

“A Historic Community Improvement”

- **Major Step Forward for our Community** – enhancing our quality of life, environment and economy
- **Building a Better Mastic-Shirley** – increasing property values, improving recreation, and benefitting local businesses
- **Improved Water Quality** – for the Forge River and Moriches Bay benefits our children and future generations
- **Building Phases 1 & 2 Now** – creates the foundation to complete Phases 3 & 4 (Mastic Beach) in the future
- **Approval of the project by voters** – critical for one time opportunity to obtain full federal funding for project construction

Key Facts About the Sewer Project

- **Free sewer hook up** for all homes –100% funded by Federal \$
- **Reduced annual fees** for homeowners to under \$500/year -that's the only cost homeowners will pay
- **No cost to residential owners** for equipment, installation, abandoning old cesspool
- **Construction costs for sewer lines and treatment plant** 100% covered by federal funds
- **More funding for commercial hook ups** sought to lower costs of hooking up
- **Mastic Beach (Phases 3 & 4) gets sewers** only if Phases 1 & 2 are approved

Construction Costs / Property Owner Annual Cost

- **100% of construction costs to be funded by FEMA**
- Rare opportunity for FEMA to provide up to \$167,780,000 in one-time construction funding
- Community support for the project vital for accessing FEMA funding
- Engineering/Construction Management costs supported by \$2 Million NYS grant with remainder to be financed by NYS loan

PROPERTY TYPE	ANNUAL OPERATIONS & MAINTENANCE COST		ANNUAL DEBT SERVICE CHARGE (NYS LOAN)		ANNUAL ESTIMATED COST TO PROPERTY OWNER
Single Family Residential	\$356	+	\$114	=	\$470

