Planning and Zoning Board / Local Planning Agency

Brevard County Government Center
2725 Judge Fran Jamieson Way, Building C, Commission Room, Viera, Florida
Agenda
Monday, February 12, 2024

Call To Order - 3:00 P.M.

Approval of Minutes - January 8, 2024

G. Public Hearings

G.1. Transmittal of the Water Supply Facilities Work Plan and related amendments to the Comprehensive Plan to the Florida Department of Commerce. (All Districts)

G.2. Christopher D. Strozier requests a change of zoning classification from RU-1-9 to RU-1-11. (23Z00086) (District 1) This item is requested to be tabled for re-advertising.

Public Comment

Adjournment

In accordance with the Americans with Disabilities Act and Section 286.26, Florida Statutes, persons needing special accommodations or an interpreter to participate in the proceedings, please notify the Planning and Development Department no later than 48 hours prior to the meeting at (321) 633-2069.

Assisted listening system receivers are available for the hearing impaired and can be obtained from SCGTV staff at the meeting. We respectfully request that ALL ELECTRONIC ITEMS and CELL PHONE REMAIN OFF while the Planning and Zoning Board is in session. Thank You.

This meeting will be broadcast live on Space Coast Government Television (SCGTV) on Spectrum Cable Channel 499, Comcast (North Brevard) Cable Channel 51, and Comcast (South Brevard) Cable Channel 13 and AT&T U-verse Channel 99. SCGTV will also replay this meeting during the coming month on its 24-hour video server nights, weekends, and holidays. Check the SCGTV website for daily program updates at http://www.brevardfl.gov. The Agenda may be viewed at: http://www.brevardfl.gov/Board Meetings

Agenda Report

2725 Judge Fran Jamieson Way
Viera, FL 32940

Public Hearing

G.1. 2/12/2024

Subject:

Transmittal of the Water Supply Facilities Work Plan and related amendments to the Comprehensive Plan to the Florida Department of Commerce. (All Districts)

Fiscal Impact:

None

Dept/Office:

Planning and Development

Requested Action:

It is requested that the Local Planning Agency recommend transmittal of the Water Supply Facilities Work Plan (WSFWP) and related Comprehensive Plan Amendments to the Florida Department of Commerce.

Summary Explanation and Background:

Sec. 163.3177(6)(c)4, FS, states that "within 18 months after the governing board approves an updated regional water supply plan, the [Potable Water] element must incorporate the alternative water supply project or projects selected by the local government from those identified in the regional water supply plan pursuant to s. 373.709(2)(a) or proposed by the local government under s. 373.709(8)(b) […] The element must identify such alternative water supply projects and traditional water supply projects and conservation and reuse necessary to meet the water needs identified in s. 373.709(2)(a) within the local government's jurisdiction and include a work plan, covering at least a 10-year planning period, for building public, private, and regional water supply facilities, including development of alternative water supplies, which are identified in the element as necessary to serve existing and new development. The work plan must be updated, at a minimum, every 5 years within 18 months after the governing board of a water management district approves an updated regional water supply plan."

To comply with statutory requirements, the attached Ordinance amends the Potable Water Element of the Comprehensive Plan to append an updated 2035 Water Supply Facilities Work Plan (WSFWP) and amends various policies within the Conservation, Potable Water, Sanitary Sewer, Intergovernmental Coordination, and Capital Improvements Elements of the Comprehensive Plan for consistency with the WSFWP.

The Board may wish to consider the recommendation of the transmittal of the Water Supply Facilities Work Plan (WSFWP) and related Comprehensive Plan Amendments to the Florida Department of Commerce for their review and acceptance.

The Building Construction Advisory Committee will consider the request on Wednesday, February 7, 2024.

The Board of County Commissioners will consider the request on Tuesday, February 20, 2024. Beginning at 9:00 a.m. The meeting will be held at the Brevard County Government Center, 2725 Judge Fran Jamieson Way, Commission Room, Viera, Florida.

Clerk to the Board Instructions:

None

BOARD OF COUNTY COMMISSIONERS

Planning & Development Department
2725 Judge Fran Jamieson Way
Building A, Room 114
Viera, Florida 32940

Inter-Office Memo

TO: Local Planning Agency (LPA)

THRU: Tad Calkins, Director, Planning and Development Department

FROM: Jeffrey Ball, AICP, Planning and Zoning Manager

DATE: February 12, 2024

SUBJECT: Transmittal of the Water Supply Facilities Work Plan and related amendments to the Comprehensive Plan to the Florida Department of Commerce.

Requested Action:

It is requested that the Local Planning Agency recommend transmittal of the Water Supply Facilities Work Plan (WSFWP) and related Comprehensive Plan Amendments to the Florida Department of Commerce.

Background:

Sec. 163.3177(6)(c)4, FS, states that "within 18 months after the governing board approves an updated regional water supply plan, the [Potable Water] element must incorporate the alternative water supply project or projects selected by the local government from those identified in the regional water supply plan pursuant to s. 373.709(2)(a) or proposed by the local government under s. 373.709(8)(b) [...] The element must identify such alternative water supply projects and traditional water supply projects and conservation and reuse necessary to meet the water needs identified in s. 373.709(2)(a) within the local government's jurisdiction and include a work plan, covering at least a 10-year planning period, for building public, private, and regional water supply facilities, including development of alternative water supplies, which are identified in the element as necessary to serve existing and new development. The work plan must be updated, at a minimum, every 5 years within 18 months after the governing board of a water management district approves an updated regional water supply plan."

To comply with statutory requirements, the attached Ordinance amends the Potable Water Element of the Comprehensive Plan to append an updated 2035 Water Supply Facilities Work Plan (WSFWP) and amends various policies within the Conservation, Potable Water, Sanitary Sewer, Intergovernmental Coordination, and Capital Improvements Elements of the Comprehensive Plan for consistency with the WSFWP.

The Conservation Element has been amended to incorporate Low Impact Development and Green Stormwater Infrastructure in publicly funded capital improvement projects. The second policy states that the County should look for potable water conservation opportunities in its infrastructure operations and maintenance activities.

Brevard COUNTY

BOARD OF COUNTY COMMISSIONERS

Planning & Development Department
2725 Judge Fran Jamieson Way
Building A, Room 114
Viera, Florida 32940

Inter-Office Memo

The Sanitary Sewer element was amended to promote potable water conservation by utilizing reuse of treated wastewater.

The Intergovernmental Coordination Element was amended to encourage the County to establish and maintain interlocal agreements with the municipalities.

The Capital Improvements Element was amended to include two new policies that address the inclusion of WSFWP projects and projects from SJRWMD Regional Water Supply Plan into the County's Capital Improvements Program. Two other policies were amended to update the Level of Service standard for potable water and update policy language regarding municipal water providers.

The Glossary was amended to include new definitions.

The Brevard County 2035 WSFWP coordinates with the St. Johns River Water Management District's (SJRWMD) Regional Water Supply Plans that include Brevard County. It demonstrates that the Brevard County Utility Services Department (BCUSD) has adequate groundwater withdrawal allocation and water treatment facility capacity to satisfy water demand through 2035 as projected based on current service areas.

The Board of County Commissioners will hear this item on February 20, 2024. Pending their approval, it will be transmitted to the Florida Department of Commerce for review. Upon return, the public hearing process for adoption will be scheduled.

Attachments:

Ordinance 24-__
Exhibit A: Water Supply Facilities Work Plan
Exhibit B: Proposed Amendments to the Comprehensive Plan and Glossary

ORDINANCE NO. 24-

AN ORDINANCE AMENDING ARTICLE III, CHAPTER 62, OF THE CODE OF ORDINANCES OF BREVARD COUNTY, ENTITLED "THE 1988 COMPREHENSIVE PLAN", SETTING FORTH THE ADOPTION OF THE WATER SUPPLY FACILITES WORK PLAN AS AN APPENDIX TO THE COMPREHENSIVE PLAN AND AMENDMENTS NECESSARY TO IMPLEMENT THE WATER SUPPLY FACILITES WORK PLAN; AMENDING SECTION 62-501 ENTITLED CONTENTS OF THE PLAN; SPECIFICALLY AMENDING SECTION 62-501, PART I, ENTITLED CONSERVATION ELEMENT TO ADOPT NEW POLICIES; SPECIFICALLY AMENDING SECTION 62-501, PART VI, ENTITLED POTABLE WATER ELEMENT TO REVISE PREVIOUSLY ADOPTED POLICIES AND ADOPT NEW POLICIES; SPECIFICALLY AMENDING SECTION 62-501, PART VII, ENTITLED SANITARY SEWER ELEMENT TO REVISED PREVIOUSLY ADOPTED POLICIES; SPECIFICALLY AMENDING SECTION 62-501, PART XII, ENTITLED INTERGOVERNMENT COORDINATION ELEMENT TO REVISE PREVIOULY ADOPTED POLICIES; SPECIFICALLY AMENDING SECTION 62-501, PART XIII, ENTITLED CAPITAL IMPROVEMENTS ELEMENT TO REVISE PREVIOULY ADOPTED POLICIES; SPECIFICALLY AMENDING SECTION 62-501, PART XVI, ENTITLED GLOSSARY TO ADD NEW DEFINITIONS; AND PROVISIONS WHICH REQUIRE AMENDMENT TO MAINTAIN INTERNAL CONSISTENCY WITH THESE AMENDMENTS; PROVIDING LEGAL STATUS; PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, Section 163.3177 (6) (c) (4), Florida Statutes requires local governments to update their Water Supply Facilities Work Plan (WSFWP) within eighteen (18) months of the approval of the regional water supply plan by the water management districts; and

WHEREAS, the St. Johns River Water Management District (SJRWMD) approved an updated Regional Water Supply Plan in 2022; and

WHEREAS, in November 2023, the WSFWP for the planning period of 2020-2035 was completed; and

WHEREAS, on February 7, 2024, the Building and Construction Advisory Committee considered the WSFWP and related Comprehensive Plan; and

WHEREAS, on February 12, 2024, the Local Planning Agency reviewed the WSFWP and related Comprehensive Plan amendments and recommended transmittal to the Florida Department of Commerce; and

WHEREAS, on (a date to be determined) the Local Planning Agency considered the comments from the Florida Department of Commerce and recommended adoption; and

WHEREAS, the County desires to make amendments to the Conservation, Potable Water, Sanitary Sewer, Intergovernmental Coordination, Capital Improvements Elements and Glossary of the Comprehensive Plan to be consistent with the 2020-2035 Work Plan as recommended by the SJRWMD.

NOW, THEREFORE, BE IT ENACTED by Brevard County, Florida as follows:

SECTION 1. Recitals. The foregoing recitals are deemed true and correct and are hereby adopted and incorporated herein by this reference.

SECTION 2. Upon the effective date of the Comprehensive Plan Amendment adopted by this Ordinance, the Work Plan, "Exhibit A", shall be incorporated into Brevard's County Comprehensive Plan as an appendix to the Comprehensive Plan.

SECTION 3. Brevard County's Comprehensive Plan, "Exhibit B," is also hereby amended to include policies to support the Work Plan".

