Peace River Manasota Regional Water Supply Authority Special District Public Facilities Report

[Revised December 2021]

Pursuant to Section 189.08, Florida Statute, special districts of the state are required to file special district public facilities reports with each local government in which the special districts are located. The purpose of the report is to provide local governments with information that may be pertinent to the development and updating of the local governments' comprehensive plan.

Overview

The Peace River Manasota Regional Water Supply Authority is an independent special district created and existing pursuant to Florida Statutes and interlocal agreement between Charlotte, DeSoto, Manatee and Sarasota Counties. The boundaries of the Authority consist of the entirety of DeSoto, Manatee and Sarasota Counties and those parts of Charlotte County which are under the jurisdiction of the Southwest Florida Water Management District.

The Authority is a regional water supply authority that provides wholesale drinking water to its member counties and the City of North Port supporting the region's economy and quality of life.

Statutory Requirements

Pursuant to Section 373.713, Florida Statutes, the Authority shall design, construct, operate, and maintain facilities in locations and at the times necessary to ensure that an adequate water supply will be available to all citizens within the Authority. By statute, the Authority is to maximize the economic development of the water resources while supplying water in such a manner as will give priority to reducing adverse environmental effects.

History

The Authority was created in 1982. Through its initial decade the Authority focused on planning the interconnection of water systems within the region. In 1991 the privately owned water utility in the region, General Development Utilities (GDU), went into bankruptcy that led to acquisition of the existing water treatment plant, the Peace River Facility that provided water to only a small segment of the region in Charlotte and DeSoto counties and the City of North Port.

Through the following three decades the Authority invested over \$364M in the expansion of the Peace River Facility and extension of the regional transmission pipeline system to provide water service to additional areas within the region including Sarasota County.

Today the Authority is a major water supplier for the region. The Peace River Facility treatment capacity has been expanded from 12 to 51 million gallons per day (MGD) incorporating a 6.5 billion gallon (BG) off-stream raw water reservoir system and aquifer storage/recovery system (ASR) providing an additional 9 BG of storage. The regional transmission system has been extended from the seven miles originally acquired from GDU in 1991, and now includes approximately 81 miles of large diameter pipeline delivering drinking water to Charlotte, DeSoto and Sarasota Counties and the City of North Port.

Existing Public Facilities

A description of existing public facilities owned or operated by the Authority including the current capacity of the facility, current demands placed upon it, and its location.

a) Water Supply

The Authority owns and operates the Peace River Facility located in southwest DeSoto County. The Peace River Facility is a 51 MGD surface water treatment facility utilizing the Peace River as a water source. Water is withdrawn from the Peace River in accordance with a withdrawal schedule established by the Southwest Florida Water Management District in a water use permit issued to the Authority to protect the downstream estuary and Charlotte harbor.

The water supply system includes an off-stream reservoir system with 6.5 billion gallons storage capacity and an ASR system consisting of 21 ASR wells with storage capacity of approximately 6.3 billion gallons at the Peace River Facility site.

b) Regional integrated Loop System

The Authority currently maintains a network of approximately 81 miles of transmission pipeline for delivery of treated drinking water to its member governments and customers (Figure 1). Off-site finished water storage tanks and pump stations are maintained in two locations, one in Punta Gorda and the other at the Carlton Water Treatment Plant in Sarasota County.

The Authority also has interconnects with other water systems including: City of Punta Gorda Utilities and Englewood Water District. These interconnects are available to supply water in case of natural disaster, equipment maintenance or failure, resource stress or unforeseen or unplanned increase in water demand.

Proposed Public Facilities

A description of public facilities the Authority is building, improving or expanding, or is proposing to build, improve or expand within the next 7 years including how the Authority currently proposes to finance the facility.

a) Water Supply

Study on the conversion of the ASR system to partially treated water for injection is on-going, as are studies to site and construct a new 9 billion gallon off-stream reservoir, and expansion of the Peace River Water Treatment Facility capacity from the current 51 MGD capacity to 75 MGD. These projects are proposed to begin construction within the next 5 years.

b) Regional integrated Loop System

The Authority's 20-year expansion program identifies construction of an additional 72 miles of interconnecting pipelines to support regional reliability, provide supplies to meet growing needs, share resources to the benefit of all residents in the four-county service area, and ensure that public water supply is provided in an environmentally sustainable manner. In mid-2021, the Authority completed construction of the Phase 3B Regional Interconnect, extending the regional transmission system 5-miles further north in Sarasota County (Figure 1). Approximately 45 miles of new transmission pipeline including the Phase 3C, Phase 3C Extension and Phase 2B/2C Pipelines are now in design. Anticipated start of construction for these projects is within the next 5 years.

