City of North Port

ORDINANCE NO. 2023-27

AN ORDINANCE OF THE CITY OF NORTH PORT, FLORIDA, AMENDING THE CITY OF NORTH PORT COMPREHENSIVE PLAN CHAPTER 4, UTILITIES ELEMENT, POLICY 1.1.5; ADOPTING THE CITY OF NORTH PORT 10-YEAR WATER SUPPLY FACILITIES WORK PLAN; PROVIDING FOR FINDINGS; PROVIDING FOR ADOPTION; PROVIDING FOR TRANSMITTAL OF DOCUMENTS; PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of North Port is committed to planning and managing the future growth and development of the City; and

WHEREAS, pursuant to Article VIII, Section 2(b) of the Constitution of the State of Florida, the North Port City Charter, and the Community Planning Act ("Act"), Florida Statutes Chapter 163, Part II, the City is authorized and required to adopt a Comprehensive Plan; and

WHEREAS, on March 15, 1989, the City Commission adopted Ordinance No. 89-3, establishing the North Port Comprehensive Plan ("Comprehensive Plan"), as revised and updated in its entirety; and

WHEREAS, on June 27, 2017, the City Commission adopted Ordinance No. 2016-34, approving the Evaluation and Appraisal Report-based Comprehensive Plan Amendment, including adoption of a Potable Water Supply, Wastewater and Reuse Element; and

WHEREAS, Section 163.3177(6)(c), Florida Statutes, requires local governments to adopt and update a 10-Year Water Supply Facilities Plan into their Comprehensive Plan within 18 months after the Southwest Florida Water Management District adopts the Regional Water Supply Plan; and

WHEREAS, the North Port Comprehensive Plan, Chapter 4, Utilities Element, Potable Water Goals, Objectives, and Policies, Policy 1.1.5., includes the City of North Port 10-Year Water Supply Facilities Work Plan, and provides for updates as required by Florida Statutes Section 163.3177(6)(c)3.; and

WHEREAS, the Southwest Florida Water Management District approved the Regional Water Supply Plan in November 2020; and

WHEREAS, on May 17, 2022, the City of North Port Utilities Department, in coordination with Black & Veatch, completed the Water Supply Facilities 10-Year Work Plan Update; and

WHEREAS, on September 7, 2023, the Planning and Zoning Advisory Board, acting as the Local Planning Agency for the City of North Port, held a duly advertised public hearing and recommended approval of the proposed Amendment to the City Commission; and

WHEREAS, the City Commission of the City of North Port held duly noticed public hearing at first and second reading of this ordinance to review the recommendations of the Planning and Zoning Advisory Board and to receive public comment on the subject matter of this ordinance; and

WHEREAS, the City Commission of the City of North Port approved the transmittal of this Amendment, together with supporting documentation, which was transmitted to the State Land Planning Agency of the Florida Department of Economic Opportunity and the various agencies and governments as appropriate for review and comment; and

WHEREAS, pursuant to Florida Statutes Section 163.3184(3)(b)4.h, the State Land Planning Agency of the Florida Department of Economic Opportunity reviewed the proposed amendments for impacts to important state resources and facilities not within the jurisdiction of other state agencies; and

WHEREAS, the Water Supply Facilities 10-Year Work Plan Update, as amended, is housed in the department responsible for utility services; and

WHEREAS, the City Commission determined that the proposed Amendments serve the public health, safety, and welfare of the citizens of the City of North Port, Florida.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF NORTH PORT, FLORIDA:

SECTION 1 – FINDINGS

1.01 The above recitals are true and correct and are incorporated in this ordinance by reference.

1.02 Pursuant to Florida Statutes Section 166.041(4)(c), a business impact estimate was not required because this ordinance is enacted to implement Part II of Florida Statutes Chapter 163, relating to growth policy, county and municipal planning, and land development regulation, including zoning, development orders, development agreements, and development permits.

1.03 Pursuant to Section 14 of Chapter 2023-304, Laws of Florida, this comprehensive plan amendment is not more restrictive or burdensome than current regulations.

1.04 Pursuant to Florida Statutes Section 163.3184(3), the City followed the expedited state review process for text changes to a local government's comprehensive plan goals, objectives, and policies, as follows:

1. Within ten (10) working days after the initial public hearing, the City transmitted the amendment and appropriate supporting data and analyses to the reviewing agencies and other local governments that filed a written request;

2. Not later than thirty (30) days after the date the reviewing agencies and local governments first received the amendment, the City received the reviewing agencies' and local governments' comments, if any;

3. The adoption hearing was held within 180 days after receipt of the agency comments; and

4. Within ten (10) working days after the second public hearing, the City transmitted the adopted comprehensive plan amendment and supporting data and analyses to the state land planning agency and any affected person that provided comments; and

5. The City did not receive notice of any deficiencies within five (5) working days after the agency's receipt of the amendment.

SECTION 2 – ADOPTION

2.01 The City Commission hereby amends the City of North Port Comprehensive Plan Utilities Element, to adopt and incorporate by reference the City of North Port Water Supply Facilities 10-Year Work Plan Update, dated May 17, 2022, as attached in "Exhibit A".

2.02 All identified exhibits are incorporated in this ordinance by reference.

SECTION 3 – TRANSMITTAL OF DOCUMENTS

3.01 Pursuant to Florida Statutes Section 163.3184, the City Clerk is directed to transmit, within ten (10) days after first reading, this ordinance and the appropriate supporting data and analyses provided by the City Manager or designee to:

a. Florida Department of Economic Opportunity;

b. Southwest Florida Regional Planning Council;

c. Southwest Florida Water Management District;

d. Florida Department of Environmental Protection;

e. Florida Department of State;

f. Florida Department of Transportation;

g. Sarasota County, Florida; and

h. Any other local government or governmental agency who has filed a request with the City.

3.02 Pursuant to Florida Statutes Section 163.3184, the City Clerk is directed to transmit, within ten (10) days of final adoption of this ordinance, all documents to the Florida Department of Economic Opportunity and any other agency or local government that provided timely comments.

SECTION 4 – CONFLICTS

4.01 In the event of any conflict between the provisions of this ordinance and any other ordinance, in whole or in part, the provisions of this ordinance will prevail to the extent of the conflict.

SECTION 5 – SEVERABILITY

5.01 If a court of competent jurisdiction finds that any section, subsection, sentence, clause, phrase, or provision of this ordinance is for any reason invalid or unconstitutional, that provision will be deemed a separate, distinct, and independent provision and will not affect the validity of the remaining portions of the ordinance.

SECTION 6 – EFFECTIVE DATE

6.01 If not timely challenged, this ordinance takes effect thirty-one (31) days after the Florida Department of Economic Opportunity notifies the City that the Comprehensive Plan Amendment package is complete, as provided in Florida Statutes Section 163.3184(3)(c).

6.02 If timely challenged, this ordinance takes effect upon the Florida Department of Economic Opportunity or Administration Commission entering a final order determining the adopted Amendment complies with Florida Statutes Section 163.3184(3)(c).

READ BY TITLE ONLY at first reading by the City Commission of the City of North Port, Florida, in public session on September 12, 2023.

ADOPTED by the City Commission of the City of North Port, Florida, on the second and final reading in public session on January 9, 2024.

CITY OF NORTH PORT, FLORIDA

_____
ALICE WHITE
MAYOR

ATTEST

_____
HEATHER TAYLOR, MMC
CITY CLERK

APPROVED AS TO FORM AND CORRECTNESS

_____
AMBER L. SLAYTON, B.C.S.
CITY ATTORNEY

Exhibit A to Ordinance No. 2023-27 (50 Pages)

CITY OF NORTH PORT

WATER SUPPLY FACILITIES 10-YEAR WORK PLAN UPDATE

Prepared for
City of North Port

May 2022

Prepared by:

BLACK & VEATCH

Black & Veatch
4415 Metro Parkway #200
Fort Myers, Florida 33916
(239) 703-8300

Certifications

ENGINEER:

The information contained in this report is true and correct to the best of my knowledge. The report was prepared in accordance with sound engineering principles.

This item has been electronically signed and sealed by J. M. McGee, PE. On May 17th, 2022 using a *SHA-1* authentication code.

Printed copies of this document are not considered signed and sealed and the *SHA-1* authentication code must be verified on electronic copies.

_____ May, 17th 2022

Mike McGee, PE #44055 Date
Black & Veatch
4415 Metro Pkwy #200
Fort Myers, Florida 33916

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1.0 Introduction

The City of North Port has updated the Water Supply Facilities 10-Year Work Plan in accordance with the City's Comprehensive Plan. The City's Comprehensive Plan's goals are long-ranged and intended to set the vision of the community guiding the policy decision-making within the community. The City's Comprehensive Plan states that the City shall coordinate with the Southwest Florida Water Management District (SWFWMD) and continue to update its Water Supply Facilities 10-Year Work Plan every 5 years, or within 18 months after an update to the Regional Water Supply Plan is approved by the SWFWMD.

SWFWMD updated the Regional Water Supply Plan in November 2020 which triggers this update to the Water Supply Facilities 10-Year Work Plan. This City of North Port Water Supply Facilities 10-Year Work Plan Update (Black & Veatch, 2022) outlines the City's water demand projections, their potable water facilities and future water supply projects. This report provides the data and analysis used to develop the Work Plan and presents the City's Capital Improvement Program (CIP) which outlines recommended projects in the future that will allow the City to meet future water demands while maintaining its excellent potable water level of service standards.

2.0 Data and Analysis

The City of North Port Utilities Department currently provides potable water utility service to approximately 62,350 residents through approximately 23,781 water connections. The City of North Port has been experiencing rapid growth the last few years. The City's Planning and Zoning Department projects that the City's population could potentially grow to approximately 100,000 people by the year 2032.

As stated in the City's 2017 Comprehensive Plan, the City's growth will be spurred by the proposed large-scale developments such as the Wellen Park and the Panacea areas. Water service is currently provided to the incorporated areas within the City limits as shown in Figure 1. Figure 1 also identifies the City's water service territory including the water treatment plant, booster pump stations, interconnects, and water supply wells.

2.1 Potable and Reuse Water Planning Studies and Efforts

The City of North Port periodically conducts water supply planning, design, and construction of infrastructure to accommodate the continuous demand growth of the City. The City's also pays close attention to any essential repairs of its water supply and reuse infrastructure. Some of the City's most recent planning efforts are described below.

The following is a list of some of the water system planning documents that were considered in this report:

- 2022 Demand Projections from the ongoing 2022 Water Master Plan
- 2022 City of North Port Neighborhood Master Plan
    - Preliminary Cost Estimates and General Sequencing of Master Plan
- 2020 Regional Water Supply Plan (SWFWMD 2020)
- 2020 Peace River Manasota Regional Water Supply Authority Integrated Regional Water Supply Plan (HDR, 2020)
- 2020 Regional Water Supply Plan – Southern Planning Region (Wade Trim, 2020)
- 2017 City of North Port Comprehensive Plan
    - Chapter 4 Potable Water, Groundwater Aquifer Recharge Station
- 2015 City of North Port's Utilities Master Plan (Wade Trim, 2015)
- 2014 Water Demand Analysis (Wade Trim, 2014)
- 2010 US 41 Corridor Utility Master Plan Executive Summary and Study Update (Watermark Engineering, 2010)
- 2008 Water Treatment Plant Enhancement Study (Carollo, 2008)
- 2007 Water Utility Master Plan Update (Hazen & Sawyer, 2008)

