



Nassau County



S.E.P.T.I.C. Program



Coastal Wastewater Solutions, LLC



SOIL & WATER CONSERVATION DISTRICT

Nassau County's Septic Environmental Program To Improve Cleanliness (S.E.P.T.I.C.) Program

2023 Program Update



Onsite Wastewater Mega-Conference

2023
Hampton, Virginia



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SOIL & WATER
CONSERVATION DISTRICT

Nassau County Soil & Water Conservation District

- **WHO WE ARE**

- Soil and Water Conservation Districts are political subdivisions of the state that were created by an Act of the President in 1937, and currently number over 3,000.

- **OUR MISSION**

- To coordinate assistance from all available sources, public and private, local, state and federal, to develop solutions to local natural resource concerns.

- **WE PROVIDE**

- Programs and services to all Nassau County residents and municipalities to manage natural resources through education and technical assistance.

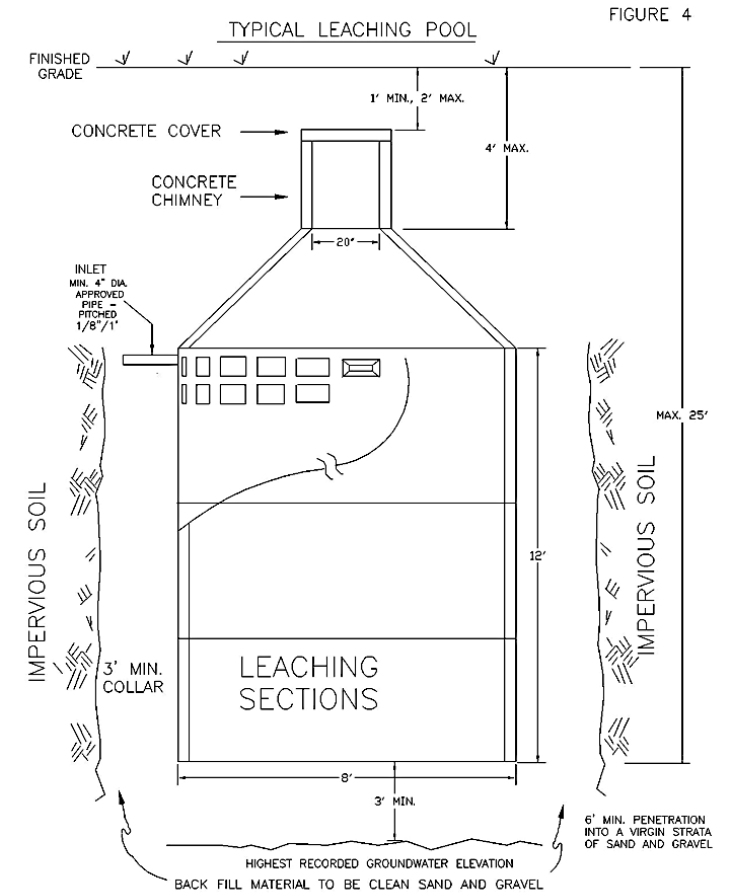
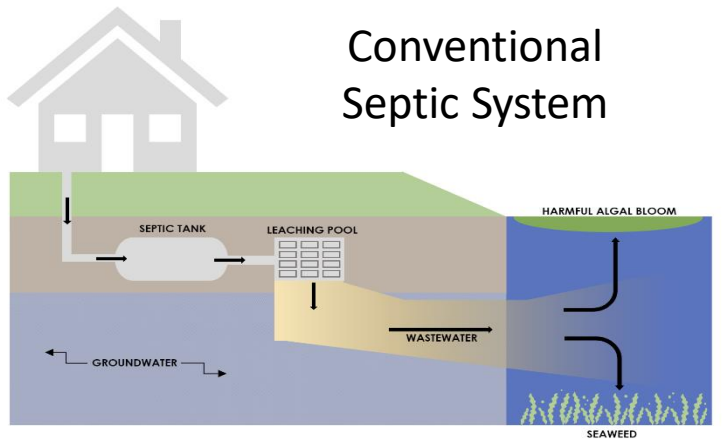
- **CURRENT PROJECTS INCLUDE**

- S.E.P.T.I.C. Program (replacement grants)
- Trail maintenance
- Green infrastructure
- Community Education and outreach

DISCLAIMER:

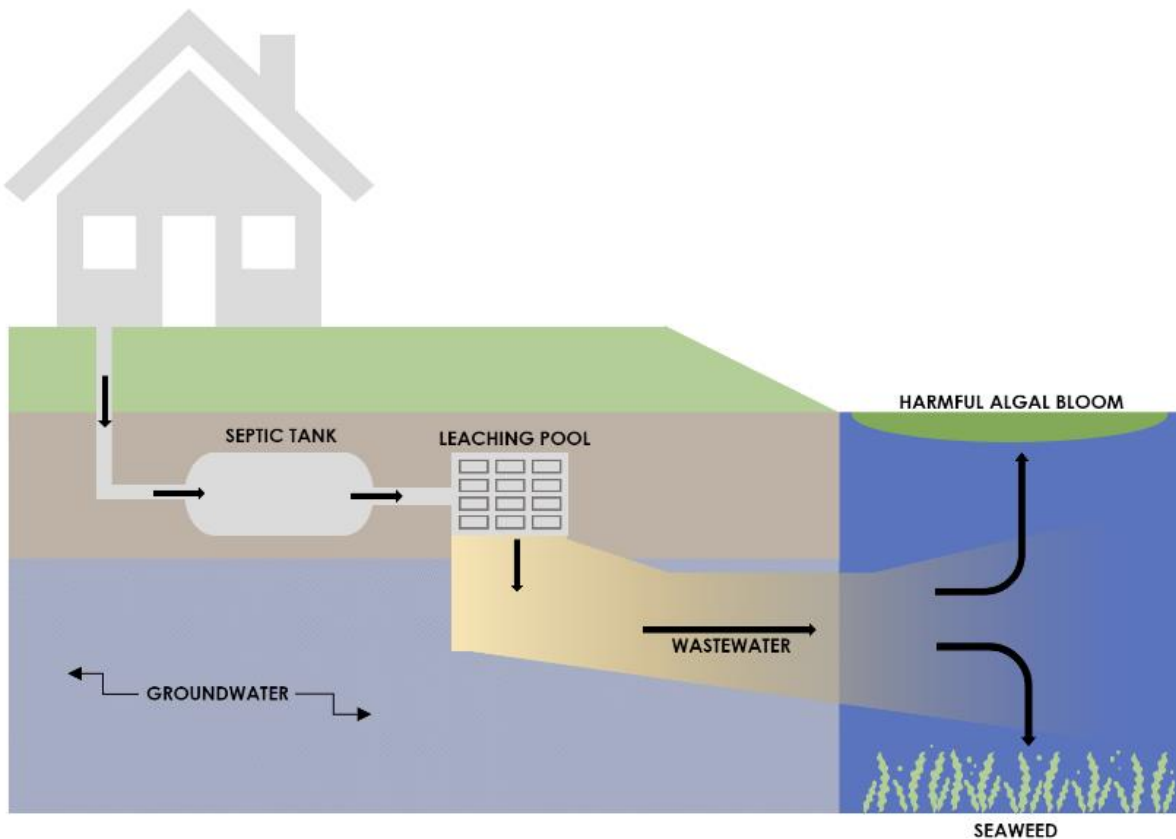
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Typical Conventional Septic Systems Found on Long Island

