


# SUFFOLK COUNTY'S RECLAIM OUR WATER INITIATIVE



**STEVE BELLONE**  
**SUFFOLK COUNTY EXECUTIVE**

---

---

---

---

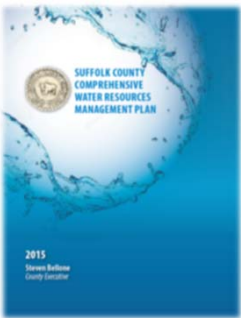

---

---

---

---

## SUFFOLK COUNTY COMPREHENSIVE WATER RESOURCES MANAGEMENT PLAN 2015



2015  
Steve Bellone  
County Executive

Topics Include:

- Value of Water
- Ways/Means to Protect Water Quality
- Wastewater Treatment
- Coastal Resiliency
- Nitrogen
- VOCs
- Pesticides
- Pharmaceuticals & Personal Care Products
- Watersheds & Integrated Ecosystem Health

---

---

---

---


---

---

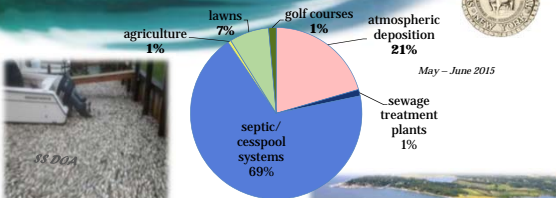
---

---




## Reclaiming Our Water



May - June 2015



Source	Percentage
septic/cesspool systems	69%
atmospheric deposition	21%
lawns	7%
agriculture	1%
golf courses	1%
sewage treatment plants	1%



---

---

---

---

---

---

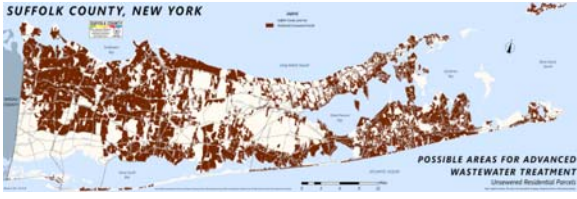
---

---

**74% NON-PERFORMING WASTEWATER TREATMENT**



- > Approximately 360,000 onsite sewage disposal system
- > 209,000 systems in priority areas
- > Approximately 252,530 pre-date requirement for septic tank



SUFFOLK COUNTY, NEW YORK

POSSIBLE AREAS FOR ADVANCED WASTEWATER TREATMENT

---

---

---

---

---

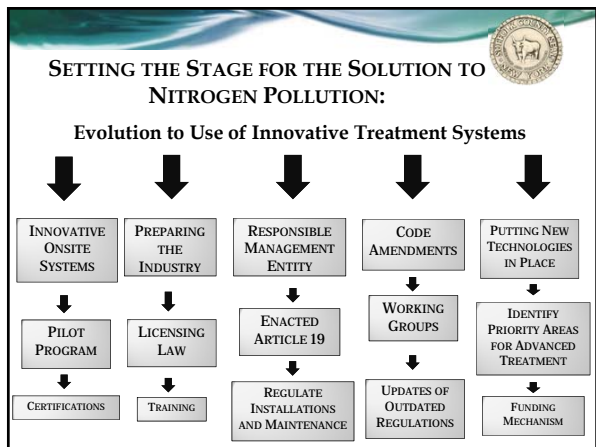
---

---

---

---

---




---

---

---

---

---

---

---

---

---

---

**SEPTIC DEMONSTRATION PROGRAM (I/A OWTS)**

- > *Phase 1 - Septic Demo Program*
  - o *Manufacturer Selection*
    - 4 manufacturers selected to install 6 types of systems for a total of 19 systems
  - o *Homeowner Selection*
    - 19 homes selected throughout the County via lottery by Legislative District
- > *Phase 2 - Septic Demo Program*
  - 6 manufacturers applied to install 8 types of systems
  - Homeowner Selection - over 207 Applicants
  - 20 homeowners selected on July 26, 2016





---

---

---

---

---

---

---

---

---

---

### SEPTIC DEMO PHASE 1 SYSTEMS



Norweco Hydro-Kinetic



Norweco Singlair TNT



Busse



Orengo AdvanTex AX20



Orengo AdvanTex AX-RT



Hydro-Action

---

---

---

---

---

---

---

---

---

---

### SUFFOLK COUNTY SEPTIC DEMO SYSTEM PERFORMANCE AS OF APRIL 2017

Technology	AVG (Mg/L)*	Provisional Approval
Hydro-Action AN Series	12 mg/L	Approved in September 2016
Norweco – Singlair TNT	18.8 mg/L	Approved in October 2016
Orengo Advantex – RT	18.8 mg/L	Approved in March 2017
Norweco – Hydro-Kinetic	18.9 mg/L	Approved in April 2017
Advantex - AX20	37.6 mg/L	Cannot project approval at this time
BUSSE - MMF	74.2 mg/L	Cannot project approval at this time