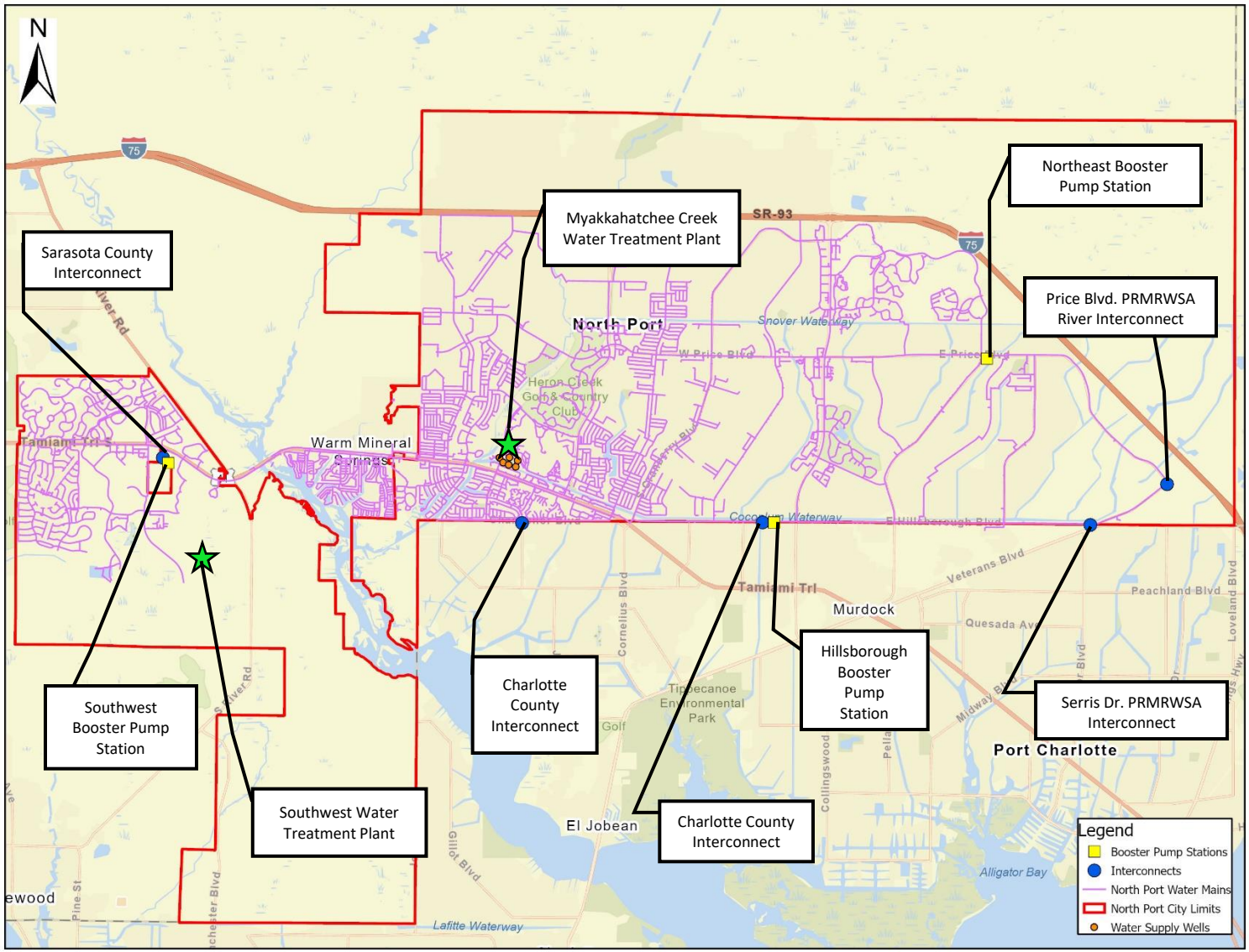

Figure 1 City of North Port Water Supply Facilities

2.2 Potable Water Facilities – Treatment, Storage, and Distribution

The City has several water supply sources, one water treatment plant, three booster stations and several ground storage tanks. A summary of those facilities is as follows.

The Myakkahatchee Creek Surface Water Treatment Plant (MCWTP) withdraws raw surface water for treatment at the MCWTP. The primary surface water supply is obtained from Myakkahatchee Creek and Cocoplum Waterway. Both are highly dependent on rainfall and any stormwater runoff. Currently, The Cocoplum Waterway is used as an emergency water supply. In 2013, the City constructed and placed into service a reverse osmosis (RO) treatment plant at the MCWTP. The RO treatment plant is proactively used as an alternative water supply and treatment using brackish wells and improves the reliability of the MCWTP**.** Figure 2 details the MCWTP wellfield and location.

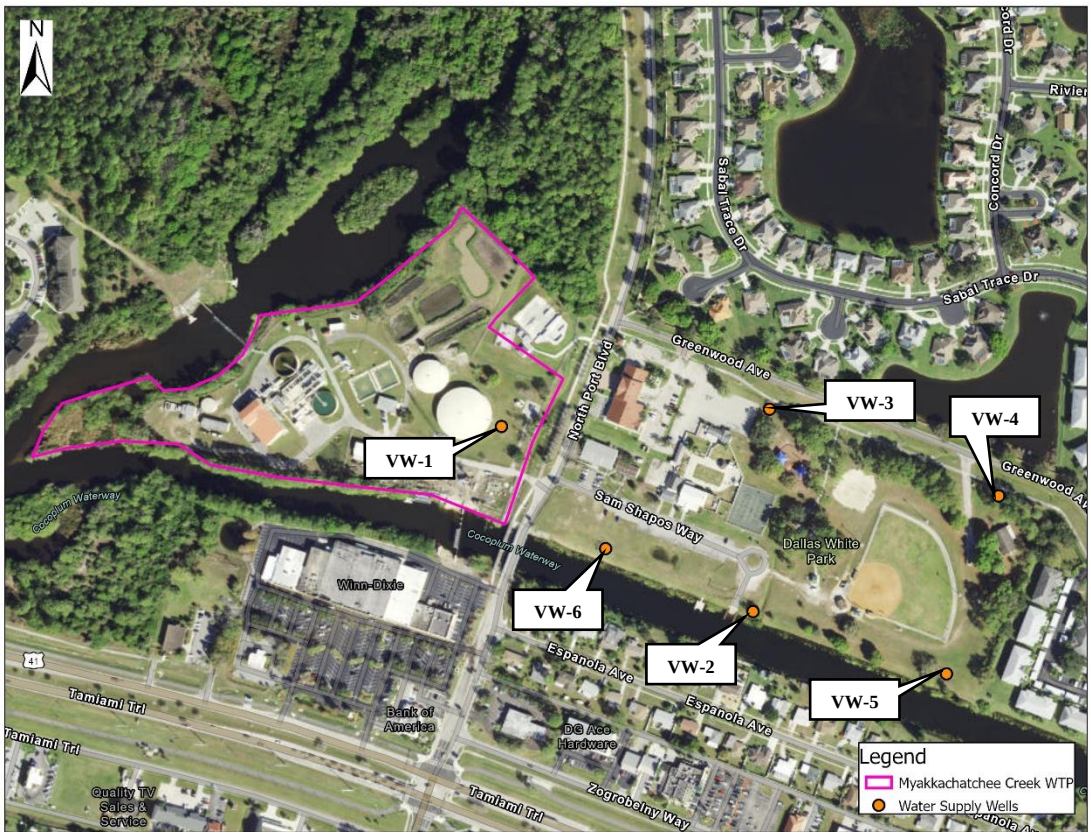

Figure 2 City of North Port MCWTP

Additionally, the City has a bulk water supply contract with the Peace River Manasota Regional Water Supply Authority (PRMRWSA). The PRMRWSA provides potable water to Charlotte County, DeSoto County, Sarasota County, and the City of North Port. Although the PRMRWSA contract is renewable, the current expiration date is October 5, 2040.

Finally, the Southwest WTP has been constructed and is undergoing commissioning. The Southwest WTP will treat brackish groundwater from the Southwest Wellfield via RO membranes.

As shown on Figure 1, the City's potable water storage and distribution facilities include ground storage tanks and pump stations that serve the potable water transmission mains and distribution system infrastructure that delivers the City's water to its customers.

2.2.1 City Owned Water Supply Summary

City Water Use Permits

The City has four permitted potable water supply sources authorized by the SWFWMD to meet its potable water demands through Year 2030:

- Myakkahatchee Creek (ID No. 10)
- Cocoplum Waterway (ID No. 11)
- The Myakkahatchee Creek RO wellfield (six wells; ID Nos. VW-1 through VW-6)
- The Southwest RO Wellfield (four wells; ID Nos. 92 through 95)

Table 1 describes the City's total permitted withdrawal amounts. The annual average quantity total of all water use permit (WUP) sources is 7.1 million gallons per day (mgd) and the peak month total permitted quantity of all sources is 8.7 mgd. These quantities have been previously allocated to meet the potable water demands of this utility through 2030, including the future allocated 2.7 mgd WUP for the Southwest RO Wellfield.

Myakkahatchee Creek Surface Water Supply

The City of North Port withdraws raw surface water from the Myakkahatchee Creek for treatment at the MCWTP. The City of North Port has a SWFWMD consumptive WUP for the Myakkahatchee Creek (WUP ID No. 20002923.015). This permit allows the City to withdraw a combined annual average quantity of 7.1 mgd and a peak monthly quantity of 8.7 mgd. It also allows the City to withdraw an annual average quantity of 4.4 mgd and a peak monthly quantity of 6 mgd from the MCWTP. WUP ID. No 20002923.015 is effective until September 22, 2030.

Cocoplum Waterway Surface Water Supply

The City of North Port has a SWFWMD consumptive WUP from the Cocoplum Waterway (WUP ID No. 20 002923.013). This WUP allows the City to withdraw from the previously mentioned annual average quantity of 4.4 mgd and a peak monthly quantity of 6 mgd that is allocated to the MCWTP. The Cocoplum Waterway WUP and its permitted water withdrawal quantities is effective through year 2030. The City plans to renew this WUP.

The Myakkahatchee Creek and the Cocoplum Waterway surface water sources experience various seasonal water qualities and flows. On occasion, these seasonal variations can result in challenges for the conventional water treatment processes.

MCWTP RO Wellfield Groundwater Supply

The MCWTP RO Wellfield groundwater supply is composed of six on-site groundwater production wells that produce raw water from the Intermediate Aquifer for the RO treatment system (2013) at the MCWTP. The City of North Port has a SWFWMD consumptive groundwater WUP (WUP ID No. 20002923.013) for the six wells (VW-1, VW-2, VW-3, VW-4, VW-5, and VW-6) as shown on Figure 2. This WUP allows the City to withdraw an annual average daily and total peak monthly quantity from this

groundwater supply that is limited to 2.0 mgd. The MCWTP RO Wellfield WUP and its permitted water withdrawal quantities is effective through year 2030. The City plans to renew this WUP.

MCWTP Combined Surface/Groundwater WUP Withdrawal Limits

Combined surface water and groundwater withdrawals at the MCWTP are limited to 4,400,000 gallons per day (gpd) on an annual average basis, and 6,000,000 gpd on a peak month basis.

Southwest RO Wellfield Groundwater Supply

The City of North Port also has an existing SWFWMD consumptive groundwater WUP ID No. 20 002923.013 (Modification 20002923.014 on May 22, 2020) for four existing wells. The WUP allows the City to withdraw an annual average daily and total peak monthly quantity that is limited to 2.7 mgd from this groundwater source. These four wells will supply the newly constructed Southwest RO Water Treatment Plant (WTP) which will mainly serve the western portion of the service area. The Southwest RO WUP is effective through year 2030.

According to the 2020 SWFWMD Regional Water Supply Plan, the Southwest Wellfield and Water Treatment Plant is to be fully constructed and in service by Summer 2022. It is assumed that there will be treatment losses of 25 percent associated with the Southwest RO Wellfield. Therefore, the annual average daily and total peak month finished water capacities are both 2.025 mgd. Table 1 presents the raw water source capacities.

Table 1 Raw Water Source Capacities (WUPs)

Source	Type	Annual Average (GPD)	Peak Month (GPD)
Myakkahatchee Creek	Surface Water	4,400,000	6,000,000
Cocoplum Waterway	Surface Water	2,400,000	4,000,000
Myakkahatchee Creek RO Wellfield(1)	Groundwater	2,000,000	2,000,000
Permitted Withdrawals at MCWTP(2)	Surface / Groundwater	4,400,000	6,000,000
Southwest RO Wellfield	Groundwater	2,700,000	2,700,000
Total Permitted Withdrawals		**7,100,000**	**8,700,000**

Notes:
1. This permit allows the City to offset surface water usage up to 2,000,000 gpd of groundwater.
2. The combined surface and groundwater withdrawals are limited to 4,400,000 gpd (annual average daily flow [AADF]) and 6,000,000 gpd (PMF) regulated at the finished water meter (ID No. 20).

2.2.2 City Water Treatment Facilities

Myakkahatchee Creek Water Treatment Plant

The MCWTP is located on the Myakkahatchee Creek and was originally constructed in 1964. In 1974, the plant was expanded to include a second treatment train. Several additional plant components and equipment have been added, upgraded, and/or replaced since the original construction date. The MCWTP treats surface water from the Myakkahatchee Creek and the Cocoplum Waterway. To improve the reliability of this plant, an RO treatment plant was constructed and placed in service at the MCWTP in year 2013.

Surface Water Treatment

The MCWTP's conventional surface water treatment process performs physical and chemical treatment of the surface water through coagulation, flocculation, sedimentation, filtration, and primary disinfection. The rated capacity of this surface water portion of the MCWTP is 4.4 mgd.

Groundwater Treatment

The RO treatment system at the MCWTP was constructed and placed into service in 2013. According to the 2020 SWFWMD Integrated Regional Water Supply Plan, this brackish groundwater desalination project has improved the reliability of an existing alternative water source and reduces dependency on fresh, Upper Florida groundwater in the Southern Water Use Caution Area (SWUCA).

When the Myakkahatchee Creek and Cocoplum Waterway experience seasonal high total dissolved solids (TDS), the RO system provides a high-quality blending process for the treated surface water. The six brackish water production wells (VW-1, VW-2, VW-3, VW-4, VW-5, and VW-6) shown in Figure 2 provides an overview of the six brackish water production wells. All six wells are permitted to withdraw up to a combined total of 2.00 mgd on an annual average daily and total peak monthly basis. The RO treatment component of the WTP has a 75 percent treatment efficiency, which yields 1.50 mgd of finished water prior to blending and storage.

