

SILVER SANDS

Septic to Sewer Conversion

Silver Sands Civic Association:
October 13, 2025

Kimley»Horn

Expect More. Experience Better.



New Smyrna Beach
... UTILITIES ...

Empowering Our Community

Agenda

1. Project Overview
2. Sewer Systems
3. Wastewater Project Drivers
4. Potable Water Project Drivers
5. Project Funding
6. Where are we now?
7. Lift Station
8. Next Steps

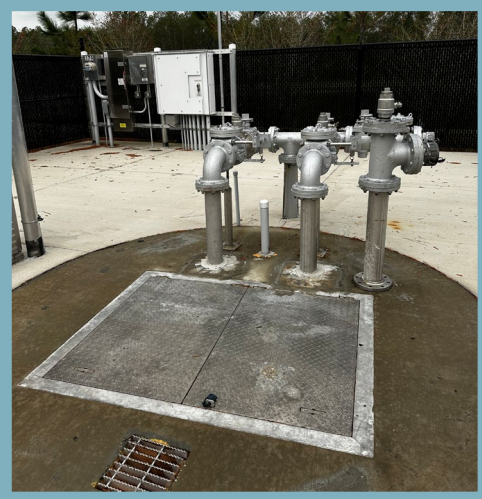
Project Overview

New Gravity Sewer: 26,000 linear feet

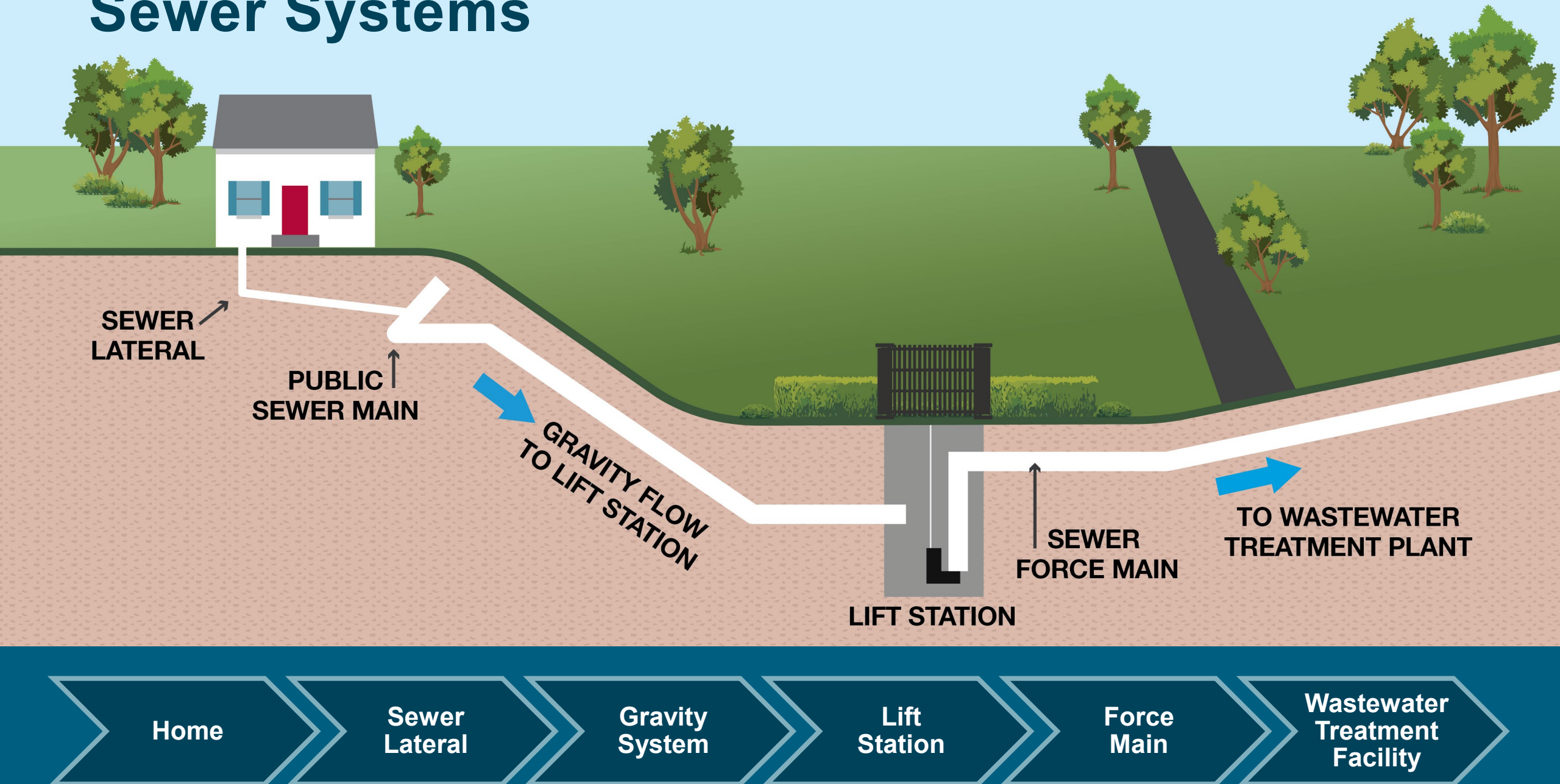
Potable Water Main Replacement: 29,000 linear feet

