## **Lisa Smith**

**From:** Office of Chairman Clark

Sent: Wednesday, September 29, 2021 8:13 AM

**To:** Commissioner Correspondence

**Subject:** FW: Sewer Expansion Docket# 20200226-SU

Attachments: 2021-0927 Sewer Expansion Docket #20200226-SU Memo.pdf

#### Good morning,

Please place the attached email in Docket No. 20200226.

#### Hannah E. Barker

Executive Assistant to Chairman Clark Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399 (850) 413-6004

From: Castillo, Delmis < Delmis. Castillo@charlottecountyfl.gov>

Sent: Tuesday, September 28, 2021 1:26 PM

To: Office of Commissioner La Rosa < Commissioner.LaRosa@psc.state.fl.us>; Office of Commissioner Graham

<Commissioner.Graham@PSC.STATE.FL.US>; Office of Chairman Clark <Commissioner.Clark@psc.state.fl.us>; Office of

Commissioner Fay < Commissioner. Fay@psc.state.fl.us>; Office of Commissioner Passidomo

<Commissioner.Passidomo@psc.state.fl.us>; Records Clerk <CLERK@PSC.STATE.FL.US>

Cc: Rudy, Craig < Craig. Rudy@charlottecountyfl.gov>; Moody, Brandon < Brandon. Moody@charlottecountyfl.gov>; Jack

Boyer (lwjd777@yahoo.com) <lwjd777@yahoo.com>

Subject: Sewer Expansion Docket# 20200226-SU

#### Good Afternoon Commissioners.

Please see the attached memo from Charlotte County Utilities Director and Water Quality Manager regarding Sewer Expansion Docket# 20200226-SU.

Thanks,

## **Delmis Castillo**

Administrative Services Supervisor Charlotte County Utilities 25550 Harbor View Rd, Suite 1 Port Charlotte, FL 33980 941.764.4507 CharlotteCountyFL.gov Delivering Exceptional Service



September 27, 2021

Florida Public Service Commission Atten: Clerk 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850

re: Docket # 20200226-SU

To whom it may concern:

Charlotte County Utilities and Administration Departments submit this letter in support of the expansion of sewer services to Knight, Don Pedro, and Little Gasparilla Islands. According to Charlotte County's 2050 Comprehensive Plan, extension of water and sewer services throughout the unincorporated portions of the county is considered an integral part of Charlotte County's development strategy. During the past decade the County has made significant progress in studying and understanding the impacts of septic systems. These efforts indicate that negative environmental impacts of septic tanks to coastal Charlotte County are quantifiable. The County has thus been working to promote sewer expansion through legislation, planning, and budgeting. The County's support of sewering its barrier islands is in keeping with the approved sewer master plan and can ultimately be consequential to long-term protection of the surrounding waters.

During the 1960's it was first realized that the large amount septic systems installed as part of the numerous land sales in South West Florida were starting to have environmental impacts. Properly functioning septic systems rely on drain fields with sufficient filtration distance to allow for attenuation of nutrients and pathogens prior to reaching groundwater. For several years, Charlotte County has funded efforts to determine the potential contribution of septic tanks to nutrient concentrations in surface waters. In 2016, the Harbor Branch Oceanographic Institute published a nutrient source assessment of surface waters in residential portions of coastal Charlotte County using sucralose and stable nitrogen isotopes commonly found in wastewater. They concluded the following:

Groundwater samples revealed a strong STE [Septic Tank Effluent] signal based on elevated nutrient concentrations,  $\delta^{15}$ N values, and sucralose concentrations. These data combined with the elevated BOD values observed during the reconnaissance sampling, indicate that STE contaminates shallow groundwaters and surface waters in Charlotte County and represent a significant source of nutrient and bacterial pollution in Charlotte Harbor. (Lapointe, 2016)

Since the issuance of that report, Charlotte County has commissioned multiple studies demonstrating the positive impact of septic to sewer conversions on nutrient concentration in stormwater and

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groundwater, as well as the rate and direction of flow from groundwater near septic systems to surface water bodies. These reports are available for review upon request.

When analysis indicates that a sanitary sewer treatment system (including septic systems) is adversely impacting the environment, the County has a responsibility to promote the repair or replacement of those systems. During a recent inspection of Knight, Don Pedro, and Little Gasparilla Islands, county staff noted numerous residential septic tanks and drain fields buried at or below the mean ground elevation. These installations are likely not meeting modern drain field requirements, based on observations of more recent elevated septic tank installations on the island. This lack of sufficient filtration capacity will be exacerbated if sea level rise continues as predicted along the coast. As base sea level elevation increases, the distance between drain field outlets and the water table will decrease, generating additional concerns over the efficacy of septic systems in the area. Extending sewer coverage to the islands eliminates these concerns.

The Comprehensive Plan states that the County shall encourage sanitary sewer disposal agreements whereby package treatment plants are to be replaced by treatment facilities and shall attempt to reduce the percentage of septic systems serving new development. It is important to note that the two package treatment plants present on the islands are nearing their end-of-life and as such will soon need to be refurbished or replaced, at expense to the taxpayers receiving waste treatment services from those facilities. Expansion of sewer service to the islands will eliminate the need (and therefore unecessary cost) to refurbish those facilities.