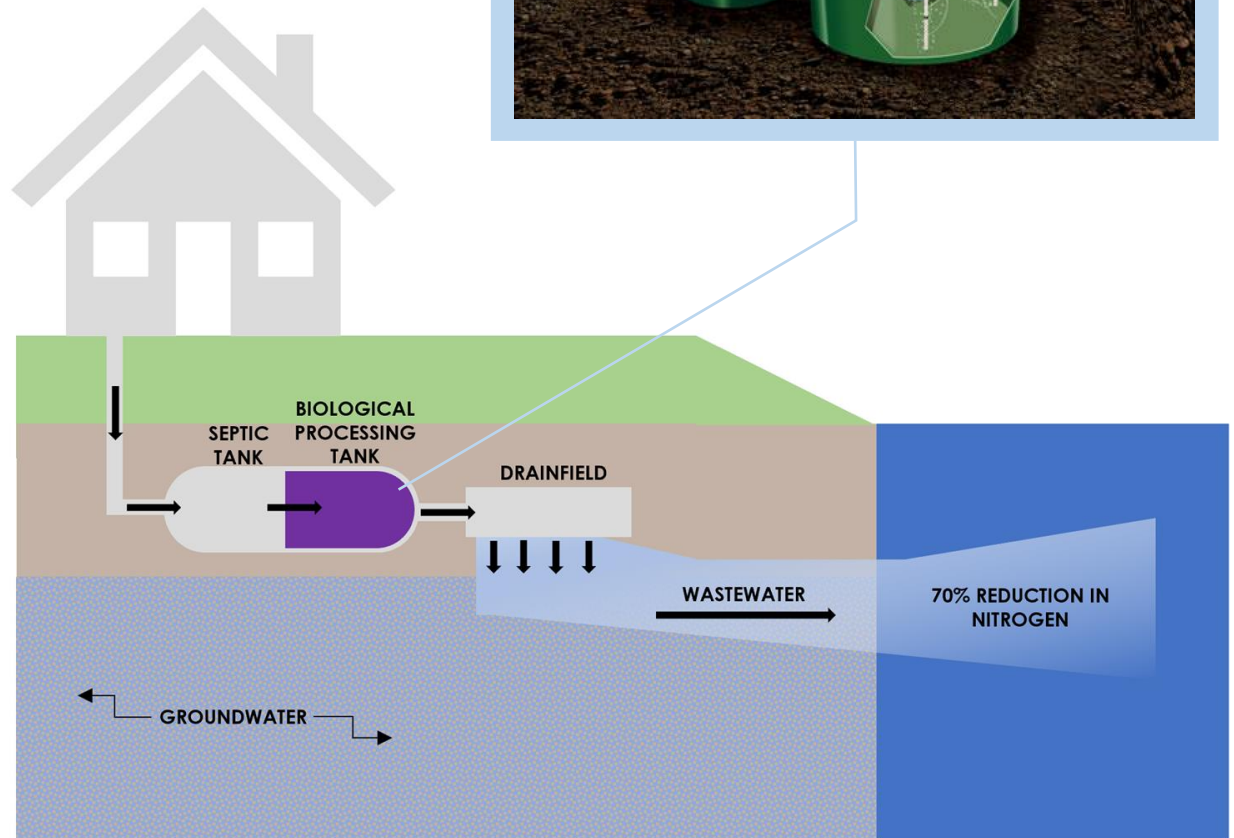


- Over 425,000 On-Site Systems on LI, Hundreds of thousands of cesspools
- 74% of Suffolk County is unsewered, 90 % of Nassau's North Shore is Unsewered
- HAB's, Shellfishing Impacts, Coastal Resiliency, Public Bathing Beaches

“Innovative Advanced (I/A) OWTS” can reduce nitrogen outputs into groundwater by up to 70%.