SECTION 4. If any section, paragraph, subdivision, clause, sentence or provision of this Ordinance shall be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair, invalidate, or nullify the remainder of this Ordinance, but the effect thereof shall be confined to the section, paragraph, subdivision, clause, sentence or provision immediately involved in the controversy in which such judgment or decree shall be rendered.

SECTION 5. Repeal of Prior Inconsistent Ordinances. All ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of the conflict.

SECTION 6. Effective Date. The effective date of this plan amendment shall be when the Florida Commerce finds the amendment in compliance in accordance with Section 163.3177, Florida Statutes.

DONE AND ADOPTED, this _____ day of _____, 2024.

ATTEST:

BOARD OF COUNTY COMMISIONERS
OF BREVARD COUNTY, FLORIDA

_____

By: _____

Rachel M. Sadoff, Clerk

Jason Steele, Chair

As approved by the Board on _____

APPENDICES

BREVARD COUNTY

WATER SUPPLY FACILITIES WORK PLAN

FOR

BREVARD COUNTY, FLORIDA

AUGUST 2023

Prepared for:

Prepared by:

BONNIE LANDRY &ASSOCIATES Professional Planning Services

Kimley»Horn

Expect More. Experience Better.

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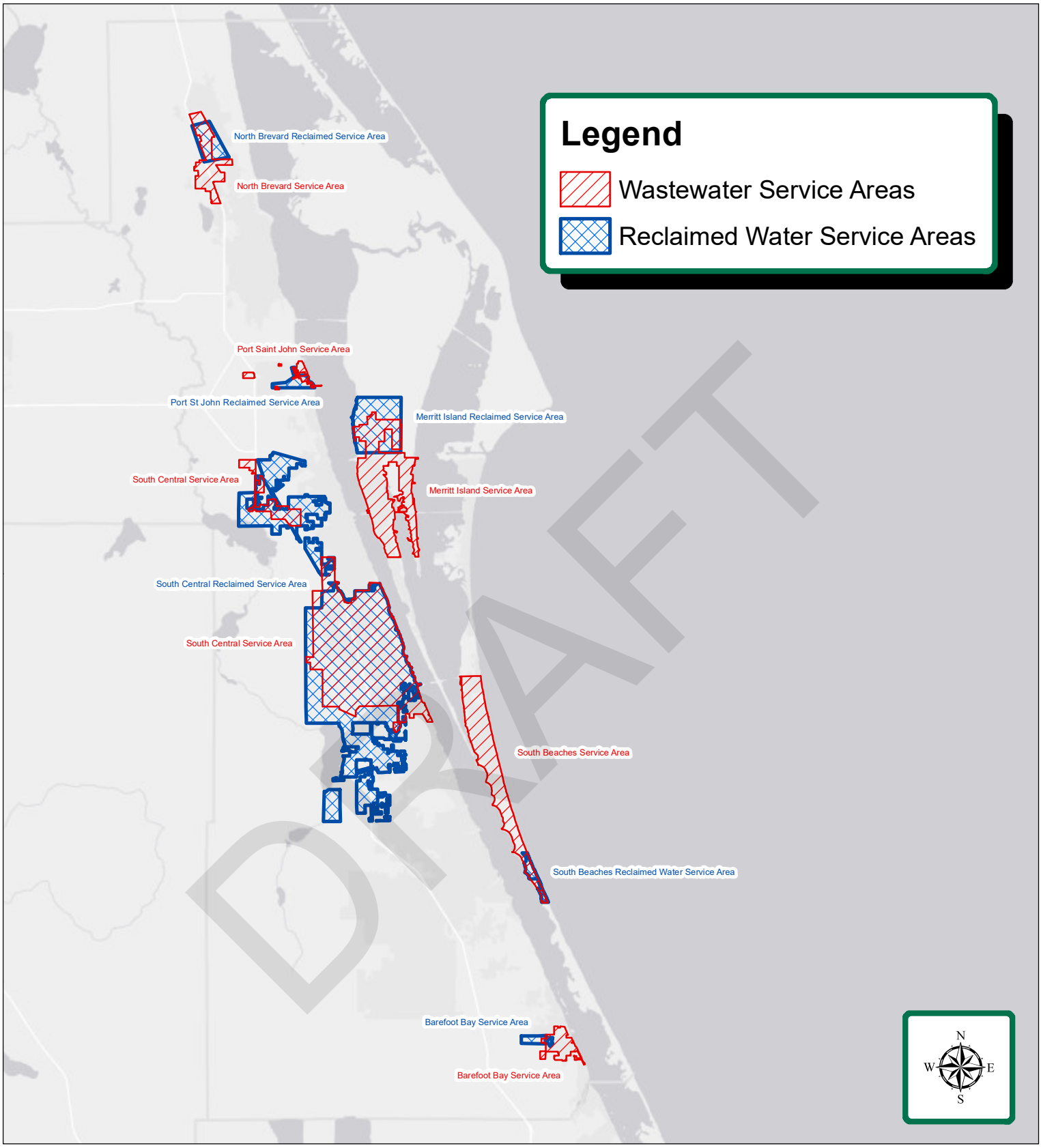
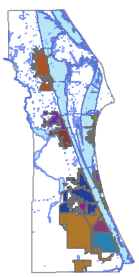
APPENDIX A

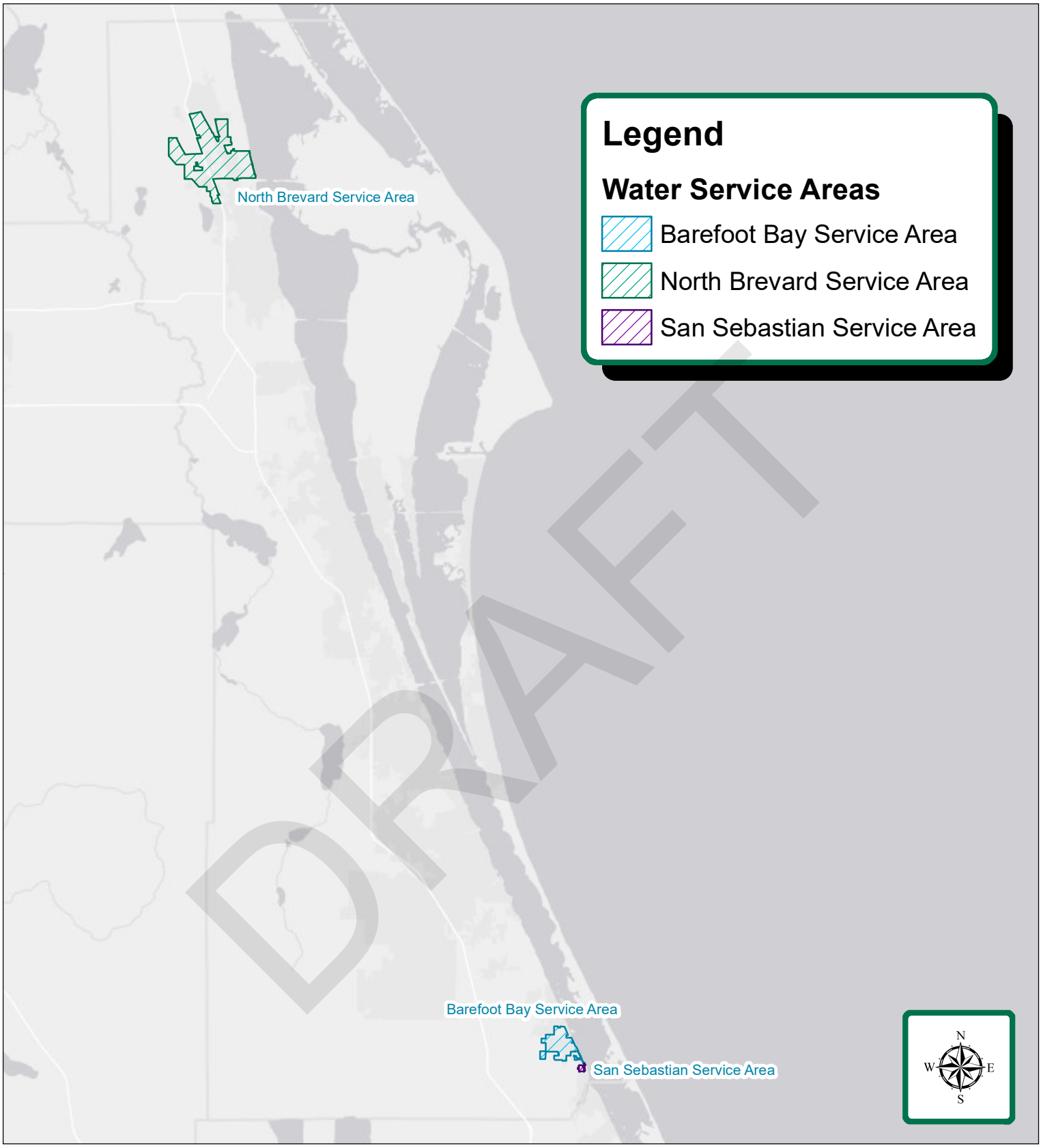


Utility Service Areas Map 2023

0 5 10 20 Miles

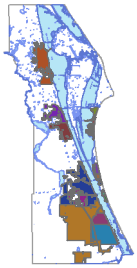


Brevard County Information Technology Department
Data Source: BOCC Utility Services Department