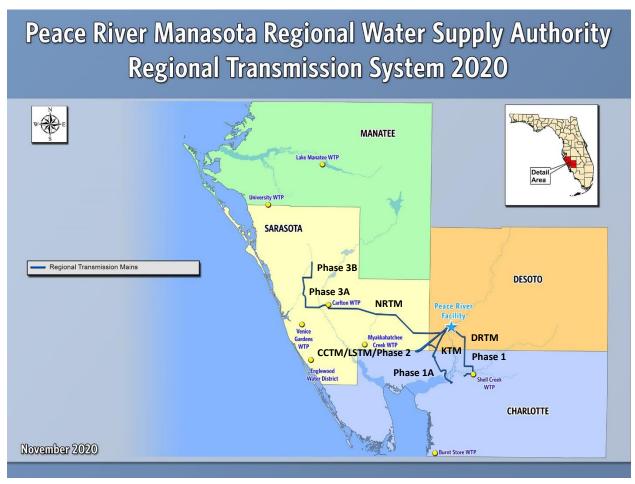


Figure 1. Existing Regional System



Figure 2. Proposed Regional System Extensions Now in Design

Table 1. Existing Water Supply Facilities

Facility	Current Permitted Capacity	Current Demands	Year Constructed	Location	
Peace River Facility 1991 Acquisition Peace River Option Regional Expansion Program	51 MGD	34.7 MGD	1980 2001 2009	8998 SW County road 769 Arcadia, FL	
Reservoir No. 1	0.5 BG	0.5 BG	1980	Peace River Facility site	
Reservoir No. 2	6 BG	6 BG	2009	Peace River Facility site	
ASR Wellfield	6.3 BG	6.3 BG	1980 - 2001	Peace River Facility site	
Punta Gorda Storage Tank Pump Station	0.5 MG 6.0 MGD	0.5 MG 1.0 MGD	2012	Cleveland Area U.S. 17 Charlotte County	
Carlton Storage Tanks Pump Station	10 MG 18.5 MGD	10 MG 7.0 MGD	2011	Carlton Water Treatment Plant Sarasota County	

MGD – Million Gallons per Day

BG – Billion Gallons

Table 2. Existing Pipelines

Facility	Diameter (inches)	Material	Length	Year Constructed	Location	
Charlotte County Transmission Main (CCTM)	36	PCCP	7 miles	1980	DeSoto County/Charlotte County/City of North Port	
Lake Suzy Transmission Main (LSTM)	12	PVC	2.4 miles	1980	DeSoto County	
North Regional Transmission Main (NRTM)	42	Steel	23 miles	2001	DeSoto County/Sarasota County	
Kings Highway Transmission Main (KTM)	24	DIP	5 miles	2001	DeSoto County	
Desoto Regional Transmission Main (DRTM)	20	DIP	7 miles	2005	DeSoto County	
Phase 1A Regional Interconnect and Pump Station	24	DIP	9 miles	2012	DeSoto County/Charlotte County	
Phase 2 Regional Interconnect	42	DIP	7 miles	2013	DeSoto County/City of North Port/Charlotte County	
Phase 3A Regional Interconnect and Pump Station	48	Steel	9 miles	2011	Sarasota County	
Phase 1 Regional Interconnect	24	DIP	6.4 miles	2020	DeSoto County/Charlotte County	
Phase 3B Regional Interconnect	48/36	Steel	5 miles	2021	Sarasota County	

PCCP – Prestressed Concrete Cylinder Pipe

DIP – Ductile Iron Pipe

Table 3. Proposed Water Supply Facilities

Facility	Description	Anticipated Completion	Anticipated Capacity	Anticipated Demand	Proposed Financing
Partially Treated Water ASR Conversion	Pump station, filtration and disinfection system to convert existing finished water ASR system to use partially treated water from the reservoir system	2027	21 MGD	21 MGD	Water Rates Grant Funds
Peace River Facility Treatment Plant Capacity Expansion	Upgrade and expansion of the Peace River Facility to increase treatment capacity from current 51 MGD to 75 MGD.	2028	75 MGD	53 MGD	Water Rates Grant Funds
Peace River Regional Reservoir No. 3 (PR³)	Off-stream reservoir and river intake to increase storage by 6 BG to 9 BG	2028	6 BG to 9 BG	20 MGD	Water Rates Grant Funds

Table 4. Proposed Pipelines

Facility	Description	Anticipated Completion	Anticipated Capacity	Anticipated Demand	Proposed Financing
Phase 3C Regional Interconnect	Approximately 10 miles of 42 to 48-inch diameter pipe and pump station.	2025	31-41 MGD	N/A	Water Rates Grant Funds
Phase 3C Regional Extension (Connection with Manatee)	Approximately 11 miles of 24 to 36-inch diameter pipe and pump station.	2028	10-23 MGD	N/A	Water Rates Grant Funds
Phase 2B/2C Regional Interconnect	Approximately 24 miles of 48/42-inch diameter pipe and pump station.	2028	31 - 41 MGD	N/A	Water Rates Grant Funds