

City of Venice Utilities Infrastructure and Private Septic Systems

Presenter:

John Monville

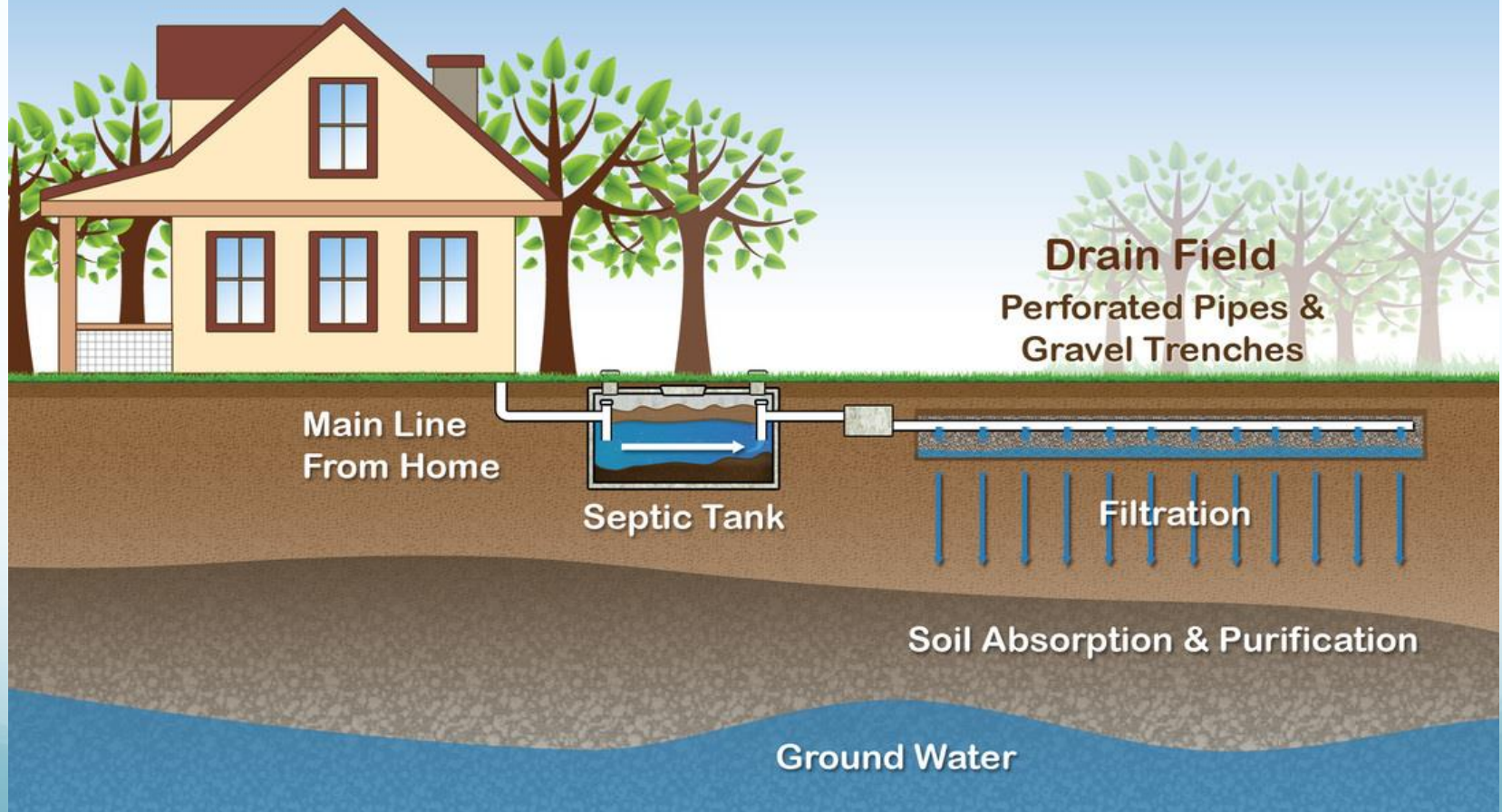
Assistant Utilities Director

Background

- For the purposes of this presentation a septic system within the City of Venice is a means of private sewage disposal. City Code Sec. 74-129
- City Code Sec. 74-129 does not allow septic systems where connection to the COV wastewater system is not available and where lots are less than 20,000 square feet.
- Private residential septic systems function by providing private sewage treatment and disposal. The majority of solids are digested in the tank by naturally occurring bacteria. The wastewater liquids are leached out through a drain field that has been appropriately sized by a licensed Engineer according to Department of Health (DOH) guidelines. The sizing of the drain field is dictated by the established DOH guidelines so that the surrounding soil, bacteria, and vegetation naturally remove nutrients from the wastewater.