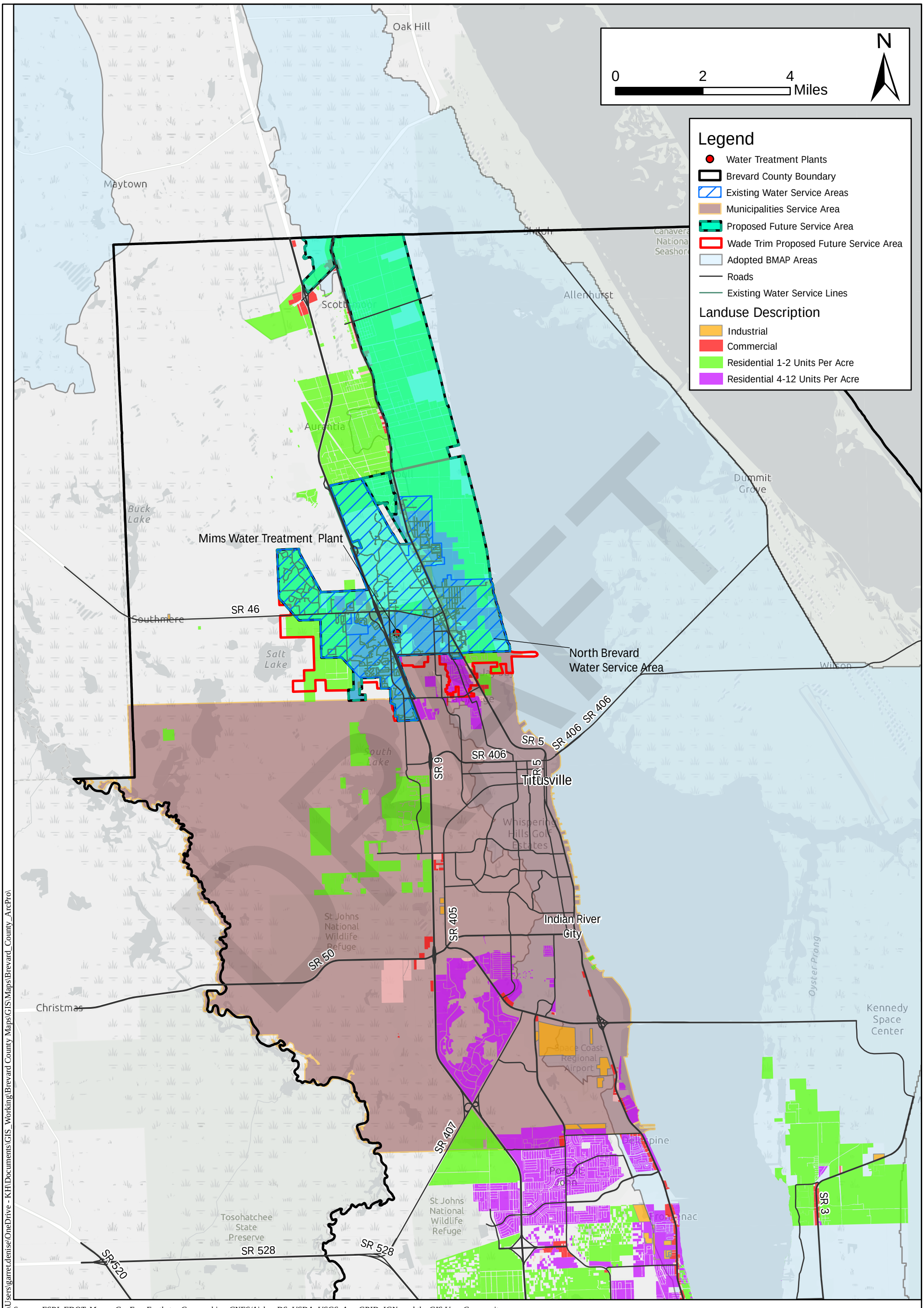
Water Service Areas Map 2023

0 5 10 20 Miles



Brevard County Information Technology Department
Data Source: BOCC Utility Services Department

APPENDIX B



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Source: ESRI, FDOT, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

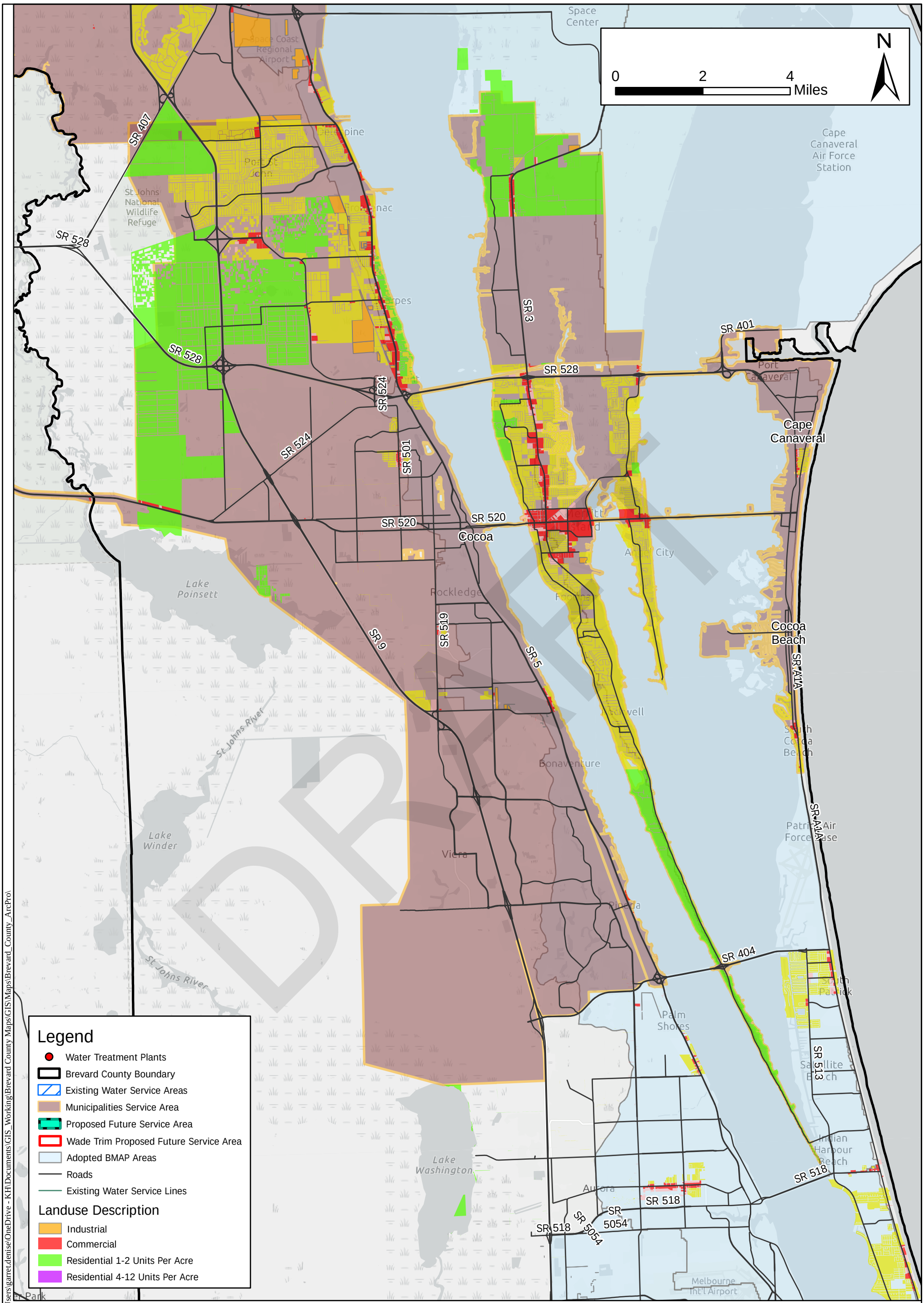
Kimley»Horn

2619 Centennial Boulevard, Suite 200
Tallahassee, FL 32308
Phone (850) 553-3500
www.kimley-horn.com

Future Water Service Area Boundary (North)

Brevard County
Utility Service Area Map

1 inch = 2 miles	*PROJECT NUMBER: 140600003.1.300*	*JULY 2023*	



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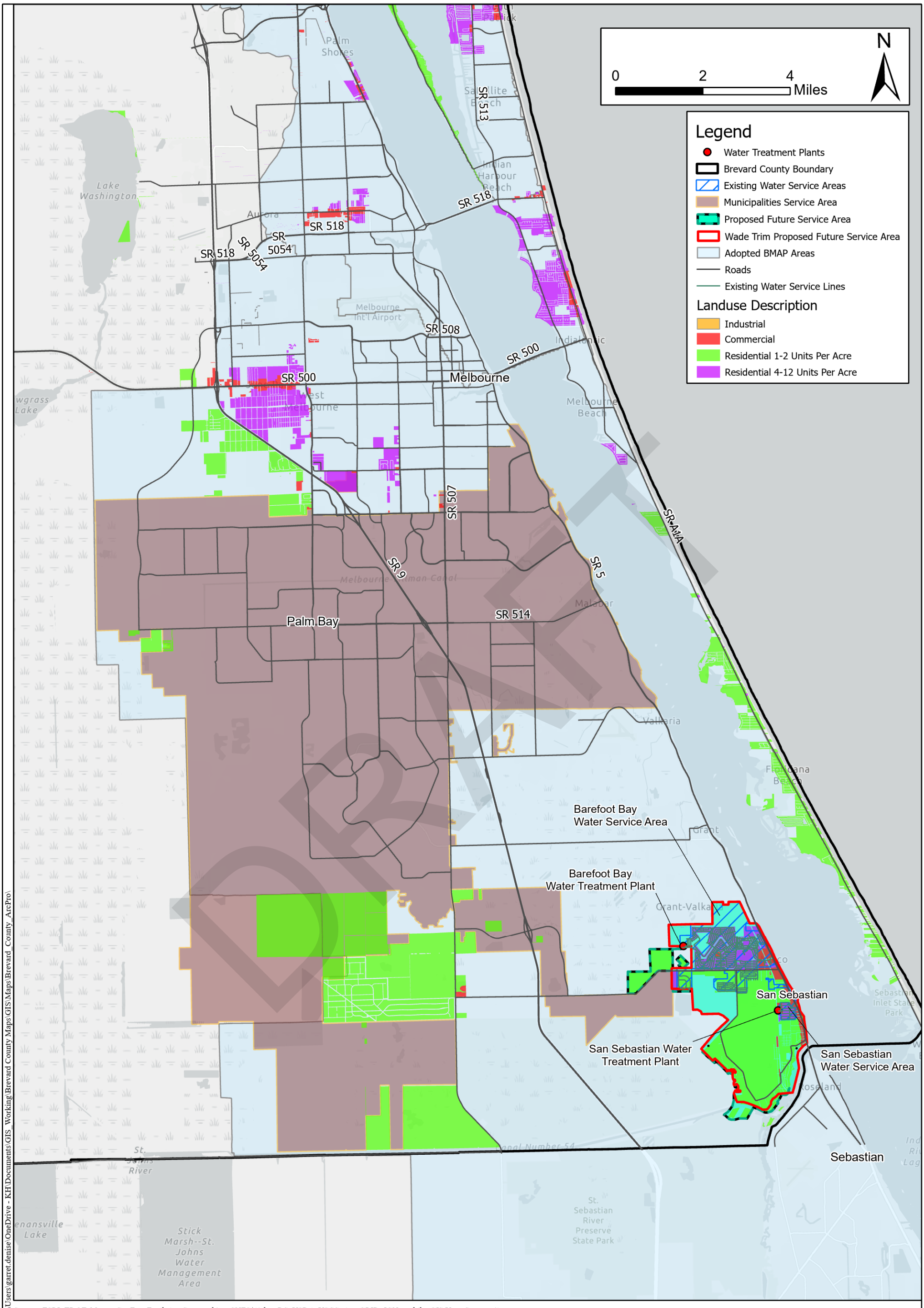
Future Water Service Area Boundary (Central)

Brevard County
Utility Service Area Map

1 inch = 2 miles	PROJECT NUMBER: 140600003.1.300	JULY 2023	



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Tallahassee, FL 32308
Phone (850) 553-3500
www.kimley-horn.com

Future Water Service Area Boundary (South)

Brevard County
Utility Service Area Map

1 inch = 2 miles	PROJECT NUMBER: 140600003.1.300	JULY 2023	

APPENDIX C

CONSUMPTIVE USE PERMIT APPLICATION

St. Johns River Water Management District

4049 Reid Street • P.O. Box 1429 • Palatka, FL 32178-1429 • (386) 329-4500

Application forms may also be submitted electronically at *floridaswater.com*.