New Wastewater Pump Station

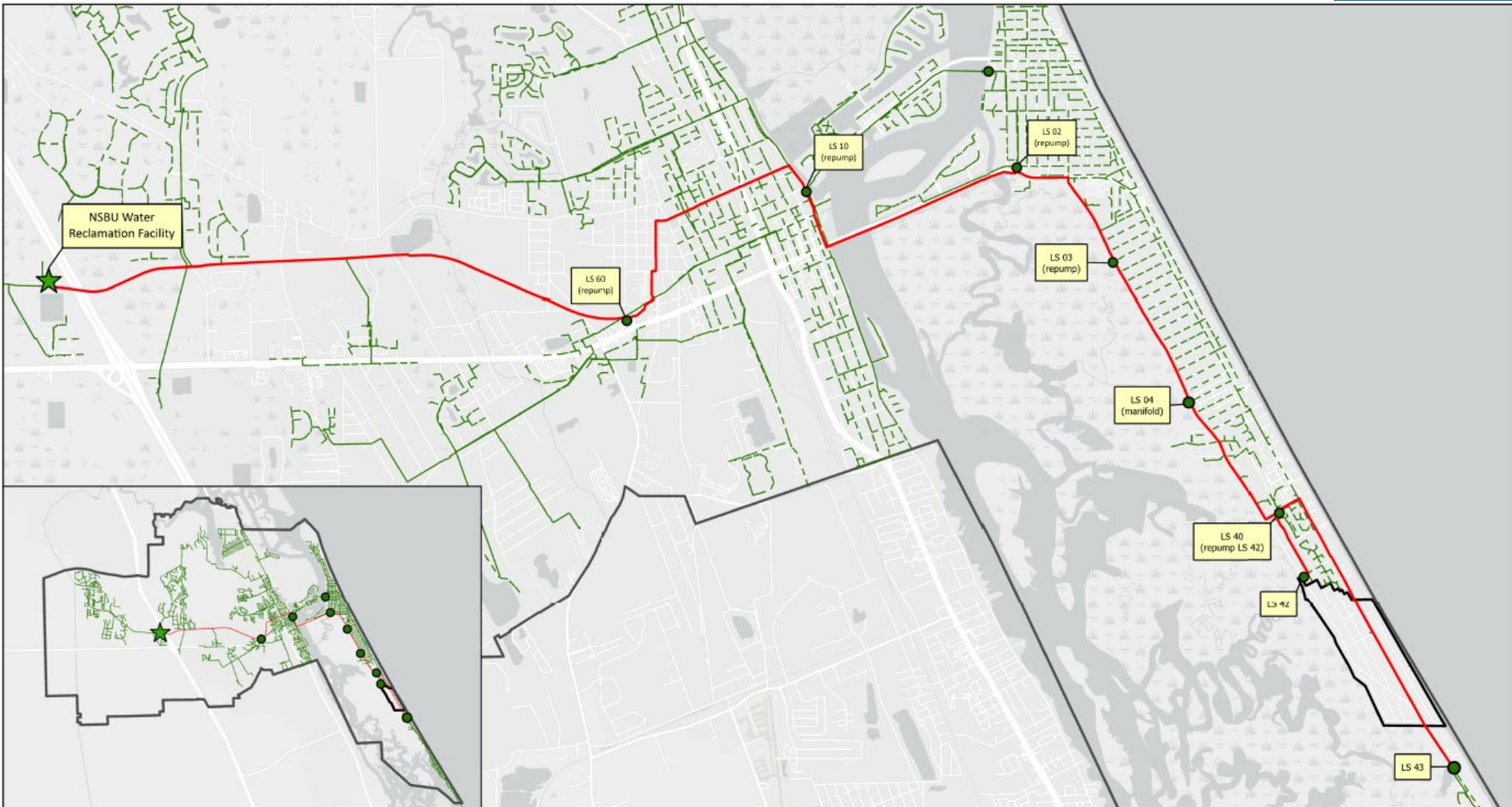
Parcels: 554 Sewer and Water Connections