The Comprehensive Plan allows the county to install water distribution and wastewater collection lines in a Rural Service Area (such as the barrier islands) only if deemed necessary to address situations where the public health, safety, and welfare are in danger; otherwise, expansion must be conducted by utilities regulated by the Florida Public Service Commission. The Charlotte County Sewer Master Plan (2017) Capital Improvements Project (CIP) Information Sheets W2 & W5 (provided as attachments to this letter) reflect this demarcation of responsibility, as Charlotte County Utilities is indicated as tasked with only providing the infrastructure to transfer wastewater from the islands to County treatment facilities located on the mainland. That said, the following project elements are also described on the aforementioned Information Sheets:

- The project boundary includes the existing treatment plants and the entire islands;
- The Project Details section indicates all lots in the project area are expected to be served by the new sewer conveyance system, not just those properties currently served by the existing treatment plants, and;
- Vacuum mains are described as a component of this project, indicating that individual
  properties are expected to be connected to the pumping station (otherwise vacuum mains
  would be unnecessary for this type of project).

Based on the description in the Information Sheets, it is apparent that the Plan authors, and the Commissioners who approved the Plan, expect sewer coverage to be extended throughout Charlotte County's barrier islands.

The Comprehensive Plan dictates that Charlotte County Utilities shall develop a cost-effective sewer expansion program consistent with the Goals, Objectives, and Policies of the Comprehensive Plan, with

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the intent of reducing the impact of pollutants on the natural environment and preserving groundwater quality. It is our position that extending sewer coverage to the barrier islands of Charlotte County is in keeping with the goals and mandates stated herein, and these proposed activities abide by the directives laid forth in the County's Sewer Master Plan. We appreciate your consideration of this matter and stand ready to answer any questions you may have regarding the County's sewer expansion efforts.

Sincerely,

Craig Rudy, Utilities Director

Brandon Moody, Water Quality Manager

Attachments:

Don Pedro CIP Information Sheet L.G.I. CIP Information Sheet

# CAPITAL IMPROVEMENTS PROJECT INFORMATION SHEET

Project Name: W2 - Don Pedro

Predecessor CIP: W-UTLCON-DP, W-FM-10 Project Area Served: W2

DESCRIPTION: This project includes the connection of a private utility's service area. The existing sewer system infrastructure will be used for wastewater collection. The existing WWTP will be converted to a pump station and the force main identified in the predecessor CIP will be used to convey wastewater flows to the existing system.

## **ENVIRONMENTAL DETAILS**

Overall Impact Score 4.4/5.0

Nitrogen Load Reduction 8,500 pounds per year

#### **PROJECT NEED**

- Reduce nitrogen loading to environment
- Increase capacity to accommodate design flows
- Reduce O&M requirements

#### **EST. CONSTRUCTION TIME**

Start: Year 6 End: Year 7

## **PROJECT DETAILS**

West County

No. of Occupied Lots 261

No. of Vacant Lots 168

No. of Total Lots 429

#### PROJECT COMPONENTS

- ✓ Pump Station☐ Force Mains✓ Vacuum Mains
- ☐ Low Pressure Mains
- Gravity Mains



## Expenditure Plan (\$1000)

	Year 5	Year 6	Year 7	Year 8	Year 9	Total	
Professional Services	630	252	252			1,134	
Land (or ROW)	30					30	
Construction Cost		2,568	2,568	1501.0	57845	5,136	
<b>Total Project Cost</b>	660	2,820	2,820			6,300	
(Costs expressed in 2017 dollars	c)						

# **CAPITAL IMPROVEMENTS PROJECT INFORMATION SHEET**

Project Name: W5 - L.G.I.

Predecessor CIP: W-UTLCON-HBBC, W-FM-12

Project Area Served:

W5

DESCRIPTION: This project includes the connection of a private utility's service area. The existing sewer system infrastructure will be used for wastewater collection. The existing WWTP will be converted to a pump station and the force main identified in the predecessor CIP will be used to convey wastewater flows to the existing system.

#### **ENVIRONMENTAL DETAILS**

Overall Impact Score 4.7/5.0

Nitrogen Load Reduction 10,500 pounds per year

## **PROJECT NEED**

- Reduce nitrogen loading to environment
- Increase capacity to accommodate design flows
- Reduce O&M requirements

#### **EST. CONSTRUCTION TIME**

Start: Year 4
End: Year 5

## PROJECT DETAILS

West County

No. of Occupied Lots 500

No. of Vacant Lots 267

No. of Total Lots 767

## PROJECT COMPONENTS

- ✓ Pump Station✓ Force Mains✓ Vacuum Mains
- Low Pressure Mains
  - ] Gravity Mains



#### Expenditure Plan (\$1000)

Experience Figure (\$2000)									
	Year 3	Year 4	Year 5	Year 6	Year 7	Total			
Professional Services	1,040	416	416			1,872			
Land (or ROW)	48					48			
Construction Cost	ST TOTAL	4,240	4,240			8,480			
<b>Total Project Cost</b>	1,088	4,656	4,656			10,400			
(Costs expressed in 2017 dollars	3)								