MCWTP Typical Operational Modes and Overall MCWTP Reliable Capacity

Typical operational modes for the MCWTP consist of finished water from both the surface water and RO treatment process that is transferred and blended in the two finished water ground storage tanks to improve finished water quality.

Typically, during the summer months, when the raw water quality and quantity of the Myakkahatchee Creek are sufficient, the surface water portion of this WTP facility is ramped up while only one RO train is in operation. This process allows for a sufficient blended finished water production from the MCWTP. During the winter months, when the raw water quality of the Myakkahatchee Creek is relatively poor, the MCWTP typically operates the surface water and groundwater treatment facilities at a relatively constant 50/50 rate (with typically both RO trains in service.) The MCWTP is typically operated approximately 16 hours per day.

The PRMRWSA and SWFWMD recently performed the 2020 Integrated Regional Water Supply Plan (HDR, 2020). In Table 2.5 of the plan, the City of North Port's 20-year supply capacity projections that were submitted by the City over the 2020 through 2040 timeframe are presented and compared. In 2020, the MCWTP contributes a 3.30 average daily demand and a peak monthly quantity of 3.438 mgd.

By 2025, the Southwest RO Wellfield will contribute an additional capacity of 2.025 mgd to the original mentioned capacities. By 2040, between both facilities, the supply capacity for the City of North Port will be approximately 8.190 mgd average daily supply and 9.423 mgd peak monthly quantity. This supply capacity increase is due to the Southwest RO Wellfield.

2.2.3 City Water Pumping, Distribution, and Transmission Facilities

As mentioned in the City of North Port's Comprehensive Plan, the City's transmission and distribution system piping consists of approximately 368 miles of piping. The system is composed of the major transmission main pipelines that deliver potable water from the MCWTP and the two PRMRWSA Interconnects as well as the Sarasota County and Charlotte County Interconnects to the City's distribution system piping. To maintain consistent operating pressures throughout the system, the City owns and operates three (3) booster pump stations, one interconnect with Sarasota County and two (2) emergency interconnects with Charlotte County's potable water system.

Overall, the sizes of the City's water transmission and water distribution pipelines range from 1 to 20 inches in diameter. The majority of the water mains are polyvinyl chloride (PVC) pipe although some are older asbestos cement (AC) pipe that still remains in the system.

MCWTP High Service Pump Station

Finished potable water treated at the MCWTP is transferred to two on-site ground storage tanks that have a combined storage capacity of 3.5 million gallons (MG). The high service pump station is currently equipped with three identical 125 horsepower (HP) high service pumps, each of which are rated for 1,500 gallons per minute (gpm).

Southwest Booster Pump Station

The Southwest Booster Pump Station was constructed and dedicated to the City of North Port in 2006 and is located in the southwest portion of the City within the Wellen Park community. This remote booster pump station has five pumps that have a total pumping capacity of 4,920 gpm.

Northeast Booster Pump Station

The Northeast Booster Pump Station (NEBPS) was originally constructed in 1995 and is located in the northeastern portion of the City of North Port near the intersection of Haberland Boulevard and Price Boulevard. The function of the NEBPS facility is to collect a portion of the supply originating from the PRMRWSA Interconnect and re-pump it back into the system at the City's desired pressure and flow rate. This remote booster pump station has five pumps that have a total pumping capacity of 5,500 gpm.

Hillsborough Booster Pump Station

The Hillsborough Booster Pump Station (HBPS) is a bidirectional, in-line booster station located along the 12-inch transmission pipeline in the southern portion of the City along Hillsborough Boulevard, west of the PRMRWSA Interconnect. The booster pump station was designed to be able to boost system pressures when flow is going either east or west. This remote in-line booster pump station has two pumps each with a capacity of 2,000 gpm.

2.2.4 City Water Storage Facilities

The City has a total of four 4 MG of combined finished water storage volume at the three booster pump stations and 3.5 MG of finished water storage volume located at the MCWTP, for a total system storage of 7.5 MG.

- MCWTP Finished Water Storage – one 2.5 MG ground storage tank and one 1 MG ground storage tank.
- Southwest Booster Pump Station - one MG storage tank.
- Northeast Booster Pump Station – two storage tanks consisting of 1 MG and 2 MG.
- Southwest Water Treatment Plant – one 0.75 MG ground storage tank

2.2.5 There is no storage tank at the Hillsborough Booster Pump Station.Water System Interconnects

The City has potable water system interconnects with the PRMRWSA, Charlotte County, and Sarasota County.

PRMRWSA Interconnects

Water from the PRMRWSA WTP is delivered to the City's transmission and distribution system at a minimum pressure of 65 pounds per square inch (psi) at two 12-inch diameter interconnects located along the southern boundary of the City's service area in eastern North Port.

- The 12" Serris Meter is located at the intersection of Raintree/Serris Dr. and Hillsborough Boulevard in eastern North Port. The Serris Meter has provided the City with bulk finished water from the PRMRWSA for years through the PRMRWSA 36-inch regional transmission main that also delivers water from the PRMRWSA supply to Charlotte County.
- The 12" Price Boulevard Meter is located at the intersection of Raintree/Serris Dr. and Hillsborough Boulevard in eastern North Port. The Price Meter has provided the City with bulk finished water from the PRMRWSA for years through the PRMRWSA 42-inch regional transmission main that also delivers water from the PRMRWSA supply to Charlotte County.
- Together, these 36-inch and 42-inch PRMRWSA Regional Transmission Mains (RTM) provide the two City of North Port interconnects with a very reliable supply of finished water at reliable pressures to serve these two interconnects and to fill the Northeast Booster Pump Station ground storage tanks on demand.
- According to the SWFWMD 2020 Regional Water Supply Plan (RWSP), future phases of the PRMRWSA Regional Integrated Loop System may extend the Phase 2 Interconnect directly to the City of North Port's MCWTP, as well as to create a connection with the Englewood Water District and provide a full transmission loop to Sarasota County's Mabry Carlton Water Treatment Facility.

Table 2 goes into detail about the City of North Port's contractual annual average and peak month public supply from PRMRWSA is currently 2.865 and 3.438 mgd in 2022. The City is authorized to use this water via WUP 20010240.008 (PRF) and WUP 20012926.022 (OFWUP). There is no loss associated with

delivery of PRMRWSA water to the City so the contracted quantities are the same as the finished water capacity for purposes of this report.

Table 2 City of North Port Water Allocation (PRMRWSA MWSC Amendment 2, approved 2015)

Year	Annual Average Daily (MGD)	Peak Monthly Average Day (MGD)	Maximum Day (MGD)
FY11	2.700	3.146	3.780
FY12	2.700	3.146	3.780
FY13	2.700	3.146	3.780
FY14	2.700	3.146	3.780
FY15	2.700	3.146	3.780
FY16	2.865	3.438	4.011
FY17	2.865	3.438	4.011
FY18	2.865	3.438	4.011
FY19	2.865	3.438	4.011
FY20	2.865	3.438	4.011
FY21	2.865	3.438	4.011
FY22	2.865	3.438	4.011
Remaining Years*	2.865	3.438	4.011
*Remaining Years – The remaining years of the terms of this Master Water Supply Contract (MWSC) have a current expiration date of October 5, 2040.			

Charlotte County Interconnects

In addition to the PRMRWSA Interconnects, the City of North Port also has two emergency-only interconnects with Charlotte County's potable water transmission system. These interconnects are all 12-inch diameter pipeline interconnects located near the Charlotte County Border. Refer to Figure 2 for the location of these two Charlotte County metering stations which can supply the City of North Port with an emergency source of potable water.

Sarasota County Interconnect

The Sarasota County interconnect is a secondary source of finished water to the City of North Port during the dry season portion of the year when surface water supplies are limited. During the wet season portion of the year when surface water is readily available, the City of North Port provides water to Sarasota County through this same interconnect. This interconnect may also serve as an emergency interconnect by increasing pressures and flows, if needed as well. As shown in Figure 2, the 12-inch Sarasota County interconnect is located on US-41 at the entrance of State College of Florida and includes telemetry with metering equipment.

2.3 Reuse Water Facilities – Treatment, Storage, and Distribution

The City of North Port has a good base of reclaimed water customers that are served from the City's Wastewater Treatment Facility (WWTF). The City has been following the 2008 Water Reuse Master Plan (Brown and Caldwell 2008) and has continually looked for opportunities to maximize the beneficial use of reclaimed water. At the time of this 2008 report, the population and wastewater flow projections predicted a rather large reuse demand projection. This 2008 report presented a summary ofight reuse capital improvement projects that would meet these overall goals in the Reuse Master Plan, thereby reducing groundwater and surface water withdrawals, which in turn assists with managing the region's overall water resources.

Consistent with the SWFWMD's policy on reuse, the City of North Port's policy is to maximize reuse of the high-quality effluent from its WWTF. The majority of the reclaimed water within the City is used for irrigation of golf courses, parks, and some residential communities.

According to the 2015 Utility Master Plan Report (Wade Trim), the backbone of the City's reclaimed water distribution system consists of approximately 16 miles of 12-inch and 16-inch transmission pipelines. Although stated as a goal in the 2008 Reuse Master Plan, there are currently no reuse system interconnects to neighboring utilities reuse systems.

The reclaimed water distributed system is permitted by the (Florida Department of Environmental Protection (FDEP) under the Domestic Wastewater Facility Permit No. FLA013378-014-DWIP, which expires September 23, 2022. The slow-rate public access reuse system has a nameplate rated capacity of 5.0 mgd AADF. Reclaimed water can be used for irrigation of residential lawns, golf courses, landscape areas, highways medians, fire protection, construction dust control, commercial car washing, and other uses within the designated service area, which includes the incorporated limits of the City of North Port. Table 3 lists the City of North Port's Domestic Wastewater Facility Operating Permit, Section IV major users (defined as using 0.1 mgd or more) of the system:

Table 3 Reclaimed Water Major Users

Major Users[(1)]	Type	Capacity (MGD)	Area (Acres)
Sable Trace[(1)]	Residential and Golf Courses	0.60	100
Heron Creek	Residential and Golf Courses	0.80	120
North Port High School[(2)]	Landscaped Area, Parks, and Playgrounds	0.20	104
North Port City Complex	Landscaped Area and Right-of-Way	0.15	68
Miscellaneous approved sites throughout the City of North Port	Landscaped Areas	3.25	2,734
Totals		**5.00**	**3,126**

Notes:
1. Although listed in the permit, the Sable Trace Golf Course has been shut down (until a new owner is identified).
2. Although listed in the permit, the North Port High School is not a current reuse customer.

Reclaimed water is transferred to the 2.5 MG reclaimed water storage tank located at the WWTF. The current reuse water customer base consists of two primary bulk users, the Sable Trace and Heron Creek developments. Both of these customers primarily use reuse water for golf course irrigation. The City also provides reuse water directly to some commercial properties, several residential neighborhoods, and to some City-owned properties, such as the North Port City Hall, and certain rights-of-way.

Based on anticipated projections stated in the 2020 SWFWMD RWSP, and assuming a future utilization rate of wastewater flows within the City will be approximately 75 percent by year 2040, the City of North Port's reuse system expansion could provide the ultimate capability of yielding up to 3.00 MGD of annual average beneficial reuse by year 2040. The City will continue to actively seek out new re-use customers and require new development, when possible, to utilize City reuse water.

2.4 Conservation Practices and Regulations

2.4.1 Overview

Despite recent development pressure that has been unprecedented in Sarasota County, North Port and its elected officials have consistently supported measures to conserve the City's natural resources. This includes the protection of endangered species, fresh water, vegetation, and archaeological sites. The City has one of the lowest per-capita water use rates in the region. This is attributed to an extensive conservation program which includes a tiered rate structure, reuse water program, the City's irrigation code, floodplain management both locally and regionally; and, a comprehensive public education and outreach program that promotes water conservation, protection of City and regional resources, and encourages public participation in flood control efforts.

2.4.2 Policies included in North Port's Comprehensive Plan

Chapter 4 Utilities – Potable Water Goals, Objectives, and Policy

In Chapter 4, policies that protect North Port's surface and ground water resources include the following:

- Provide restrictions on development in sensitive areas;
- Conduct a higher level of review in areas bordering Cocoplum Waterway, Myakkahatchee Creek, and freshwater canals;
- Require developers in water conservation areas, including Thomas Ranch and Kelce Ranch and the Panacea DRI, to provide a water resource protection plan;
- Acquire lots along Myakkahatchee Creek and protection of the headwaters of Myakkahatchee Creek;
- Ensure preservation of Myakkahatchee Creek as a Class I potable water supply;
- Participate in Surface Water Improvement Management programs for Charlotte Harbor, the Myakka River, and the Charlotte Harbor National Estuary Program;
- Support regulatory activities designed to increase protection of Myakkahatchee Creek and the Peace River as sources of potable water;

- Amend the Unified Land Development Code to regulate high-risk land uses within areas having potential for potable water resources;
- Create a new section of the Unified Land Development Code addressing wellhead and wellfield protection consistent with FDEP regulations;
- Request cooperative funding assistance from the SWFWMD to identify zones of protection and cones of influence around wells and wellfields;
- Implement programs to improve water quality in the surficial aquifer;
- Discourage the use of septic tanks;
- Require stormwater treatment for all new development and retrofit stormwater treatment in developed areas;
- Pursue funding for controlling non-point source pollution;
- Implement aquifer protection plans as required by the Safe Drinking Water Act;
- Amend the Unified Land Development Code consistent with F.S 163-3202 to regulate land use development to protect natural drainage and ground water recharge areas;
- Maintain surficial water table levels at current levels;
- Require the use of stormwater treatment ponds; and implement through amendments to the Unified Land Development Code recommendations contained in the Big Slough Study when completed.