CONVENTIONAL SEPTIC TANK

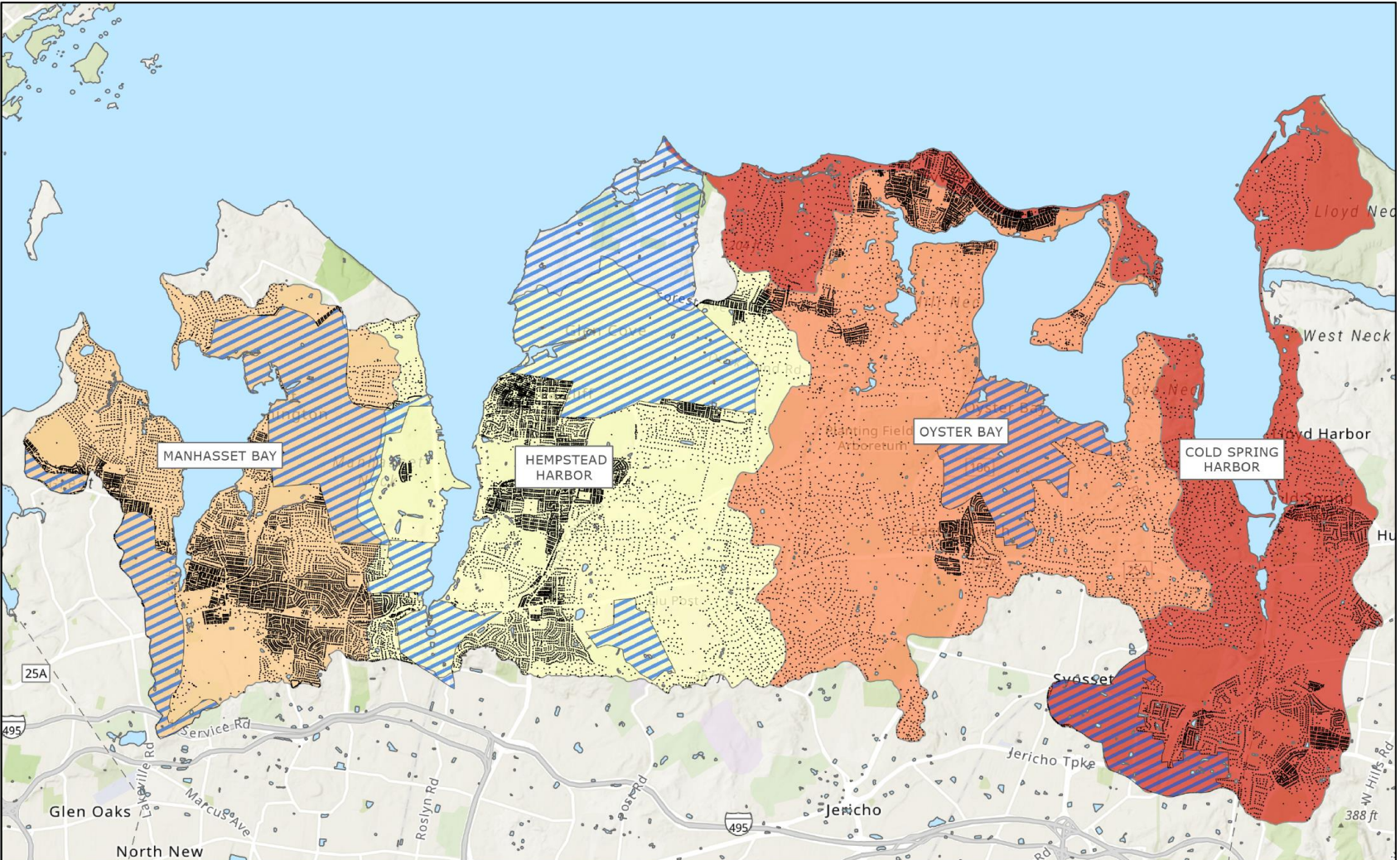
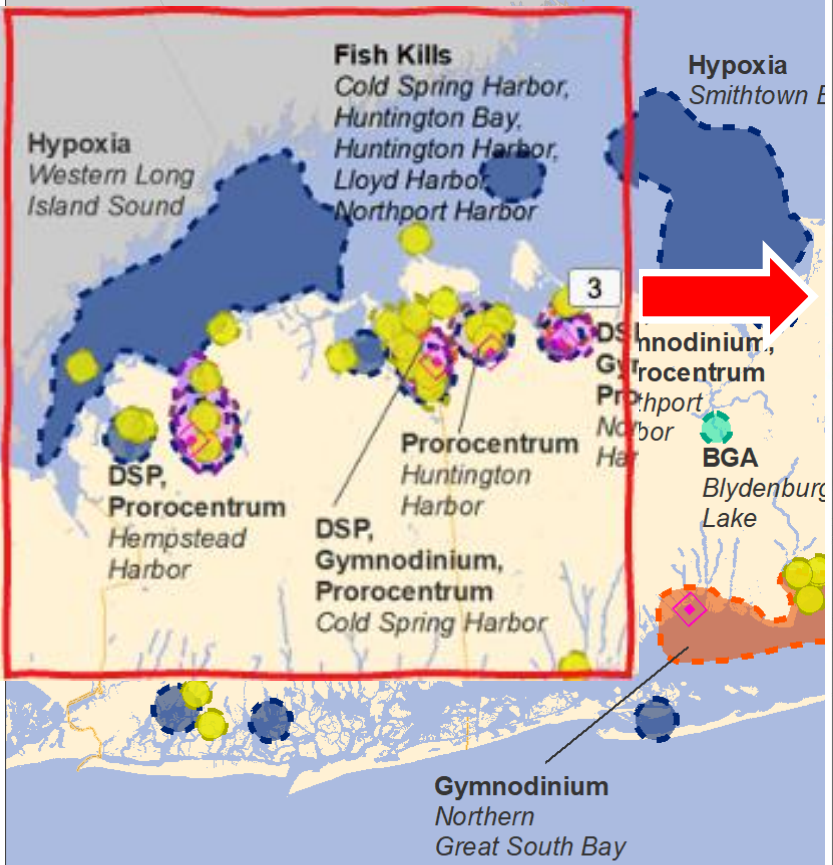


NITROGEN-REDUCING IA SEPTIC TANK



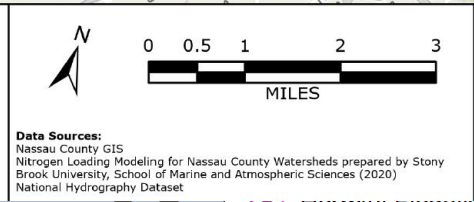
Long

Please note that the locations digitized are approximate and a lack of area highlighted is not confirmation that an imp...
 The Nature Conservancy makes no warranty as to the accuracy or reliability of any content.



NORTH SHORE OF LONG ISLAND WATERSHED NITROGEN-REDUCTION TARGETS

- LEGEND:**
- APPROXIMATE SEPTIC TANK LOCATION
 - ▨ SEWAGE SERVICE AREA WITHIN WATERSHED BOUNDARY
 - ▨ WATERSHED BOUNDARY AND % NITROGEN REDUCTION TARGET
 - 19.5% HEMPSTEAD HARBOR
 - 42.2% MANHASSET BAY
 - 48.7% OYSTER BAY
 - 63.3% COLD SPRING HARBOR

