SUFFOLK COUNTY RECLAIM OUR WATER
PROJECT UPDATE

October 21, 2020

ReclaimOurWater.info
PRESENTATION OVERVIEW

- Introduction (Peter Scully)
- Subwatersheds Wastewater Plan Update (Ken Zegel)
- Septic Improvement Program Update (Julia Priolo)
- Questions?
By Earl Lane

Ecuador—Mention Long Island to some people in Bangladesh, India, or Tashkent, USSR, and they might shrug their noses and ask, “Isn’t that where they have cesspools?”

That proves something, Dwight F. Metzler, the state’s deputy health commissioner for environmental services, said yesterday to make a point about sewers.

Recounting his travels through India, Russia and other countries and his discussions with health officials, Metzler said, “Long Island is the outstanding example in the world where a major population still discharges sewage in ground waters. Even people in underdeveloped countries tell me they can’t understand it.”

Metzler spoke at a conference at Dowling College on water pollution. He called for passage of a proposed sewer district for southwestern Suffolk County on the November ballot. After the session, he outlined steps that state agencies could take to prevent further sewage discharge into the supply by sewage from cesspools. About half of Nassau County is served by sewers. In Suffolk, only several isolated communities and developments have sewers.

Metzler said that the State Water Resources Commission, which is concerned about the use of fresh water supplies, could reduce or halt permits for use of the county’s remaining water resources if contamination continues. He also said that the drilling of new wells could be halted and existing wells could be quarantined in areas where underground water supplies are being contaminated.

Metzler said, “I doubt that the state will move in within the next five years” to press for construction of the sewers if the sewer proposal is defeated. But he said that the State Health Department would continue a close scrutiny of county water usage and contamination levels. He said that Suffolk health officials have been asked to meet next week with the Water Resources Commission in Albany to discuss the county’s water supply. It will be the first such report from Suffolk in about two years, he said.

Metzler said that the State Pure Water Authority, which can construct and operate sewers if requested by a local government, has no authority to order sewer construction. A department of health spokesman said that if health conditions in an area become hazardous because of inadequate sewage facilities, the department has to intervene under existing provisions of the public health law and require a local timetable on projects to remedy the situation.

“Sewers must come; you need them now. The longer you put it off, the more expensive it will be,” Metzler said. He said that about $100,000,000 is left from a $1 billion state bond issue approved in 1966 for sewer facilities. The proposed Southwest Suffolk District would cost $289,000,000 to build. Interest charges on the 40-year bonds would bring the total cost to $521,373,750. About $60,000,000 of the remaining state funds can be applied to the Suffolk project.

Metzler said that those funds will likely be fully obligated by next summer whether Suffolk acts or not. Metzler also said that information, constructed at the costs of sewage facilities totals about 12 percent a year.

John M. Flynn, a public health engineer in the county health department, agreed with Metzler that only about 30 years ago the county’s water supply was being extracted from water tables less than 75 feet below the surface. The figure was about 80 percent in 1953.

By William Nack

Brooklyn—A Suffolk conservation group, claiming that cesspools pollute the county’s ground waters, is seeking a preliminary injunction in U.S. District Court here today restraining the health department from allowing cesspools to be put in ground waters.

The arguments for the injunction are part of a broader suit which, if successful, would curtail almost all commercial, residential and industrial development in the county. The suit, prepared by attorney Victor J. Yannaccone Jr. for the Suffolk Defenders of the Environment, is an attempt to block the county, 10 towns and 29 incorporated villages from “further the development of their natural resources... until ecologically sound, environmentally responsible criteria for such development have been established.” Yannaccone said that citizens are being deprived of a “livable environment” without due process of law.

Yannaccone said that he would seek a preliminary injunction before U.S. District Judge Joseph Zavatt to “restrain the Suffolk County Department of Health from issuing any more permits for cesspool construction in any location where cesspools are set in ground waters.” That would prohibit the installation of cesspools, which serve about 98 percent of the Suffolk population, “Almost anywhere south of the terminal moraine south of Jericho (Tunya) on the grounds that continued cesspool disposal of sewage waste would cause serious, permanent and irreparable damage to the (county) water supply,” he said.

