport STP. These projects should not be subject to a separate process if conditions allow them to move forward.

The section lists the following "scenarios":
- Cesspool failure;
- New construction;
- Property transfer;
- Grandfathered residential sites with legacy cesspools;
- Grandfathered residential sites with lot sizes below current Sanitary Code requirements;
- Grandfathered Other Than Single Family Residential sites including grandfathered SPDES and failed denitrification system sites; and,
- Phased upgrades within the tiered priority area boundaries defined in the SWP;

A few of these terms warrant revision and definition.

First, the problem with cesspools is not "failure." Cesspools contribute to nitrogen pollution whether or not they have technically "failed." Numerous scientists, town governments, and county documents have recognized this fact. Conventional septic systems are only marginally better than cesspools when it comes to nitrogen reduction from wastewater inputs. It is important for the County to be a strong voice on this key point, which is often misunderstood by the media and others. We ask that you replace "cesspool failure" with the following two items:
- Homes and businesses with cesspools
- Homes and businesses with conventional septic systems
replacement of “failing” systems. All cesspools and conventional septic systems should be defined as substandard with respect to nitrogen emissions.

Innovative/Ongite Wastewater Treatment Systems, Section 3

We recommend the following changes:

- Replace “will likely be” with “is expected to be” in the following sentence: “The use of I/A OWTS will likely be expanded to Other Than Single Family Residential properties that meet the allowable flow/design limitations of approved technologies.”

- Include discussion of shallow drainfields as a necessary component of I/A systems, with a variance being required in the future for a leaching pool if a site is completely limiting. Once standards are drafted for drainfields, attention can be given to issues such as setbacks.

Clustered/Decentralized Systems, Section 4

As stated above, use of the phrase “grandfathered sites” is too vague and should be clarified. Is the DSD referring to establishments whose flows were previously grandfathered, or to future applicants for grandfathered flow? And, the question whether to require better nitrogen reduction treatment at grandfathered sites (past or future) is a separate matter. Per the 2005 internal memo, the County already has the power to do that.

Advanced Wastewater Treatment Pilot Areas, Section 6

In this section, we recommend adding other somewhat novel approaches to nitrogen reduction, including, but not limited to, water re-use, resource recovery from waste water (e.g. efforts to use macro algae as fertilizer), urine-diversion and composting toilets, botanical treatment projects, wetland restoration, and buffers along water bodies, especially at agricultural sites. There is potential to utilize wastewater for irrigation in a way that both reduces pumping of potable water and adds extra treatment to waste water, thus reducing pollution.

In the bullet points, expand “New York State and Suffolk County owned parks” to “state, county and other municipally owned properties, including parks” because it is not only parks where there is the potential for the County to work with other levels of government, and on properties that are not privately owned. Also, include reference to other taxable districts and uses such as libraries, five districts, school districts, etc.

Purpose and Need, Section 3.0

There is a strong public health component to the nitrogen-reduction effort given that 1) excess nitrogen is a known direct cause of blue baby syndrome, 2) cyanobacteria caused by excess nitrogen has been documented to cause a variety of human health problems from rashes to respiratory problems to kidney failure to death, and 3) consumption of shellfish affected by toxic algae can lead to sickness and even paralysis, among other health problems. Research is ongoing into linkages between toxic algae, cancer, and muscular degenerative diseases.

Accordingly, the Purpose and Need section should include public health. Further, although mentioned at the bottom of page 7 and top of page 8, it is worth highlighting in Section 3.0 that the goal is also to reduce contamination of drinking and surface waters from other constituents of wastewater, such as pathogens, pharmaceuticals, and personal care products.

Generic Environmental Impact Statement Outline, Section 4.0

To the extent that the issues mentioned in this section can be addressed in a general way, they should be. It will help for the public to see that the County has considered a variety of factors, with reference being made to the site-specific issues that would need to be addressed in supplemental SEQRA reviews. The GEIS could do a good service
Grandfathering

We have a number of comments regarding "grandfathering" or non-conforming, preexisting usages. Grandfathering is a fuzzy concept that should be used minimally and with care. People use the word to mean different things, such that clarity is extremely important in the GEIS.