Sewer Systems



New Smyrna Beach Utilities Sewer System



Wastewater Project Drivers

Clean Waterways Act (2020)

Established to clean up pollutants and nutrients in water bodies

Introduced mandatory septic system inspections

Standards for Onsite Sewage Systems (2021)

States that performance-based septic systems require a bi-annual inspection by a qualified professional

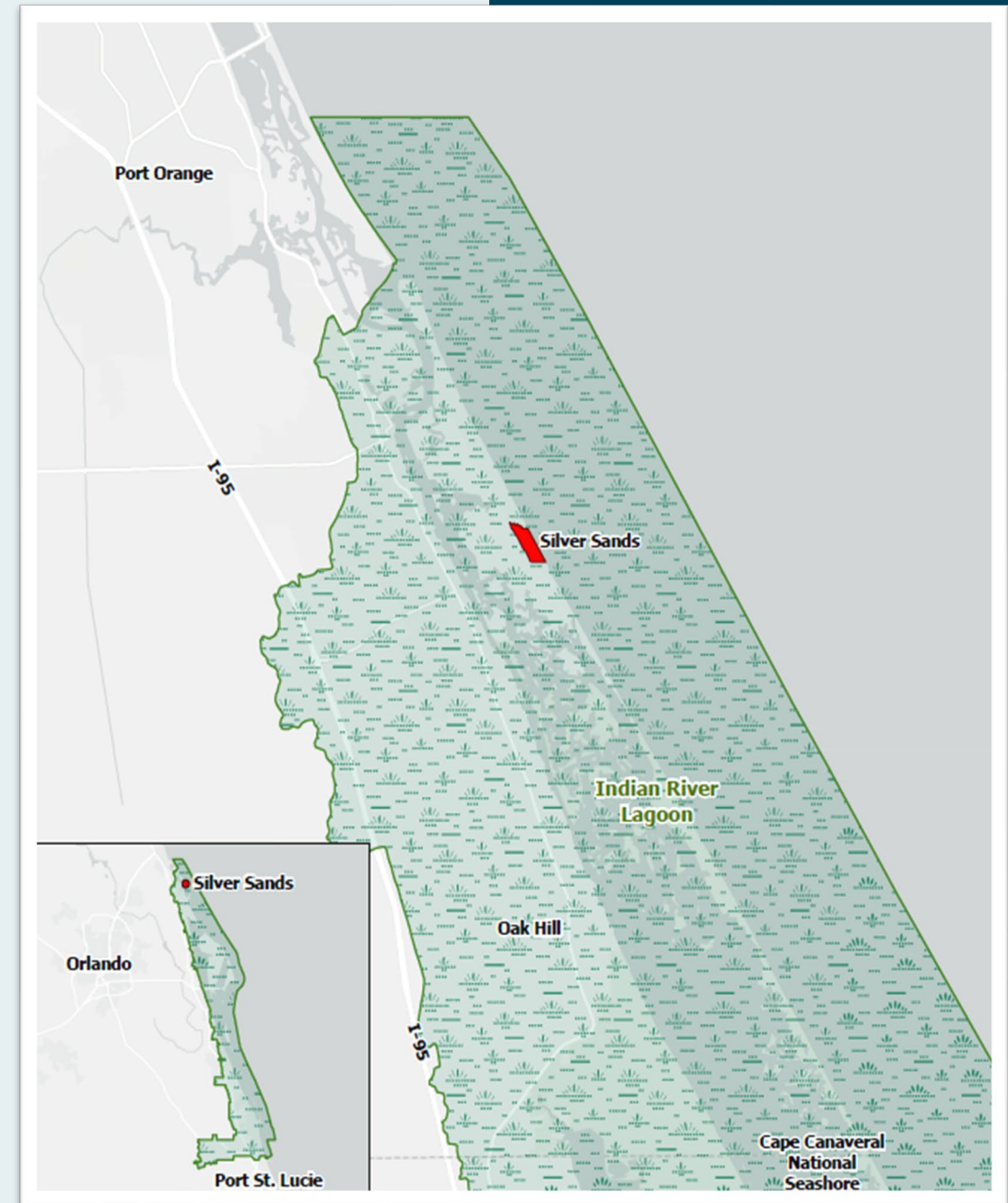
House Bill 1379 (2023)