By Alan Eisen

Patchogue—The federal government may take an active interest in helping Suffolk County unless the county speeds its efforts to halt pollution of the bay waters between Blue Point and Westhampton Beach, a federal official said yesterday.

Morris Stein, assistant commissioner for enforcement for the U.S. Water Pollution Control Administration, told a water pollution conference here that the federal government would work with the state in seeking development of a regional sewage collection and treatment system in the county if Suffolk fails to take action. “Unless you come up with such a system, you may have us working for the state for a long time,” Stein said.

The federal official declined to go into detail on what the government could do to bring about the development of a sewer system or to suggest any deadlines for local action. He said, however, “We can order the county to stop polluting the water.”

Stein added that if the county refused to comply with such an order, the government could bring a civil action that could result in fines being levied against Suffolk. A proposed sewer system for the West End was defeated in a February, 1967, referendum by a 6-1 margin.

The County Board of Supervisors is in the process of naming a new 10-member sewer agency to consist of five voting members, chosen for their knowledge of sewer engineering, and five non-voting members, including the county executive and the chairman of the board of supervisors.

Stein remarked on the need for a major Suffolk sewer system in approving the progress that has been made in reducing pollution created in the eastern portion of Great South Bay and Moriches Bay by duck farms and by the Village of Patchoque’s inadequate sewage treatment system.

The commissioner said, “You need an annular collection and treatment system if you want to utilize Moriches Bay to the fullest extent.” Deputy State Health Commissioner Dwight F. Metzler, who also attended the conference, said that his agency would also press for action on such a system. Both Stein and Metzler said, however, that they would move cautiously in the hope that the state would lead the initiative in developing the system.

They said that their current efforts would be geared to following through on the recommendations made at two earlier conferences called by the federal government on pollution in the 16-mile stretch of bay between Blue Point and Westhampton Beach. Yesterday’s conference would, in effect, a progress report on those recommendations. Stein said that it would be at least six months before the next conference would be held.

The recommendations were that the Village of Patchoque construct a secondary sewage treatment plant to be in operation by 1970; that duck farms in the area have pollution treatment facilities installed, and that federal and state authorities study the Moriches Bay front and recommend dredging and waste disposal measures.

County Board Chairman John V. N. Klein said that he would not care to see the federal government force a sewer system on the county. “I would rather see the initiative come from the people of Suffolk County,” he said. County Executive Dennis said, “We have to do something on the local level, and quickly, I have said often enough that if we don’t move ourselves to eliminate the problems somebody would step in.”

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
SUFFOLK COUNTY COASTAL RESILIENCY INITIATIVE
$388 MILLION FOR SEWER PROJECTS

Governor Cuomo Announces Actions to Strengthen Coastal Resiliency Against Future Storms on Long Island

$388M for sewers

Top Stories

J.Y. and federal aid aimed at fighting nitrogen pollution

Suffolk County will receive $388 million in state and federal aid to assist sewer projects in 10,000 homes along the north shore, Gov. Andrew M. Cuomo’s office announced yesterday.

The money includes $242 million for an initial design and environmental review phase, which could take at least 18 months. The administration hopes to use $100 million for sewer infrastructure projects in an effort to stem pollution and bolster water quality.

The plan would hook up homes in North Bellmore, Deer Park, Oakdale, Mattituck, Mattituck Beach and Oakdale.

“This money allows us to take the first significant actional step toward building the necessary waste water infrastructure,” said Justice Myers, a spokesman for Suffolk County Executive Steve Bellone.

The money will pay for the construction of new collection systems in the Cold Stream and Peconic rivers watershed areas that contain thousands of residential, commercial and institutional parcels to existing water conveyances and treatment systems, the governor’s office said.