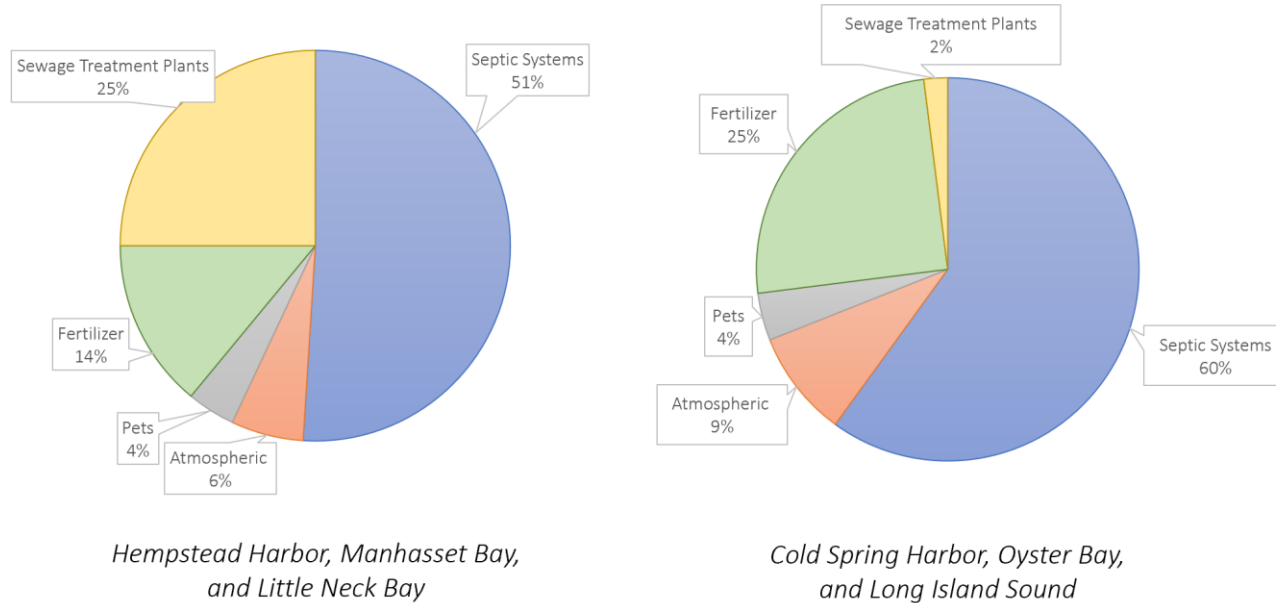


Data Sources:
 Nassau County GIS
 Nitrogen Loading Modeling for Nassau County Watersheds prepared by Stony Brook University, School of Marine and Atmospheric Sciences (2020)
 National Hydrography Dataset

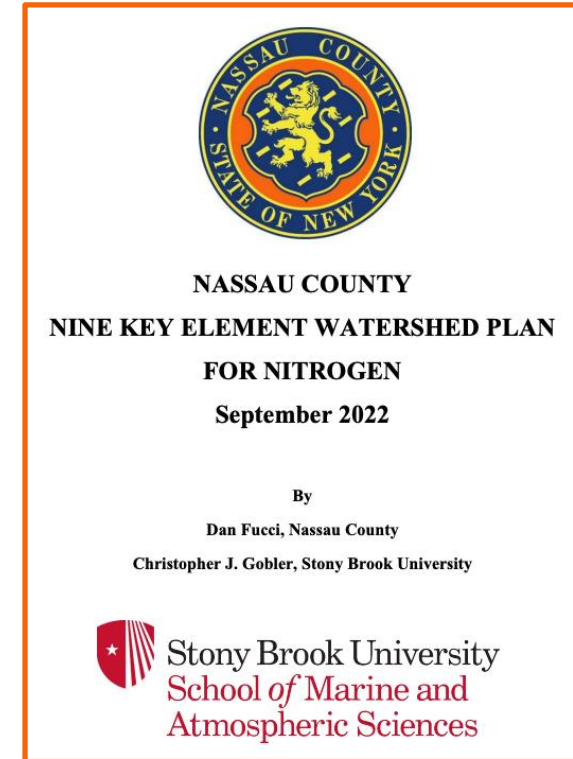


LINAP & 9 Element Plan

Distribution of Nitrogen to North Shore of Long Island

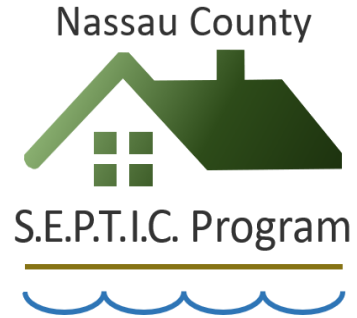


Data from Stony Brook University's Nitrogen-Loading Modeling for Nassau County Subwatersheds.



- Nassau County's Nine Key Element Watershed Plan for Nitrogen sets a goal of providing financial incentives of \$20,000 to upgrade 2,000 eligible properties by 12/31/2032.
- The Program has received \$14 million of the required \$40 million to date.
- In 2023 the District will publish a 10-year implementation plan that will allow us to leverage existing funds and pursue additional funding sources to achieve this aggressive but achievable goal.

Nassau's S.E.P.T.I.C. Program – Overview



- Administered by the District on behalf of Nassau County
- Launched in May of 2021
- Provides State and County financial incentives of up to \$20,000 to applicants looking to replace existing onsite systems with nitrogen-reducing technologies

Join the Nassau County Septic Replacement Program

Help keep Long Island waterways clean by replacing your conventional or failing septic system with a new innovative advanced onsite wastewater treatment system. Eligible Applicants will receive a **\$20,000** reimbursement for installing a nitrogen reducing septic system on their property.

[Click here to learn more about the program](#)



Funding

- The NY Clean Water Infrastructure Act of 2017 established the “State Septic System Replacement Fund” and allocated \$75 million to support a multi-year program
 - \$4,000,000 has been awarded to Nassau to date
- Nassau County has provided \$4,030,000 through ARPA, to provide a combined grant of up to \$20,000



IRS Says Septic Rebates Will Not Be Taxed; Refunds Coming for Some Who Paid Taxes

Taxability of Grants on L.I.

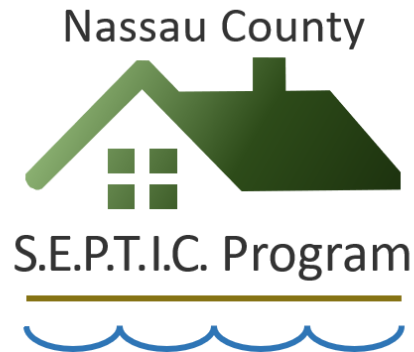
- U.S. Senator Chuck Schumer announced Nov. 22 that **the U.S. Department of Agriculture had ruled that Suffolk County taxpayers should not receive 1099s**
- Per IRS announcement 2022-26, **Nitrogen-reducing septic system grants payments do not have to be included in the gross income** of the payment recipients for Federal income tax purposes



DISTRICT'S RESPONSIBILITIES & 5-PRONGED APPROACH

to the Evolution to IA Septic Systems, as outlined in 9 Element Plan

1. Develop Capacity to Evaluate, Approve, Permit, and Regulate Technologies
2. Train, Inform, and Prepare the Industry and Public on Nutrient Reducing Technologies
3. Update Outdated Regulations (Code, Ordinances, Guidance Documents and Memos)
4. Promote Implementation of Advanced Treatment in Priority Areas
5. Public Funding to Incentivize Large Number of Installation & Eventually the Development of Long-Term Funding Sources



Nassau's S.E.P.T.I.C. Program – Qualifying Properties

- Single family or two-family homes, not-for profit organizations, municipalities, and small businesses.
- Sanitary design flow less than 1,000 gallons per day.
- Replacement of an existing septic system or cesspool with IA OWTS.
- Must have been approved by the local permitting authority.
- Property has no tax liens or active foreclosure actions.
- Have a valid certificate of occupancy of existing use issued by city, town or village.
- Property is not located within an existing or proposed sewer district.
 - If the property is in an existing sewer district but is unable to connect due to site constraints documented by the Sewer District in question, the property may be eligible.



