

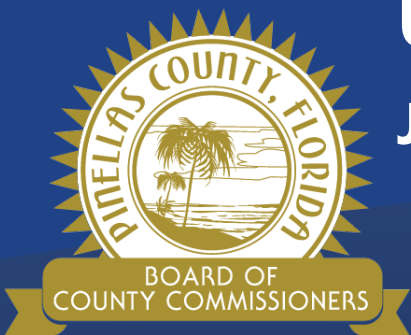
Sanitary Sewer Inflow and Infiltration Prevention Program

July 11, 2024



Utilities Department

Jeremy Waugh, PE, Director of Utilities

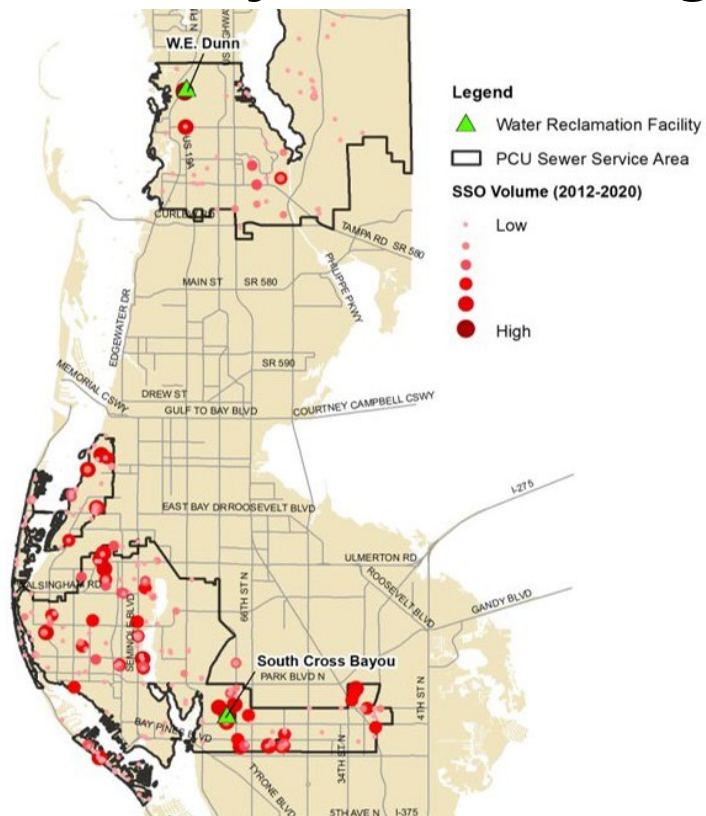


Our Vision: To Be the Standard for Public Service in America



Inflow and Infiltration Background

Two Key Issues Driving I&I Reduction:



1 Reoccurring SSO Hot Spots



2 South Cross Bayou Consent Order

Sanitary Sewer I/I Activities



PCU Overall Service Area Efforts

1. Ongoing Routine Maintenance and CIP Projects
2. Private Sewer System Inspection Program
3. Private Sewer Lateral Rebate/Enforcement Program

South County Service Area Focused Efforts

4. Mobile Home Collection Systems Projects
5. Sanitary Sewer Find and Fix Program



1. Ongoing Routine Maintenance and CIP

- Daily Inspections and Repairs
- Smoke Testing
- Pipe Lining CIP Projects
- Manholes Rehabilitation CIP Projects