We support the County's proposal to eliminate grandfathering of all kinds and require nitrogen-reducing technology for previously grandfathered properties. We understand that there may be a gradual process of narrowing the scope of grandfathering for commercial properties in the process of getting to complete elimination of this automatic variance from current standards and requirements.

There are different types of grandfathering as set forth in Article 6, section 609(B), and there are further variations when one includes decisions made through the variance process. Residential "grandfathering" differs from commercial "grandfathering" in that most residential "grandfathering" results from a pre-1981 lot. Accordingly, we do not see what is gained by referring to such residences as "Grandfathered residential sites with legacy cesspools." Virtually all cesspools in the County are "legacy" in that they are not currently authorized under the County's wastewater standards. Why is the word "legacy" needed or useful here? If the County is concerned that equity should not require replacement of a recently installed cesspool (which would only have been allowed as a replacement-in-kind of an older cesspool), that can be handled with a separate provision.

With respect to commercial grandfathering, it is important to state whether the County is referring to existing commercial establishments operating with flows previously grandfathered, or future applicants for grandfathered flow. The County has elsewhere proposed to narrow and potentially eliminate the grandfathering allowance set forth in Article 6, and it should consider the GEIS the complete elimination of grandfathering. That, of course, would apply prospectively, not retroactively. However, the use of better technology or a cluster system can be required both prospectively for any newly grandfathered usage, and retroactively for any previously grandfathered establishment. We believe the County's 2005 internal memorandum concerning grandfathering makes this clear, and no new regulations beyond the approvals the County has already authorized would be necessary—though it is certainly prudent to document the requirement and announce the policy clearly.

The phrase "failed denitrification system sites" requires elaboration in the bullet point "Grandfathered Other Than Single Family Residential sites including grandfathered SPDES and failed denitrification system sites." The phrase should be defined. The GEIS should say where these sites are and how they have been measured.

There are other categories that should be included, such as all existing non-residential establishments with cesspools or conventional septic systems, and also the category of large-capacity cesspools which the EPA has considered illegal for over ten years yet remain throughout the County.

Finally, the use of shallow drainfields should be included, in place of cesspits.

Water Quality Protection District and Responsible Management Entity, Section 2

For the reasons stated above, the words "failed" and "legacy" should be removed from the following bullet point:
- Provide a funding mechanism, such as low interest loans or grants, for the replacement of legacy cesspools or failed conventional sanitary systems by I/A OWTS;

There is a difference between reactive and proactive upgrades of cesspools and conventional septic systems. A "reactive" approach would tell a homeowner with a "failed" system—either cesspool or septic—that s/he must install an I/A system in its place. A proactive approach will mandate upgrades, perhaps in priority areas at first, but overtime becoming the norm. A "funding mechanism" is necessary only with respect to the proactive upgrades to the extent that individual homeowners cannot afford the cost of the upgrade. Proactive upgrades are absolutely necessary if there is to be nitrogen reduction at a scale that makes a difference to our groundwater and surface waters—and funding assistance should not be limited to "legacy" cesspools or
by giving a general outline of what is already known, the policy actions that logically respond to the problems, and the issues and specific questions that need to be answered in the supplemental SEQRA processes.

### Existing Environmental Setting

Add to the first set of bullet points:
- Suffolk County Water Authority information, data, forecasts, etc.
- Relevant data from non-profits and academic institutions, such as nitrogen-load models and studies of nitrogen impacts on wetlands and seagrass.