Nassau's S.E.P.T.I.C. Program – Eligible Costs

Costs must be reasonable and necessary, and include but are not limited to:

- Site Evaluation and Design
 - Soil Borings
 - Perc Tests
 - Engineering Plans
- I/A OWTS materials and necessary components
- Electrician costs
- Labor for installation, excavation, backfilling and leaching structures
- Three-year warranty for the I/A OWTS



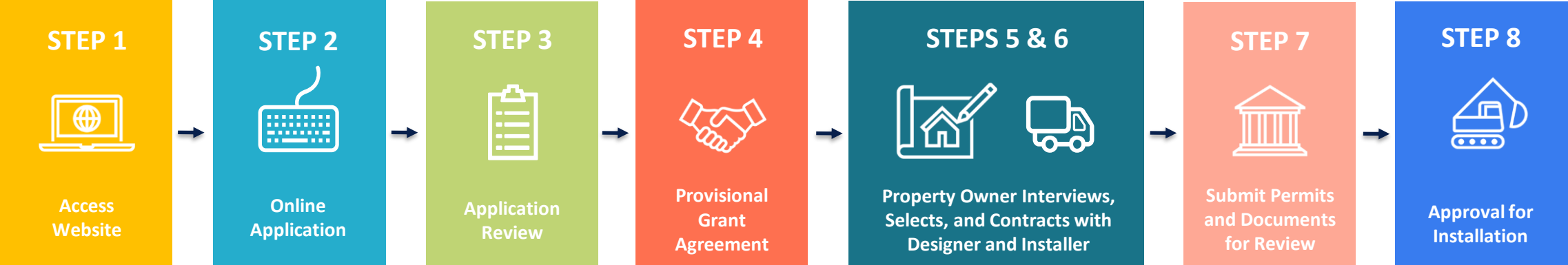
Nassau's S.E.P.T.I.C. Program – Ineligible Costs

- Irrigation repairs & beautification
- Fees, fines, or penalties (includes permit fees)
- Pumping, decommissioning, and abandonment
- Inspection, operation, and maintenance expenses
- Any expenses that are not appropriately documented or exceed the \$20K grant award

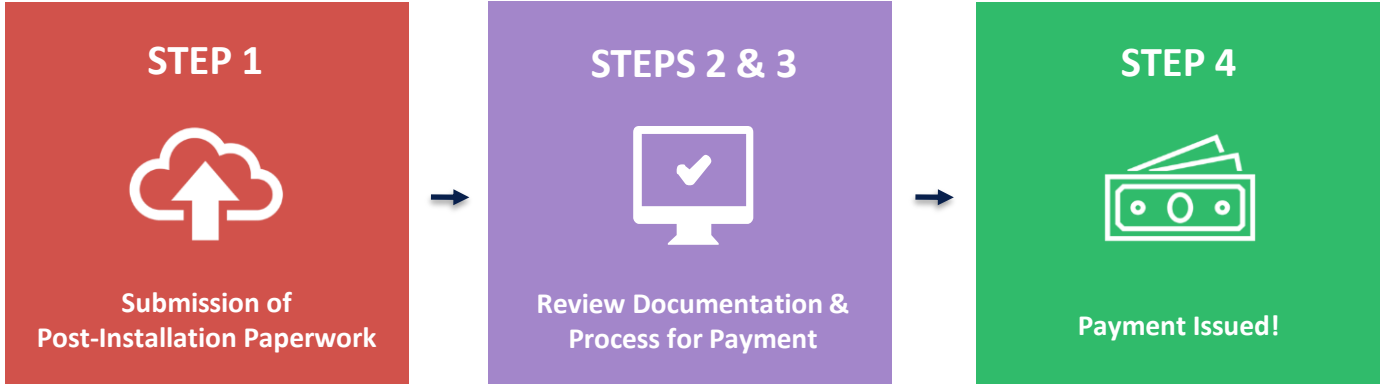


Nassau's S.E.P.T.I.C. Program – Streamlined Workflow

Part 1: Electronic Application Process



Part 2: Payment Process



Types of Payment:

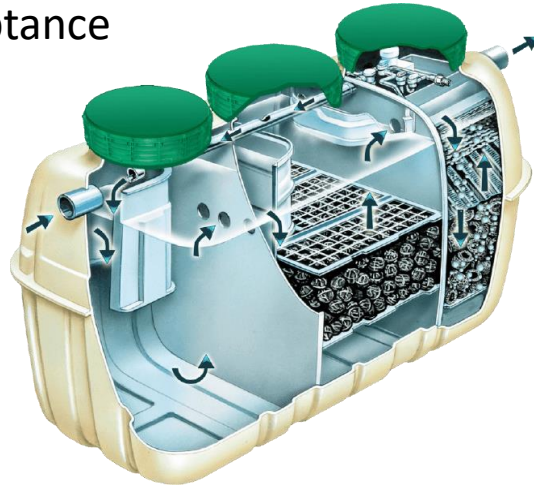
1. Reimbursement
2. Two-Party-Authorization

Nassau's S.E.P.T.I.C. Program – Accepted Technologies

General Use Acceptance



Hydro-Action AN Series



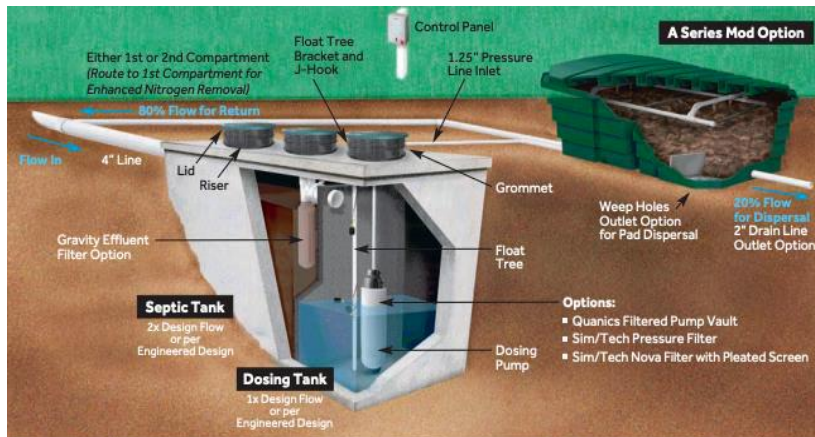
Fuji Clean CEN Series



Norweco HydroKinetic



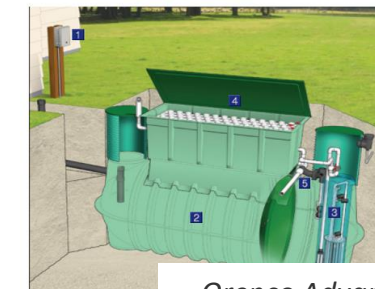
SeptiTech STAAR



Anua - BioCoir Coconut Fiber Biofilter (A Series & IM Series)



Piloting Acceptance
Limited to 12 Installations with Restrictions



Orengo Advantex AX-20

Typical backyard configuration of an AdvanTex® Treatment System.
 The system has five main functional parts:
 1 VeriComm® web-based monitoring system†
 2 Processing tank
 3 Biotube® pumping package
 4 AdvanTex filter
 5 Recirculating splitter valve
 † MVP digital programmable panels are available as an option in some markets.
 Other configurations and models available.