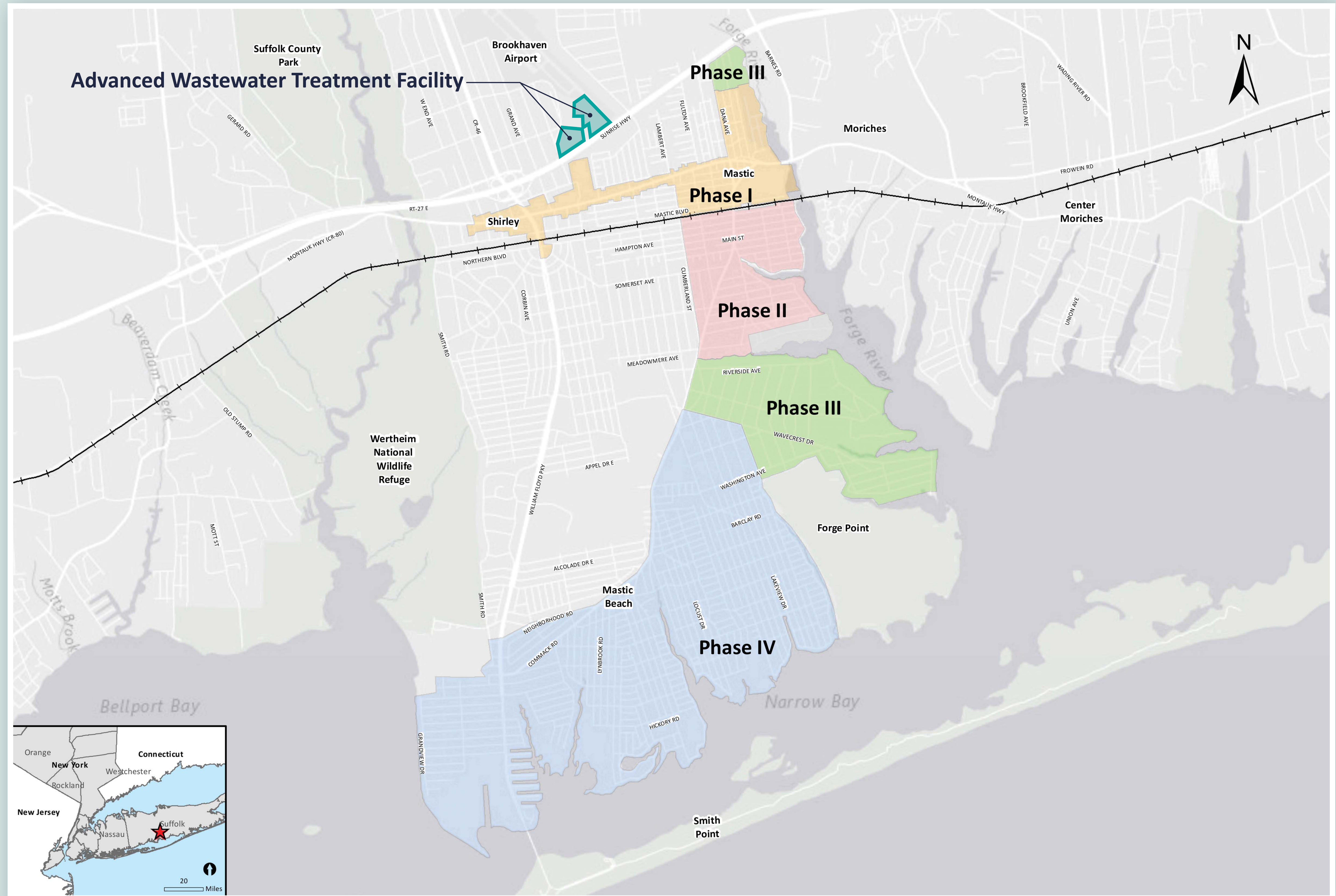
January 22, 2019 Public Referendum

- State law requires that a sewer district be established in Mastic-Shirley
- Suffolk County agreed that community members should approve the new district through vote
- The January public referendum will be an up or down vote on the project
- Mastic-Shirley will lose \$167 million if residents don't vote yes to the new sewer district

Project Background

- Decades of nitrogen pollution from septic systems, cesspools, agricultural uses and runoff have degraded surface and groundwaters
- Poor water quality hurts land values, recreation, tourism, the economy and coastal resiliency
- Tidal wetlands are critical in protecting against storm surge like that from Superstorm Sandy, which devastated the area
- After years of discussion and review, design of the project is underway with an anticipated 2019 start of construction

Mastic/Shirley Study Area Phase I, II, III and IV



Sewer District Boundary Map (Phase I & II)



Property Owner Questionnaire

Property owner information so that the questionnaire can be linked to the property being provided sewage service.

If the Parcel Tax ID Number isn't known, this could be left blank.

By providing information about your property, such as question numbers 1 through 20, the Field Investigation Team will be able to reduce the time they must spend at your property. This information will also allow the Field Investigation Team a way to cross check the information that they obtain.