SECTION I – CONTACT INFORMATION

If necessary, attach additional sheets if there are multiple applicants, owners, agents, etc.

1. **APPLICANT** (Complete legal name in which permit should be issued)

NAME: **Barefoot Bay Water & Sewer District**

If applicant is a business, provide a contact person: ***Jim Helmer***

ADDRESS: **2725 Judge Fran Jamieson Way, Utility Services Dept**

CITY, STATE, ZIP: **Melbourne FL 32940-6605**

PHONE: **(321) 633-2091** CELL PHONE:

EMAIL ADDRESS: **jim.helmer@brevardfl.gov**

Do you want all correspondence to be transmitted electronically to this email address? ☐ Yes ☐ No

Applicant is: ☐ Owner ☐ Lessee* ☐ Other (explain)

*Attach copy of current lease, or written authorization from property owner

2. **OWNER** (If different than applicant)

NAME: **Jim Helmer, Barefoot Bay Water & Sewer District**

ADDRESS: **2725 Judge Fran Jamieson Way, Utility Services Dept**

CITY, STATE, ZIP: **Melbourne FL 32940-6605**

PHONE: **(321) 633-2091** CELL PHONE:

EMAIL ADDRESS: **jim.helmer@brevardfl.gov**

3. **AGENT OR CONSULTANT** Address all correspondence to the person below? ☐ Yes ☐ No

NAME:

COMPANY NAME (if applicable):

ADDRESS:

CITY, STATE, ZIP:

PHONE: CELL PHONE:

EMAIL ADDRESS:

4. **COMPLIANCE CONTACT** (Person responsible for ensuring that the permit conditions are met)

NAME: **Shelley Locklear, Barefoot Bay Water & Sewer District**

ADDRESS: **2575 Judge Fran Jamieson Way Bldg A-213**

CITY, STATE, ZIP: **Viera FL 32940**

PHONE: **(407) 633-2093** CELL PHONE:

EMAIL ADDRESS: **shelley.locklear@brevardfl.gov**

SECTION II – APPLICATION INFORMATION

For permit application guidance, please refer to the Applicant's Handbook, Consumptive Uses of Water, which is incorporated by reference in Rule 40C-2.101(1)(a), F.A.C. (A.H.). Please complete all fields. Enter N/A for any fields that are not applicable.

1. **TYPE OF APPLICATION:** ☐ New ☒ Modification ☐ Renewal

   If this application is for a modification, please describe the modification request and the reason the modification is necessary. **Transferring Well Station IDs 4213 and 4214 from the South Florida Sod Farm CUP 1708-7 to this CUP.**

2. **CONSUMPTIVE USE PERMIT NO.** (if application is for renewal or modification): **236**

3. **REQUESTED PERMIT DURATION**: ☒ 20 years ☐ _____ years (up to 20 years)

   ☐ This project qualifies for a duration greater than 20 years, per Section 373.236, F.S.

4. **PROJECT NAME:** **Barefoot Bay WTP** **COUNTY:** **Brevard**

   PHYSICAL ADDRESS: _____

5. **RELATED PERMITS** (for projects other than Public Supply)

   ☐ ENVIRONMENTAL RESOURCE PERMIT: MSSW/ERP No(s): _____

   ☐ INDUSTRIAL WASTEWATER (IWW) PERMIT: IWW Permit No(s): _____

   ☐ NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT:

   NPDES Permit No(s): _____

SECTION III – USE TYPE CATEGORIES

Please check all applicable use categories associated with this application and complete the associated supplemental form(s) indicated. The **Minor Individual Supplemental Form** (Form No. 40C-2.900(2)) can be completed in lieu of Supplemental Forms A through G if all of the following criteria are met:

- Use is less than 100,000 gallons per day
- Withdrawal facilities (wells or pump intakes) are less than 8-inches diameter
- Combined withdrawal capacity is less than 1,000,000 gallons per day
- Use is not for Mining/Dewatering
- Use is for Public Supply where end users are not individually metered

Use Type Category	Supplemental Form
☐ **Agricultural** (e.g., crops, livestock, nursery, aquaculture, pasture)	Form A Form No. 40C-2.900(1)(a)
☐ **Commercial / Industrial** (e.g., service business, food and beverage production, cooling and heating, commercial attraction, manufacturing, chemical processing, power generation)	Form B Form No. 40C-2.900(1)(b)
☐ **Landscape / Recreation** (e.g., irrigation of parks, cemeteries, landscaped areas, golf courses, athletic fields, playgrounds)	Form C Form No. 40C-2.900(1)(c)
☐ **Mining / Dewatering** (e.g., water use or removal associated with construction or excavation)	Form D Form No. 40C-2.900(1)(d)
☒ **Public Supply** (e.g., public or privately owned potable water supply utility)	Form E Form No. 40C-2.900(1)(e)
☐ **Environmental / Other** (e.g., aquifer remediation, environmental enhancement, or the use of water for other purposes)	Form F Form No. 40C-2.900(1)(f)

☐**Institutional** (e.g., hospital, university, military base, correctional facility)	Form G Form No. 40C-2.900(1)(g)

SECTION IV – SOURCES OF WATER

(please attach additional facility tables if necessary)

SUMMARY OF GROUNDWATER (WELL) FACILITIES

Site or Wellfield Name[1]	District ID (if available)	Florida Unique Well ID (if available)	Owner's Well Name	Capacity (gpm)	Pump Type[2]	Casing Diameter (inches)[3]	Casing Depth (feet)	Total Depth (feet)	Status[4] (include date if proposed)	Type of Water Use Accounting Method[5]	Last Meter Check / Method Validation[6]	Type of Water Use (refer to Section III)
Barefoot Bay WTP	4426		1	180		8	60	98	Active			
Barefoot Bay WTP	4427		2	180		8	73	98	Active			
Barefoot Bay WTP	4428		3	150		10	60	100	Active			
Barefoot Bay WTP	4429		4	125		10	60	100	Active			
Barefoot Bay WTP	4430		6	140		12	60	100	Active			
Barefoot Bay WTP	4431		7	160		12	60	100	Active			
Barefoot Bay WTP	4432		8	175		12	60	100	Active			
Barefoot Bay WTP	4433		9	200		12	60	100	Active			

1 If project consists of separate or non-contiguous pieces of property or wellfields
2 Centrifugal (impeller located above water level), submersible (pump set below water level), turbine (motor at ground surface that drives an impeller below water level), vacuum underdrain (typically used for dewatering), well point system (typically used for dewatering), or other (any pump that does not fall into one of the categories previously listed)
3 The casing diameter is defined as the largest permanent water-bearing casing of the well at land surface.
4 Active (currently in use), Inactive (capped, does not have power, or the connection to the water supply system has been severed), Abandoned (plugged and abandoned in accordance with 40C-3, Florida Administrative Code), or Proposed (include anticipated construction date)
5 Flow Meter, Time Clock / Pump Run Time, Hour Meter, Digital Electric Meter, Analog Electric Meter

6 Enter the date of the last flow meter accuracy check or alternative method validation

SUMMARY OF SURFACE WATER (PUMP) FACILITES

Site Name[1]	District ID (if available)	Owner's Pump Name	Pump Capacity (gpm)	Pump Intake Diameter (inches)	Pump Type[2]	Name of Surface Water Body	Type of Surface Water Body[3]	Status[4] (include date if proposed)	Type of Water Use Accounting Method[5]	Last Meter Check / Method Validation[6]	Type of Water Use (refer to Section III)

1 If project consists of separate or non-contiguous pieces of property or wellfields
2 Centrifugal (impeller located above water level), submersible (pump set below water level), turbine (motor at ground surface that drives an impeller below water level), hydraulic dredge pump (typically used for mining), hydraulic dewatering pump (typically used for construction or mining), other (any pump that does not fall into one of the categories previously listed)
3 Ditch/canal, lake/pond (natural), lake/pond (artificial), river/creek, spring, mining/borrow pit
4 Active (currently in use), Inactive (does not have power, or the connection to the water supply system has been severed), Proposed
5 Flow Meter, Time Clock / Pump Run Time, Hour Meter, Digital Electric Meter, Analog Electric Meter
6 Enter the date of the last flow meter accuracy check or alternative method validation

SUMMARY OF CONNECTION POINT FACILITIES

Connection points include locations where potable or non-potable water (including reclaimed water) purchased from a water supplier enters a project site.

Site Name[1]	District ID (if available)	Owner's Connection Point Name	Water Supplier Name[2]	Type of Surface Water Body[3]	Status[4] (include date if proposed)	Type of Water Use Accounting Method[5]	Last Meter Check / Method Validation[6]	Type of Water Use (refer to Section III)

1 If project consists of separate or non-contiguous pieces of property or wellfields
2 Name of water supplier that provides water to the project through the connection point
3 Reclaimed water holding pond, stormwater management system
4 Active (currently in use), Inactive (the connection to the water supply system has been severed), Proposed
5 Flow Meter, Time Clock / Pump Run Time, Hour Meter, Digital Electric Meter, Analog Electric Meter
6 Enter the date of the last flow meter accuracy check or alternative method validation

SECTION V –
USE OF LOWEST QUALITY WATER AND EVALUATION OF RECLAIMED WATER FEASIBILITY

The applicant may be required to evaluate the feasibility of utilizing reclaimed water and/or other lower quality water sources. The feasibility analysis must be completed as outlined in Section 2.3.3(e), A.H.

SECTION VI – SUMMARY OF REQUESTED WATER USE

Summarize the requested water use from each supplemental form (Agricultural, Public Supply, Commercial / Industrial, etc.) in the table below. Provide projections for each source, at five-year intervals, for the requested permit duration. If the requested permit duration exceeds 20 years, please attach a supplemental sheet providing additional five-year projections for each source.

Year	Requested Amounts and Source(s) of Water				
	____ (mgy[2])	_____ (mgy)	_____ (mgy)	_____ (mgy)	Total Requested Water Use (mgy)

[1] Provide the name of the water source. Examples include upper Floridan aquifer, stormwater pond, surficial aquifer, Davis Lake.
[2] Million gallons per year

SECTION VII – AQUIFER STORAGE AND RECOVERY *(complete if applicable)*

ASR Facility Name	Source of Stored Water[1]	Storage Aquifer Name	Recovery Water Destination	Projected Demand Average (mgy)	Projected Demand Maximum (mgy)	Projected Injected Average (mgy)	Projected Injected Maximum (mgy)

[1] Aquifer name, surface water body, water treatment plant name.

Please describe any projected increases or decreases (from historical average) in the amounts stored or recovered.

SECTION VIII – IMPACT EVALUATION

When determining whether the permit applicant has provided reasonable assurances that the conditions for issuance in Rule 40C-2.301, F.A.C., are met, the District will consider the projected impacts of the proposed consumptive use on an individual and cumulative basis. In order to provide reasonable assurance, studies and/or impact evaluations may be required. Please refer to the Applicant's Handbook for guidance regarding the impact evaluations and attach analyses, if applicable.