\*Standard is 19mg/L

---

---

---

---

---

---


---

---


---

---


### SEPTIC DEMO PHASE 2 SYSTEMS




1. EcoFlo Coco Filter




2. Amphidrome




3. Waterloo BioFilter




4. Pugo Systems



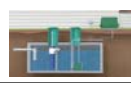
5. Fuji Clean USA



6. BioMicrobics: MicroFAST



7. BioMicrobics: SeptiTech STAAR



8. BioMicrobics: BioBarrier MBR

---

---

---

---

---

---

---

---

---

---

Phase II I/A OWTS Applicants					
	Company Name	Technology Name	Number of Systems Donated	Number of Systems Installed	Status
1	Adelante Consulting, Inc.	Pugo Systems	4	4	Could Receive Provisional Approval in fall 2017
2	Fuji Clean USA	Fuji Systems	4	2	Final Systems to be Installed by end of March 2017
3	Premier Tech Aqua	Eco-Flow Coco Filter	2	2	Could Receive Provisional Approval in fall 2017
4	f.r.mahony & associates inc	Amphidrome	2	1	Final system to be installed in April 2017
5	Waterloo Biofilter Systems Inc.	Waterloo Biofilter	2	0	To Be Installed by end of April 2017
6	BioMicrobics Inc.	SeptiTech / STARR	2	0	To Be Installed by end of May 2017
7	BioMicrobics Inc.	MicroFAST	2	0	To Be Installed by end of May 2017
8	BioMicrobics Inc.	Bio-Barrier MBR	2	0	To Be Installed by end of May 2017

---

---

---

---

---

---

---

---

---

---

### THE PRESSURIZED SHALLOW DRAINFIELDS (PSDs)

- Pressurized drainfields that evenly and horizontally distribute treated effluent within 18 inches of the top soil horizon.
- Emphasis on increased microbial activity and nutrient absorption.
- Treated effluent reductions up to 50% TN

---

---

---

---

---

---

---

---

---

---

### HOW MUCH DO I/A OWTS COST?

Cesspool Replacement*	New Septic Tank & Leaching Pool System*	I/A OWTS**
\$4,000 - \$6,000	\$6,000 - \$8,000	\$17,850

\* Assumes Typical Installation with no site constraints  
 \*\* Includes Engineering and Installation Costs  
 \*\* Provisionally Approved Material Cost Average \$7,800

---

---

---

---

---

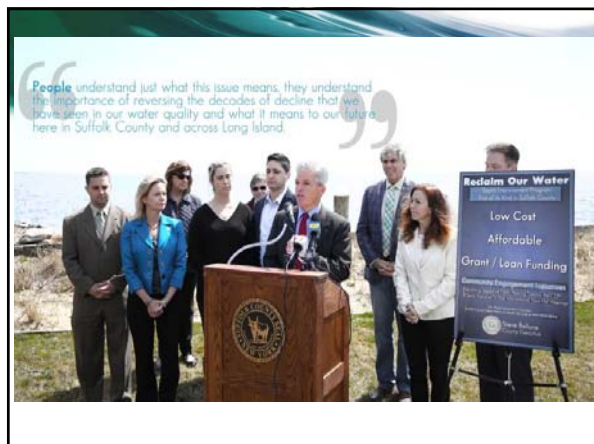
---

---

---

---

---



---

---

---

---

---

---

---

---

---

---

**SUFFOLK COUNTY'S SEPTIC IMPROVEMENT PROGRAM**

**GRANT PROGRAM DETAILS:**

- Administered by Suffolk County Department of Health Services.
- Individual homeowners may be eligible for a grant up to \$11,000.
- \$10,000 will be provided toward the purchase and installation of an approved I/A OWTS and leaching structure, as well as for attendant engineering and design services.
- An additional \$1,000 may be available for installation of Pressurized Shallow Drainfield for a maximum grant of up to \$11,000.
- All other costs, including, but not limited to, irrigation repairs, electrical improvements unrelated to system installation or other improvements necessary for the installation are to be paid by the property owner/applicant.
- Post-installation landscaping restoration is the responsibility of the property owner.