The Potable Water Element – Chapter 4

Policies that address further water resource development include the following:

- Identify and evaluate other sources of potable water such as ground water, surface reservoirs, desalination, cisterns, and water conservation resources;
- Coordinate with regional agencies such as the SWFWMD, the PRMRWSA, and the Water Alliance for technical assistance to develop reliable water sources;
- With the assistance of regional agencies identify, evaluate and develop potable water sources including groundwater, surface reservoirs, desalination, cisterns, and water conservation resources;
- Enter into Developer Agreements for properties determined to have water resources potential to allow testing for the purpose of developing water supplies;
- Enter into Developer Agreements to develop potable water supply wellfields or surface sources; and
- Amend the Unified Land Development Code to regulate high risk land uses in area with potential for the development of water resources.

Water Conservation policies to conserve water include the following:

- Implement conservation programs consistent with the Comprehensive Plan Conservation Element;
- Implement and enforce City regulations and restrictions on water use consistent with the SWFWMD's Water Shortage Plan and any other regulatory agency when called to do so;
- On a regular basis, evaluate building codes, utility regulations, landscaping ordinances, and public education for implementation of water conservation measures;
- Encourage "Florida Friendly" plantings, the use of native plant landscaping and draught resistant plants, and other water saving measures in the Unified Land Development Code;
- Discourage water intensive developments;
- Support and implement SWFWMD and FDEP programs promoting conservation of potable water by reuse of treated wastewater effluent;
- Require metering of all potable and reclaimed water to ensure accountability;
- Ensure coordination between the SWFWMD Regional Water Supply Plan and the Comprehensive Plan by emphasis of water conservation and the use of reclaimed water;
- Maximize the utilization of existing water production facilities;
- Not provide potable water service to development areas designated as Agriculture / Estate; cooperate with the SWFWMD to remedy free-flowing or leaking artesian wells; and
- Discourage the use of septic tanks (while promoting reclaimed water).

Chapter 5 Conservation and Coastal Zone Management – Goals, Objectives, and Policy

The city's surface water source, Myakkahatchee Creek, is a tributary of the Myakka River system. The city is a participant in the State - Local Agreement for administering the Myakka Wild and Scenic River Protection Zone. The goals, objectives, and policy outlines for the conservation and coastal zone management can be found at the following site: - https://www.cityofnorthport.com/home/showpublisheddocument/16787/636530842875130000

2.4.3 Ordinances in Place

North Port has ordinances in place with regard to conservation including Section 22 – Environment and Natural Resources, Section 38 - Natural Resources 38-19 through 38-30 that address enforcement of water use restrictions and reclaimed water utility; as well as the Potable Water Goals and Objectives listed in the Comprehensive Plan. In the ULDC, North Port has several sections relating to water conservation, including Chapter 21.

2.4.4 Education and Outreach Programs

The City has an extensive outreach program and speaks to community and school groups, hosting workshops and contest and outreach through social media. North Port has received international awards for their outreach program. As a demonstration of this commitment, North Port Utilities staffs a full-time outreach position. Refer to https://www.cityofnorthport.com/government/city-services/utilities for information regarding North Port's ongoing conservation and public educations programs.

2.4.5 Conservation Oriented Water Rates

North Port Code Section 78-23 and Resolution No. 2019-R-16 provide for progressive water rates to encourage water conservation. As of October 1, 2021, the new general water rate is $4.50 per 1,000 gallons for the first block and increases to $22.56 for the sixth block of water consumed per raw water meter.

2.4.6 Rebates and Retrofits

The City has participated in programs in the past to encourage the implementation of water conserving appliances and fixtures. Currently, they do not have a fixture replacement program but may implement in the future.

2.4.7 Leak Detection

The City is pursuing purchasing leak detection equipment; however, currently does not have an ongoing leak detection program.

3.0 Potable Water Demand Projections

Potable water demand projections for the City of North Port are presented and discussed below. The following sections briefly describe the population and water demand projection methodologies. The methods are based on population projections, housing growth, developer trends, the City's Water Main Extension Plan, and historical water production. The following reports and data were gathered to complete water demand projections using these methodologies.

The City's population projections are shown in Table 4 along with the average demand projections for the 10-year period from 2022 through 2032. The basis of the City's water demand projections is the University of Florida's Bureau of Economic and Business Research (BEBR) projections, the City's Planning Department's current planned projections, the SWFWMD projections, as well as consideration of current developer growth, and the US Census Bureau's block data projections.

The City of North Port is experiencing rather high population and demand growth due to the construction and expansion of the Wellen Park community. The calculated population projections are presented in Table 4 below. The area denoted as 'Other' includes parcels with growing populations that are not included within the Wellen Park community but still lie within city limits. In 2022, the City of North Port's community has a total of 62,351 residents. Currently, The Wellen Park community consists of approximately 19 percent of those residents. By 2032, The Wellen Park community's population is anticipated to be approximately 42 percent of the total population in the City of North Port. In 2032 the projected population for the City of North Port is deemed to increase by approximately 35 percent with a grand total of 95,188 residents.

The calculated annual average daily potable water demand projections are presented in Table 5. Water supply demands are also expected to increase as the population increases. The annual average day water supply demand increases from 3.88 mgd in 2022 to 5.87 mgd in 2032. The City's water supply demands will increase by approximately 35 percent within the next 10 years.

In summary, the future continuous development of the Wellen Park community will result in a population and demand increase from 2022 through 2032.

Table 4 City of North Port 2022-2032 Population Projections

Population			
Year	**2022**	**2027**	**2032**
Wellen Park	11,887	25,936	39,986
Other	50,464	53,218	55,202
Total	62,351	79,154	95,188

Table 5 City of North Port 2022-2032 Demand Projections

Annual Average Flow (MGD)			
Year	**2022**	**2027**	**2032**
Wellen Park	0.93	1.78	2.64
Other	2.95	3.11	3.23
Total	3.88	4.89	5.87

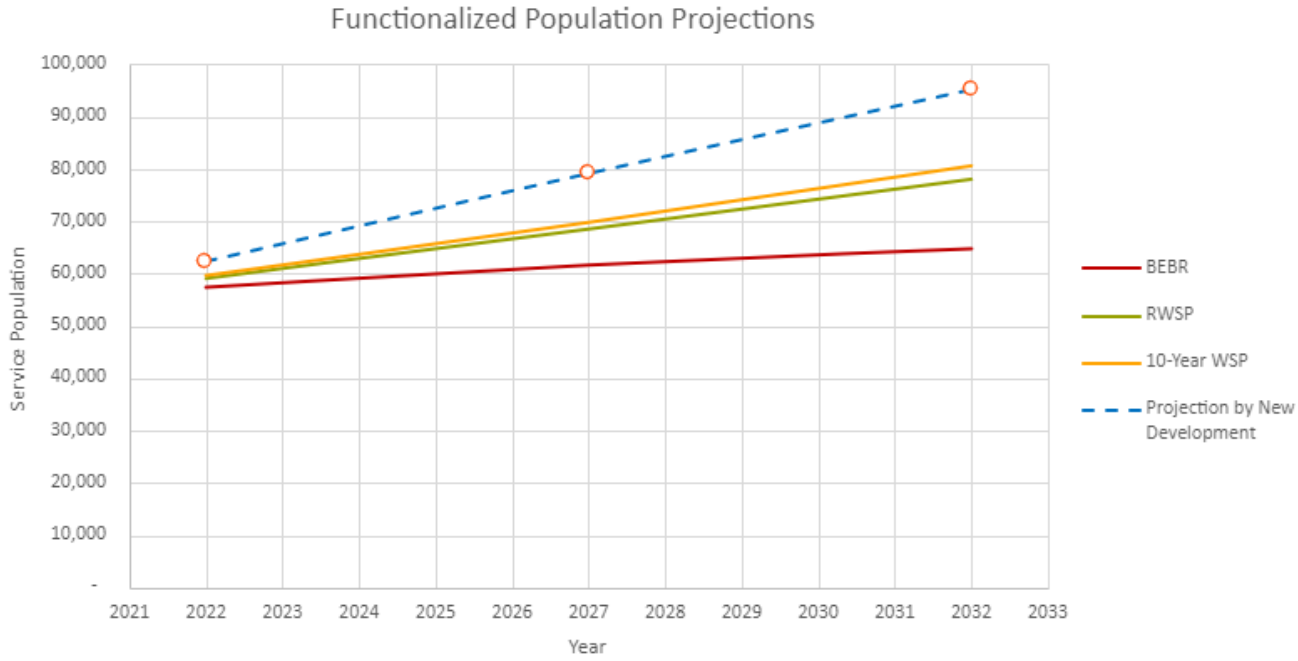

Figure 3 City of North Port Population Projections Comparisons

3.1 Future Potable Water System Expansions

Current WTP Expansions

The City CIP program has several reliability, sustainability, and rehabilitation projects planned for the conventional surface WTP portions of the MCWTP, although these CIPs are not expanding the capacity of this facility. For example, one of the detailed CIPs (**Appendix B**) mentions current and future upgrades

to the MCWTP that include filter improvements, rehabilitation of floc basin #2, and rehabilitation of the clearwells and pump rooms.

In response to anticipated growth and water demands from large scale developments that are planned in the Wellen Park, Kelce Ranch, and Panacea areas, the City and the Comprehensive Plan have considered these areas as focal points of growth in the future. The City utilized a previously constructed and capped brackish groundwater wellfield to develop the new Southwest Treatment Plant which will serve the Wellen Park community that is rapidly growing. The groundwater wellfield is permitted for an average and peak withdrawal rate of 2.7 mgd. Assuming 25 percent RO treatment losses, the finished water capacity is anticipated to be 2.03 mgd. In Summer 2022, the construction of the Southwest Water Treatment Plant will be finalized and issued for service.

Future Potable Water Transmission and Distribution System Expansions

Although there are no plans for expanding the City of North Port's service area, North Port Utilities has proactively expanded some portions of its potable water distribution system over the past few years in its overall goals of ultimately serving everyone within its service area.

The CIPs detailed in **Appendix B** focus on water transmission and distribution upgrades and expansions, along with rehabilitation of facilities. For example, an extension of 16,000 linear feet of 10-inch pipeline has been designed, permitted, and constructed from Price Boulevard to Hillsborough Boulevard on San Mateo Drive. There are also several water distribution system improvements planned that will improve the reliability of the system, fire flow, water quality, and pressure as well as reduce the amount of flushing necessary to maintain water quality. Projects like these are to be phased throughout city limits within the next 10-year timeframe, as outlined in **Appendix B**.

3.2 Summary of Water Demands, Facilities Capacity, and Permits

Table 6 summarizes the next 10-year period from 2022 to 2032, the City of North Port's approximate demands, supply and treatment capacity, contracted water amount, and permitted WUP amount.

Table 6 Summary of City of North Port Water Demands, Supply/Treatment Capacity, and Permitted Amounts

Year	2022	2027	2032
Population Served[(1)]	62,350	79,154	95,188
Average Daily Demand (mgd)[(1)]	3.87	4.89	5.87
Available Supply/Treatment Capacity (mgd)			
Myakkahatchee Creek Water Treatment Plant[(2)]	4.400	4.400	4.400
PRMRWSA Interconnects	2.865	2.865	2.865
Southwest Water Treatment Plant[(3)]	0.000	2.000	4.000
Total Supply/Treatment Capacity (mgd)	7.265	9.265	11.265
Facility Treatment Capacity Surplus[(4)]	3.395	4.375	5.395

Year	2022	2027	2032
Permitted/Contracted Water Amount (mgd)			
Surface Water and Wellfield Sources (WUP Quantities)[5]	7.100	7.100	7.100
PRMRWSA	2.865	2.865	2.865
Future Permitted/Contracted Water Amount	0.000	0.000	0.000
Total Permitted/Contracted Amount (mgd)	9.965	9.965	9.965
Permitted/Contracted Surplus[6]	6.095	5.075	4.095

Notes:

1. Based on City of North Port and SWFWMD demand projections and population projections shown in Table 4 and Table 5.
2. The expected total reliable production capacity of the MCWTP facility is expected to remain at 4.4 mgd on an annual average daily basis.
3. Based on the anticipated development schedule in the WVID area, the new brackish groundwater wellfield is permitted for an average and peak withdrawal rate of 2.7 mgd. Assumed 25 percent RO treatment losses, the finished water capacity is anticipated to be 2.03 mgd.
4. Calculated by subtracting Average Daily Demand from Total Supply/Treatment Capacity.
5. Refer to Table 1 for a summary of the combined surface water and groundwater WUP withdrawal limits for the City.
6. Calculated by subtracting the Average Daily Demand from the Total Permitted/Contracted Amount.

