AGENDA
Peconic Estuary Solute Transport Model Meeting
Wednesday, May 6th, 2020
1:30pm – 3:00pm

Zoom Conference Call Information
Click the below link to the Join Zoom Meeting through your computer
https://zoom.us/j/93311809241?pwd=ekNZQkh0K0lSNTE1Vmg3WjUvdEtCdz09
Meeting ID: 933 1180 9241

Or call in on your phone
+1 646 558 8656
Access Code: 933 1180 9241
Password: 437864
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1:30 PM Welcome & Introductions – Sarah Schaefer (PEP Program Coordinator)
Zoom Call Participant list:
Chris Schubert (USGS), Don Walter (USGS), Jack Monti (USGS), Nicole Casamassina (USGS), Debbie Aller (CCE), Aimee Boucher (USEPA), Ronald Busciolano (USGS), Sarah Schaefer (PEP), Joyce Novak (PEP), Elizabeth Hornstein (PEP), Matthew Scalfani (CCE), Ken Zegel (SCDHS), Michele Golden (NYSDEC), Corey Humphrey (SCSWCD), Anthony Caniano (SCDHS), Johnathan Wanlass (SCDHS), Brian Pedersen (SCDHS), Mary Ann Eddy (Sag Harbor, Harbor Committee)

1:35 PM Review of the Peconic Estuary Solute Transport Model scenario list**-** Sarah Schaefer
- Presented and finalized at the Solute Transport Model meeting on December 4th- attached.

1:45 PM Peconic Estuary Solute Transport Model Review and Update
Click here to review Solute Transport Model project information and past meeting agendas and attendance.
- Overview of the project and model development- Don Walter (USGS, Hydrologist)
- Update on development of historical nitrogen source terms and land use data collection- Jack Monti (USGS, Hydrologist)

2:15 PM DISCUSSION

2:55 PM Next Steps and Meetings – Sarah Schaefer

Next PEP Solute Transport Model Meeting
August 19th, 2020 1:30- 3:30 pm

3:00 PM Adjourn

FINAL DRAFT Peconic Estuary Solute Transport Model Scenario List

For review at May 6th, 2020 meeting

The USGS-PEP Solute Transport Modeling Project is developing a subregional solute transport model of the Peconic Estuary ground watershed to assess the time-varying discharge of nitrogen into fresh and coastal waters within the Peconic Estuary watershed. Once the model is complete it can then be applied to run a limited set of scenarios to estimate resulting nitrogen loading rates over time. These tools will provide valuable insights into how nitrogen discharge likely will change in response to nitrogen mitigation efforts within the watershed to guide local, state and regional management actions.

The Peconic Estuary Partnership wants to ensure that our partners can effectively use the PE Solute Transport Model to guide nitrogen mitigation efforts and wants to make sure that the set of scenarios that the model runs are representative of local, state and regional management actions. Our stakeholders discussed and provided comment on a list of potential scenarios at the November 2018, May, August and December 2019 PE Solute Transport Model meetings. Scenarios reference the Draft Suffolk County Subwatersheds Wastewater Plan (SCSWP).

Prioritization of the scenarios considered the scale of the scenario application among partners and current data availability.

Any comments or feedback should be directed to sarah.schaefer@suffolkcountyny.gov

Scenario Prioritization	Description	Notes
*Climate change scenarios can be a subset to each scenario.		i.e. draught, increased intensity of precipitation events, rising groundwater levels.
Base scenario	"Pastoral"/ pre-development nitrogen load.	
Base scenario	No further nitrogen loading to the watershed.	
Base scenario	No nitrogen load reduction action in watershed.	
Base scenario	The reduction in atmospheric deposition of nitrogen BUT no on the ground nitrogen load reduction action in watershed.	
Base scenario	Potential Future/full build-out in watershed at the current allowable density.	**Detail from SCSWP:** For purposes of the SCSWP, Suffolk County Department of Economic Development and Planning developed the conditions used for potential future build-out which were based on the more stringent of Suffolk County Sanitary Code Article 6 or local zoning for all: Vacant Parcels without development restrictions, Agricultural parcels without development restrictions, and Subdividable low density residential parcels.
1	Full Implementation of Wastewater Treatment upgrades (I/A OWTS, sewering and clustering) in 6 Peconic Estuary Management Areas.	**Detail from SCSWP:** 6 Peconic Estuary Management Areas- Peconic Estuary Restoration and Protection Area I, II and III, Sag Harbor Cove and Connected Creeks, West Neck Bay and Creek and Menantic Creek, & Peconic Estuary Restoration and Protection Area IV.
2	**Implementation of Full Implementation of Wastewater Treatment upgrades (Scenario 1) at 3 "speeds":** 1) as laid out in the SWP; 2) 50% faster, assuming the industry and revenue source can accommodate a more aggressive program ; and 3) 50% slower, assuming the industry and/or funding source can't support the recommended timeline.	

3	**Implementation of Full Implementation of Wastewater Treatment upgrades (Scenario 1) in Phases:** 1) Full Implementation of Wastewater Treatment upgrades in 0-2 year groundwater contributing area. 2) Full Implementation of Wastewater Treatment upgrades in 0-2 year groundwater contributing area and Phase II area. 3) Full Implementation of Wastewater Treatment upgrades in Phase III area.	**Detail from SCSWP:** 1) 0-2 year groundwater contributing area in all priority areas ranking 1, 2, 3, 4. 2) Phase II area- Surface water and groundwater priority area 1. 3) Phase III area- Surface water priority area 2-4 and Groundwater priority area 2. 2-25/50 Year Contributing Area.
4	**Potential mitigating Town actions- Land Management:** Up-zoning from 0.5 acres to 1 acre., Land preservation and easements- according to CPF/ Town and County Comprehensive Plan lists; Land preservation according to 2019 PEP Critical Lands Protection Strategy.	
5	**Potential mitigating Town actions- Existing STPs:** 1) Implementation of Peconic Estuary watershed Potential Sewer Expansion Projects from SCSWP. 2) Increasing other existing STP capacity/ expansion, STP water reuse projects.	**Detail from SCSWP:** Based on Wastewater Management Response Evaluation Findings, these are parcels that were identified as benefitting from additional sewer expansion.
6	Full Implementation of Proposed Sewering Proposals in Peconic Estuary Subwatersheds.	**Detail from SCSWP:** Existing Sewer Proposals- Riverside Revitalization Project, Springs School District sewer project, Downtown Montauk Sewer project.
7	**On the ground Fertilizer Management Actions in watershed and implementation of fertilizer best management actions in the watershed:** 1) The LINAP Turf Fertilizer Recommendations: -Residential/Turf Fertilizer: 1.4 lbs N/1,000 sqft annually. -Golf Courses: 2.7 lbs N/1,000 sqft annually. 2) Complete elimination of residential fertilizer. 3) 50% slow release fertilizer.	Detail from LINAP Turf Fertilizer Recommendations.
8	Increase in N load from 10, 20, 30% etc. of agricultural land switching over to livestock production.	
9	Impacts of implementing soil health BMPs.	
10	Implementation of Shallow Narrow Drainfields.	
11	Model what wastewater management actions are needed to meet groundwater quality and quantity protection goals.	Get Load Reduction Goals from SCSWP and Towns.