SECTION IX – APPLICANT CERTIFICATION

I certify that to the best of my knowledge and belief, all of the information provided on this form and in any attachment to it is correct. I also certify that I have legal authority to execute this application for the applicant and certify that the applicant will have sufficient legal authority to undertake the activities described herein. I understand that any material false statement in an application to continue, initiate, or modify a use, or any material false statement in any report or statement of fact required of the permittee, may result in revocation, in whole or in part, of the permit (Section 373.243(1), F.S.). With advance notice, I agree to provide St. Johns River Water Management District staff, with proper identification, entry to the project site for the purpose of performing analyses of the site for determining whether the conditions for issuance will be met. Further, if a permit is granted, I agree that, with advance notice, District staff with proper identification shall have permission to enter, inspect, collect samples, and take measurements of permitted facilities to determine compliance with the permit conditions and permitted plans and specifications.

(If applicable) I authorize _____ to act as my agent for permit application coordination.

Jim Helmer		**25-JAN-18**
APPLICANT'S NAME (print or type)	APPLICANT'S SIGNATURE	DATE
AUTHORIZED AGENT'S NAME (print or type)	AUTHORIZED AGENT'S SIGNATURE	DATE

When an application that will be considered by the District's Governing Board is complete, the applicant will be notified of the date of the hearing (Governing Board meeting) at which the application will be considered at least 14 days in advance. The Governing Board normally meets on the second Tuesday of the month.

SECTION X – APPLICANT CHECKLIST

The following items must be included with the permit application submittal:

- ☐ Proof of Property Control (e.g., deed, lease), if not already on file with the District
- ☐ Application Fee (refer to online fee schedule or Applicant's Handbook)
- ☐ Location/Site Map
- ☐ Supplemental Form(s) and associated supporting information (e.g., maps, calculations)
- ☐ Water Conservation Plan

Additional Addresses

Applicant	

Land Owner	

Agent	

Compliance Contact	

Consultant	

Water Use Reporting (EN-50) Contact	Mark Dowe Barefoot Bay Water Treatment Plant

	931 Barefoot Blvd Ste 2 Barefoot Bay FL 32976-7653

Attorney	

CONSUMPTIVE USE PERMIT APPLICATION

St. Johns River Water Management District

4049 Reid Street • P.O. Box 1429 • Palatka, FL 32178-1429 • (386) 329-4500

Application forms may also be submitted electronically at *floridaswater.com*.

SECTION I – CONTACT INFORMATION

If necessary, attach additional sheets if there are multiple applicants, owners, agents, etc.

1. **APPLICANT** (Complete legal name in which permit should be issued)

NAME: **Brevard County Utility Services Department**

If applicant is a business, provide a contact person: ***James Helmer***

ADDRESS: **2725 Judge Fran Jamieson Way**

CITY, STATE, ZIP: **Melbourne FL 32940-6605**

PHONE: **321-633-2091** CELL PHONE:

EMAIL ADDRESS:

Do you want all correspondence to be transmitted electronically to this email address? ☐ Yes ☐ No

Applicant is: ☐ Owner ☐ Lessee* ☐ Other (explain)

*Attach copy of current lease, or written authorization from property owner

2. **OWNER** (If different than applicant)

NAME: **James Helmer, Brevard County Utility Services Department**

ADDRESS: **2725 Judge Fran Jamieson Way**

CITY, STATE, ZIP: **Melbourne FL 32940-6605**

PHONE: **321-633-2091** CELL PHONE:

EMAIL ADDRESS:

3. **AGENT OR CONSULTANT** Address all correspondence to the person below? ☐ Yes ☐ No

NAME:

COMPANY NAME (if applicable):

ADDRESS:

CITY, STATE, ZIP:

PHONE: CELL PHONE:

EMAIL ADDRESS:

4. **COMPLIANCE CONTACT** (Person responsible for ensuring that the permit conditions are met)

NAME: **Shelley Locklear, Barefoot Bay Water & Sewer District**

ADDRESS: **Bldg A-213, 2575 Judge Fran Jamieson Way**

CITY, STATE, ZIP: **Viera FL 32940**

PHONE: **321-633-2093** CELL PHONE:

EMAIL ADDRESS: **shelley.locklear@brevardfl.gov**

SECTION II – APPLICATION INFORMATION

For permit application guidance, please refer to the Applicant's Handbook, Consumptive Uses of Water, which is incorporated by reference in Rule 40C-2.101(1)(a), F.A.C. (A.H.). Please complete all fields. Enter N/A for any fields that are not applicable.

1. **TYPE OF APPLICATION:** ☐ New ☐ Modification ☒ Renewal

   If this application is for a modification, please describe the modification request and the reason the modification is necessary. _____

2. **CONSUMPTIVE USE PERMIT NO.** (if application is for renewal or modification): **233**

3. **REQUESTED PERMIT DURATION**: ☒ 20 years ☐ _____ years (up to 20 years)

   ☐ This project qualifies for a duration greater than 20 years, per Section 373.236, F.S.

4. **PROJECT NAME:** **Mims Water Supply System** **COUNTY:** **Brevard**

   PHYSICAL ADDRESS: **2262 High Drive Mims 32754**

5. **RELATED PERMITS** (for projects other than Public Supply)

   ☐ ENVIRONMENTAL RESOURCE PERMIT: MSSW/ERP No(s): _____

   ☐ INDUSTRIAL WASTEWATER (IWW) PERMIT: IWW Permit No(s): _____

   ☐ NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT:

   NPDES Permit No(s): _____

SECTION III – USE TYPE CATEGORIES

Please check all applicable use categories associated with this application and complete the associated supplemental form(s) indicated. The **Minor Individual Supplemental Form** (Form No. 40C-2.900(2)) can be completed in lieu of Supplemental Forms A through G if all of the following criteria are met:

- Use is less than 100,000 gallons per day
- Withdrawal facilities (wells or pump intakes) are less than 8-inches diameter
- Combined withdrawal capacity is less than 1,000,000 gallons per day
- Use is not for Mining/Dewatering
- Use is for Public Supply where end users are not individually metered

Use Type Category	Supplemental Form
☐ **Agricultural** (e.g., crops, livestock, nursery, aquaculture, pasture)	Form A Form No. 40C-2.900(1)(a)
☐ **Commercial / Industrial** (e.g., service business, food and beverage production, cooling and heating, commercial attraction, manufacturing, chemical processing, power generation)	Form B Form No. 40C-2.900(1)(b)
☐ **Landscape / Recreation** (e.g., irrigation of parks, cemeteries, landscaped areas, golf courses, athletic fields, playgrounds)	Form C Form No. 40C-2.900(1)(c)
☐ **Mining / Dewatering** (e.g., water use or removal associated with construction or excavation)	Form D Form No. 40C-2.900(1)(d)
☒ **Public Supply** (e.g., public or privately owned potable water supply utility)	Form E Form No. 40C-2.900(1)(e)
☐ **Environmental / Other** (e.g., aquifer remediation, environmental enhancement, or the use of water for other purposes)	Form F Form No. 40C-2.900(1)(f)
☐ **Institutional** (e.g., hospital, university, military base, correctional facility)	Form G Form No. 40C-2.900(1)(g)

SECTION IV – SOURCES OF WATER

(please attach additional facility tables if necessary)

SUMMARY OF GROUNDWATER (WELL) FACILITIES

Site or Wellfield Name[1]	District ID (if available)	Florida Unique Well ID (if available)	Owner's Well Name	Capacity (gpm)	Pump Type[2]	Casing Diameter (inches)[3]	Casing Depth (feet)	Total Depth (feet)	Status[4] (include date if proposed)	Type of Water Use Accounting Method[5]	Last Meter Check / Method Validation[6]	Type of Water Use (refer to Section III)
Mims Water Supply System	36150		16	300		12	50	80	Proposed			
Mims Water Supply System	36149		15	300		12	50	80	Proposed			
Mims Water Supply System	36151		17	300		12	50	80	Proposed			
Mims Water Supply System	36152		18	300		12	50	80	Proposed			
Mims Water Supply System	36153		19	300		12	50	80	Proposed			
Mims Water	36154		20	300		12	50	80	Proposed			

Supply System												
Mims Water Supply System	36155		21	300		12	50	80	Proposed			
Mims Water Supply System	36156		22	300		12	50	80	Proposed			
Mims Water Supply System	0		GMW-CL4 (MW 8-9)				Unknown	Unknown	Active			
Mims Water Supply System	0		Monitoring Station at Well 7 (PZ2)				Unknown	Unknown	Active			
Mims Water Supply System	0		Monitoring Station at Well 7 (PZ1) (S13 T21S R34E)				Unknown	Unknown	Active			
Mims Water Supply System	0		GMW-All5 (MW 10-11)				Unknown	Unknown	Active			

Mims Water Supply System	0		GMW-CL3 (MW 7)				Unknown	Unknown	Active			
Mims Water Supply System	0		Monitoring Station at Well 6 (PZ3) (S19 T21S R35E)				Unknown	Unknown	Active			
Mims Water Supply System	0		Monitoring Station at Well 6 (PZ4)				Unknown	Unknown	Active			
Mims Water Supply System	0		GMW-CL5 (MW 6)				Unknown	Unknown	Active			
Mims Water Supply System	36147		13	300		12	50	80	Proposed			
Mims Water Supply System	4304		7	280		12	35	70	Active			
Mims Water Supply	4312		1	350		8	63	90	Active			

System												
Mims Water Supply System	36148		14	300		12	50	80	Proposed			
Mims Water Supply System	4313		2	350		12	50	70	Active			
Mims Water Supply System	4315		4	350		8	61	66	Active			
Mims Water Supply System	4316		5	150		10	62	80	Active			
Mims Water Supply System	4321		11	250		12	55	80	Active			
Mims Water Supply System	4322		12	300		12	50	80	Proposed			
Mims Water Supply	4317		6	200		12	50	70	Active			

System												
Mims Water Supply System	4318		8	240		12	30	65	Active			
Mims Water Supply System	4319		9	350		12	65	85	Active			
Mims Water Supply System	4320		10	350		12	42	67	Active			

1 If project consists of separate or non-contiguous pieces of property or wellfields
2 Centrifugal (impeller located above water level), submersible (pump set below water level), turbine (motor at ground surface that drives an impeller below water level), vacuum underdrain (typically used for dewatering), well point system (typically used for dewatering), or other (any pump that does not fall into one of the categories previously listed)
3 The casing diameter is defined as the largest permanent water-bearing casing of the well at land surface.
4 Active (currently in use), Inactive (capped, does not have power, or the connection to the water supply system has been severed), Abandoned (plugged and abandoned in accordance with 40C-3, Florida Administrative Code), or Proposed (include anticipated construction date)
5 Flow Meter, Time Clock / Pump Run Time, Hour Meter, Digital Electric Meter, Analog Electric Meter
6 Enter the date of the last flow meter accuracy check or alternative method validation

SUMMARY OF SURFACE WATER (PUMP) FACILITES

Site Name[1]	District ID (if available)	Owner's Pump Name	Pump Capacity (gpm)	Pump Intake Diameter (inches)	Pump Type[2]	Name of Surface Water Body	Type of Surface Water Body[3]	Status[4] (include date if proposed)	Type of Water Use Accounting Method[5]	Last Meter Check / Method Validation[6]	Type of Water Use (refer to Section III)

1 If project consists of separate or non-contiguous pieces of property or wellfields
2 Centrifugal (impeller located above water level), submersible (pump set below water level), turbine (motor at ground surface that drives an impeller below water level), hydraulic dredge pump (typically used for mining), hydraulic dewatering pump (typically used for construction or mining), other (any pump that does not fall into one of the categories previously listed)
3 Ditch/canal, lake/pond (natural), lake/pond (artificial), river/creek, spring, mining/borrow pit
4 Active (currently in use), Inactive (does not have power, or the connection to the water supply system has been severed), Proposed

5 Flow Meter, Time Clock / Pump Run Time, Hour Meter, Digital Electric Meter, Analog Electric Meter
6 Enter the date of the last flow meter accuracy check or alternative method validation

SUMMARY OF CONNECTION POINT FACILITIES

Connection points include locations where potable or non-potable water (including reclaimed water) purchased from a water supplier enters a project site.