As shown in Table 6, the City of North Port's treatment capacity surplus of 5.395 mgd in year 2032 will be sufficient to meet the projected demands in the future.

4.0 10-Year Work Plan (CIP)

The 10-year work plan for the City of North Port is presented in this section.

To meet future needs based on increases in customer growth and to properly maintain its potable water systems, the City has developed a CIP program that consists of a variety of major additions, extensions, improvements, and rehabilitations of its potable water infrastructure. These projects will be funded from the water capacity fee fund, utility revenue fund, SWFWMD grants, and other potential grants such as American Rescue Plan Act. A summarized description of the primary CIP projects up to fiscal year 2026 is listed below:

1. Needs and site selection analysis, design, permitting, and construction of a new administration and field operations building.
2. Construction of the Haberland Blvd., Woodhaven Drive/Bobcat Trail, and North Toledo Blade Blvd. Bridges.
3. Water distribution improvements throughout the City. The locations will be prioritized based on results of fire flow and water quality dynamic hydraulic modeling.
4. Removal and relocation of the watermain on the bridge located on Ortiz Blvd., in conjunction with Sarasota County which is currently out to bid and construction will begin later this year.
5. Rehabilitation of the MCWTP. Upgrades will include filter improvements, rehabilitation of the flash mixer, floc basin #2, clearwells, and pump rooms.
6. Rehabilitation of the raw water intake structures on the Myakkahatchee Creek and Cocoplum Waterway.
7. Construction cost of oversizing water mains in various locations throughout the City due to development.
8. Develop, install, and run a pilot plant of the selected alternative(s) identified in the Direct Potable Reuse Feasibility Study.
9. Construction of a sludge press.
10. MCWTP improvements to provide treatment capability of Myakkahatchee Creek water during periods of high TDS.
11. The demolition and replacement of the current powder activated carbon system.
12. Replacement of old steel water lines affixed to bridges.
13. Extend water and wastewater to the commercial areas at the I-75/Toldeo Blade Blvd. and I-75/Sumter interchange.
14. Extend water and wastewater to residents throughout the City.

Appendix B details the City of North Port's current 10-Year Project Summary and CIPs for improving its potable water infrastructure.

5.0 Goals, Objectives, and Policies

City of North Port Comprehensive Plan

The Comprehensive Plan was updated and approved by the City on June 27, 2017. The Comprehensive Plan, specifically, the Potable Water Element (Chapter 4) will be utilized to adopt a new Utilities Master Plan in Fall 2022. Furthermore, the City of North Port's Comprehensive Plan and associated goals, objectives, and policies are consistent with the City's regional planning.

This document provides the basis for establishing a level of service and demand for potable water generated by any future development and for system expansions to meet that demand. **Appendix B** provides detailed CIPs that will initiate these goals, objectives, and policies with those that are established in the PRMRWSA/SWFWMD 2020 Integrated Regional Water Supply Plan Update.

The City intends to continuously ensure the availability of water supplies, protection of water sources, promotion of conservation, and coordinating with SWFWMD and the PRMRWSA and other water providers within the region to implement this work plan.

Highlights of the City's Comprehensive Plan related to potable water include commitments to the following:

1. Update the City's 10-Year Water Supply Facility Work Plan.
2. Update the City's Master Plan every 5 years.
3. Develop, operate, and maintain an environmentally sound, economically efficient, potable water treatment and distribution system.
4. Assure the potable water treatment and distribution system meets all regulatory standards.
5. Maintain funding for system improvements.
6. Continuously consult with the PRMRWSA to assure any water which the City cannot supply that is needed to meet development could be supplied elsewhere.
7. Protect the City's water supplies from contamination.
8. Continue to implement conservation programs.
9. Continue to participate in regional planning efforts.
10. Continue to address water loss in the distribution system and the repair and replacement of aging infrastructure.
11. Continue to protect the water quality and quantity in the surficial aquifer.

6.0 Summary and Conclusions

F.S., Section 163.3177(6)(c) requires local utilities to incorporate local projects identified in the Regional Water Supply Plan into their own 10-Year Water Supply Facilities Work Plan within 18 months after Governing Board approval.

The City of North Port has prepared this update to their Water Supply Facilities 10-Year Work Plan in coordination with the 2020 Regional Water Supply Plan – Southern Planning Region approved by the SWFWMD Board in November 2020.

In the next 10 years, North Port will need to renovate the MCWTP and utilize approximately 2 mgd of the new Southwest Water Treatment supply to serve the anticipated development needs in the Wellen Park Community. During this 10-year period, the City will continue to strategically build, maintain, operate, improve existing potable water infrastructure, and control water loss. The City will continue with conservation programs where opportunities present themselves.

Currently, the City of North Port is developing a Potable Water Master Supply Plan that will be finalized in the Fall of year 2022. This forthcoming master plan effort will focus on a more prioritized CIP list of projects that will identify additional specific improvements in the future.

This Water Supply Facilities 10-Year Work Plan is consistent with North Port's 2017 Comprehensive Plan, the 2020 Regional Water Supply Plan – Southern Region, and any planning conducted by the North Port's local supplemental potable water provider PRMRWSA.

7.0 References

2017 City of North Port Comprehensive Plan:

1. Chapter 4 Potable Water, Groundwater Aquifer Recharge Station, June 2017.

By reference in the North Port Comprehensive Plan update:

2. Giffels-Webster Engineers, Inc., Preliminary Cost Estimates and General Sequencing of Master Plan, October 2020.
3. Wade Trim, 2015 City of North Port's Utilities Master Plan, September 2015 (accepted by City Commission on April 26, 2016).
4. Wade Trim, 2014 Water Demand Analysis, June 2014 (accepted by City Commission on April 28, 2014).
5. Hazen and Sawyer, 2007 Water Utilities Master Plan Update, March 2008 (accepted by City Commission on April 28, 2008).
6. Watermark Engineering Group, City of North Port US 41 Corridor Utility Master Plan Executive Summary and Study Updates, January 2010.
7. Carollo Engineers, 2008 Water Treatment Plant Enhancement Study, 2008.
8. 2022 Demand Projections from the ongoing 2022 Water Master Plan.
9. 2022
10. Wade Trim, Southwest Florida Water Management District, 2020 Regional Water Supply Plan – Southern Planning Region, November 2020.
11. HDR, 2020 Peace River Manasota Regional Water Supply Authority Integrated Regional Water Supply Plan, 2020.

Appendix A. City of North Port Comprehensive Plan Summary

GOAL 1: PROMOTE AND MAINTAIN BALANCED AND ORDERLY ECONOMIC GROWTH.

Objective 1.1: Attraction, Retention, and Expansion of Targeted Businesses - The City shall plan, design, and implement programs, projects, and activities that support and assist in the expansion of existing businesses in the City and the recruitment of new businesses.

Policy 1.1.1: The City will support the continuation and expansion of existing commercial and manufacturing enterprises at appropriate locations through technical assistance, the provision of incentives, and/or other appropriate strategies.

Policy 1.1.2: The City will support and encourage the establishment of new commercial and manufacturing enterprises at appropriate locations, with a focus on businesses that will be owned by and/or that will employ City residents, through technical assistance, the provision of incentives, and/or other appropriate strategies.

Policy 1.1.3: North Port may continue efforts to create mechanisms, including incentives and workforce training, to attract, retain and expand diverse, innovative, and responsible businesses to the City.

Policy 1.1.4: Encourage and support regional collaboration to advance mutual economic goals, while maintaining competitive incentives and programs to attract and retain diverse industries to expand North Port's economic base.

Policy 1.1.5: The City recognizes the value of continuing to establish land use regulations that allows industrial and commercial uses, in appropriate locations, that have limited options for locating in other areas of the County and region, if these uses employ best management practices that reduce negative on- and off-site impacts and are appropriately buffered from other potentially incompatible land uses.

Policy 1.1.6: The City shall seek to diversify its tax base through the implementation of programs to attract additional commercial, industrial, and mixed-use developments and encourage the development or redevelopment of vacant or underutilized parcels.

Objective 1.2: Coordinated Planning and Economic Development - Create a regulatory environment that embraces collaboration and cooperation.

Policy 1.2.1: Coordinate planning and growth management initiatives with the City's economic development and redevelopment strategies.

GOAL 2: ENHANCE RELATIONSHIPS WITH THE BUSINESS COMMUNITY

Objective 2.1: Public/Private Partnerships - Engage in and create innovative partnerships to support existing businesses and business expansion opportunities.

Policy 2.1.1: The City will identify, maintain, and promote a cluster industry development approach throughout the city to strengthen existing businesses and interrelationships, and also to create a framework for targeting economic development activities.

Policy 2.1.2: The Economic Development Office shall mobilize public and private resources, including educational institutions, to support the City's economic development efforts to assist both existing and new businesses.

Policy 2.1.3: The City strives for a business-friendly atmosphere which enhances economic diversity by eliciting feedback from businesses and organizations representing the commercial, industrial, business sectors and encourages private sector investment in office and business parks.

Policy 2.1.4: Promote and encourage programs that facilitate market identification, management training, technical assistance, and improved capital access.

Policy 2.1.5: The City may support financial assistance and specialized training programs to encourage the development of businesses enterprises.

Policy 2.1.6: Encourage the development of business incubator facilities.

Policy 2.1.7: Coordinate planning initiatives and regulatory processes with external partners and programs to ensure maximum dissemination of information for maximum economic benefit.

Policy 2.1.8: Work with appropriate public sector and private groups to promote economic development in targeted areas.

GOAL3: EXPAND AVAILABILITY OF EDUCATIONAL AND TRAINING OPPORTUNITIES

Objective 3.1: Workforce Attraction and Training - Encourage efforts to attract, develop, and retain a workforce for targeted industries and training opportunities for the resident workforce in order to obtain necessary work skills to qualify for higher wage jobs.

Policy 3.1.1: The City encourages partnerships between existing and potential businesses and educational institutions to develop programs that will utilize new and existing technologies as they become available and widely utilized in the marketplace.

Policy 3.1.2: The City will continue to encourage the presence and expansion of university programs within the City and incorporate specific strategies within a strategic economic development plan.

Policy 3.1.3: Support opportunities for STEM (Science, Technology, Engineering, and Mathematics) educational opportunities by working with area high schools.

Policy 3.1.4: The City should continue to work with educational partners to ensure there are appropriate educational opportunities, job skills programs, and facilities to meet business and industry needs.

Policy 3.1.5: Encourage community based educational support for potential entrepreneurs to develop business skills.

Policy 3.1.6: The City may support and promote efforts to provide education and training to its residents in order to prepare them to work in targeted business sectors and industries, and to become more competitive at the local, regional, state and national levels.

GOAL 4: INVENTORY AND DEVELOP INFRASTRUCTURE TO MEET EXISTING AND FUTURE NEEDS OF BUSINESS AND THE PUBLIC

Objective 4.1: Growth Management and Infrastructure - Inventory and plan the development of infrastructure to not only suit existing needs but future needs of the business community and public as well.

Policy 4.1.1: The City will plan for sufficient public infrastructure (i.e., transportation network and utilities) to serve the growth needs of new and expanding business and industry.

Policy 4.1.2: The City encourages the location of business and industry in Activity Center(s) and other areas designated for future infrastructure improvements in the City's Capital Improvements Program.

Policy 4.1.3: The City shall continue to pursue State and Federal grant funds that may be applicable to infrastructure improvements as well as other activities that enhance the City's competitive position in attracting new business and industry.

Policy 4.1.4: The City shall identify and implement capital improvement projects to address infrastructure deficiencies and improve the quality of the built environment, and the function of its land use districts.

Policy 4.1.5: The City shall develop a list of strategic improvements needed to support entrepreneurial and business activities, including but not limited to connectivity, business signage, improving the alignment of streets, customer parking, stormwater management, sidewalk completion, urban greening, street repair, building renovation, and gateways.

GOAL 5: ACHIEVE AN ECONOMICALLY STABLE COMMUNITY WITH A SUPERIOR QUALITY OF LIFE.

Objective 5.1: The City encourages the full utilization by businesses and industries of the economic development enhancement programs implemented by the Legislature for the purpose of the development and expansion of permanent job opportunities, especially for the economically disadvantaged, brownfield designations, tax incentives, community development corporations, and other programs designed to enhance economic and employment opportunities.

Policy 5.1.1: Expand urban, sub-urban and neighborhood infill development and redevelopment housing options that support the workforce by planning for development near employment and transportation centers.

Policy 5.1.2: Expand housing options that support the local workforce by planning for development near employment and transportation centers.

Policy 5.1.3: Promote policies and activities that support the quality of life of our targeted workforce.

Policy 5.1.4: The City will encourage the development of major public and/or private hospital facilities.

Policy 5.1.5: Attract young professionals by supporting urban, sub-urban, and neighborhood infill development and redevelopment as the city evolves and grows with new industries and new residents.

Objective 5.2: Quality of Life and Tourism - Continue to enhance local attractions and recreational facilities to promote quality of life and tourism.