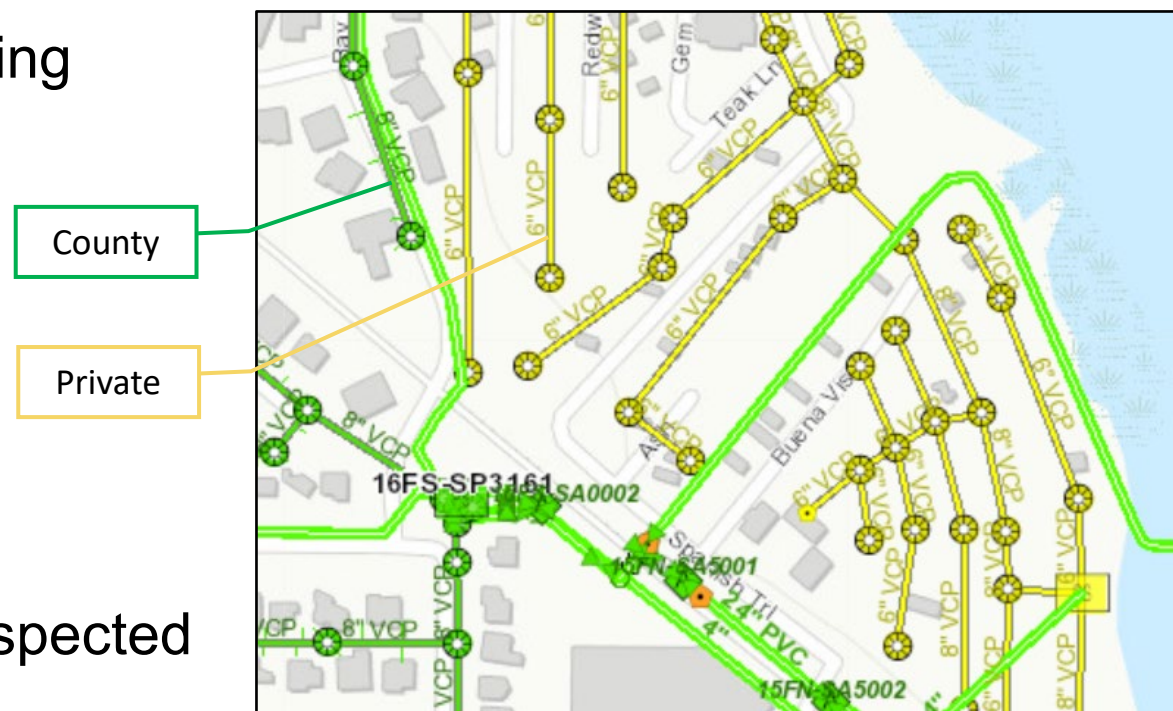
2. Private Sewer System Inspection Program

Goal:

Reduce I/I from Private Sewer Systems serving more than one individual customer.

Status:

- Estimated 1,000 Private systems
- 210 Systems Officially Identified
- 160 Permits Issued
- 97% MHCs & 94% Private Lift Stations Inspected (South County)
- Mapping Private Systems in County GIS
- Expected to complete all first cycle inspections in 2026.



2. Private Sewer System Inspection Program

Successes:

- Identified and corrected two sources of ongoing SSOs.
- Identified and corrected 10 sources of I&I
 - ✓ lift stations without solid lids
 - ✓ combined sewer/stormwater overflow.
- Instituted billing structure for both PCU and Non-PCU customers for inspections.



2. Private Sewer System Inspection Program

Successes:



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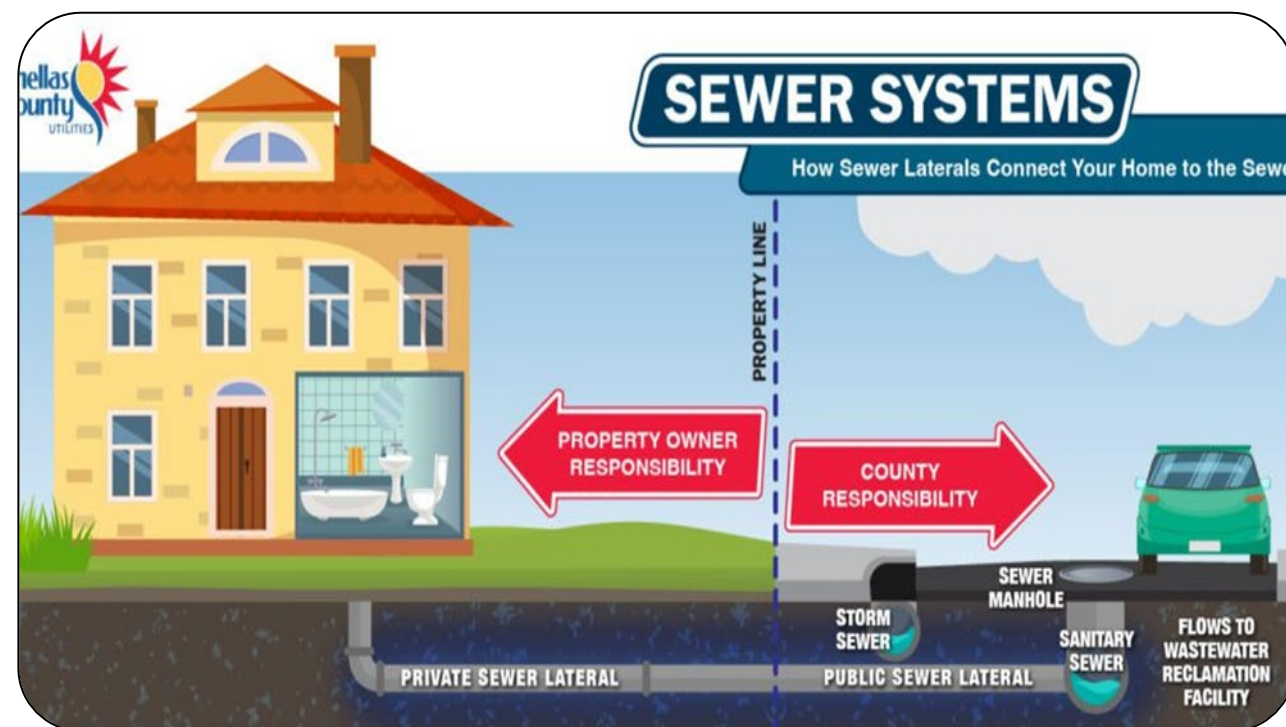
3. Private Sewer Lateral Rebate/Enforcement

Goal:

Reduce I/I from individual customers on the private side of sewer laterals. i.e. from the house to the ROW line.