After your home is connected to the sewer system, the existing septic tank and cesspools will be eliminated by the County. **Question Numbers 9 through 12** will help the Field Investigation Team identify the scope of work required to eliminate your home's existing on-lot sewage disposal facilities.

Question Numbers 16 through 19 will provide the Field Investigation Team with the information needed to determine if your home requires basement sewage service, or if only the living floors require sewage service.

There are three ways that you can provide the information on the questionnaire. Simply pick the method that is most convenient for you.

Date _____

Property Owner's Name(s) _____

Phone Number _____

Email Address _____

Resident's Name(s) (If Different than Above) _____

Parcel Tax ID Number _____

Property Address _____

Property Owner's Mailing Address (If Different) _____

Please answer the following questions about your property:

1. Where does your sewer lateral exit your house?
(Answer as if you are standing in the street looking at the front of your house.)
 Rear Front Left Side Right Side Don't Know

2. Do you have natural gas service?
 Yes No

3. Do you have public water service?
 Yes No

4. Do you have a water sprinkler/irrigation system?
 Yes No

5. Was your electrical panel installed after 2012?
 Yes No Don't Know

6. What size is your electrical panel?
 60 amps 100 amps 150 amps 200 amps Other _____ amps Don't Know

7. Are there any spare circuit breakers or spaces within your electrical panel?
 Yes No Don't Know

8. How many septic tanks do you have?
 1 2 3 Don't Know

9. Where is your septic tank(s) located?
(Answer as if you are standing in the street looking at the front of your house.)
 Rear Front Left Side Right Side Don't Know