Policy 5.2.1: Enhance North Port's draw as a tourist destination by strengthening and diversifying the arts and entertainment offerings, promoting historical and archaeological assets, enhancing natural resources, developing recreation and sports opportunities, and expanding the availability of events and venues.

Policy 5.2.2: The City of North Port will continue to promote arts and culture into the social and economic fabric of North Port.

Policy 5.2.3: The City will continue to require all new development in all Activity Centers to provide public art or contribute financially for the acquisition of public art within the City.

Policy 5.2.4: The City shall continue to support arts and culture and the preservation of natural, historic, and archaeological assets as core component to enhancing the economic health of the City.

Policy 5.2.5: The City will identify local and sub-regional attractions in the natural and built environment to promote tourism.

Appendix B. City of North Port's 10-Year Water Facilities Work Plan

10-Year Project Summary

Water Systems Projects Summary											
SUMMARY OF COSTS											
Project	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Fiscal Year 2025-2026	Fiscal Year 2026-2027	Fiscal Year 2027-2028	Fiscal Year 2028-2029	Fiscal Year 2029-2030	Fiscal Year 2030-2031	Fiscal Year 2031-2032
Plant Rehab/maitenence	$ 3,037,000	$ 330,000	$ 400,000	$ 500,000	$ 222,500	$ 150,000	$ -	$ 300,000	$ -	$ 330,000	$ -
Generator Switchgear (20 years)	$ -	$ -	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ -	$ -	$ -	$ -	$ -
Pump Replacement	$ 85,000	$ 85,000	$ 85,000	$ 85,000	$ 85,000	$ 85,000	$ 85,000	$ 85,000	$ 85,000	$ 85,000	$ 85,000
Chem Pump Skid Replacement (per schedule)	$ 70,000	$ 70,000	$ 70,000	$ 70,000	$ 70,000	$ 70,000	$ 70,000	$ 70,000	$ 70,000	$ 70,000	$ 70,000
Well Cleaning/Rehab	$ 170,000	$ 180,000	$ 150,000	$ 75,000	$ -	$ -	$ -	$ -	$ 125,000	$ 12,000	$ 15,000
Coatings	$ -	$ 160,000.00	$ 190,000.00	$ 85,000.00	$ 5,000.00	$ -	$ -	$ 62,000.00	$ -	$ -	$ 270,000.00
VFD Replacements	$ -	$ 75,000	$ -	$ 80,000	$ 30,000	$ 55,000	$ 35,000	$ -	$ -	$ -	$ -
PLC panel replacement	$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 40,000
Security system upgrades	$ 27,000	$ -	$ 30,000	$ -	$ -	$ 50,000	$ 32,000	$ -	$ -	$ -	$ 100,000
Instrument Replacements	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Bulk Chemical Tank Replacement	$ 45,000	$ 35,000	$ -	$ -	$ 90,000	$ 155,000	$ 50,000	$ 175,000	$ 35,000	$ 100,000	$ 50,000
Required Service (Mote Marine,GST cleaning, AWIA)	$ 100,000	$ 100,000	$ 387,500	$ 175,000	$ 107,500	$ 140,000	$ 107,500	$ 190,000	$ 272,500	$ 100,000	$ 107,500
Fence Replacement	$ 70,000	$ -	$ -	$ -	$ 132,000	$ 14,000	$ 72,000	$ 7,000	$ 7,000	$ 7,000	$ 7,000
SCADA/Server Replacement	$ -	$ -	$ -	$ -	$ 70,000	$ 25,000	$ -	$ -	$ -	$ 25,000	$ 75,000
Water Transmission oversizing	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000
Water Supply Facilities 10 yr work plan	$ 55,000										
Sludge Press					$ 3,000,000						
Treatability Study Results								$ 8,000,000			
Reclaimed to Potable (DPR)			$ 2,500,000								
Developer funded water treatment p	$ 24,150,000										
Developer funded water treatment plant											
MCWTP Pre-disinfection								$ 500,000			
NEB recirc pump project							$ 95,000				
MCWTP Roof replacement	$ 125,000										
I&C/Maintenance Building (Split Cost with WWTP)				$ 45,000	$ 300,000						
PR interconnect MOV & controls		$ 100,000									
Hillsborough Relocation (road widening)			$ 200,000	$ 2,000,000							
Replace PAC					$ 370,000						
RO plant run W/O Surface water				$ 50,000							
Reservoir							$ 10,000,000				
Total Cost	**$ 28,024,000**	**$ 1,225,000**	**$ 4,252,500**	**$ 3,405,000**	**$ 4,722,000**	**$ 984,000**	**$ 10,636,500**	**$ 9,479,000**	**$ 684,500**	**$ 819,000**	**$ 869,500**
Plant Rehab CIP line	$ 3,037,000	$ 590,000	$ 590,000	$ 585,000	$ 227,500	$ 150,000	$ -	$ 362,000	$ -	$ 330,000	$ 270,000

CIP Detail Sheets

Project: U18UAB	**Title:** Utilities Administration Building & Field Operations Center	**Status:** Existing CIP Project
Category: City Facilities	**Department:** WATER & SEWER UTILITIES	**LMS:** N/A

Comprehensive Plan Information		Project Location
CIE Project: Yes	**Capital Improvement:**	**District:**
LOS/Concurrency: N/A	**Project Need:** N/A	**Location:**

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2022	Non-Appropriated Programmed CIP Funding FY 2023	FY 2024	FY 2025	FY 2026	Future Funding
13,110,000	13,110,000	0	0	0	0	0	0

Project Description

Needs and site selection analysis, design, permitting, and construction of a new administration and field operations building.

Project Rationale

The existing building is not adequately sized for the number of staff currently working out of the building. Additionally, the existing building is owned by the Public Works Department and can be repurposed for something more appropriate. The existing site is adjacent to the training track for Police and Fire, which is also near an archeological site; therefore, no additional property is available in the immediate vicinity to expand the existing site. Moving the office, inventory, historical documents, staff, and operations to a larger location to allow for growth would be more appropriate.

Funding Strategy

This project is funded by Utilities funds, Water Capacity Fees, and Sewer Capacity Fees.

Expenditures To Date $334,050

Operation Budget Impact

With a larger parcel of land and building, there would be additional maintenance and electrical costs. Operational expenditures are anticipated to be budgeted in Fiscal Year 2023.

Impact Description	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Operating Expenditures	0	3,100	3,163	3,228	3,295
Total Operating Budget Impacts	0	3,100	3,163	3,228	3,295

Project Image

Schedule of Activities

Project Activities	From - To	Amount
DESIGN/ENGINEERING	10/2017 - 09/2021	850.000
LAND ACQUISITION	10/2017 - 09/2021	1.660.000
CONSTRUCTION	10/2019 - 09/2023	10.000.000
EQUIPMENT	10/2019 - 09/2023	600.000
Total Budgetary Cost Estimate:		13,110,000

Means of Financing

Funding Source	Amount
WATER CAPACITY FEE FUND	2.500.000
SEWER CAPACITY FEE FUND	2.500.000
UTILITY REVENUE FUND	8.110.000
Total Programmed Funding:	13,110,000
Future Funding Requirements:	0

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CIP Detail Sheets

Project: U19WSM	**Title:** Water Transmission on San Mateo Drive from Price Boulevard to Hillsborough Boulevard	**Status:** Existing CIP Project
Category: Utilities - Water Systems	**Department:** WATER & SEWER UTILITIES	**LMS:** N/A

Comprehensive Plan Information		Project Location
CIE Project: N/A	**Capital Improvement:**	**District:**
LOS/Concurrency: N/A	**Project Need:** N/A	**Location:**

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2022	*Non-Appropriated Programmed CIP Funding* FY 2023	FY 2024	FY 2025	FY 2026	Future Funding
2,987,909	2,987,909	0	0	0	0	0	0

Project Description

Design, permit and construct a pipeline from Price Boulevard to Hillsborough Boulevard on San Mateo Drive.

Project Rationale

Design, permit and construct a pipeline from the Price to Hillsborough on San Mateo. The project consists of 16,000 linear feet of new 10" pipe. The existing infrastructure reduces down to ranging between 12" and 6", but does not run strictly along San Mateo. Many sections run along various side streets, having a detrimental impact on water quality.

Funding Strategy

This project is funded by Utilities funds and Water Capacity Fees.

Expenditures To Date $1,339,632

Operation Budget Impact

Addition of new pipeline to the distribution and transmission systems inherently increases operation costs over time. However, the pumping system becomes more efficient as this pipeline will result in elimination of several missing sections that cause significant pressure losses that need to be overcome by the pumping systems.

Project Image

Schedule of Activities

Project Activities	From - To	Amount
DESIGN/ENGINEERING	10/2018 - 09/2020	350.000
CONSTRUCTION	10/2018 - 09/2022	2.637.909
	Total Budgetary Cost Estimate:	2,987,909

Means of Financing

Funding Source	Amount
WATER CAPACITY FEE FUND	480.000
UTILITY REVENUE FUND	2.507.909
Total Programmed Funding:	2,987,909
Future Funding Requirements:	0

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CIP Detail Sheets

Project: U21WBR	**Title:** Water Pipeline Bridge Replacements - Haberland/Woodhaven/North Toledo Blade	**Status:** Existing CIP Program
Category: Utilities - Water Systems	**Department:** WATER & SEWER UTILITIES	**LMS:** N/A

Comprehensive Plan Information		Project Location
CIE Project: N/A	**Capital Improvement:**	**District:**
LOS/Concurrency: N/A	**Project Need:** N/A	**Location:**

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2022	Non-Appropriated Programmed CIP Funding FY 2023	FY 2024	FY 2025	FY 2026	Future Funding
742,906	297,906	275,000	170,000	0	0	0	0

Project Description

Fiscal Year 2021 included design for Haberland Boulevard, Woodhaven Drive/Bobcat Trail and North Toledo Blade Boulevard Bridges. Construction will take place in the following two years.

Project Rationale

To improve the potable water distribution system reliability to the residents of the City. The project is in various locations in the City. Replacement of aged water lines on three bridges is planned, with additional ones in the future. Old steel water lines on bridges have reached end of their service life and pipe deterioration and leaks are on pipe bends that cannot be readily repaired. Some very small leaks are unable to be stopped at this time resulting in un-billed water loss.

Funding Strategy

This program will be funded by Surtax and Utilities funds.

Expenditures To Date $0

Operation Budget Impact

Replacement of these pipelines will prevent potential catastrophic failure and emergency repairs, which will be more costly than current planned replacements.

Project Image

Schedule of Activities

Project Activities	From - To	Amount
DESIGN/ENGINEERING	10/2020 - 09/2021	253.670
CONSTRUCTION	10/2021 - 09/2023	489.236
	Total Budgetary Cost Estimate:	742,906

Means of Financing

Funding Source	Amount
SURTAX	489.236
UTILITY REVENUE FUND	253.670
Total Programmed Funding:	742,906
Future Funding Requirements:	0

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CIP Detail Sheets

Project: U21WDI	**Title:** Water Distribution System Improvements	**Status:** Existing CIP Program
Category: Utilities - Water Systems	**Department:** WATER & SEWER UTILITIES	**LMS:** N/A

Comprehensive Plan Information		Project Location
CIE Project: Yes	**Capital Improvement:**	**District:**
LOS/Concurrency: N/A	**Project Need:** N/A	**Location:**

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2022	*Non-Appropriated Programmed CIP Funding* FY 2023	FY 2024	FY 2025	FY 2026	Future Funding
1,368,850	768,850	600,000	0	0	0	0	0

Project Description

The project is in various locations of the City. Project locations to be determined and prioritized based on results of fire flow and water quality dynamic hydraulic modeling. The focus areas for Fiscal Year 2021 were S. Hartsdale Street, Aldovin and Totem Avenues. The focus areas for Fiscal Year 2022 will be Lamplighter and Rockwell Avenues, Renault Circle, Meroni Boulevard, and Ridgewood Drive.

Project Rationale

To improve potable water distribution system reliability, fire flow, water quality and pressure as well as reduce the amount of flushing necessary to maintain water quality. The project is in various locations of the city. Project locations to be determined and prioritized based on results of fire flow and water quality dynamic hydraulic modeling. Some existing potable piping exceeds 40 years of age and the scattered design of water "distribution" lines with many less than 6" diameter is detrimental to the overall system. Throughout the city, improvements are needed to replace old asbestos cement lines, increase system reliability and fire flow, water quality and pressure, and reduce flushing. The community, as a whole benefits from these projects since the water system supplies water to institutional/commercial/industrial developments.

Funding Strategy

This project will be funded with Surtax and Utilities Funds. The City also received a grant from the SWFWMD for the Fiscal Year 2021 project. The City is anticipated to receive a grant from SWFWMD for the Fiscal Year 2022 project.

Expenditures To Date $49,226

Operation Budget Impact

Addition of new pipeline to the distribution system inherently increases operation costs over time. However, improvements should also decrease operations costs by improving water quality in the system, as applicable, and by replacing old asbestos cement main with new, as applicable.