Add to the "Physical Environment" bullet points:
- Water withdrawal from public and private wells
- Sediment characteristics

### Potential Impacts of Proposed Action

- Under "Land Use," the list of "regional and county water protection programs" should include the Long Island Committee for Aquifer Protection (LICAP).
- In the discussion of "Groundwater and Surface Water," we recommend making more of the fact that better wastewater treatment of nitrogen will also have benefits by reducing pathogens and other contaminants. The extent to which this is true will depend on the technology and contaminant, but in general there should be more awareness that several water quality gains can be achieved through better water cycle and wastewater management.
- The impacts of pumping water from one subwatershed and discharging it into another subwatershed may also be something that needs to be considered.
- Regarding the section entitled "Human Health (Contaminant Exposure/Hazardous Materials)," the human health impacts are far greater than spills, as noted above. The human health section should not be limited to "contaminant exposure/hazardous materials" and should include the range of diseases from direct ingestion of nitrogen to contact with toxic algae caused by excess nitrogen, either through recreational contact, shellfish and fish consumption, or other means.

- "Economics" is outlined in unjustifiably narrow terms. Water quality undergirds Long Island's economy in many respects: some 40% of the island's businesses are considered water-dependent—either freshwater or surface waters. Real estate values are influenced by water quality. That means property tax revenues depend on water quality, as does the multi-billion-dollar tourist industry of Long Island. If water quality deteriorates further, all of these economic indices will suffer. Accordingly, the costs of not acting to reduce nitrogen to necessary levels must be considered in addition to the "potential economic benefits" of improved water quality.

In terms of economic benefits, there should also be consideration given to the economic gains that will arise from a more professionalized wastewater industry that is client-focused and requires better maintenance and monitoring and potentially pumping. This new industry will create jobs from design to permitting to installation and maintenance workers.

### Alternatives Analysis

As referenced in our introductory paragraph, the "no action alternative" does not really exist. It implies that if the County does not act, no one else will—and that is simply incorrect. The County has already approved Section 19 of the sanitary code and has authorized new IFI technology, such that towns may require use of these systems, and individuals may install them voluntarily. Further, the Long Island Nitrogen Action Plan will propose certain actions, if not required, and the same can be said with the Long Island Sound and Peconic Estuary TMDLs. (And additional TMDLs may be created in Suffolk County related to nitrogen on the basis of the State's compliance with the federal Clean Water Act.) Accordingly, "no action" is not really possible. The "no action" alternative here is really no action of the sort proposed, or no additional action at this time, but what exactly does that mean? No
subwatersheds delineated, no goals set, no amendment to Articles 5 and 6, no attempts at uniform implementation, etc.—or the undertaking of these tasks by other entities? The absence of active County involvement while others act is a separate alternative that must be addressed in the GEIS.

In conclusion, The Nature Conservancy offers its appreciation to Suffolk County for your leadership in advancing solutions to the island's water quality crisis. Moving forward, The Nature Conservancy is committed to as well as continue working with the county and others as these efforts progress.

Sincerely,

[Signature]

Kevin McDonald
Conservation Policy Advisor
The Nature Conservancy, Long Island Chapter

cc
Peter Scully
Dear Ken,

I learned a lot and was very impressed with the detail of your scoping session and document. Friends of Georgica Pond Foundation will submit brief written statements by Dec 13. At your suggestion, I will work with Bridget Fleming and Kim Shaw, to get all the Georgica Pond data to them for consideration in your planning. Our preliminary thinking is that we want to advocate for voluntary upgrade of septic systems (+/- 75) around the pond in the coming year and the look for partnerships with the Town CPF and County within critical areas of the watershed, especially the commercial district of Wainscott.

Let me know if this makes sense!

So nice to meet you.

Sara Davison
Executive Director
Friends of Georgica Pond Foundation, Inc.

*To preserve the Georgica Pond ecosystem for future generations through science-based, watershed-wide policy and restoration*
Ken,

Below please find public comments related to the County’s recently released DRAFT Scoping Document associated with the Generic Environmental Impact Statement (GEIS) for the Suffolk County Subwatersheds Wastewater Plan. Please incorporate these comments into the public record for the GEIS.