A new water collection and conveyance system also will be built in the Peconic River watershed, easing even more residential, commercial and nonresidential parcels to a new wastewater treatment plant to be built on the site of the Calabro Airport in Brookhaven.

The county had previously announced it was receiving the money.

Funding comes from the New York State Environmental Facilities Corporation’s Sureg Systems Revolving Fund and the U.S. Department of Housing and Urban Development’s Community Development Block Grant-Discaster Recovery Program, Cuomo’s office said. The federal Hazard Mitigation Grant Program also is helping fund the construction phase.

Myers said the project is the “single largest sewer infrastructure project” to come to Suffolk in a generation.

Cuomo, in a news release, said: “This funding allows Suffolk County to improve and expand its sewer system in a way that not only reduces threats to water quality and contamination but also strengthens Long Island’s coast to better withstand future storms.”

A large portion of nitrogen comes from outdated septic systems, in a county where 74 percent of homes are not connected to sewage treatment plants.

Of the 360,000 septic systems in Suffolk, more than 250,000 were built before 1972, when septic tanks were not required.

Excess levels of nitrogen have impaired waters, cause algal blooms, depleted oxygen levels, and destroyed aquatic coastal barriers and storm bays, including marshland.

Completely bringing sewage to Suffolk would cost an estimated $9 billion and remove 5 percent of nitrogen seeps into bays and harbors.

Bellone has made stopping nitrogen pollution from septic tanks and cesspools his top priority.

Cuomo’s office said the first phase of the project has already begun and the money for the second portion is being dealt out.
SUFFOLK COUNTY COASTAL RESILIENCY INITIATIVE

VOTER APPROVAL MEANS $360 MILLION IN PROJECTS WILL CONNECT NEARLY 6,500 PARCELS

JANUARY 22, 2019 – PUBLIC VOTE/REFERENDUM

TOP STORIES

Two Sewer Plans OK’d

Mastic, Babylon

Mastic and Babylon voters say yes; Great River, no

BY DAVID M. SCHWARTZ

Mastic and Babylon voters on Tuesday approved two sewer projects that will serve 4,800 homes, Suffolk’s largest sewer expansion since the 1970s, while Great River voters rejected a measure to expand service into their community.

The $6 million worth of approved sewer expansions will be under federal and state permits. Construction is expected to start next year.

This is a major victory for water quality in Suffolk County, said Peter Novik, a deputy county executive under County Executive Steve Bellone.

The county would add $7.5 million in non-reimbursable federal and state grants to the Great River project. Mastic would add $7 million in federal and state grants, according to the Suffolk County Board of Legislators. The project would pay to sewer area 12,000 homes and businesses along the Connetquot River, including a commercial center along Montauk Highway and construction of a new sewage treatment plant at Brookhaven CDPW Airport, according to the county.

In West Babylon, North Babylon and Wyandanch around the Connetquot River, residents voted 223-209 in favor of expanding 2,507 homes at a cost of $162.2 million in grants.

Voters at Great River, along the Connetquot River, voted 230-204 in favor of the proposal that would have connected 415 homes at a cost of $50.4 million. After the referendum, a report on the sewers in the existing Southwest Sewer District would be paid for and sewers would be connected 11,300 homes within the sewers District at South Setauket, according to the county. The project would be paid for through a $500 bond in each home.

An anonymous mayor has passed away against the county’s challenge, it said. The mayor’s office announced the mayor’s death on Sunday, and the mayor’s office said the mayor’s death has been confirmed by the county. The mayor, who had reported the mayor’s death to the county, died of a heart attack. The mayor’s death has been confirmed by the county. The mayor’s death has been confirmed by the county.

Forge River

86% voter approval – PASSED

Carlls River

88% voter approval – PASSED

Patchogue River

No referendum required

Connetquot River

44% voter approval – FAILED

A voter at the Mastic Fire Department on Tuesday cast a ballot on the proposal of a $360 million sewer project along the Fort River. The voter agreed in July to convert a $50 million loan into a grant, reducing the amount to be taken care of by the voters to $50 million. The project would pay the $50 million to pay the $50 million.