Site Name[1]	District ID (if available)	Owner's Connection Point Name	Water Supplier Name[2]	Type of Surface Water Body[3]	Status[4] (include date if proposed)	Type of Water Use Accounting Method[5]	Last Meter Check / Method Validation[6]	Type of Water Use (refer to Section III)

1 If project consists of separate or non-contiguous pieces of property or wellfields
2 Name of water supplier that provides water to the project through the connection point
3 Reclaimed water holding pond, stormwater management system
4 Active (currently in use), Inactive (the connection to the water supply system has been severed), Proposed
5 Flow Meter, Time Clock / Pump Run Time, Hour Meter, Digital Electric Meter, Analog Electric Meter
6 Enter the date of the last flow meter accuracy check or alternative method validation

SECTION V – USE OF LOWEST QUALITY WATER AND EVALUATION OF RECLAIMED WATER FEASIBILITY

The applicant may be required to evaluate the feasibility of utilizing reclaimed water and/or other lower quality water sources. The feasibility analysis must be completed as outlined in Section 2.3.3(e), A.H.

SECTION VI – SUMMARY OF REQUESTED WATER USE

Summarize the requested water use from each supplemental form (Agricultural, Public Supply, Commercial / Industrial, etc.) in the table below. Provide projections for each source, at five-year intervals, for the requested permit duration. If the requested permit duration exceeds 20 years, please attach a supplemental sheet providing additional five-year projections for each source.

Year	Requested Amounts and Source(s) of Water				
	Surficial Aquafer ____ (mgy[2])	**Surficial Aquifer** _____ (mgy)	_____ (mgy)	_____ (mgy)	Total Requested Water Use (mgy)
Other/Unknown	277.9	321.2			277.9
2023 - 2028		310.8			310.8
2028 - 2033		319.5			319.5
2033 - 2038		321.2			321.2

[1] Provide the name of the water source. Examples include upper Floridan aquifer, stormwater pond, surficial aquifer, Davis Lake.
[2] Million gallons per year

SECTION VII – AQUIFER STORAGE AND RECOVERY *(complete if applicable)*

ASR Facility Name	Source of Stored Water[1]	Storage Aquifer Name	Recovery Water Destination	Projected Demand Average (mgy)	Projected Demand Maximum (mgy)	Projected Injected Average (mgy)	Projected Injected Maximum (mgy)

[1] Aquifer name, surface water body, water treatment plant name.

Please describe any projected increases or decreases (from historical average) in the amounts stored or recovered.

SECTION VIII – IMPACT EVALUATION

When determining whether the permit applicant has provided reasonable assurances that the conditions for issuance in Rule 40C-2.301, F.A.C., are met, the District will consider the projected impacts of the proposed consumptive use on an individual and cumulative basis. In order to provide reasonable assurance, studies and/or impact evaluations may be required. Please refer to the Applicant's Handbook for guidance regarding the impact evaluations and attach analyses, if applicable.

SECTION IX – APPLICANT CERTIFICATION

I certify that to the best of my knowledge and belief, all of the information provided on this form and in any attachment to it is correct. I also certify that I have legal authority to execute this application for the applicant and certify that the applicant will have sufficient legal authority to undertake the activities described herein. I understand that any material false statement in an application to continue, initiate, or modify a use, or any material false statement in any report or statement of fact required of the permittee, may result in revocation, in whole or in part, of the permit (Section 373.243(1), F.S.). With advance notice, I agree to provide St. Johns River Water Management District staff, with proper identification, entry to the project site for the purpose of performing analyses of the site for determining whether the conditions for issuance will be met. Further, if a permit is granted, I agree that, with advance notice, District staff with proper identification shall have permission to enter, inspect, collect samples, and take measurements of permitted facilities to determine compliance with the permit conditions and permitted plans and specifications.

(If applicable) I authorize _____ to act as my agent for permit application coordination.

James Helmer		**08-JUN-18**
APPLICANT'S NAME (print or type)	APPLICANT'S SIGNATURE	DATE
AUTHORIZED AGENT'S NAME (print or type)	AUTHORIZED AGENT'S SIGNATURE	DATE

When an application that will be considered by the District's Governing Board is complete, the applicant will be notified of the date of the hearing (Governing Board meeting) at which the application will be considered at least 14 days in advance. The Governing Board normally meets on the second Tuesday of the month.

SECTION X – APPLICANT CHECKLIST

The following items must be included with the permit application submittal:

☐ Proof of Property Control (e.g., deed, lease), if not already on file with the District

☐ Application Fee (refer to online fee schedule or Applicant's Handbook)

☐Location/Site Map

☐ Supplemental Form(s) and associated supporting information (e.g., maps, calculations)

☐ Water Conservation Plan

Additional Addresses

Applicant	

Land Owner	

Agent	

Compliance Contact	

Consultant	

Water Use Reporting (EN-50) Contact	Rudy Khan Brevard County Utility Services Department

	2725 Judge Fran Jamieson Way Melbourne FL 32940-6605

Attorney	

CONSUMPTIVE USE PERMIT APPLICATION

St. Johns River Water Management District
4049 Reid Street • P.O. Box 1429 • Palatka, FL 32178-1429 • (386) 329-4500
Application forms may also be submitted electronically at *floridaswater.com*.

SECTION I – CONTACT INFORMATION

If necessary, attach additional sheets if there are multiple applicants, owners, agents, etc.

1. **APPLICANT** (Complete legal name in which permit should be issued)

NAME: **Brevard County Utility Services**

If applicant is a business, provide a contact person: ***Edward Fontanin***

ADDRESS: **2725 Judge Fran Jamieson Way**

CITY, STATE, ZIP: **Viera FL 32940-6605**

PHONE: **(321) 350-8374** CELL PHONE:

EMAIL ADDRESS: **Edward.fontanin@brevardfl.gov**

Do you want all correspondence to be transmitted electronically to this email address? ☐ Yes ☐ No

Applicant is: ☒Owner ☐ Lessee* ☐ Other (explain)

*Attach copy of current lease, or written authorization from property owner

2. **OWNER** (If different than applicant)

NAME: **Edward Fontanin, Brevard County Utility Services**

ADDRESS: **2725 Judge Fran Jamieson Way**

CITY, STATE, ZIP: **Viera FL 32940-6605**

PHONE: **(321) 350-8374** CELL PHONE:

EMAIL ADDRESS: **Edward.fontanin@brevardfl.gov**

3. **AGENT OR CONSULTANT** Address all correspondence to the person below? ☐Yes ☐ No

NAME: **Courtney Duff**

COMPANY NAME (if applicable): **Brevard County Utility Services**

ADDRESS: **2725 Judge Fran Jamieson Way Bldg A Ste 213**

CITY, STATE, ZIP: **Viera FL 32940-6605**

PHONE: **(321) 350-8374** CELL PHONE: **(321) 507-8136**

EMAIL ADDRESS: **Courtney.Duff@brevardfl.gov**

4. **COMPLIANCE CONTACT** (Person responsible for ensuring that the permit conditions are met)

NAME: **Courtney Duff, Brevard County Utility Services**

ADDRESS: **2725 Judge Fran Jamieson Way Bldg A Ste 213**

CITY, STATE, ZIP: **Viera FL 32940-6605**

PHONE: **(321) 350-8374** CELL PHONE: **(321) 507-8136**

EMAIL ADDRESS: **Courtney.Duff@brevardfl.gov**

SECTION II – APPLICATION INFORMATION

For permit application guidance, please refer to the Applicant's Handbook, Consumptive Uses of Water, which is incorporated by reference in Rule 40C-2.101(1)(a), F.A.C. (A.H.). Please complete all fields. Enter N/A for any fields that are not applicable.

1. **TYPE OF APPLICATION:** ☐ New ☐ Modification ☒ Renewal
   If this application is for a modification, please describe the modification request and the reason the modification is necessary. _____

2. **CONSUMPTIVE USE PERMIT NO.** (if application is for renewal or modification): **1742**

3. **REQUESTED PERMIT DURATION**: ☒ 20 years ☐ _____ years (up to 20 years)
   ☐ This project qualifies for a duration greater than 20 years, per Section 373.236, F.S.

4. **PROJECT NAME:** **San Sebastian Water** **COUNTY:** **Brevard**
   PHYSICAL ADDRESS: _____

5. **RELATED PERMITS** (for projects other than Public Supply)
   ☐ ENVIRONMENTAL RESOURCE PERMIT: MSSW/ERP No(s): _____
   ☐ INDUSTRIAL WASTEWATER (IWW) PERMIT: IWW Permit No(s): _____
   ☐ NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT:
   NPDES Permit No(s): _____

SECTION III – USE TYPE CATEGORIES

Please check all applicable use categories associated with this application and complete the associated supplemental form(s) indicated. The **Minor Individual Supplemental Form** (Form No. 40C-2.900(2)) can be completed in lieu of Supplemental Forms A through G if all of the following criteria are met:

- Use is less than 100,000 gallons per day
- Withdrawal facilities (wells or pump intakes) are less than 8-inches diameter
- Combined withdrawal capacity is less than 1,000,000 gallons per day
- Use is not for Mining/Dewatering
- Use is for Public Supply where end users are not individually metered

Use Type Category	Supplemental Form
☐ **Agricultural** (e.g., crops, livestock, nursery, aquaculture, pasture)	Form A Form No. 40C-2.900(1)(a)
☐ **Commercial / Industrial** (e.g., service business, food and beverage production, cooling and heating, commercial attraction, manufacturing, chemical processing, power generation)	Form B Form No. 40C-2.900(1)(b)
☐ **Landscape / Recreation** (e.g., irrigation of parks, cemeteries, landscaped areas, golf courses, athletic fields, playgrounds)	Form C Form No. 40C-2.900(1)(c)
☐ **Mining / Dewatering** (e.g., water use or removal associated with construction or excavation)	Form D Form No. 40C-2.900(1)(d)
☒ **Public Supply** (e.g., public or privately owned potable water supply utility)	Form E Form No. 40C-2.900(1)(e)
☐ **Environmental / Other** (e.g., aquifer remediation, environmental enhancement, or the use of water for other purposes)	Form F Form No. 40C-2.900(1)(f)
☐ **Institutional** (e.g., hospital, university, military base, correctional facility)	Form G Form No. 40C-2.900(1)(g)

SECTION IV – SOURCES OF WATER

(please attach additional facility tables if necessary)

SUMMARY OF GROUNDWATER (WELL) FACILITIES

Site or Wellfield Name[1]	District ID (if available)	Florida Unique Well ID (if available)	Owner's Well Name	Capacity (gpm)	Pump Type[2]	Casing Diameter (inches)[3]	Casing Depth (feet)	Total Depth (feet)	Status[4] (include date if proposed)	Type of Water Use Accounting Method[5]	Last Meter Check / Method Validation[6]	Type of Water Use (refer to Section III)
San Sebastian Water LLC	478472		West Well # 5- replacement for Well 1	150	Submersible		72	95	Proposed		10-MAY-18	
San Sebastian Water LLC	38982		4 - replace for Well 2	55		6	83	103	Active			

1 If project consists of separate or non-contiguous pieces of property or wellfields
2 Centrifugal (impeller located above water level), submersible (pump set below water level), turbine (motor at ground surface that drives an impeller below water level), vacuum underdrain (typically used for dewatering), well point system (typically used for dewatering), or other (any pump that does not fall into one of the categories previously listed)
3 The casing diameter is defined as the largest permanent water-bearing casing of the well at land surface.