By January 1, 2024, all new septic systems in the Indian River Lagoon Protection Area must be nitrogen reducing

US District Court Moratorium Case (2025)

Beginning July 17, 2025 FDEP cannot issue NEW permits for the construction and installation of septic systems within the North Indian River Lagoon

This does not affect the issuance of repair permits



Potable Water Project Drivers

- Aging Infrastructure
- Improved materials of construction (PVC vs AC)
- Improved water delivery
- Added fire protection
- Ease of construction during wastewater project
- Cost effective to replace water at the same time sewer is being installed
- Roadway restoration will only have to occur once



FDEP Project Funding



For conversion of
residential septic
systems to
sanitary sewer

For construction of
the sewer system

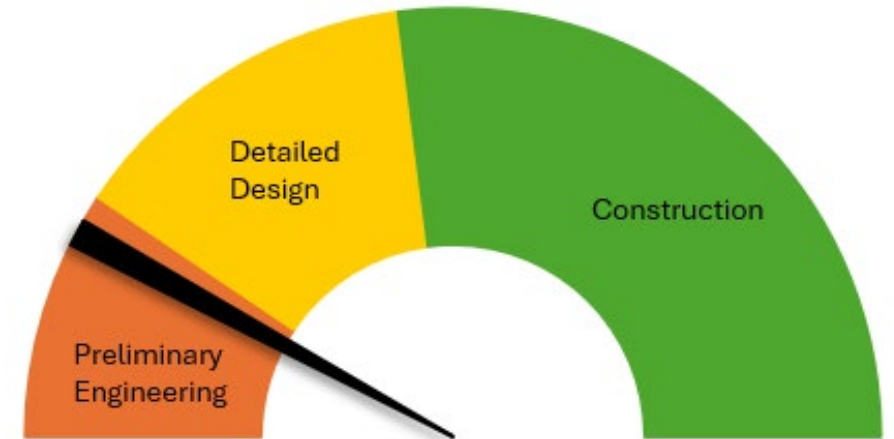
For private
connection costs

Where are we now?