Provisional Use Acceptance

Average S.E.P.T.I.C. Installation Costs

Note: these numbers are representative of all installations completed within our program to date.

Average Cost - \$27,115.03

NOTE:

- This reflects total installation and design fee costs
- Grants are meant to offset and incentivize IA systems over conventional systems and cesspools
- Applicants should expect out-of-pocket expenses



Nassau's S.E.P.T.I.C. Program – Operating & Maintenance Costs

Maintenance Costs Associated with Clean-Water Septic Systems

ANNUAL SERVICE DETAILS

- ✓ \$300 - \$400.00 a year
- ✓ Site Visit every 6-months
- ✓ First 3-years included with Project Participation
- ✓ Check Controls and Panel Function
- ✓ Inspect and Clean filters, floats, and pump intake
- ✓ Inspect tank compartments and measure solids accumulations



SYSTEM MANUFACTURERS ARE RESPONSIBLE FOR IDENTIFYING, TRAINING, AND CERTIFYING SERVICE PROVIDERS IN NASSAU COUNTY, NY



Electric costs range from approximately \$60 - \$300 per year depending on the technology

Approximate Repair and Replacement Costs

Item	Cost	Life Expectancy
Blower / Aerator Replacement	\$400.00	10 years
Blower / Aerator Rebuild	\$150.00	10 years
Float Replacement	\$100.00	5 - 10 years
Recirculation Pump Replacement	\$700.00	10 years

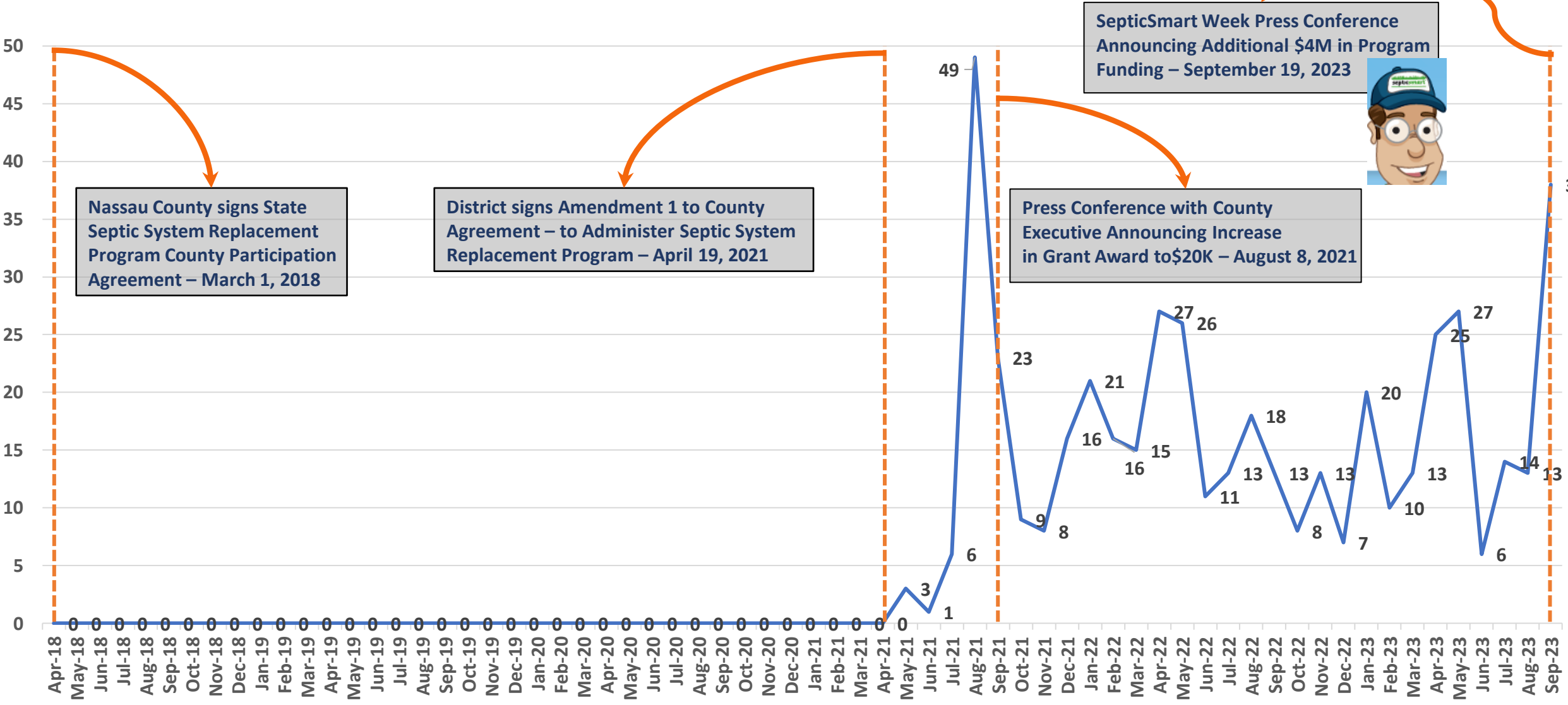
Site Constraints & Costs

- **Cost Range** -\$20,850.00 - \$69,990.00
- Individual costs are subject to site-specific challenges such as:
 - Deep Line Systems
 - Type of Leaching System
 - High Groundwater
 - Site Access
 - Plumbing, Electrical, or Utility Upgrades & Relocation
 - Town or Village Permitting Requirements
 - Driveway or Traffic Bearing Installations



Nassau's S.E.P.T.I.C. Program – Program Statistics as of 9/30/23

Nassau S.E.P.T.I.C. Applicants per month to Date



Nassau County signs State Septic System Replacement Program County Participation Agreement – March 1, 2018

District signs Amendment 1 to County Agreement – to Administer Septic System Replacement Program – April 19, 2021