4 Active (currently in use), Inactive (capped, does not have power, or the connection to the water supply system has been severed), Abandoned (plugged and abandoned in accordance with 40C-3, Florida Administrative Code), or Proposed (include anticipated construction date)
5 Flow Meter, Time Clock / Pump Run Time, Hour Meter, Digital Electric Meter, Analog Electric Meter
6 Enter the date of the last flow meter accuracy check or alternative method validation

SUMMARY OF SURFACE WATER (PUMP) FACILITES

Site Name[1]	District ID (if available)	Owner's Pump Name	Pump Capacity (gpm)	Pump Intake Diameter (inches)	Pump Type[2]	Name of Surface Water Body	Type of Surface Water Body[3]	Status[4] (include date if proposed)	Type of Water Use Accounting Method[5]	Last Meter Check / Method Validation[6]	Type of Water Use (refer to Section III)

1 If project consists of separate or non-contiguous pieces of property or wellfields
2 Centrifugal (impeller located above water level), submersible (pump set below water level), turbine (motor at ground surface that drives an impeller below water level), hydraulic dredge pump (typically used for mining), hydraulic dewatering pump (typically used for construction or mining), other (any pump that does not fall into one of the categories previously listed)
3 Ditch/canal, lake/pond (natural), lake/pond (artificial), river/creek, spring, mining/borrow pit
4 Active (currently in use), Inactive (does not have power, or the connection to the water supply system has been severed), Proposed
5 Flow Meter, Time Clock / Pump Run Time, Hour Meter, Digital Electric Meter, Analog Electric Meter
6 Enter the date of the last flow meter accuracy check or alternative method validation

SUMMARY OF CONNECTION POINT FACILITIES

Connection points include locations where potable or non-potable water (including reclaimed water) purchased from a water supplier enters a project site.

Site Name[1]	District ID (if available)	Owner's Connection Point Name	Water Supplier Name[2]	Type of Surface Water Body[3]	Status[4] (include date if proposed)	Type of Water Use Accounting Method[5]	Last Meter Check / Method Validation[6]	Type of Water Use (refer to Section III)

1 If project consists of separate or non-contiguous pieces of property or wellfields
2 Name of water supplier that provides water to the project through the connection point
3 Reclaimed water holding pond, stormwater management system
4 Active (currently in use), Inactive (the connection to the water supply system has been severed), Proposed

Form No. 40C-2.900(1), effective August 2014
Incorporated by reference in 40C-2.900(1), F.A.C.

5 Flow Meter, Time Clock / Pump Run Time, Hour Meter, Digital Electric Meter, Analog Electric Meter
6 Enter the date of the last flow meter accuracy check or alternative method validation

SECTION V – USE OF LOWEST QUALITY WATER AND EVALUATION OF RECLAIMED WATER FEASIBILITY

The applicant may be required to evaluate the feasibility of utilizing reclaimed water and/or other lower quality water sources. The feasibility analysis must be completed as outlined in Section 2.3.3(e), A.H.

SECTION VI – SUMMARY OF REQUESTED WATER USE

Summarize the requested water use from each supplemental form (Agricultural, Public Supply, Commercial / Industrial, etc.) in the table below. Provide projections for each source, at five-year intervals, for the requested permit duration. If the requested permit duration exceeds 20 years, please attach a supplemental sheet providing additional five-year projections for each source.

Year	Requested Amounts and Source(s) of Water				
	Surficial Aquifer ____ (mgy[2])	_____ (mgy)	_____ (mgy)	_____ (mgy)	Total Requested Water Use (mgy)
Other/Unknown	31.32				28.08
2026 - 2031	29.15				29.15
2031 - 2036	30.22				30.22
2036 - 2041	31.32				31.32

[1] Provide the name of the water source. Examples include upper Floridan aquifer, stormwater pond, surficial aquifer, Davis Lake.
[2] Million gallons per year

SECTION VII – AQUIFER STORAGE AND RECOVERY *(complete if applicable)*

ASR Facility Name	Source of Stored Water[1]	Storage Aquifer Name	Recovery Water Destination	Projected Demand Average (mgy)	Projected Demand Maximum (mgy)	Projected Injected Average (mgy)	Projected Injected Maximum (mgy)

[1] Aquifer name, surface water body, water treatment plant name.

Please describe any projected increases or decreases (from historical average) in the amounts stored or recovered.

SECTION VIII – IMPACT EVALUATION

When determining whether the permit applicant has provided reasonable assurances that the conditions for issuance in Rule 40C-2.301, F.A.C., are met, the District will consider the projected impacts of the proposed consumptive use on an individual and cumulative basis. In order to provide reasonable assurance, studies and/or impact evaluations may be required. Please refer to the Applicant's Handbook for guidance regarding the impact evaluations and attach analyses, if applicable.

SECTION IX – APPLICANT CERTIFICATION

I certify that to the best of my knowledge and belief, all of the information provided on this form and in any attachment to it is correct. I also certify that I have legal authority to execute this application for the applicant and certify that the applicant will have sufficient legal authority to undertake the activities described herein. I understand that any material false statement in an application to continue, initiate, or modify a use, or any material false statement in any report or statement of fact required of the permittee, may result in revocation, in whole or in part, of the permit (Section 373.243(1), F.S.). With advance notice, I agree to provide St. Johns River Water Management District staff, with proper identification, entry to the project site for the purpose of performing analyses of the site for determining whether the conditions for issuance will be met. Further, if a permit is granted, I agree that, with advance notice, District staff with proper identification shall have permission to enter, inspect, collect samples, and take measurements of permitted facilities to determine compliance with the permit conditions and permitted plans and specifications.

(If applicable) I authorize **Courtney Duff** to act as my agent for permit application coordination.

Edward Fontanin		**22-JUN-21**
APPLICANT'S NAME (print or type)	APPLICANT'S SIGNATURE	DATE
Courtney Duff	**Courtney Duff**	**22-JUN-21**
AUTHORIZED AGENT'S NAME (print or type)	AUTHORIZED AGENT'S SIGNATURE	DATE

When an application that will be considered by the District's Governing Board is complete, the applicant will be notified of the date of the hearing (Governing Board meeting) at which the application will be considered at least 14 days in advance. The Governing Board normally meets on the second Tuesday of the month.

SECTION X – APPLICANT CHECKLIST

The following items must be included with the permit application submittal:

- ☐ Proof of Property Control (e.g., deed, lease), if not already on file with the District
- ☐ Application Fee (refer to online fee schedule or Applicant's Handbook)
- ☐ Location/Site Map
- ☐ Supplemental Form(s) and associated supporting information (e.g., maps, calculations)
- ☐ Water Conservation Plan

Additional Addresses

Applicant	

Land Owner	

Agent	

Compliance Contact	

Consultant	

Water Use Reporting (EN-50) Contact	

Attorney	

St. Johns River
Water Management District
Hans G. Tanzler III, Executive Director

4049 Reid Street • P.O. Box 1429 • Palatka, FL 32178-1429 • (386) 329-4500
On the Internet at floridaswater.com.

March 21, 2013

City of Titusville
2836 Garden St
Titusville, FL 32796

SUBJECT: Consumptive Use Permit Number 2-009-10647-7
Titusville Area II & Area III Wellfields

Dear Sir/Madam:

Enclosed is your permit as authorized by the St. Johns River Water Management District on March 21, 2013.

Please be advised that the period of time within which a third party may request an administrative hearing on this permit may not have expired by the date of issuance. A potential petitioner has twenty-six (26) days from the date on which the actual notice is deposited in the mail, or twenty-one (21) days from publication of this notice when actual notice is not provided, within which to file a petition for an administrative hearing pursuant to Sections 120.569 and 120.57, Florida Statutes. Receipt of such a petition by the District may result in this permit becoming null and void.

Permit issuance does not relieve you from the responsibility of obtaining permits from any federal, state and/or local agencies asserting concurrent jurisdiction over this work.

The enclosed permit is a legal document and should be kept with your other important records. Please read the permit and conditions carefully since the referenced conditions may require submittal of additional information. All information submitted as compliance with permit conditions must be submitted to the nearest District Service Center and should include the above referenced permit number.

Sincerely,

M. Daniels

Margaret Daniels, Bureau Chief
Bureau of Regulatory Support

Enclosures: Permit, Conditions for Issuance,

cc: District Permit File

Attorney: City of Titusville
C/O Dwight W Severs
PO Box 2806
Titusville, FL 32781-2806

Attorney: de la Parte & Gilbert PA
C/O Edward P de la Parte Jr Esq
PO Box 2350
Tampa, FL 33601-2350

PERMIT NO. 2-009-10647-7 **DATE ISSUED:** March 21, 2013
PROJECT NAME: Titusville Area II & Area III Wellfields

A PERMIT AUTHORIZING:

The District authorizes the continued use, as limited by the attached conditions, of 6.01 million gallons per day (mgd) of groundwater from the surficial aquifer system (Area II and Area III wellfields) and the Floridan aquifer (already permitted from the Area IV Wellfield) to serve an estimated population of 63,369 with potable water for household, commercial/industrial, water utility, and essential (fire protection) uses through 2031. This modification authorizes an increase in groundwater withdrawals from the Area III wellfield from 0.3 mgd to 0.5 mgd in 2013. The combined annual groundwater withdrawals from the Area II, Area III and Area IV wellfields will not be changed with this modification.