---

---

---

---

---

---

---

---

---

---

**SUFFOLK COUNTY'S SEPTIC IMPROVEMENT PROGRAM**

**GRANT ELIGIBILITY CRITERIA:**

- ✓
- ✓
- ✓
- ✓
- ✓
- ✓
- ✓
- ✓

---

---

---

---

---

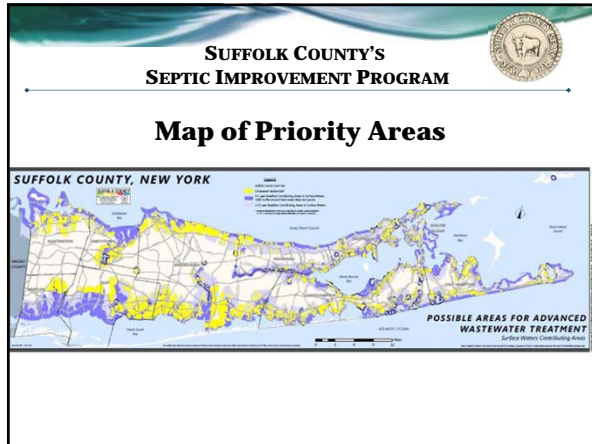
---

---

---

---

---




---

---

---

---

---

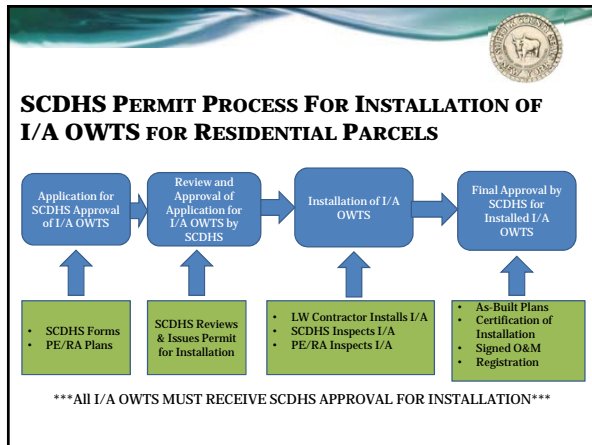
---

---

---

---

---




---

---

---

---

---

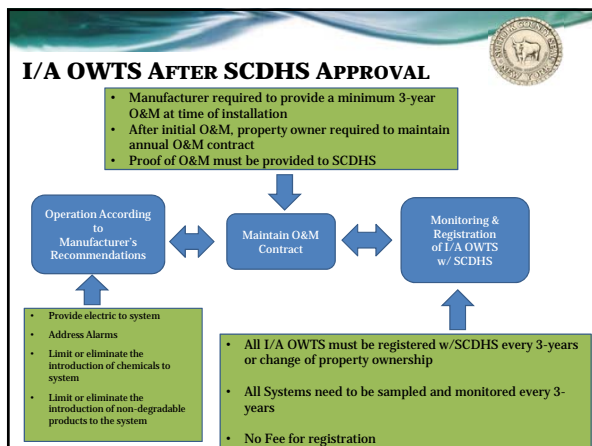
---

---

---

---

---




---

---

---

---

---

---

---

---


---

---

**HOW MUCH DO I/A OWTS COST?**

Cesspool Replacement*	New Septic Tank & Leaching Pool System*	I/A OWTS**
\$4,000 - \$6,000	\$6,000 - \$8,000	\$17,850

\* Assumes Typical Installation with no site constraints  
 \*\* Includes Engineering and Installation Costs  
 \*\* Provisionally Approved Material Cost Average \$7,800




---

---

---

---

---

---

---

---

---

---

---

---

**SUFFOLK COUNTY'S SEPTIC IMPROVEMENT PROGRAM**

**CURRENT LEGISLATIVE PROCESS AND TIMETABLE:**

<b>MARCH 28, 2017</b>	PROPOSED PROGRAM LEGISLATION INTRODUCED AT GENERAL LEGISLATURE MEETING
<b>APRIL 25, 2017</b>	ANTICIPATED PUBLIC HEARING ON THE PROGRAM
<b>MAY 16, 2017</b>	PROGRAM IS ELIGIBLE FOR A VOTE AT THE GENERAL LEGISLATURE MEETING, IF PUBLIC HEARING IS CLOSED ON APRIL 25 <sup>TH</sup>
<b>JULY 1, 2017</b>	TARGET OPERATIONAL DATE, IF APPROVED ON MAY 16 <sup>TH</sup>

---

---

---

---

---

---

---

---

---

---

---

---

**FINAL THOUGHT**

*"Clean water should be the birthright of every Long Islander and it's time we tackle this crisis together and Reclaim our Water."*

-Steve Bellone, Suffolk County Executive  
2014 State of the County

---

---

---

---

---

---

---

---

---

---

---

---