

**DRAFT SCOPING DOCUMENT**  
**Generic Environmental Impact Statement**  
**Suffolk County Subwatersheds Wastewater Plan**  
*Suffolk County Wastewater Management Program for the Reduction of Nitrogen Loading from  
Wastewater Sources*  
**Suffolk County, New York**  
**November 2016**

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## 1.0 Introduction

This Draft 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. 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 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 Draft Scoping Document includes a:

- Description of the Proposed Action and
- Preliminary 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.

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. 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 status under the New York State Environmental Quality Review Act (SEQRA) 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.

## 2.0 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 through the establishment of 'priority areas' for nitrogen reduction, establishment of nitrogen load reduction goals for each priority area, and a development of a recommended wastewater upgrade strategy to meet nitrogen load reduction goals. Changes to the County's Sanitary Code will be required to implement the recommendations provided in the SC SWP. There are expected to be six major recommendations within the SC SWP as follows:

### 1. Recommended Wastewater Management Strategy

The SC SWP will be used by the County to support the development of a County-wide wastewater management strategy. The SWP will:

- Evaluate nitrogen loading to groundwater and surface water;
- 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 these three treatment methods and the results and 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:

- 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.

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. Water Quality Protection District and Responsible Management Entity**

A Water Quality Protection District and Responsible Management Entity (RME) will be established 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.

A water quality protection fee is proposed that would be used to:

- 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;
- 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. 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 will likely 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. 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;
- 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.

### 3.0 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. 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. 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 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,
- 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 sewerage, cluster/decentralized wastewater treatment, and I/A OWTS.

### 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, economic costs and 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. 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)
- 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)
- Suffolk County Department of Health Services databases
- Aerial imagery
- Suffolk County Department of Health Services (SCDHS) databases
- Aerial imagery

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

- Physical Environment

- Land Use
  - Groundwater and Surface Water
  - Plants and Animals (threatened and endangered species, critical habitat, wetlands, floodplains)
  - Historic and Archeological Resources
- Social and Economic 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
- 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. 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 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. The need to consider the impact of projected increases in sea level elevation with respect to development along the coast will be noted.

- Plants and Animals

The potential 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

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.

- 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. New development is not part of the proposed action and an assessment of potential impacts would be subject to supplemental SEQRA review.

- Economics

This section will discuss the potential economic impacts to Suffolk County residents as a result of the establishment of the Water Quality District and the funding mechanisms identified by the County (i.e. grants) to support the recommendations listed in the SC SWP and fund. Potential economic benefits resulting from improved water quality will also be assessed using literature reported estimates.

- 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. The potential impact to Environmental Justice areas within the County will be incorporated into the economic assessment to implement the recommended wastewater management strategy.

**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
- **Plants/Animals**, 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
- **Human Health** (Contaminant Exposure/Hazardous Materials), as construction may take place on parcels adjacent to land under remediation

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
- Potential for growth inducement within the County
- Energy Demand (Greenhouse Gas impact)

Site-specific and/or municipality specific growth options will be subject to supplemental SEQRA review.

**7.0 Unavoidable Adverse Impacts** -This section will summarize those impacts that cannot be avoided or adequately mitigated if the 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 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)
- 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 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 condition or criteria under which a future action or actions that would require additional review under SEQRA. Example thresholds or criteria for supplemental or site-specific EISs to address site specific or municipality specific actions will be provided.

## List of References

## 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

The CEQ with the initiating Department, on behalf of the Suffolk County Legislature as Lead Agency will hold two Public Scoping Meetings at which time comments on the Draft Scope will be received. Written comments will also be accepted through December 13, 2016. The Draft Scoping Document will be updated to include input from stakeholders and the public based on comments received. The Scoping Document will then be finalized, and the preparation of the GEIS will commence.