SEQRA mandates that a lead agency identify the relevant areas of environmental concern, take a “hard look” at any potential impacts and provide a reasoned elaboration for its conclusions. In the process, the lead agency is obligated to consider a variety of potential impacts including short-term, long-term, primary, secondary and cumulative impacts. Cumulative impacts include any potential impacts associated with “reasonably related” actions. In this case, there are a host of reasonably related actions that should be considered in conjunction with the GEIS for the subwatersheds wastewater plan. In addition to the County’s water resources management plan, this should include as a minimum the following:

- Reclaim Our Waters Initiative - The Subwatersheds Study was described as a “sub-component” of the County Executive’s Reclaim Our Waters Initiative. As such, the potential impacts assessed in the GEIS should include all reasonably related actions contained within the broader policy document referred to as the Reclaim Our Waters Initiative.

- Comprehensive Water Resources Management Plan - The County has recently released a “Comprehensive Water Resources Management Plan” which has served as the foundation for initiatives like the Subwatersheds study. However, the Water Resources Management Plan has never been adopted by the County, nor have the potential environmental impacts of its recommendations been reviewed under the State Environmental Quality Review Act (SEQRA). Resource management plans are defined as Type I Actions under SEQRA. As such, if the County’s water resources management plan is to be used to support amendments to the sanitary code or studies such as the subwatersheds wastewater plan, it should be analyzed under SEQRA in conjunction with the subwatersheds study.
The Sanitary Code - Recent and ongoing updates to the Suffolk County Sanitary Code are a direct result of the information prepared and analyzed as a part of the comprehensive water resources management plan. Segmentation is inconsistent with SEQRA and the division of reasonably related actions like the update of the sanitary code, the release of the water resources management plan and the subwatersheds wastewater plan represents an impermissible segmentation of these reasonably related actions.

Sewer Capacity Study - The County has previously prepared a sewer capacity study that analyzed the expansion of existing sewage treatment plants and the potential development of new systems. Sewer capacity and the permitting of innovative alternative on-site wastewater systems are also reasonably related actions to the subwatersheds study. Accordingly, the impacts of these plans should be considered in conjunction with the subwatersheds study.

County Comprehensive Plan - The County recently adopted a new comprehensive plan. Land use plans are Type I Actions under SEQRA. Despite this fact, the County deemed the adoption of the plan a Type II Action. Since resource management is a necessary component of a properly prepared comprehensive plan, the recently released water resources management plan should be considered a component of the County’s Comprehensive Plan. The potential environmental impacts of the comprehensive plan should be considered in conjunction with the GEIS for the subwatersheds study.

County Regional Transportation and Development Plan - The County recently released a “Regional Transportation and Development Plan” which details infrastructure needs and potential economic development opportunities. This study, the comprehensive plan, the updates to the sanitary code and the sewer capacity study are all reasonably related actions under SEQRA. Accordingly, all associated potential impacts including cumulative impacts, should be considered at this time.

Bergen Point Expansion - The County recently approved a 10 million gallon per day expansion of the Bergen Point STP. In addition, the County is currently considering a 7-mile main extension from the Bergen Point Plant to the project known as the Ronkonkoma Hub. This project also includes a second main for the connection of both existing and proposed development along Veterans Memorial Highway. These are also reasonably related actions under SEQRA, the cumulative impact of which has never been assessed. Accordingly, the GEIS for the subwatersheds study should incorporate these actions as well.

In summary, the County is in the process of expanding sewering, implementing innovative on-site wastewater systems and updating the sanitary code. All of these reasonably related actions will impact water resources throughout the County. The County has an obligation to assess the
cumulative impact of these reasonably related actions and, in particular, development-related impacts resulting from increased wastewater capacity. To date, it has failed to do so. The subwatersheds wastewater plan represents an opportunity to secure compliance with SEQRA. We recommend that the scope of the GEIS be expanded to consider the full range of potential environmental impacts consistent with SEQRA.

Thank you for the opportunity to provide comments.

Sincerely,
Dan Gulizio

Your Clear Voice for Clean Water