



Greater Pine Island Civic Association

Protecting Pine Island Since 1957

P.O. Box 3044
Pineland, FL 33945
GPICA.org

Pamela Keyes
Director, Lee County Public Utilities
7391 College Parkway
Fort Myers, FL 33907
PKeyes@leegov.com

Dear Ms. Keyes,

I'm writing today on behalf of the Greater Pine Island Civic Association (GPICA) to share with you information we have gathered on septic and water quality issues surrounding Greater Pine Island and to request that our community receive priority consideration as Lee County undertakes the \$734,000 Countywide Wastewater Management Plan approved by the Lee County Commission in June. We also request that Lee County sponsor a septic-to-sewer study for Greater Pine Island.

As you'll see from our Septic Conversion Task Force Summary attached here, Pine Island's situation bears resemblance to that facing Captiva — though on a larger scale. We believe that our size and scale — and obvious geographic situation as the largest island on Florida's west coast — lends itself making Pine Island a high-priority target for wastewater planning and that we should be at the top of the list of unincorporated communities where septic and water quality issues are being addressed by Lee County.

I'm also writing to invite you to be the key speaker at the 6:30 p.m. Dec. 7, 2021, meeting of our membership (either in person or via Zoom, depending on the state of Covid at the time).

- You previously agreed to present information about septic conversions and wastewater management at our November 2021 meeting; however, due to a conflict, we're wondering if you would be able to change your presentation to the December date?

Thank you very much for your consideration of Pine Island as a priority target for septic-to-sewer conversion study and planning.

Please also let me know whether the December date is convenient for you.

Respectfully,

Nadine Slimak
Vice President, Greater Pine Island Civic Association
Nadine@VettedCommunications.com

Board of Directors

Septic Conversion Task Force Summary

Between December 2020-January 2021, the GPICA conducted a community survey to ask our residents and members (in Matlacha Isles, Matlacha, St. James City, Pine Island Center, Pineland and Bokeelia) about the key issues of concern to them. One of the main issues they identified was water quality. A common refrain was that “our quality of life depends on clean water for everything from our commercial fishery to recreation.”

The beauty and vitality of the waters that surround Pine Island have drawn many residents to call this Island home. However, in recent years, our waterways — like those in much of Florida’s Southwest Coast — have been plagued by toxic algae blooms. Today, Matlacha Pass and Pine Island Sound are also designated as impaired waterways for excess nutrients and/or fecal coliform.

While many of the issues impacting water quality locally require political solutions at the state and federal levels, the GPICA believes there are areas where we can work locally to help improve our waters.

In June 2021, we formed the “GPICA Septic Conversion Task Force.” The mission of this task force is to “support improved quality for the public waters surrounding Pine Island by exploring the feasibility of converting Island residences from septic to a central sewer system.”

Our goal was to follow the path of the Captiva Community Panel, which gained Lee County funding for a septic-to-sewer conversion study of the costs and benefits of connecting Captiva residences to the already-existing Sanibel wastewater treatment plant.

Our initial work has focused on several avenues:

- Understanding the use and capacity of the current Pine Island Wastewater Treatment Plant/Water Reclamation Facility (6928 Stringfellow Road, St. James City, FL 33956);
- Understanding the current use and history of package plants on the Island and the number of septic systems on the Island;
- Looking at water quality indicators and parameters gathered about local waters by state/federal/nonprofit agencies and organizations.

Use and capacity of the current Pine Island Wastewater Treatment Plant/Water Reclamation Facility

- The facility serves 2,236 customers and is projected to serve 3,323 by 2040 (based on what is already permitted);
- Currently has 808 connections (90% residential);
- The Plant's main lift station is located at Pine Island Center, Phillips Park. It receives sewage from Matlacha, a few private stations and the park itself. Then the waste is pumped to the plant;
- Current capacity is 130,000 gal/day but the facility is permitted up to 500,000 gallons per day — indicating room at its current capacity for expansion;
- The plant could also be expanded beyond its permitted capacity as long as it meets disposal requirements for treated water/sludge;
- Considering “current” permitting (i.e. capacity that is “spoken for” but not necessarily in use) the capacity will be at 382,000 gal/day — indicating that even if all currently permitted properties are built out, there is room for expansion;
- “Treated” water is currently disposed of using the deep injection well jointly built and owned with Pine Island Water.

According to our discussions with Pine Island Water, the deep injection well is permitted to receive 2.91 million gallons per day. Currently, only 19% of the well capacity is being utilized — 5% by Lee County Utilities and 14% by Pine Island Water. While we believe the use of a deep injection well on the Island bears further community discussion based on concerns about aquifers, etc., current usage indicates plenty of excess capacity available to expand.

Current use and history of package plants on the Island and the number of septic systems on the Island

We know that Florida's high water table and sandy soils that allow wastewater to move quickly can make septic systems problematic to water quality and that improperly constructed, placed, or maintained septic systems can leach nutrients and bacteria into groundwater and indirectly to surface waters.

Lee County utilities personnel estimate that there are 4,500-5,000 septic tanks currently in use on the Island and, given the age of many Island properties, it's likely that many of them are no longer in proper working order.

There are 11 Package Plants on the Island (not including the main wastewater treatment plant):

- Bocilla Marina
- Four Winds Marina
- Tropic Isle RV resort
- The Palms at Pine Island
- Pine Island Cove
- Captain's Cove
- Island Investors
- Isle of Pines
- Blue Crab Key
- Pine Island WRF — 600 gallon spill
- PI KOA — 800 gallon spill

About 1/3 of these plants have received some kind of warning letter or citation — typically for minor mechanical malfunctions, though several have been cited for spills. (See “Package Plants Addendum 1”)

Water quality indicators and parameters

According to the Charlotte Harbor National Estuary Partnership, the South Florida Water Management District (and other agencies or organizations), water quality (See “Pine Island Water Quality Addendum 2”) in Pine Island Sound and Matlacha Pass shows excess levels of:

- Fecal coliform
- Nutrients
- Phosphorous
- Mercury

An older 2017 Estuaries Report Card produced by The Conservancy of Southwest Florida [<https://conservancy.org/our-work/policy/water-quality/>], Pine Island Sound (including Matlacha Pass) received a D score grade for water quality and considering there have been no or minimal mitigation efforts it's unlikely the situation has improved since the report stated that:

“Pine Island Sound has degraded water quality with 95% of the watershed impaired for at least one parameter category... Nutrients in the watershed are of increasing concern, as the draft watershed assessment lists indicate that Matlacha Pass is newly impaired for nutrients, likely as a result of stormwater and sewage/septic runoff. The same runoff is also most likely the source of the pathogen category impairments, specifically for fecal coliform.”

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Additional Findings and Questions

It is our understanding (per communications between Lee County Community Development staff and developers proposing new residential properties in Bokeelia, at the north end of the Island) that:

- Current DEP and DOH policy states that no additional package plants may be permitted or built on Pine Island;
- That because of this DOH and DEP policy, developments needing package plants cannot be approved; instead, developers would be required to hook into the Pine Island Reclamation Facility.

Not only does this raise questions about the fate of developments previously permitted on Pine Island (i.e. those properties covered under existing development orders), it also raises questions about what happened to an earlier plan for a central sewer line to be built from the reclamation plant in St. James City north to Bokeelia and why that plan appears to have been abandoned.

One main role of the GPICA is to help protect the unique coastal-rural atmosphere on Greater Pine Island — including protecting the health of the water bodies surrounding our homes.

In sum, we would very much like to partner with Lee County to work to improve our water quality and way of life and seek guidance for moving forward — in partnership — so that we may see real and concrete improvements to the health of our environment.