Project Image

Schedule of Activities

Project Activities	From - To	Amount
DESIGN/ENGINEERING	10/2020 - 09/2021	181.630
CONSTRUCTION	10/2020 - 09/2022	1.187.220
	Total Budgetary Cost Estimate:	1,368,850

Means of Financing

Funding Source	Amount
SURTAX	494.700
UTILITY REVENUE FUND	874.150
Total Programmed Funding:	1,368,850
Future Funding Requirements:	0

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CIP Detail Sheets

Project: U21WPI	**Title:** Myakkahatchee Creek Water Treatment Plant (MCWTP) Improvements	**Status:** Existing CIP Project
Category: Utilities - Water Systems	**Department:** WATER & SEWER UTILITIES	**LMS:** N/A

Comprehensive Plan Information		Project Location
CIE Project: N/A	**Capital Improvement:**	**District:**
LOS/Concurrency: N/A	**Project Need:** N/A	**Location:**

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2022	*Non-Appropriated Programmed CIP Funding* FY 2023	FY 2024	FY 2025	FY 2026	Future Funding
3,504,090	1,467,090	2,037,000	0	0	0	0	0

Project Description

This project will implement improvements at the Myakkahatchee Creek Water Treatment Plant (MCWTP).

Project Rationale

This project will implement improvements at the Myakkahatchee Creek Water Treatment Plant (MCWTP) based on the results of the Structural Evaluation. In Fiscal Year 2021 and Fiscal Year 2022, the WTP rehabilitation and upgrades will include filter improvements, rehabilitation of the flash mixer, rehabilitation of floc basin #2, and rehabilitation of the clearwells and pump rooms.

Funding Strategy

This project will be funded by Utilities funds.

Expenditures To Date $71,745

Operation Budget Impact

The proposed improvements at the WTP will have a minor net operating impact on the operating budget. Operational expenditures are anticipated to be budgeted in Fiscal Year 2023.

Impact Description	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Operating Expenditures	0	1,130	1,130	1,130	1,130
Total Operating Budget Impacts	0	1,130	1,130	1,130	1,130

Project Image

Schedule of Activities

Project Activities	From - To	Amount
DESIGN/ENGINEERING	10/2020 - 09/2022	384.660
CONSTRUCTION	10/2020 - 09/2022	3.119.430
	Total Budgetary Cost Estimate:	3,504,090

Means of Financing

Funding Source	Amount
UTILITY REVENUE FUND	3.504.090
Total Programmed Funding:	3,504,090
Future Funding Requirements:	0

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CIP Detail Sheets

Project: U22WDI	**Title:** Water Distribution System Improvements	**Status:** Existing CIP Program
Category: Utilities - Water Systems	**Department:** WATER & SEWER UTILITIES	**LMS:**

Comprehensive Plan Information		Project Location
CIE Project: Yes	**Capital Improvement:**	**District:**
LOS/Concurrency:	**Project Need:**	**Location:**

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2022	Non-Appropriated Programmed CIP Funding FY 2023	FY 2024	FY 2025	FY 2026	Future Funding
486,880	0	112,360	374,520	0	0	0	0

Project Description

The project is in various locations of the City. Project locations to be determined and prioritized based on results of fire flow and water quality dynamic hydraulic modeling. Design for the following areas is anticipated to take place in Fiscal Year 2022 with construction to follow: Cunliffe Road, Peake Street, Morandi Avenue, and Tripoli Street.

Project Rationale

To improve potable water distribution system reliability, fire flow, water quality and pressure as well as reduce the amount of flushing necessary to maintain water quality. The project is in various locations of the city. Project locations to be determined and prioritized based on results of fire flow and water quality dynamic hydraulic modeling. Some existing potable piping exceeds 40 years of age and the scattered design of water "distribution" lines with many less than 6" diameter is detrimental to the overall system. Throughout the city, improvements are needed to replace old asbestos cement lines, increase system reliability and fire flow, water quality and pressure, and reduce flushing. The community, as a whole benefits from these projects since the water system supplies water to institutional/commercial/industrial developments.

Funding Strategy

This project will be funded with Surtax and Utilities Funds. Utilities anticipates applying for a grant through the Southwest Florida Water Management District (SWFWMD).

Expenditures To Date $0

Operation Budget Impact

Addition of new pipeline to the distribution system inherently increases operation costs over time. However, improvements should also decrease operations costs by improving water quality in the system, as applicable, and by replacing old asbestos cement main with new, as applicable.

Project Image

Schedule of Activities

Project Activities	From - To	Amount
DESIGN/ENGINEERING	10/2021 - 09/2022	112.360
CONSTRUCTION	10/2022 - 09/2023	374.520
	Total Budgetary Cost Estimate:	486,880

Means of Financing

Funding Source	Amount
SURTAX	340.610
UTILITY REVENUE FUND	146.270
Total Programmed Funding:	486,880
Future Funding Requirements:	0

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CIP Detail Sheets

Project: U22WIS	**Title:** Raw Water Intake Structure Rehabilitation	**Status:** New Request
Category: Utilities - Water Systems	**Department:** WATER & SEWER UTILITIES	**LMS:**

Comprehensive Plan Information		Project Location	
CIE Project: Yes	**Capital Improvement:**	**District:**	
LOS/Concurrency:	**Project Need:**	**Location:**	

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2022	*Non-Appropriated Programmed CIP Funding* FY 2023	FY 2024	FY 2025	FY 2026	Future Funding
1,000,000	0	1,000,000	0	0	0	0	0

Project Description

Rehabilitation of the raw water intake structures on the Myakkahatchee Creek and Cocoplum Waterway

Project Rationale

The intake structures on the Myakkahatchee Creek were constructed in approximately 1964 and 1974. The screens, sluice gates and other portions of the structures are deteriorating which may compromise the ability to withdraw water from the Myakkahatchee Creek for production purposes. The Cocoplum Water intake structure is significantly newer and only limited work is anticipated on that structure. An evaluation of all three structures is being performed in Fiscal Year 2021 but has not commenced.

Funding Strategy

This project will be funded by Utilities funds.

Expenditures To Date $0

Operation Budget Impact

The inability to withdraw water from the Myakkahatchee Creek limits the production capability of the surface water treatment plant leading to purchasing more water from the Peace River Manasota Regional Water Supply Authority. Additionally, limiting the intake ability of the plant ultimately would lead to a reduced plant capability and new water sources would need to be found.

Project Image

Schedule of Activities

Project Activities	From - To	Amount
DESIGN/ENGINEERING	10/2021 - 09/2022	200.000
CONSTRUCTION	10/2021 - 09/2022	800.000
	Total Budgetary Cost Estimate:	1,000,000

Means of Financing

Funding Source	Amount
UTILITY REVENUE FUND	1.000.000
Total Programmed Funding:	1,000,000
Future Funding Requirements:	0

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CIP Detail Sheets

Project: U22WTO	**Title:** Water Transmission Oversizing	**Status:** Existing CIP Program
Category: Utilities - Water Systems	**Department:** WATER & SEWER UTILITIES	**LMS:** N/A

Comprehensive Plan Information		Project Location
CIE Project: Yes	**Capital Improvement:**	**District:**
LOS/Concurrency: N/A	**Project Need:** N/A	**Location:**

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2022	Non-Appropriated Programmed CIP Funding FY 2023	FY 2024	FY 2025	FY 2026	Future Funding
50,000	0	50,000	0	0	0	0	0

Project Description

Construction cost of oversizing water mains in various locations throughout the City due to development.

Project Rationale

Specific locations of project are unknown at this time. As developers install the necessary mains to serve the development, the city will oversize these lines if needed to serve future growth/connections.

Funding Strategy

This program will be funded with Water Capacity Fees.

Expenditures To Date $0

Operation Budget Impact

No operating impact is expected at this time.

Project Image

Schedule of Activities

Project Activities	From - To	Amount
CONSTRUCTION	10/2021 - 09/2022	50.000
	Total Budgetary Cost Estimate:	50,000

Means of Financing

Funding Source	Amount
WATER CAPACITY FEE FUND	50.000
Total Programmed Funding:	50,000
Future Funding Requirements:	0

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CIP Detail Sheets

Project: U23DPR	**Title:** Direct Potable Reuse Pilot Plant Project	**Status:** New Request
Category: Utilities - Water Systems	**Department:** WATER & SEWER UTILITIES	**LMS:**

Comprehensive Plan Information		Project Location	
CIE Project: Yes	**Capital Improvement:**	**District:**	
LOS/Concurrency:	**Project Need:**	**Location:**	

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2022	*Non-Appropriated Programmed CIP Funding* FY 2023	FY 2024	FY 2025	FY 2026	Future Funding
2,500,000	0	0	2,500,000	0	0	0	0

Project Description

Develop, install and run a pilot plant of the selected alternative(s) identified in the Direct Potable Reuse Feasibility Study

Project Rationale

Based on the information gathered from the Direct Potable Reuse Feasibility Study, Utilities would perform pilot testing on the top alternatives identified.

Funding Strategy

This project will be funded by Water Capacity Fees.

Expenditures To Date $0

Operation Budget Impact

Operation of the pilot plant will add a small increase to the electrical costs for the treatment process.

Impact Description	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Operating Expenditures	0	3,600	0	0	0
Total Operating Budget Impacts	0	3,600	0	0	0

Project Image

Schedule of Activities

Project Activities	From - To	Amount
DESIGN/ENGINEERING	10/2022 - 09/2023	2.500.000
	Total Budgetary Cost Estimate:	2,500,000

Means of Financing

Funding Source	Amount
WATER CAPACITY FEE FUND	2.500.000
Total Programmed Funding:	2,500,000
Future Funding Requirements:	0

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CIP Detail Sheets

Project: U23WSP	**Title:** Sludge Press	**Status:** Existing CIP Project
Category: Utilities - Water Systems	**Department:** WATER & SEWER UTILITIES	**LMS:** N/A

Comprehensive Plan Information		Project Location
CIE Project: N/A	**Capital Improvement:**	**District:**
LOS/Concurrency: N/A	**Project Need:** N/A	**Location:**

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2022	*Non-Appropriated Programmed CIP Funding* FY 2023	FY 2024	FY 2025	FY 2026	Future Funding
3,000,000	0	0	3,000,000	0	0	0	0

Project Description

This project is for the construction of a sludge press.

Project Rationale

Currently sludge from the surface water treatment process is discharged to the onsite ponds. The sludge is dried by the evaporation of the water from the pond. Once dry, the sludge is removed from the ponds and hauled to a landfill for disposal. Since the drying ponds are open to the atmosphere the sludge does not completely dry and must be removed from the pond and storage adjacent to the pond to complete the drying process. This process leads to the ponds being overcapacity and sludge is sent to the City's wastewater treatment plant where it goes through the entire treatment process. The sludge has deleterious effects on the wastewater treatment process and increases the cost of dewatering and hauling the wastewater treatment plant sludge. The sludge press will eliminate the use of ponds for drying and the necessary diversion of sludge to the wastewater treatment plant.

Funding Strategy

This project will be funded by Utilities funds.

Expenditures To Date $0

Operation Budget Impact

A sludge press will have electrical, chemical (polymer) and hauling costs. The current process has costs associated with the removal of the sludge from the ponds and hauling, which are already included in the budget. The cost to the wastewater process is difficult to calculate but significant additional sludge is hauled from the WWTP when the WTP is discharging sludge. The overall operating budget impact should be relatively minor. Additional chemical and power but less hauling and elimination of transfers to the WTP. Operational expenditures are anticipated to be budgeted in Fiscal Year 2024.

Impact Description	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Operating Expenditures	0	0	15,000	15,050	15,100
Total Operating Budget Impacts	0	0	15,000	15,050	15,100

Project Image

Schedule of Activities

Project Activities	From - To	Amount
DESIGN/ENGINEERING	10/2022 - 09/2023	500.000
CONSTRUCTION	10/2022 - 09/2023	2.500.000
	Total Budgetary Cost Estimate:	3,000,000

Means of Financing

Funding Source	Amount
UTILITY REVENUE FUND	3.000.000
Total Programmed Funding:	3,000,000
Future Funding Requirements:	0

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CIP Detail Sheets

Project: U25WTI	**Title:** Water Treatability Implementation	**Status:** New Request
Category: Utilities - Water Systems	**Department:** WATER & SEWER UTILITIES	**LMS:**

Comprehensive Plan Information

CIE Project: Yes	**Capital Improvement:**	**District:**
LOS/Concurrency:	**Project Need:**	**Location:**

Project Location

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2022	*Non-Appropriated Programmed CIP Funding* FY 2023	FY 2024	FY 2025	FY 2026	Future Funding
1,000,000	0	0	0	0	0	1,000,000	0

Project Description

Myakkahatchee Water Treatment Plant improvements to provide treatment capability of Myakkahatchee Creek water during periods of high total dissolved solids (TDS).

Project Rationale

The implementation of this project will allow the plant to treat more water from the Myakkahatchee Creek during periods of high TDS. The surface water portion of the plant has very limited capability to treat for TDS. Using the combination of the surface water plant and the reverse osmosis plant would allow the system to produce water using the Creek in lieu of the much higher TDS wells.