10. How many cesspool(s) do you have?
 1 2 3 Other _____ Don't Know

11. Where is your cesspool(s) located?
(Answer as if you are standing in the street looking at the front of your house.)
 Rear Front Left Side Right Side Don't Know

12. Current Septic Hauler Company Name: _____

13. Do you have an oil storage tank?
 Yes No Don't Know Above Grade Below Grade

14. Where is your oil storage tank located?
(Answer as if you are standing in the street looking at the front of your house.)
 Rear Front Left Side Right Side Basement Don't Know

15. Does your home have a basement?
 Yes No

16. Does your home have a crawlspace?
 Yes No

17. Does your home have a bathroom in the basement?
 Yes No

18. Does your home have a clothes washer located in the basement?
 Yes No

19. What is the size of your existing sewer line?
 4" 6" Other _____ Don't Know

In the space below, please provide any additional information or comments that you feel are relevant to your specific property.

You can provide the Field Investigation Team with information regarding your property through one of three methods:

1. Visit the "Property Investigation Questionnaire" link within the project website www.forgewatershedsewers.com and complete the property questionnaire online.
2. Submit the completed questionnaire to your Legislator's office at:
 Legislator Rudy Sunderman
 1120 Montauk Highway
 Suite G
 Mastic, NY 11950
 Phone: 631-852-1300
3. Give it to the Field Technician during the Field Investigation conducted on your property.

Your assistance in completing this questionnaire will allow for accurate and efficient information gathering.

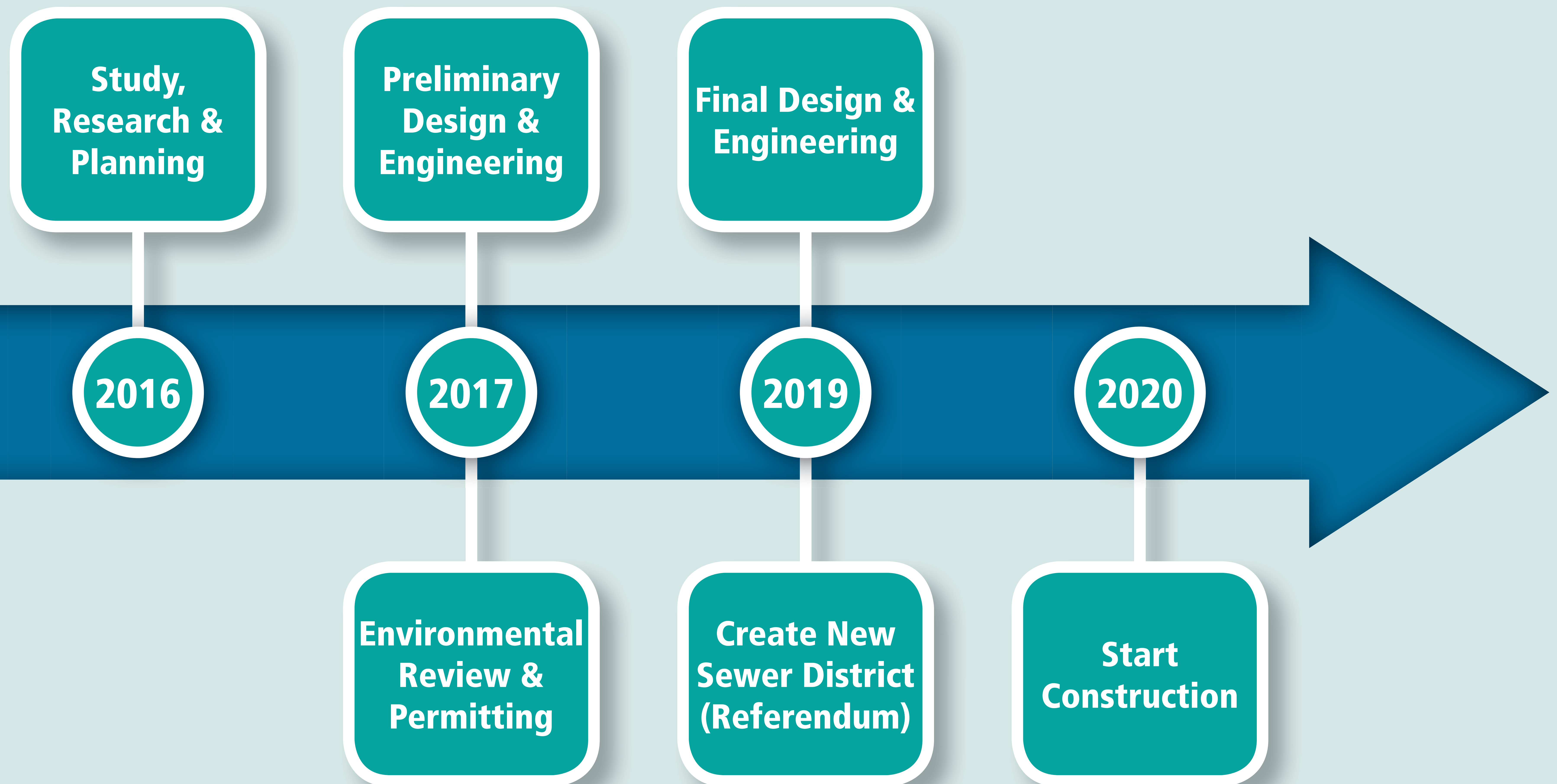
ALL information provided for this project will be kept confidential by the County.