Status:

- Live since 2022
- 393 Inspections from Building Permits
- 223 Rebates requested – 153 Issued
 - 2023 - \$175,663.90
 - 2024 - \$39,129.80 (thru May)
- 68 Properties Currently Out of Compliance



3. Private Sewer Lateral Rebate/Enforcement

Successes:

- No Citations / Fines issued to date
 - ✓ We've been able to work with Customers to resolve issues
- Ave. Repair Cost = \$6,800
- Rebate Max. = \$3,500
- 52 Local Contractors have participated
- 50% of the laterals inspected have had defects



4. Mobile Home Collection Systems

Goal:

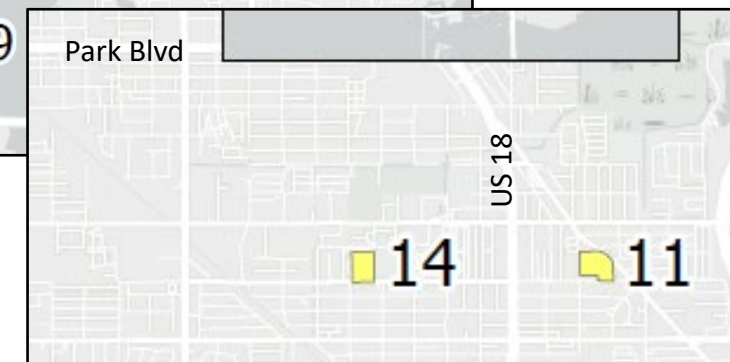
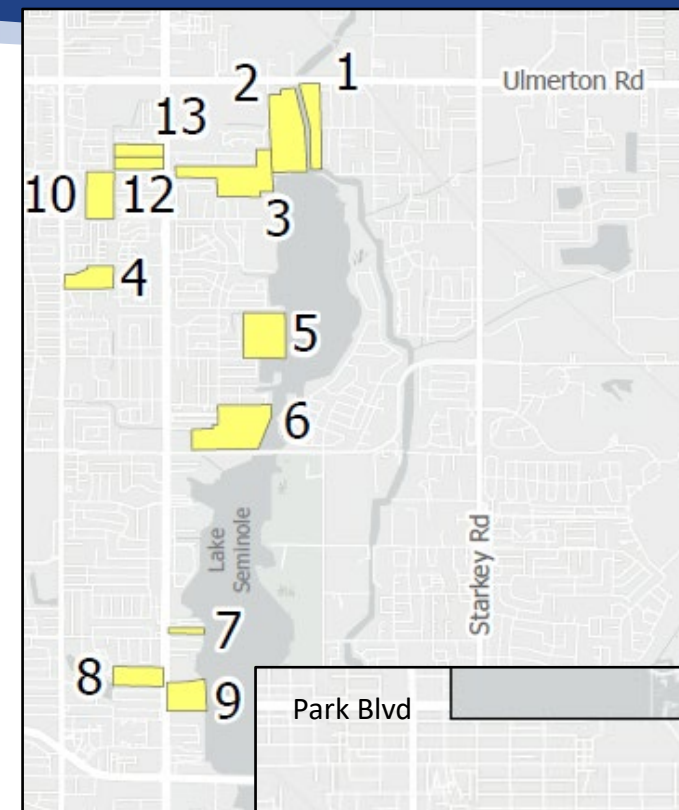
Reduce I/I private systems within fourteen (14) manufactured home communities (MHCs) verified as high I&I contributors.

Status:

- Completed engineering plans for all 14 MHCs
- 3 Bid Packages Advertised for 13 MHCs
- First bids due back June 20th.

Successes:

- Collaborated with 14 separate MHCs ownership entities.
- \$46.4M in Grant funding secured (ARPA, Restore Act, Resilient FL)



5. Sanitary Sewer Find and Fix Program

Goal:

Reduce I/I for priority areas in the South County by repairing or replacing deteriorating wastewater infrastructure in both public and private systems.

Status:

- Developed a design criteria package to solicit for design-build (DB) services.
- Negotiated scope and fee with selected DB Firm
- Started flow monitoring studies to verify baseline conditions in May/June 2024
- Engineering solutions beginning fall 2024