The voter said that the $50 million loan would pay the $50 million to pay the $50 million. The voter said that the $50 million loan would pay the $50 million to pay the $50 million.

Voter approval means $360 million in projects will connect nearly 6,500 parcels
Suffolk County
Subwatersheds Wastewater Plan
Project Update
SWP PRIMARY RECOMMENDATION
COUNTY-WIDE PHASED WASTEWATER UPGRADE PROGRAM

Phase I “Program Ramp Up” includes:

- **I/A OWTS for New Construction/Addition**
- **Increase allowable flow of App. A systems to 30,000 gpd**
- Implement SCCRI sewer connections ($440M existing Federal funding) plus connections within SWSD
- Establishment of revenue source/CWMD
- Continue I/A OWTS voluntary incentives
- Continue industry/RME ramp up

172,000 upgrades*  
30 years

76,000 upgrades*  
15 Years

131,000 upgrades  
Timeframe TBD

*Wastewater upgrades include use of I/A OWTS, connection to sewers, or clustered/decentralized systems. Use of I/A OWTS to be facilitated through changes to the Suffolk County Sanitary Code. Systems may be upgraded voluntarily, upon existing system failure, upon major building renovation, or at property transfer.
SEQRA STATEMENT OF FINDINGS

PRIMARY CONCLUSIONS

The Proposed Action represents the only alternative capable of achieving the goals of the program

- No significant adverse environmental impacts
- The Proposed Action will result in:
  - Clearer surface waters through improved water clarity
  - Increased dissolved oxygen in surface waters
  - A significant reduction in the concentration of nitrogen in the sole-source aquifer
- Nitrogen discharge from onsite wastewater represents the single greatest factor that can be managed to restore and protect our waters from the impacts of nutrient enrichment-related water quality degradation
- Clearly delineates triggers for further SEQRA review
Resolution 215-2020 **unanimously approved** on 3/17/2020

Satisfies SEQRA requirements for Subwatershed Wastewater Plan policy recommendations and allows them to advance without additional SEQRA review***
RESOLUTION NO 702-2020

REQUIREMENTS FOR I/A OWTS FOR NEW OR EXPANDED CONSTRUCTION AND REVISIONS TO APPENDIX A TREATMENT SYSTEMS

- **Unanimously approved** by SC Legislature on 10/6/2020
- **Unanimously approved** by SC BOH on 10/21/2020
- Broad and unprecedented support from regulatory, government, environmental, industry, builders, and other NGOs
RESOLUTION NO 702-2020
REQUIREMENTS FOR I/A OWTS FOR NEW OR EXPANDED CONSTRUCTION AND REVISIONS TO APPENDIX A TREATMENT SYSTEMS

➢ New or Expanded Construction
  ● Effective for residential and commercial applications submitted to the Office of Wastewater Management on or after July 1, 2021
  ● Exemptions for parcels within existing or proposed sewer districts, minor reconstruction, and projects with five bedrooms or less.

➢ Appendix A Modified Sewage Disposal Systems
  ● Increase allowable flow from 15,000 gpd to 30,000 gpd
  ● Reduce setbacks in settings where reduced setbacks can be accommodated (e.g., commercial, industrial, mixed use)
OTHER NEWS

- **SWP approved as a NYSDEC Nine Elements Plan**
  - Approved 8/7/2020
  - "The County's 9E Plan is the first of its kind, as it addresses nitrogen pollution throughout an entire county. No other county has completed such a plan. DEC intends to employ Suffolk County's groundbreaking 9E Plan as an example for others,"
    - Jim Tierney, Deputy Commissioner for the NYSDEC.
  - Watersheds in 9E Plan receive higher scoring for NYS WQIP awards
    [https://www.dec.ny.gov/chemical/103264.html](https://www.dec.ny.gov/chemical/103264.html)