2025 Critical Path to Start Design

Identification of Lift Station Site

2026	Design Phase
2027	Bidding and Procurement
2027	Construction Commence
2030	Construction Complete



NSBU is continuing to apply for grant funding in an effort to obtain full coverage of the project cost

Where are we now?

Survey and Geotechnical Investigations Complete

Preliminary Engineering Report (Draft)

Finding: No available publicly owned or right-of-way site suitable for the construction of a lift station

Lift Station Site Analysis

Extensive alternative site analysis performed to identify feasible sites within the community

Finding: Property/Easement acquisition is required

Civic Association Engaged NSBU to consider 5 Palm Dr.



Lift Station Site Criteria

First Engineering Study Developed to Obtain Grant Funding
Identified 4 Lift Stations

2025 Preliminary Engineering Design Approach – Minimize
Number of Lift Stations p

Extensive Lift Station Site Evaluation

- ROW/Government Owned Parcels
- Site Elevations
- Proximity to Water Bodies
- Site Accessibility

Civic Association Engaged NSBU to consider 5 Palm Dr. lift station
site

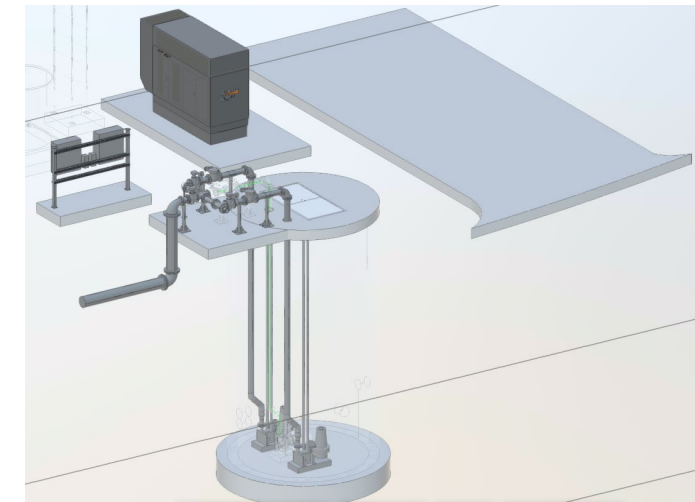
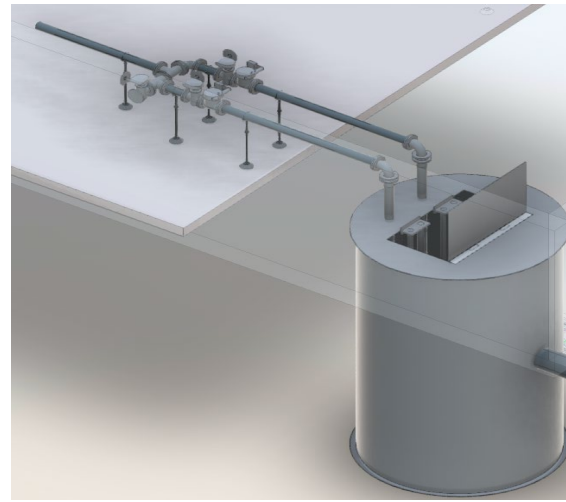
What is a lift station?