Profile

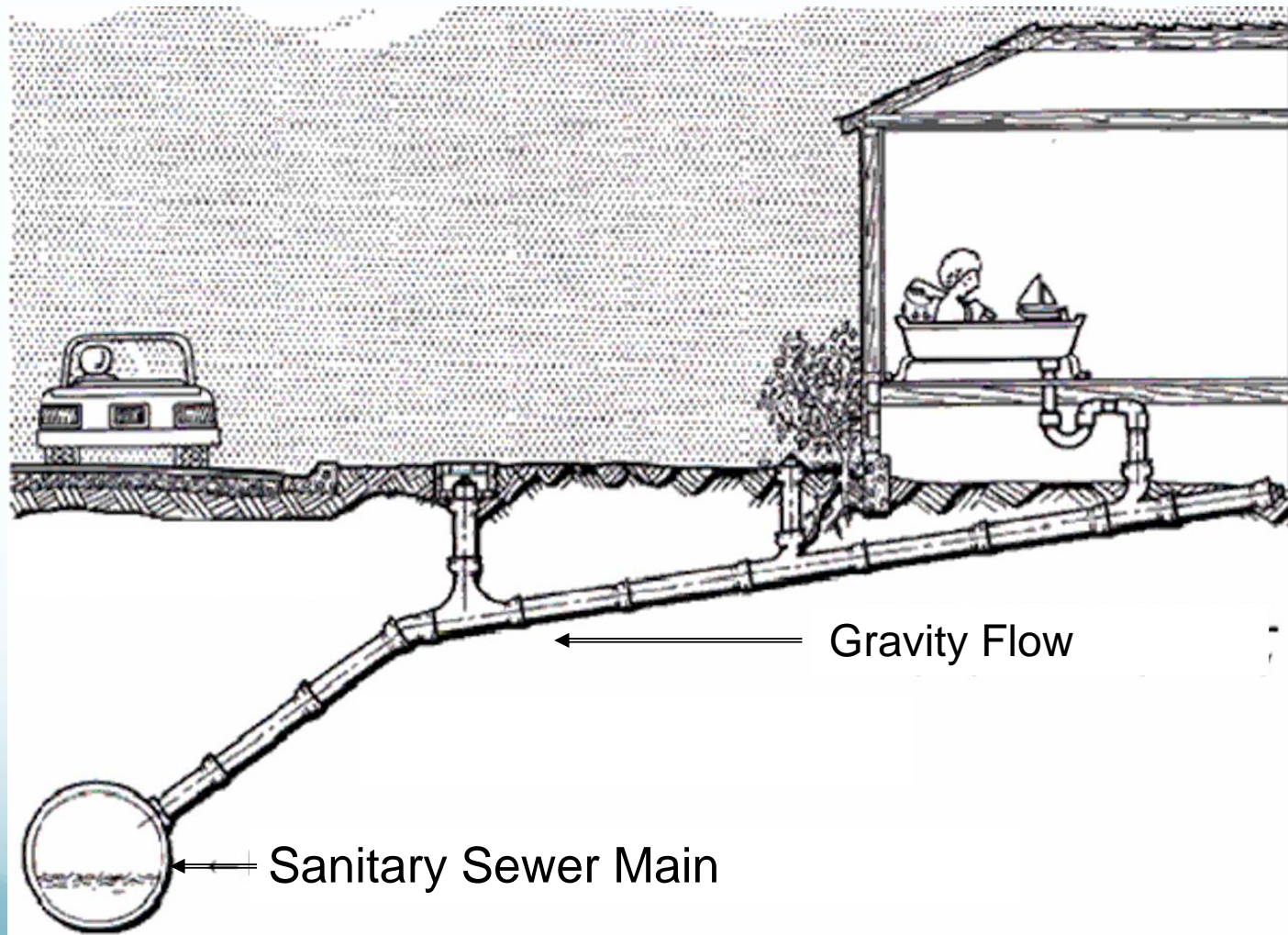
Conventional Septic System



Background

- Septic systems are regulated by the Florida Department of Health (DOH). New Septic system installation or replacement is allowed by DOH when public sewer service is not available as defined by DOH. City code is even stricter.
- **City Code Sec. 74-3. - Availability of water and sewer service; connection to city system.**
 - (b) Wastewater service availability. A sewerage system shall be considered available when city wastewater lines exist in a public right-of-way or easement which abuts the property or is within 100 feet of the property, and if gravity flow can be maintained from the building drain to the sewer line.

Typical Existing Connection to City Infrastructure



Septic System Data

- Onsite sewage treatment and disposal systems or septic tanks serve approximately 30% of Florida's population.
- Life expectancy of a septic tank is 15-30 years.
- Septic Tanks in Florida in operation = 2,746,089
US Census estimates 2.3 million system in service in 2000
Florida represents 12% of the United States' septic systems
- Septic Tanks installed in the County = 60,991 (since 1970)
- Septic tanks in the City = 45; less than 0.2% of customers.
- Due to past projects we have 0 septic tanks within city limits that are not in compliance with our city code

City Septic System Data

- These remaining customers do not have public sewer service available due to their location. This is either because their property is accessed by a private road where the city cannot provide services or due to the elevation of their residence and would require that they install a private lift-station.
- In either of these instances connection to public sewer system is not mandatory.

Rules, Regulations, Proposed Initiatives

- Permitting & inspection of septic tanks is handled by the local County DOH.
- DOH is not inspecting existing septic tanks; it is currently not required unless being installed, abandoned, or replaced.
- Proposed legislation could require the Florida Department of Health to ID all septic systems in the state by January 2021, conduct inspection every five years, and develop minimum standards and requirements for pumping out or repairing failing systems.
- New proposal includes state and local funding to help homeowners pay for the testing.