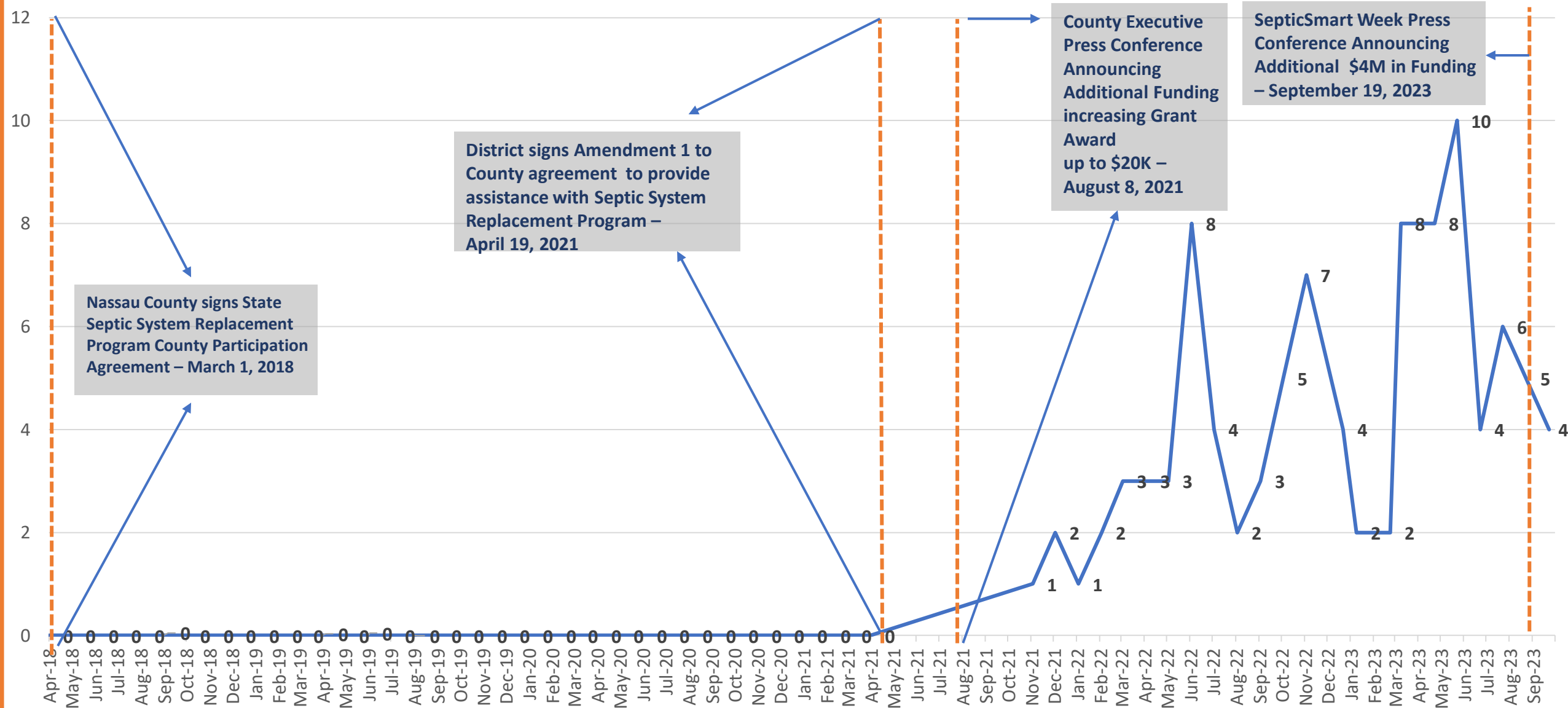
Press Conference with County Executive Announcing Increase in Grant Award to \$20K – August 8, 2021

SepticSmart Week Press Conference Announcing Additional \$4M in Program Funding – September 19, 2023



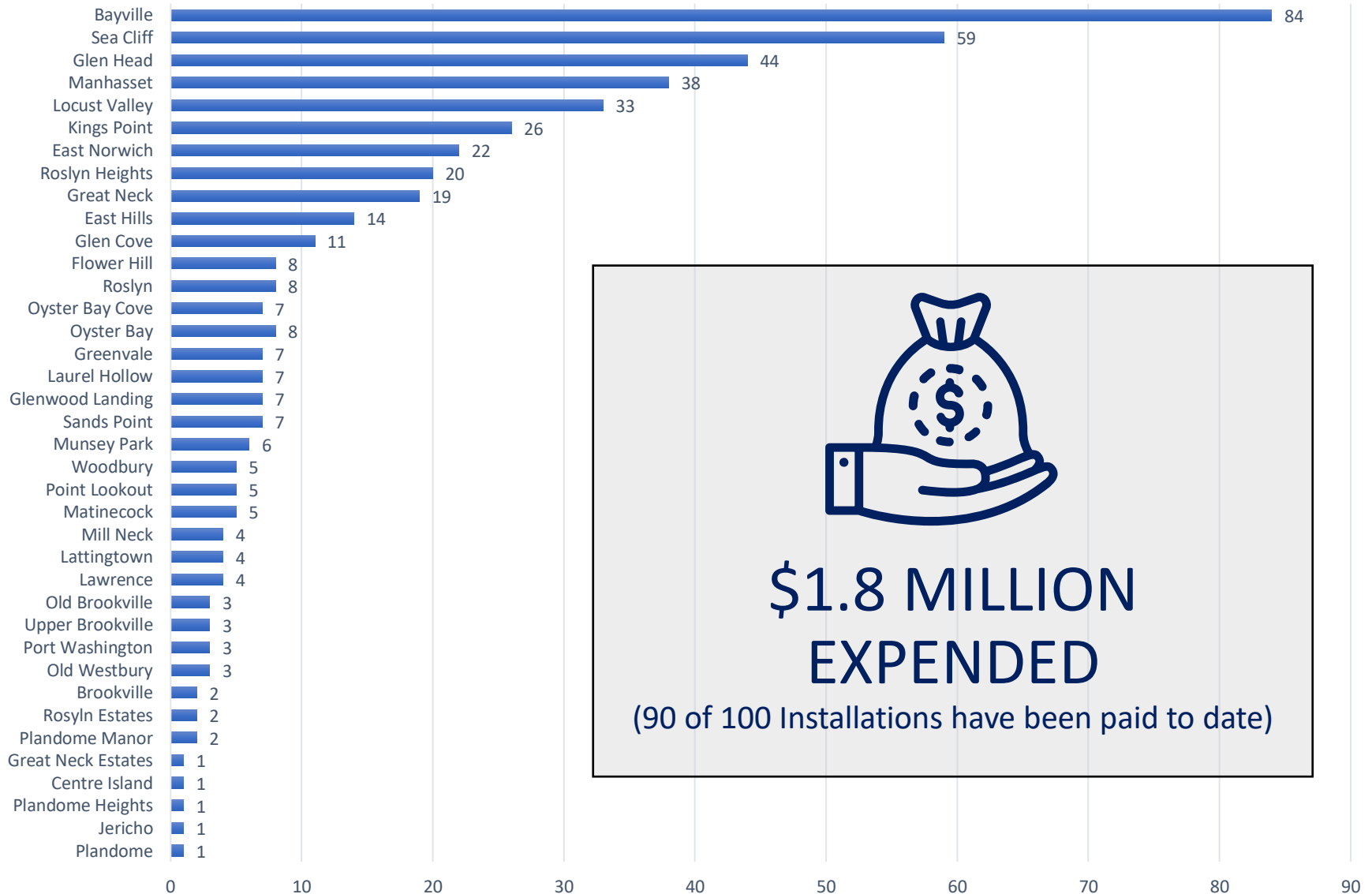
Nassau's S.E.P.T.I.C. Program – Program Statistics as of 9/30/23