Below below-ground wet well that collects the wastewater and houses the pumps

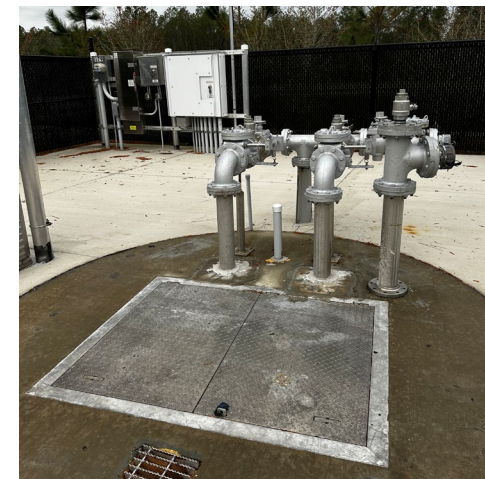
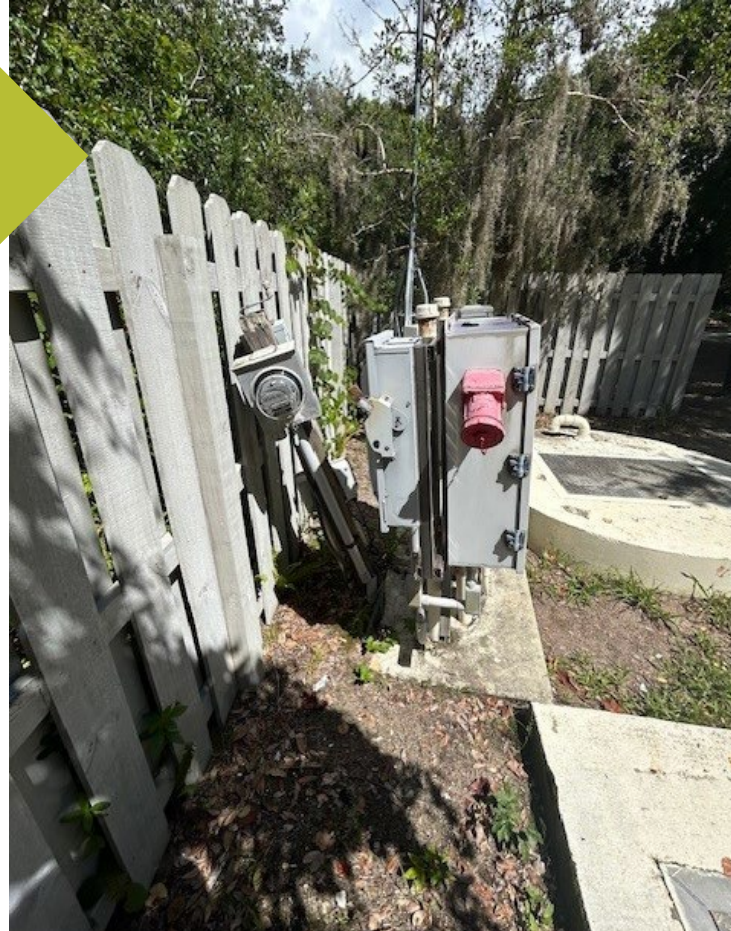
Discharge force main piping and valves

Control panel

Generator



Lift Station



Lift Station Site Evaluation

SILVER SANDS CIVIC ASSOCIATION

- Only a portion of the parcel would be used – minimizing community impacts
- Site has low elevation and could support the entire Silver Sands area
- Can configure the site in a way to allow for adequate space for construction, operations, and maintenance
- Visual landscape buffers



Purpose of Easement

An easement gives NSBU the right to install, operate, and maintain wastewater infrastructure in a specific area for a specific purpose (lift station operations), while the landowner maintains ownership of the entire property

The terms of the easement will be detailed in an Easement Deed or Agreement that will be recorded among the land records of Volusia County

Critical Path and Next Steps



Critical Path

- Acquisition of a lift station easement



Next Steps

- Completion of conceptual lift station design and presentation to the community
- Completion of design
- Ongoing community outreach and meetings
- Additional grant funding and financial planning
- Advertise project for bid
- Award contract
- Begin construction

Project Website

<https://projects.nsbufl.com/>



INCLUDES:

- ✓ Project Background and Purpose
- ✓ Links to all finalized reports
- ✓ Frequently Asked Questions



New Smyrna Beach Utilities is pleased to announce we were awarded \$11.4 million through the 2024-2025 Indian River Lagoon (IRL) Water Quality Improvement Grant Program to help fund the Silver Sands Septic to Sewer conversion project. This amount is in addition to the \$7.5 million previously awarded. The project is now substantially funded, and we will proceed with the subsequent phases. NSBU will continue to review various funding options to cover project expenses in excess of the awarded amounts.