Question Numbers 5 through 8 will assist the Field Investigation relative to the existing electric system for your home. This is especially important for determining how best to provide power to the grinder pump unit that will be installed for your home.

If you are unsure as to how to answer Question Numbers 9 through 12, provide the name of your current septic hauler. The Field Investigation Team will contact your septic hauler for additional information.

Any information that you feel may be helpful can be provided in this space.

Estimated Project Timeline



Sewer Collection System

Low Pressure Sewer Grinder Pumps

- **Entire installation by Suffolk County's contractor**
- **Operation and maintenance by Suffolk County**

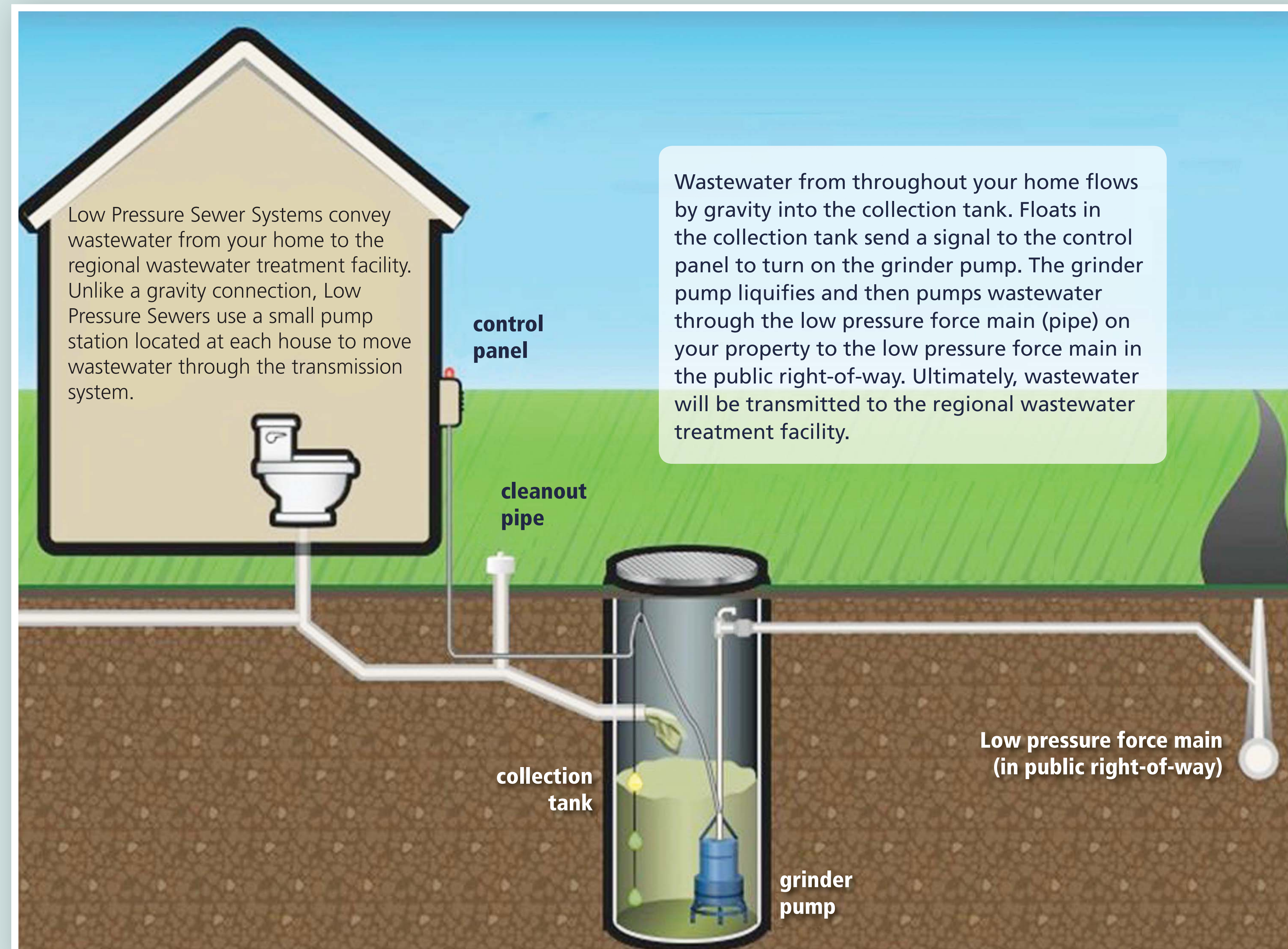
Connection to Home by Suffolk County

- **Complete connection of house to sewer line and grinder pump unit**
- **Make electrical connection from home to grinder pump unit control**
- **Perform restoration of disturbed surfaces**

Septic System Abandonment by Suffolk County

- **Abandon system-in-place by filling with sand**
- **Perform restoration of disturbed surfaces**

Low Pressure Sewer Systems



Low Pressure Sewer Systems

In the upcoming months surveyors will visit homes to take measurements and document existing conditions to be used in system design.



Top of Ground View



Unit Control Panel Mounted on House

Advanced Wastewater Treatment Facility

- **Town of Brookhaven Calabro Airport site proposed**
- **State-of-the-art advanced treatment system would remove nitrogen from wastewater**
- **All equipment fully enclosed inside buildings**
- **Odor control systems included to eliminate potential impacts**
- **Groundwater recharge using underground leaching structures**
- **Preservation of existing trees will limit visual impacts**