Nassau S.E.P.T.I.C. Installations per month to Date



Nassau's S.E.P.T.I.C. Program – Program Statistics

Nassau County S.E.P.T.I.C. Applicants per Town / Village



NCSWCD started accepting applications in May 2021

- 529 Applications Received
- 270 Active Applicants
- 215 Grant Agreements Executed
- 100 Installations
- 14 Pending Installations

\$1.8 MILLION EXPENDED
 (90 of 100 Installations have been paid to date)

Nassau's S.E.P.T.I.C. Program – Grant Expenditures to Date

Item	Amount
Total Amount of funds allocated to Nassau County	\$8,060,000.00
Total amount of funds Reimbursed as of 09/30/2023	\$1,720,000.00
Total Amount of pending payments as of 09/30/2023	\$80,000.00
Total Amount of funds Allocated as of 09/30/2023	\$4,300,000.00
Total Amount of Unallocated Funds Allocated as of 09/30/2023	\$3,760,000.00
Average Grant Award	\$20,000.00

**FUNDING REMAINING
FOR
~ 275 GRANTS**

**BUILDING CAPACITY TO
OVER 200 PER YEAR**

\$8,060,000.00 Total Funds = 403 grants (\$20K each)

IA OWTS Installations by Year & Install Rate

Year	# of Installs	Inst. Rate (per week)	Notes
2021	5	0.14	Program Launched in May of 2021
2022	43	0.82	760% increase from 2021
2023 (as of 09/30/2023)	49	0.79	Will determine % increase at end of year
Totals	97	0.58	

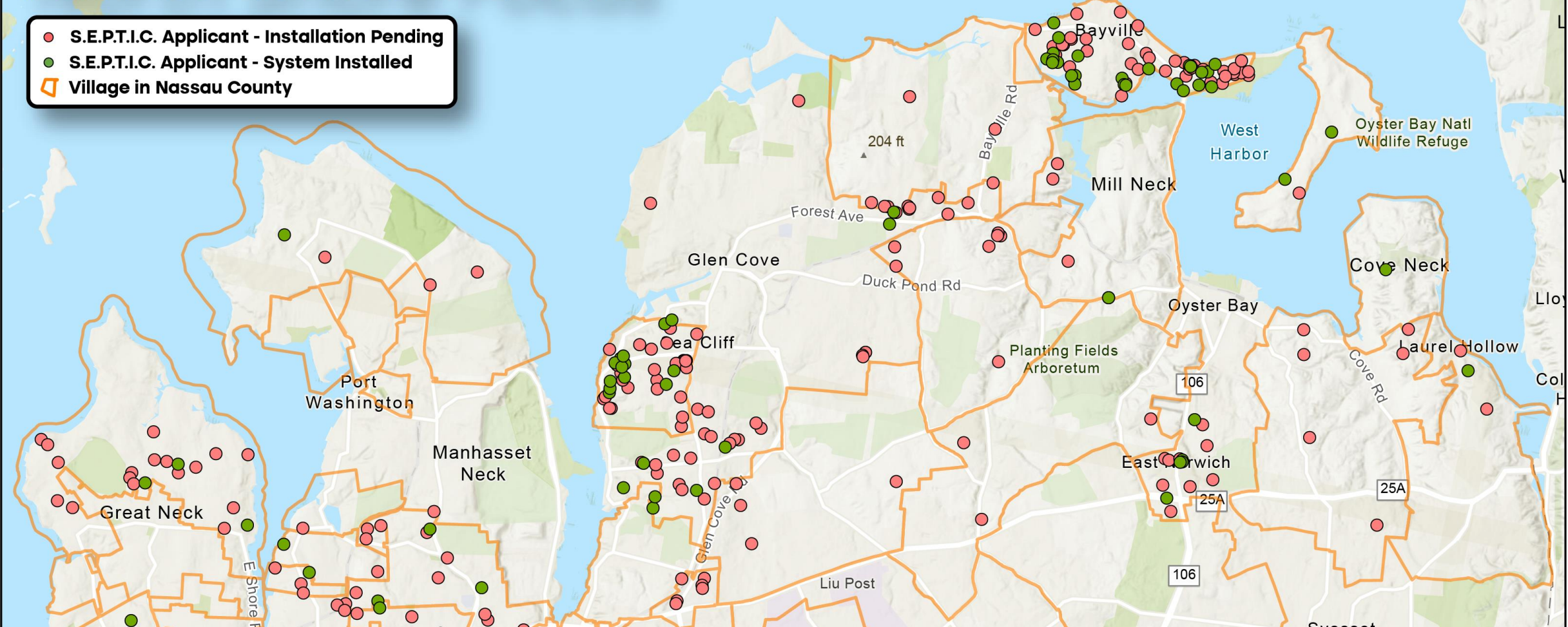


Nassau S.E.P.T.I.C. Installations

North Shore Focus



- S.E.P.T.I.C. Applicant - Installation Pending
- S.E.P.T.I.C. Applicant - System Installed
- ▭ Village in Nassau County



GRANT FUNDING: NEXT 10 YEARS

- Existing funding expected to cover 2024
 - LISS/BIL funding proposed for incentive grants to increase grants to \$25k
- County min goal of 2,000 installations over 10 years
- \$4M annually through 2032
 - \$2M commitment from NYDEC
 - \$2M commitment from Nassau County

**\$32 MILLION REQUESTED OVER 10 YEARS
(\$16 MILLION NYDEC & \$16M NASSAU COUNTY)**

PROJECTED # OF INSTALLATIONS

YEAR	#
2023	Reach 125 Installs
2024	275
2025	200
2026	200
2027	200
2028	200
2029	200
2030	200
2031	200
2032	200



**ESTIMATED
CARRY OVER**



**\$32 M NEEDED TO
FUND 1,000
ADDITIONAL INSTALLS
THROUGH THE END
OF 2032**

Next Steps

- Work toward goal of 2,000 installations and securing \$40 million in Program Funds
- Implement training for building officials and inspectors
- Continue targeted outreach in priority areas
- Implement additional management & tracking procedures
- Continue work with permitting jurisdictions to:
 - Streamline permitting & reduce overly burdensome permit requirements
 - Change outdated practices (stop allowing cesspools, focus on soil treatment areas over deep leaching)



Questions?

For more information, please contact

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