Sarasota County

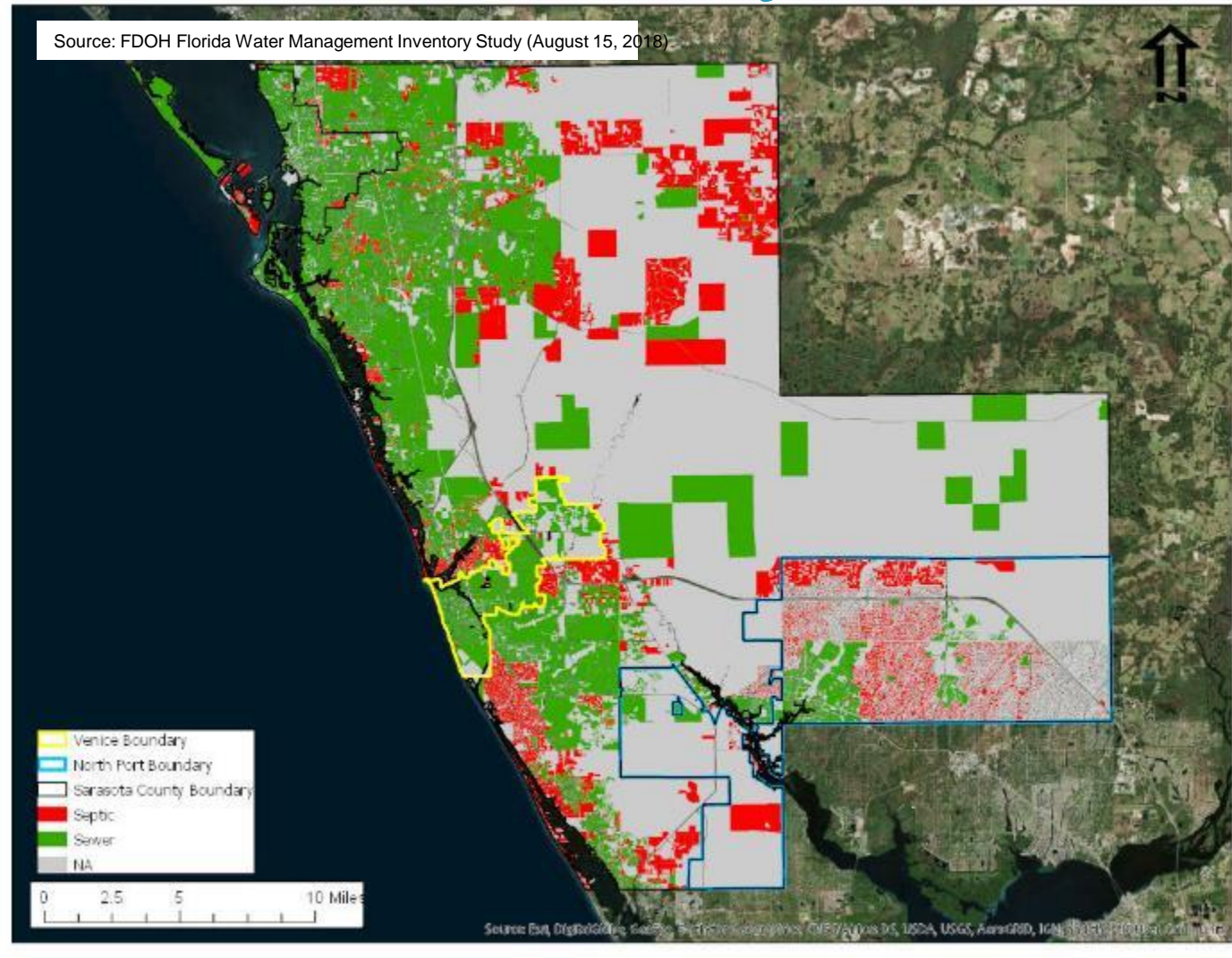
Source: FDOH Florida Water Management Inventory Study (August 15, 2018)

Sarasota County [Total]
38,300 septic parcels (19%)