Funding Strategy

This project will be funded by Utilities Funds.

Expenditures To Date $0

Operation Budget Impact

The study is not yet complete; however, the alternatives include the use of ultrafiltration membranes which will require additional power to operate. The exact scope of the additional power is difficult to ascertain at the time.

Project Image

Schedule of Activities

Project Activities	From - To	Amount
DESIGN/ENGINEERING	10/2025 - 09/2026	1,000,000
	Total Budgetary Cost Estimate:	1,000,000

Means of Financing

Funding Source	Amount
UTILITY REVENUE FUND	1,000,000
Total Programmed Funding:	1,000,000
Future Funding Requirements:	0

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CIP Detail Sheets

Project: U26PAC	**Title:** Water Plant Powder Activated Carbon System	**Status:** New Request
Category: Utilities - Water Systems	**Department:** WATER & SEWER UTILITIES	**LMS:**

Comprehensive Plan Information		Project Location
CIE Project: Yes	**Capital Improvement:**	**District:**
LOS/Concurrency:	**Project Need:**	**Location:**

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2022	*Non-Appropriated Programmed CIP Funding* FY 2023	FY 2024	FY 2025	FY 2026	Future Funding
370,000	0	0	0	0	0	370,000	0

Project Description

The demolition and replacement of the current powder activated carbon system.

Project Rationale

The current structure that contains the powder activated carbon has deteriorated to a point where replacement is necessary. There are new and more efficient ways to mix and inject the powder activated carbon into the water treatment process as well, which will update the plant process and provide more control and efficiency.

Funding Strategy

This project will be funded by Utilities Fund.

Expenditures To Date $0

Operation Budget Impact

The water treatment process currently involves the incorporation of powder activated carbon, therefore, there are no anticipated additional operational costs.

Project Image

Schedule of Activities

Project Activities	From - To	Amount
CONSTRUCTION	10/2025 - 09/2026	370.000
	Total Budgetary Cost Estimate:	370,000

Means of Financing

Funding Source	Amount
UTILITY REVENUE FUND	370.000
Total Programmed Funding:	370,000
Future Funding Requirements:	0

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CIP Detail Sheets

Project: UWBR	**Title:** Water Pipeline Bridge Replacements	**Status:** Existing CIP Program
Category: Utilities - Water Systems	**Department:** WATER & SEWER UTILITIES	**LMS:** N/A

Comprehensive Plan Information		Project Location
CIE Project: Yes	**Capital Improvement:**	**District:**
LOS/Concurrency: N/A	**Project Need:** N/A	**Location:**

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2022	*Non-Appropriated Programmed CIP Funding* FY 2023	FY 2024	FY 2025	FY 2026	Future Funding
490,000	0	0	0	150,000	170,000	170,000	0

Project Description

Replacement of old steel water lines on bridges.

Project Rationale

To improve the potable water distribution system reliability to the residents of the City. The project is in various locations in the City. Replacement of aged water lines on three bridges is planned, with additional ones in the future. Old steel water lines on bridges have reached end of their service life and pipe deterioration and leaks are on pipe bends that cannot be readily repaired. Some very small leaks are unable to be stopped at this time resulting in un-billed water loss.

Funding Strategy

This program will be funded by Surtax funds.

Operation Budget Impact

Replacement of these pipelines will prevent potential catastrophic failure and emergency repairs, which will be more costly than current planned replacements.

Project Image

Schedule of Activities

Project Activities	From - To	Amount
DESIGN/ENGINEERING	10/2023 - 09/2024	150.000
CONSTRUCTION	10/2024 - 09/2026	340.000
	Total Budgetary Cost Estimate:	490,000

Means of Financing

Funding Source	Amount
SURTAX	490.000
Total Programmed Funding:	490,000
Future Funding Requirements:	0

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CIP Detail Sheets

Project: UWDI	**Title:** Water Distribution System Improvements	**Status:** Existing CIP Program
Category: Utilities - Water Systems	**Department:** WATER & SEWER UTILITIES	**LMS:** N/A

Comprehensive Plan Information		Project Location
CIE Project: Yes	**Capital Improvement:**	**District:**
LOS/Concurrency: Yes	**Project Need:** N/A	**Location:**

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2022	*Non-Appropriated Programmed CIP Funding* FY 2023	FY 2024	FY 2025	FY 2026	Future Funding
1,264,430	0	0	137,200	385,430	365,500	376,300	0

Project Description

The project is in various locations of the City. Project locations to be determined and prioritized based on results of fire flow and water quality dynamic hydraulic modeling.

Project Rationale

To improve potable water distribution system reliability, fire flow, water quality and pressure as well as reduce the amount of flushing necessary to maintain water quality. Some existing potable piping exceeds 40 years of age and the scattered design of water "distribution" lines with many less than 6" diameter is detrimental to the overall system. Throughout the city, improvements are needed to replace old asbestos cement lines, increase system reliability and fire flow, water quality and pressure, and reduce flushing. The community, as a whole benefits from these projects since the water system supplies water to institutional/commercial/industrial developments.

Funding Strategy

This program will be funded with Surtax and Utilities funds.

Operation Budget Impact

Addition of new pipeline to the distribution system inherently increases operation costs over time. However, improvements should also decrease operations costs by improving water quality in the system, as applicable, and by replacing old asbestos cement main with new, as applicable.

Project Image

Schedule of Activities

Project Activities	From - To	Amount
DESIGN/ENGINEERING	10/2022 - 09/2024	343.670
CONSTRUCTION	10/2022 - 09/2026	920.760
	Total Budgetary Cost Estimate:	1,264,430

Means of Financing

Funding Source	Amount
SURTAX	1.170.490
UTILITY REVENUE FUND	93.940
Total Programmed Funding:	1,264,430
Future Funding Requirements:	0

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CIP Detail Sheets

Project: UWTO	**Title:** Water Transmission Oversizing	**Status:** Existing CIP Program
Category: Utilities - Water Systems	**Department:** WATER & SEWER UTILITIES	**LMS:** N/A

Comprehensive Plan Information

CIE Project: Yes	**Capital Improvement:**	**District:**
LOS/Concurrency: N/A	**Project Need:** N/A	**Location:**

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2022	*Non-Appropriated Programmed CIP Funding* FY 2023	FY 2024	FY 2025	FY 2026	Future Funding
200,000	0	0	50,000	50,000	50,000	50,000	0

Project Description

Construction cost of oversizing water mains in various locations throughout the City due to development.

Project Rationale

Specific locations of project are unknown at this time. As developers install the necessary mains to serve the development, the city will oversize these lines if needed to serve future growth/connections.

Funding Strategy

This program will be funded with Water Capacity Fees.

Operation Budget Impact

No operating impact is expected at this time.

Project Image

Schedule of Activities

Project Activities	From - To	Amount
CONSTRUCTION	10/2023 - 09/2026	200.000
	Total Budgetary Cost Estimate:	200,000

Means of Financing

Funding Source	Amount
WATER CAPACITY FEE FUND	200.000
Total Programmed Funding:	200,000
Future Funding Requirements:	0

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CIP Detail Sheets

Project: U20WES	**Title:** Neighborhood Water/Wastewater Line Extensions-Sumter Blvd.	**Status:** Existing CIP Project
Category: Utilities - Wastewater Systems	**Department:** WATER & SEWER UTILITIES	**LMS:** N/A

Comprehensive Plan Information		Project Location
CIE Project: N/A	**Capital Improvement:**	**District:**
LOS/Concurrency: N/A	**Project Need:** N/A	**Location:**

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2022	*Non-Appropriated Programmed CIP Funding* FY 2023	FY 2024	FY 2025	FY 2026	Future Funding
3,940,331	3,126,651	813,680	0	0	0	0	0

Project Description

This project is to extend water/wastewater to the commercial areas at the I-75/Sumter interchange.

Project Rationale

This project is to extend water/wastewater to residents in the areas on Sumter Boulevard from South of Hansard Avenue to Kalish Avenue. This will also serve the commercial areas at the I-75/Sumter interchange.

Funding Strategy

This project is funded by Surtax and ARPA Funds.

Expenditures To Date $120,630

Operation Budget Impact

Addition of new pipeline to the distribution system inherently increases operation costs over time. However, improvements should also decrease operations costs by improving water quality in the system.

Project Image

Schedule of Activities

Project Activities	From - To	Amount
DESIGN/ENGINEERING	10/2019 - 09/2021	178.548
CONSTRUCTION	10/2021 - 09/2022	3.761.783
	Total Budgetary Cost Estimate:	3,940,331

Means of Financing

Funding Source	Amount
SURTAX	3.126.651
UTILITY REVENUE FUND	813.680
Total Programmed Funding:	3,940,331
Future Funding Requirements:	0

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CIP Detail Sheets

Project: U21TWE	**Title:** Neighborhood Water/Wastewater Line Extensions – Toledo Blade Blvd	**Status:** Existing CIP Project
Category: Utilities - Wastewater Systems	**Department:** WATER & SEWER UTILITIES	**LMS:**

Comprehensive Plan Information		Project Location
CIE Project: Yes	**Capital Improvement:**	**District:**
LOS/Concurrency:	**Project Need:**	**Location:**

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2022	*Non-Appropriated Programmed CIP Funding* FY 2023	FY 2024	FY 2025	FY 2026	Future Funding
3,573,143	173,143	3,400,000	0	0	0	0	0

Project Description

This project is to extend water/wastewater to the commercial areas at the I-75/Toledo Blade Blvd. interchange.

Project Rationale

To unlock the development potential at the interchange to increase one-time development revenue, annual tax revenue and new job creation, infrastructure is deemed necessary to increase competitiveness of this site.

Funding Strategy

This project is funded by ARPA Funds.

Expenditures To Date $0

Operation Budget Impact

Addition of new pipeline to the distribution system and lift station, if applicable, inherently increases operation costs over time. If lines are put in service prior to enough demand, there could potentially be operating impacts from the expense of flushed water and potential additional maintenance on parts and equipment.

Project Image

Schedule of Activities

Project Activities	From - To	Amount
DESIGN/ENGINEERING	10/2021 - 09/2022	173.143
CONSTRUCTION	10/2021 - 09/2023	3.400.000
	Total Budgetary Cost Estimate:	3,573,143

Means of Financing

Funding Source	Amount
UTILITY REVENUE FUND	3.573.143
Total Programmed Funding:	3,573,143
Future Funding Requirements:	0

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CIP Detail Sheets

Project: U19NEP	**Title:** Neighborhood Water/Wastewater Line Extensions	**Status:** Existing CIP Project
Category: Utilities - Wastewater Systems	**Department:** WATER & SEWER UTILITIES	**LMS:** N/A

Comprehensive Plan Information		Project Location
CIE Project: N/A	**Capital Improvement:**	**District:**
LOS/Concurrency: N/A	**Project Need:** N/A	**Location:**

Programmed Funding

Programmed Funding	Appropriated To Date	Budgeted FY 2022	*Non-Appropriated Programmed CIP Funding* FY 2023	FY 2024	FY 2025	FY 2026	Future Funding
7,496,309	846,709	1,277,700	1,303,300	1,329,400	1,356,000	1,383,200	0

Project Description

This project is to extend water/wastewater to residents throughout the City in a methodical, economical manner to maximize efficiency and minimize cost.

Project Rationale

Giffels & Webster developed a master plan including maps for a phased expansion. Commission reached a consensus to move forward with design for the first phase of the project in the Blue Ridge-Salford North area. As customers connect, payments toward the line extension could go back to the Surtax fund, serving as a revolving fund for future expansions.

Funding Strategy

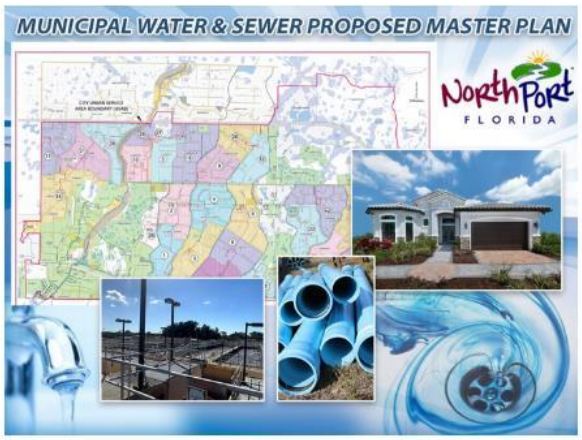
The project is funded by Surtax.

Expenditures To Date $341,935

Operation Budget Impact

Addition of new pipeline to the distribution system inherently increases operational costs over time. However, improvements should also decrease operational costs by improving water quality in the system.

Project Image



Schedule of Activities

Project Activities	From - To	Amount
DESIGN/ENGINEERING	10/2018 - 09/2022	846,709
CONSTRUCTION	10/2018 - 09/2026	6,649,600
	Total Budgetary Cost Estimate:	7,496,309

Means of Financing

Funding Source	Amount
SURTAX	7,496,309
Total Programmed Funding:	7,496,309
Future Funding Requirements:	0

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