Advanced Wastewater Treatment Facility/ Recharge Area Preliminary Site Layout



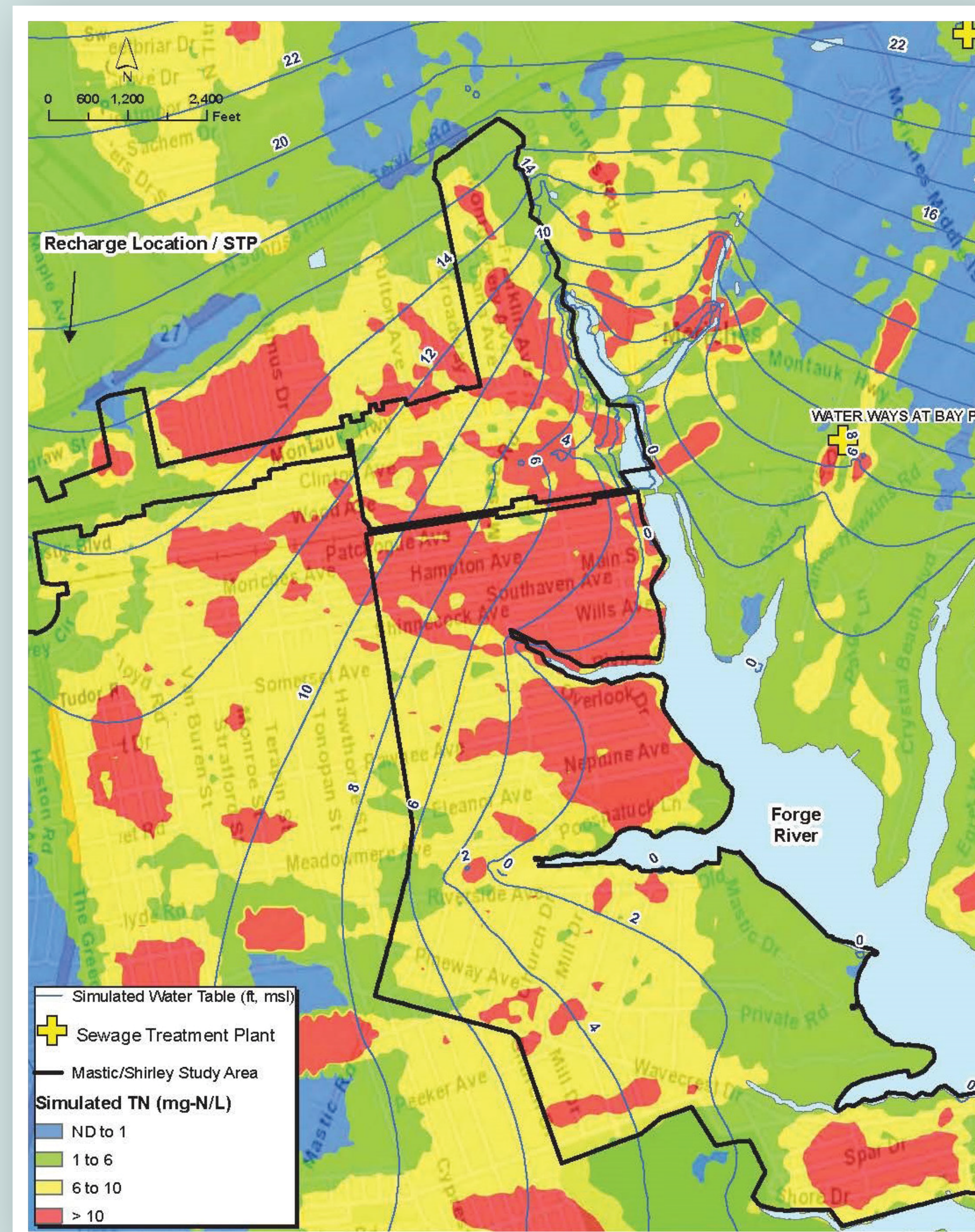
Projected Environmental Improvements

Existing Conditions

Forge River receives a total nitrogen load of 2,362 pounds/day

244 pounds/day of total nitrogen is attributed to OWTS within the project area

Modeling indicates total nitrogen concentrations in groundwater are expected to be higher than 10 mg/L



(Simulated) Baseline levels of Nitrogen within Water Table.