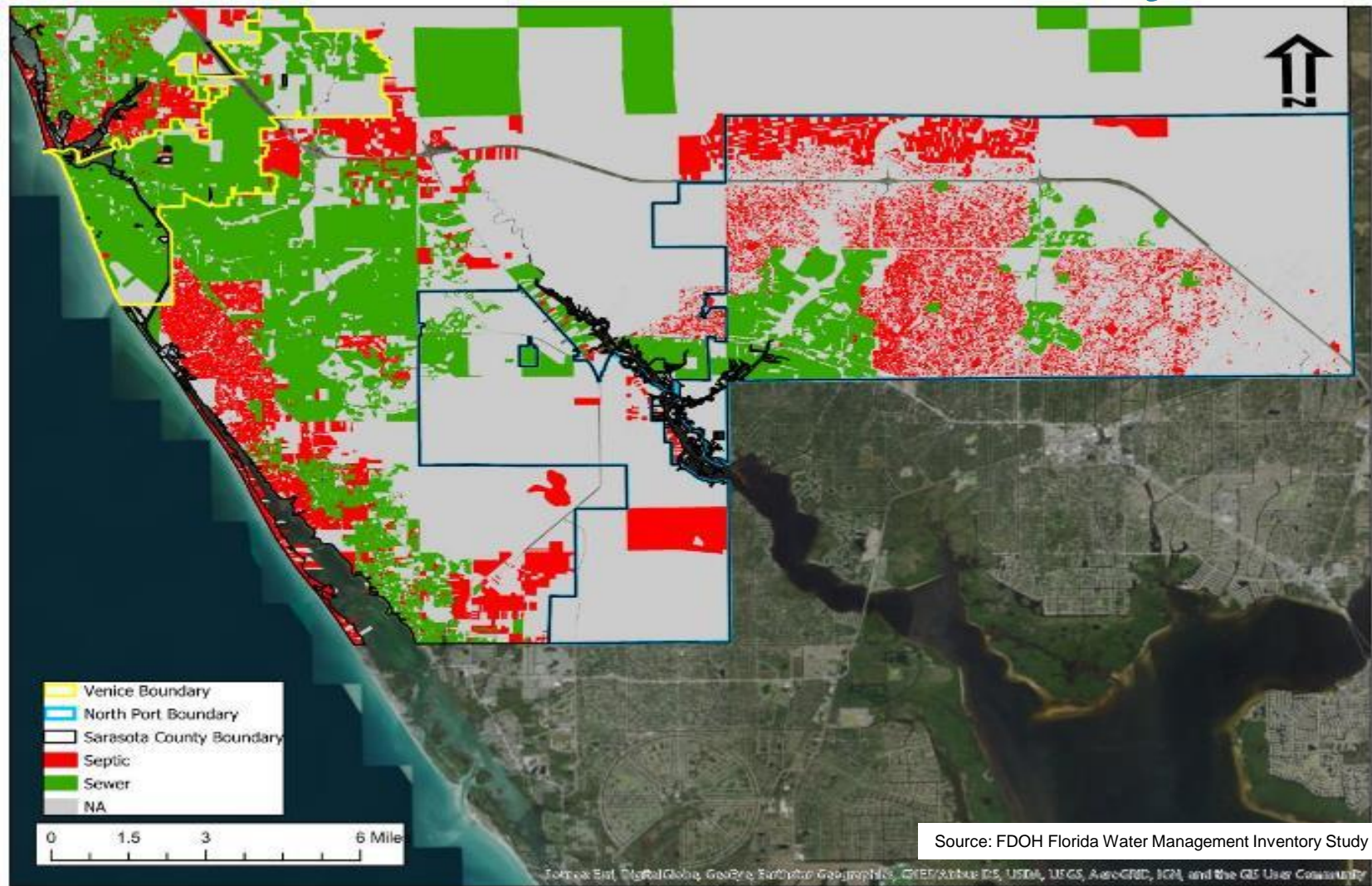
City of Venice
45 septic parcels (0.2%)

North Port
17,550 septic parcels (59%)