- **SWP GIS layers are now available**
I/A OWTS Program
Project Update
Suffolk County, NY
PROVISIONALLY APPROVED I/A OWTS

- Hydro-Action
- Fuji Clean System
- Norweco Singulair TNT
- Norweco Hydrokinetic
- SeptiTech STAAR
- Orenco Advantex AX-RT
- Orenco Advantex AX-20
- Ecoflo Coco Filter + Denite
CUMULATIVE BI-MONTHLY SAMPLING RESULTS FOR PROVISIONALLY APPROVED I/A OWTS

65 mg/L represents average conventional septic effluent

2017 Cumulative Average of 25.9 mg/L - 4 Technologies Approved
2018 Cumulative Average of 17.7 mg/L - 6 Technologies Approved
2019 Cumulative Average of 16.0 mg/L - 8 Technologies Approved
# 12-Month BI-Monthly Sampling Results for Provisionally-Approved I/A OWTS (1/2019 - 12/2019)

**65 mg/L - Average Conventional Septic System Effluent**

**2017 Average of 25.9 mg/L - 4 Technologies Approved**

**2018 Average of 16.4 mg/L - 6 Technologies Approved**

**2019 Average of 15.0 mg/L - 8 Technologies Approved**

---

**30 mg/L – Trigger for Major Violation**

**19 mg/L Suffolk County Standard – Trigger for Minor Violation**

<table>
<thead>
<tr>
<th>Provisionally-Approved I/A OWTS Technologies</th>
<th>9.43</th>
<th>18.2</th>
<th>26.6</th>
<th>11.2</th>
<th>14.5</th>
<th>9.5</th>
<th>21.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norweco Singulair</td>
<td>86 Samples</td>
<td>30 Samples</td>
<td>44 Samples</td>
<td>104 Samples</td>
<td>19 Samples</td>
<td>24 Samples</td>
<td>4 Samples</td>
</tr>
<tr>
<td>Norweco Hydro-Kinetic</td>
<td>20 Systems</td>
<td>30 Samples</td>
<td>44 Samples</td>
<td>104 Samples</td>
<td>19 Samples</td>
<td>24 Samples</td>
<td>4 Samples</td>
</tr>
<tr>
<td>Orenco AX-RT</td>
<td>14 Systems</td>
<td>44 Samples</td>
<td>104 Samples</td>
<td>19 Samples</td>
<td>24 Samples</td>
<td>4 Samples</td>
<td>4 Samples</td>
</tr>
<tr>
<td>Fuji Clean</td>
<td>14 Systems</td>
<td>44 Samples</td>
<td>104 Samples</td>
<td>19 Samples</td>
<td>24 Samples</td>
<td>4 Samples</td>
<td>4 Samples</td>
</tr>
<tr>
<td>SeptiTech</td>
<td>20 Systems</td>
<td>104 Samples</td>
<td>19 Samples</td>
<td>24 Samples</td>
<td>4 Samples</td>
<td>4 Samples</td>
<td>4 Samples</td>
</tr>
<tr>
<td>Orenco AX-20</td>
<td>11 Systems</td>
<td>19 Samples</td>
<td>24 Samples</td>
<td>4 Samples</td>
<td>4 Samples</td>
<td>4 Samples</td>
<td>4 Samples</td>
</tr>
<tr>
<td>EcoFlo Coco Filter + Denite</td>
<td>2 Systems</td>
<td>4 Samples</td>
<td>4 Samples</td>
<td>4 Samples</td>
<td>4 Samples</td>
<td>4 Samples</td>
<td>4 Samples</td>
</tr>
</tbody>
</table>
### Septic Improvement Program