Silver Sands Project Overview

Project Background and Purpose

In December of 2023, New Smyrna Beach Utilities (NSBU) was awarded \$7.5 million in grant funding for the conversion of residential septic systems to sanitary sewer in the Silver Sands area. In early 2025, NSBU was awarded an additional \$11.4 million in grant funding for construction costs as well as for private connection costs.

Silver Sands is located in the southern portion of New Smyrna Beach, between the Atlantic coast and the intercoastal waterway. This septic to sewer project will convert approximately 554 residential septic systems to centralized sewer. Once the residents are connected to the sewer system, the wastewater generated will be treated at NSBU's treatment facility through a lift station and gravity collection system.

The new sewer system will be constructed within the right-of-way; however, a portion of the system will need to be constructed on each property to connect the home to the sewer system. While the new gravity system is being constructed and installed, the water mains in the area will be replaced. The existing water mains are asbestos cement pipes and are estimated to be nearing the end of their useful life.

The purpose of this project is to comply with all State regulations related to septic systems. While installing a new centralized wastewater system in the area NSBU has opted to add a Capital Project to address the aging potable water piping.



Silver Sands Project Area Map as of 11/19/2024. Map shows Silver Sands service area and New Smyrna Beach parcels.

Project Drivers

In recent years, the Florida Department of Environmental Protection (FDEP) has implemented several rules and regulations related to wastewater treatment, and specifically septic systems including House Bill 1379. Additionally, ordinances have been implemented by Volusia County and the City of New Smyrna Beach related to septic systems. These rules and regulations include:

- ▶ Clean Waterways Act (2020)
- ▶ Standards for Onsite Sewage Systems (2021)
- ▶ House Bill 1379 (2023)
- ▶ Florida Statute Chapter 381.00655(2)(c)
- ▶ Local Ordinances
- ▶ Federal Moratoriums Case: 6:22-cv-02048-CEM-LHP



Project Schedule, Progress, and Next Steps

On June 26, 2024, NSBU entered into a contract with Kimley-Horn to develop cost effective solutions and strategies to design, permit, and construct the Silver Sands sanitary sewer system.

The agreed upon scope of work includes:

- | | |
|-------------------------------------|--------------------------------|
| 1. Project Management | 5. Grant Funding Support |
| 2. Preliminary Engineering Services | 6. Public Outreach Services |
| 3. Field Investigation Services | 7. Bid Phase Services |
| 4. Detailed Design and Permitting | 8. Construction Phase Services |



Additional Resources

Additional resources have been developed during the preliminary engineering and public outreach portion of this project. These resources are provided through the links below.

Community Awareness Plan – The Community Awareness Plan provides a strategy for effectively engaging the public and stakeholders, as well as document public outreach efforts throughout the project. The plan represents a commitment by NSBU to promote public involvement initiatives throughout the project as well as provide information and involvement opportunities.

Cost Analysis Memorandum – The Cost Analysis Memorandum provides a detailed description of a life cycle cost analysis that was performed to determine an annual cost per homeowner over a 30-year period for wastewater services, comparing septic system costs with central sewer system costs.

Evaluation of Sewer Connection Options – The Evaluation of Sewer Connection Options includes a review of options for homeowners to connect to the centralized sewer system, septic system abandonment, as well as funding and repayment options. This memorandum was developed to present information to NSBU and does not include any recommendations or final decisions.

Ordinance and Regulatory Memorandum – The Ordinance and Regulatory Memorandum summarizes State and Local wastewater rules and regulations related to septic systems including the Clean Waterways Act, House Bill 1379, Florida Statute Chapter 381.00655(2)(c), Volusia County Ordinances, and City of New Smyrna Beach Ordinances.

Thank You!

For questions please contact:

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