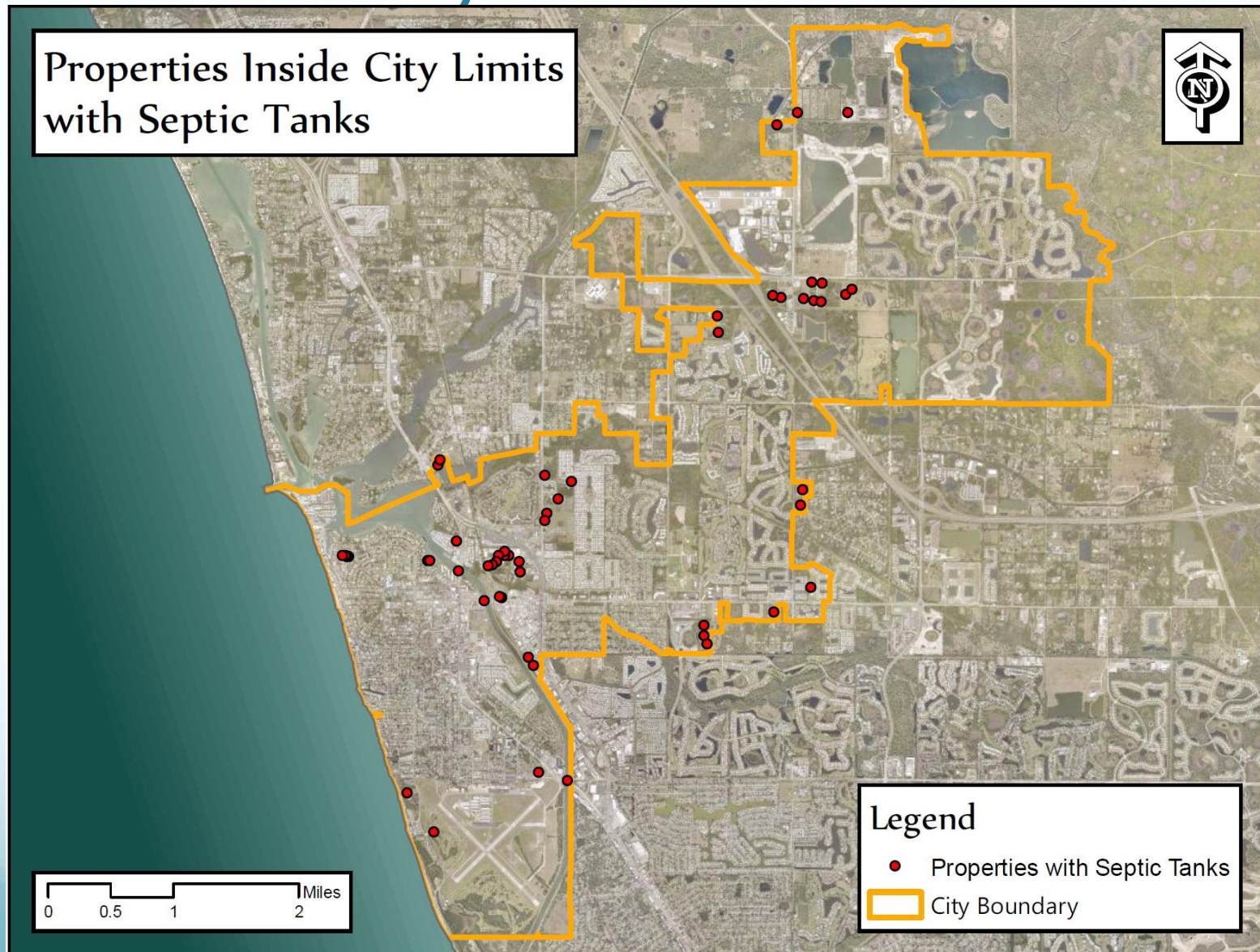
Sarasota County Utilities
System
20,700 septic parcels (14%)



South Sarasota County



City of Venice



Septic to Central Sewer

- There are generally three types of sewer collection systems: Gravity, Low Pressure, & Vacuum systems.
- Low pressure systems would be the main option for connecting existing septic tanks within City limits.
- This would require the installation of small grinder pumping systems at private residences to transport their sewer to new City utilities infrastructure.
- In other situations the City could acquire rights to install public sewer mains that would make service available to some customers and their connection would be required by code.

Estimated Cost

- Private side per system
Septic Tank Abandonment + Capacity fee + Plumbing + Restoration = \$8,000 - \$25,000
- Public Utilities side
Sewer System Infrastructure + Design + Construction + Site Restoration = \$1.8 M
- Total Estimated Cost = \$2.7 M
- This does not include easements costs

Recommended Action

- Implement educational outreach
- Be a good neighbor and replace existing septic tanks that are owned by the City
- Offer to pay for system inspection by a Certified Septic Tank Contractor on a voluntary basis at no fee to the customer
 - Inspector = \$500/septic system
 - Estimated City cost = \$25,000
- Once the surrounding areas of North Port and unincorporated Sarasota County begin addressing septic systems in high risk areas, we would advise acquiring rights and beginning design to install additional sewer lines strategically.

QUESTIONS