SOURCES:

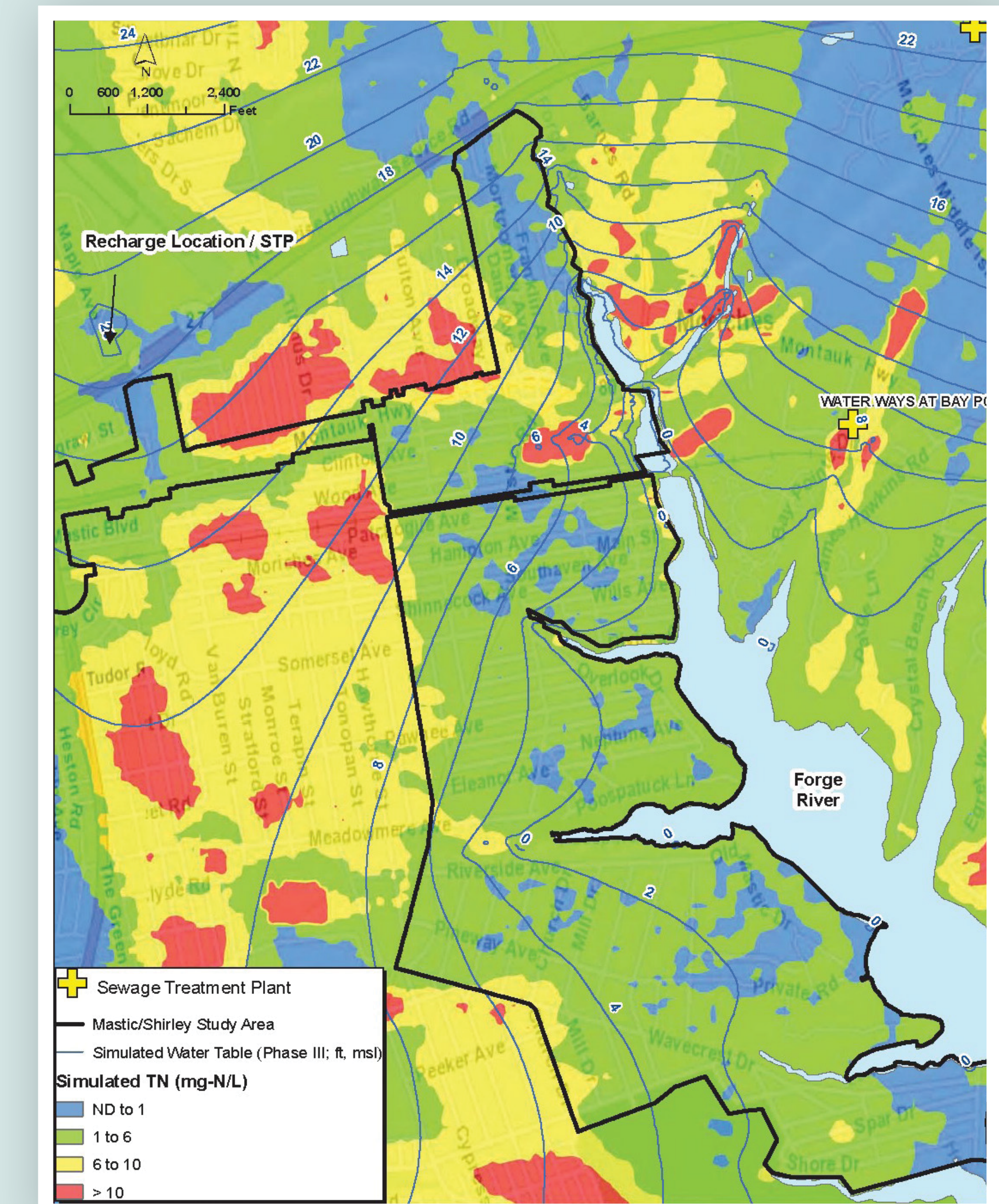
Swanson et al. 2009b
CDM Smith 2014
DEIS May 2018

Project Conditions

Total nitrogen entering Forge River from the project area would be reduced by 50%

Total nitrogen within the project area would be reduced by 58 pounds per day

Model results show that the total nitrogen concentrations in groundwater would decrease to mostly below 6 mg/L



(Simulated) Improved levels of Nitrogen within Water Table following project implementation.

SOURCES:

Swanson et al. 2009b
CDM Smith 2014
DEIS May 2018