**Statistics as of 10/1/2020**

- 3,207 SIP Applicants to-date
- 1,128 Issued SIP Grant Agreements to-date

#### Monthly Application Breakdown

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>56</td>
<td>31</td>
<td>28</td>
<td>22</td>
<td>21</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>23</td>
<td>5</td>
<td>15</td>
<td>20</td>
<td>18</td>
<td>17</td>
<td>14</td>
<td>16</td>
<td>18</td>
<td>27</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>40</td>
<td>58</td>
<td>67</td>
<td>64</td>
<td>41</td>
<td>62</td>
<td>51</td>
<td>69</td>
<td>97</td>
<td>124</td>
<td>86</td>
<td>61</td>
</tr>
<tr>
<td>2020</td>
<td>111</td>
<td>88</td>
<td>72</td>
<td>74</td>
<td>55</td>
<td>73</td>
<td>81</td>
<td>78</td>
<td>88</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Began Implementation of expanded SIP Program
Program Launched on July 3, 2017
State SSRP Funding Announced
Began Implementation of SSRP Funds

2019 Capacity to process 80 applicants per month
2017 Capacity to process 17 applicants per month

SIP & SSRP Monthly Application Rate
July 3, 2017 – July 1, 2020
42% of Installed Systems Replaced Existing Failed Septic Systems or Cesspools

Average 2020 County Grant Amount = $11,543

Septic Improvement Program Financial Allocations

<table>
<thead>
<tr>
<th></th>
<th>Total Funding Allocated to Program from 2017 - 2020</th>
<th>Amount Expended</th>
<th>Amount Allocated</th>
<th># of Grants Remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>County SIP</td>
<td>$11,700,000</td>
<td>$6,217,072.72</td>
<td>$10,807,242.99</td>
<td>59 - 76 grants</td>
</tr>
<tr>
<td>State SSRP</td>
<td>$10,025,000</td>
<td>$4,950,780.97</td>
<td>$9,20,638.47</td>
<td>20 grants</td>
</tr>
</tbody>
</table>

INSTALLATIONS BY YEAR

<table>
<thead>
<tr>
<th></th>
<th>2017 (Started 7/3/2017)</th>
<th>2018</th>
<th>2018</th>
<th>2020 (as of 10/1/2020)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>8</td>
<td>50</td>
<td>241</td>
<td>285</td>
</tr>
</tbody>
</table>

TOTAL OF 584 SIP / SSRP installations as of 10/1/2020
Resolution No. 558-2020

Appropriating an Additional $3.7M for the Septic Improvement Program

➢ $3.7 million in additional funds to SIP to keep up with program demand and continue to build momentum of the Reclaim Our Water initiative.

● Exponential program growth since rollout of the NYS SSRP ($10K of additional funds per applicant).

● Extensive outreach and a streamlined permitting process for failed cesspools to I/A OWTS.

● Surge in existing system failures and program demand due to increased.
What’s Next: 2020/2021

1. Develop STP Capacity Strategy
   a. Develop work plan/scope of work (Q3/Q4 2020)
   b. Collect data/implement work plan (2021)
   c. Synthesize data/develop recommendations (Q4 2021)

2. EHIMS I/A OWTS Integration (Q4 2020)

3. Develop strategy for large commercial systems >1,000 gpd
   a. Identify priority parcels (scanning/indexing) (Q1/Q2 2021)
   b. Issue RFP and for scanning and indexing (Q4 2021)
   c. Develop recommended sanitary code/standard revisions (Q4 2021)

4. Continue SIP/Industry Growth (additional $2M in County funds and ??? in NYS SSRP funds)

5. Evaluate Alternatives for Stable and Recurring Revenue Source (2020/2021)

6. Develop Adaptive Management and Long-Term Monitoring Plan (Q3 2021)
   a. STP flow rates, I/A systems, and conventional septics/cesspools
   b. Aquifer-wide, priority watershed-specific, pilot/demo/implementation
   c. Contaminants of Emerging Concern

7. I/A OWTS Technology and Program Enhancements
Questions?

Ken Zegel, PE, Principal Public Health Engineer
Ken.Zegel@SuffolkCountyNY.gov
631-852-5809

Julia Priolo, Senior Environmental Analyst
Julia.Priolo@SuffolkCountyNY.gov
631-852-5938