LOCATION:

Site: AREA II
Brevard County
Site: Area III
Brevard County

Section(s):	30, 31, 32	Township(s):	21S	Range(s):	35E
	4, 5		22S		35E
	27, 28, 33		23S		35E

ISSUED TO:

City of Titusville
2836 Garden St
Titusville, FL 32796

Permittee agrees to hold and save the St. Johns River Water Management District and its successors harmless from any and all damages, claims, or liabilities which may arise from permit issuance. Said application, including all maps and specifications attached thereto, is by reference made a part hereof.

This permit does not convey to permittee any property rights nor any rights or privileges other than those specified herein, nor relieve the permittee from complying with any law, regulation or requirement affecting the rights of other bodies or agencies. All structures and works installed by permittee hereunder shall remain the property of the permittee.

This permit may be revoked, modified or transferred at any time pursuant to the appropriate provisions of Chapter 373, Florida Statutes and 40C-1, Florida Administrative Code.

PERMIT IS CONDITIONED UPON:

See conditions on attached "Exhibit A", dated March 21, 2013

AUTHORIZED BY: St. Johns River Water Management District
Division of Regulatory Services

By: Carl R Lanabee, Jr.

_____

Carl Larrabee
Bureau Chief

"EXHIBIT A"
CONDITIONS FOR ISSUANCE OF PERMIT NUMBER 10647
City of Titusville
DATED MARCH 21, 2013

1. District authorized staff, upon proper identification, will have permission to enter, inspect, and observe permitted and related facilities in order to determine compliance with the approved plans, specifications, and conditions of this permit.

2. Nothing in this permit should be construed to limit the authority of the St. Johns River Water Management District to declare a water shortage and issue orders pursuant to Section 373.175, Florida Statutes, or to formulate a plan for implementation during periods of water shortage, pursuant to Section 373.246, Florida Statutes. In the event a water shortage is declared by the District Governing Board, the permittee must adhere to the water shortage restrictions as specified by the District, even though the specified water shortage restrictions may be inconsistent with the terms and conditions of this permit.

3. Prior to the construction, modification, or abandonment of a well, the permittee must obtain a Water Well Construction Permit from the St. Johns River Water Management District, or the appropriate local government pursuant to Chapter 40C-3, Florida Administrative Code. Construction, modification, or abandonment of a well will require modification of the consumptive use permit when such construction, modification, or abandonment is other than that specified and described on the consumptive use permit application form.

4. Leaking or inoperative well casings, valves, or controls must be repaired or replaced as required to eliminate the leak or make the system fully operational.

5. Legal uses of water existing at the time of permit application may not be significantly adversely impacted by the consumptive use. If unanticipated significant adverse impacts occur, the District shall revoke the permit in whole or in part to curtail or abate the adverse impacts, unless the impacts can be mitigated by the permittee.

6. Off-site land uses existing at the time of permit application may not be significantly adversely impacted as a result of the consumptive use. If unanticipated significant adverse impacts occur, the District shall revoke the permit in whole or in part to curtail or abate the adverse impacts, unless the impacts can be mitigated by the permittee.

7. The District must be notified, in writing, within 30 days of any sale, conveyance, or other transfer of a well or facility from which the permitted consumptive use is made or with in 30 days of any transfer of ownership or control of the real property at which the permitted consumptive use is located. All transfers of ownership or transfers of permits are subject to the provisions of section 40C-1.612.

8. A District issued identification tag shall be prominently displayed at each withdrawal site by permanently affixing such tag to the pump, headgate, valve, or other withdrawal facility as provided by Section 40C-2.401, Florida Administrative Code. Permittee shall notify the District in the event that a replacement tag is needed.

9. The permittee's use of water as authorized by this permit shall not cause an interference with an existing legal use of water as defined in District rules. If interference occurs, the District may revoke the permit in whole or in part to abate the adverse impact unless otherwise mitigated by the permittee. In those cases where other permit holders are identified by the District as also contributing to the interference, the permittee may choose to mitigate in a cooperative effort with these other permittees. The permittee

shall submit a mitigation plan to the District, and obtain District approval, prior to implementing any mitigation.

10. All irrigation shall be in conformity with the requirements set forth in subsection 40C-2.042(2), F.A.C.

11. All submittals made to demonstrate compliance with this permit must include the CUP number 10647 plainly labeled on the submittal.

12. This permit will expire on January 11, 2032.

13. Maximum annual groundwater withdrawals from the Area II Wellfield must not exceed:

    1,278 million gallons (3.50 mgd average) in 2011,
    1,004 million gallons (2.75 mgd average) in 2012,
    913 million gallons (2.50 mgd average) in 2013,
    803 million gallons (2.20 mgd average) in 2014,
    1,004 million gallons (2.75 mgd average) in 2015,
    913 million gallons (2.50 mgd average) in 2016,
    730 million gallons (2.00 mgd average) in 2017,
    730 million gallons (2.00 mgd average) in 2018,
    821 million gallons (2.25 mgd average) in 2019,
    821 million gallons (2.25 mgd average) in 2020,
    821 million gallons (2.25 mgd average) in 2021,
    821 million gallons (2.25 mgd average) in 2022,
    913 million gallons (2.50 mgd average) in 2023,
    913 million gallons (2.50 mgd average) in 2024,
    913 million gallons (2.50 mgd average) in 2025,
    1,004 million gallons (2.75 mgd average) in 2026,
    1,004 million gallons (2.75 mgd average) in 2027,
    1,004 million gallons (2.75 mgd average) in 2028,
    1,004 million gallons (2.75 mgd average) in 2029,
    and 1,095 million gallons (3.00 mgd average) in 2030 and 2031.

14. Maximum annual groundwater withdrawals from the Area III Wellfield must not exceed:

    416.1 million gallons (1.14 mgd average) in 2011,
    394.2 million gallons (1.08 mgd average) in 2012,
    182.5 million gallons (0.5 mgd average) in 2013,
    109.5 million gallons (0.3 mgd average) in 2014,
    0 million gallons (0.0 mgd average) in 2015,
    109.5 million gallons (0.3 mgd average) in 2016,
    438.0 million gallons (1.2 mgd average) in 2017 through 2031.

15. The combined annual groundwater withdrawals from the Area II, Area III, and Area IV Wellfields and the water obtained from the City of Cocoa for the public supply needs of Titusville must not exceed:

    1,756 million gallons (4.81 mgd average) in 2011,
    1,767 million gallons (4.84 mgd average) in 2012,
    1,778 million gallons (4.87 mgd average) in 2013,
    1,792 million gallons (4.91 mgd average) in 2014,
    1,803 million gallons (4.94 mgd average) in 2015,
    1,843 million gallons (5.05 mgd average) in 2016,
    1,865 million gallons (5.11 mgd average) in 2017,
    1,887 million gallons (5.17 mgd average) in 2018,

1,909 million gallons (5.23 mgd average) in 2019,
1,927 million gallons (5.28 mgd average) in 2020,
1,949 million gallons (5.34 mgd average) in 2021,
1,975 million gallons (5.41 mgd average) in 2022,
1,997 million gallons (5.47 mgd average) in 2023,
2,018 million gallons (5.53 mgd average) in 2024,
2,040 million gallons (5.59 mgd average) in 2025,
2,066 million gallons (5.66 mgd average) in 2026,
2,088 million gallons (5.72 mgd average) in 2027,
2,110 million gallons (5.78 mgd average) in 2028,
2,135 million gallons (5.85 mgd average) in 2029, and
2,194 million gallons (6.01 mgd average) in 2030 and 2031.

In the event that the permittee receives water from the City of Cocoa for potable use, then the allocation for any year above shall be reduced an amount equivalent to the quantity provided to the permittee by the City of Cocoa in that year.

16. The permittee must operate under the Area II Wellfield Management Plan submitted to the District on June 22, 2010, and continue to abide with the following conditions: a) Continuous surface water and shallow ground water monitoring devices must continue to monitor water levels within the Parkland wetland. The existing wells near the Parkland wetland may be pumped when the wetland water level is at or above 13.5 feet NGVD during the wet season (June through October) and at or above 11.5 NGVD during the dry season (November through May). Pumping from these wells is not authorized when the Parkland wetland water levels fall below these elevations. The permittee must maintain water level control devices (e.g. float valves) on each well to ensure that water levels do not fall below the above, prescribed elevations. After the proposed wells have been operated for one year, the initial pumping level elevations may be adjusted based upon a review of the associated wetland-monitoring plan by District staff. b) Wells 7, 16, 17, and 27 are to remain off-line. These wells are not to be used except for sample collection and emergency use. Any emergency use other than for fire protection must be approved by the District prior to use.

17. The permittee must operate under the Area III Wellfield Management Plan submitted to the District in June 22, 2010, and continue to abide by the following conditions: a) Wells 315 (ID No. 3869), 316 (ID No. 3870), 319 (3873), 327 (ID No. 3881), and 332 (ID No. 3886) are to remain off-line. These wells are not to be used except for emergency use. Any emergency use other fire protection must be approved by the District prior to use. b) Wells 339 (ID No. 3890) through 345 (ID No. 3897) are only to be used during periods of wet weather when the water level in the pond located approximately 900 feet west of Well 345 is at or above an elevation of 17 NGVD (4.5 feet below the top of staff gauge). The pond water level elevation must be monitored on a monthly basis during dry periods and on a weekly basis during periods when the wells 339 through 345 are in use.

18. Total withdrawals from all Area II and Area III wells (i.e. well 1 (ID No. 3837) through well 57 (ID No. 20098)), must be recorded continuously, totaled monthly, and reported to the District at least every six months for the duration of this permit using District Form No. EN-50. The reporting dates each year will be as follows:

Reporting Period	Report Due Date
January - June	July 31
July - December	January 31

19. Total withdrawals from the City of Cocoa interconnection (ID No. 411463) must be recorded continuously, totaled monthly, and reported to the District at least every six months for the duration of this permit using District Form No. EN-50. The reporting

dates each year will be as follows:

Reporting Period	Report Due Date
January - June	July 31
July - December	January 31

20. The permittee must have all flow meters checked for accuracy at least once every 10 years within 30 days of the anniversary date of permit issuance, and recalibrated if the difference between the actual flow and the meter reading is greater than 5%. District Form No. EN-51 must be submitted to the District within 10 days of the inspection/calibration.

21. Within one year of permit issuance, monitor well AIII-1b must be replaced by deep monitor wells to the northeast, AIII-2b located near production well 335, and to the south, AIII-3b located near production well 312. The well completion reports for the new wells must be submitted within 30 days of well installation.

22. If hydrologic or vegetative wetland monitoring data and evaluations indicate adverse impacts are occurring to the Parkland wetland, one or a combination of the following actions will be required to mitigate the adverse impacts to the wetland: (a) Titusville shall comply with any new wet season and dry season critical water level elevations established by the District; (b) Titusville shall reduce pumping from the wells within the vicinity of Parkland wetland.

23. The City of Titusville reclaimed water system must continue to beneficially reuse at least 75% of the wastewater generated.

24. The permittee must have groundwater samples from all permitted Titusville production wells and monitoring wells collected and analyzed quarterly for the permit duration according to the following schedule: Quarter 1 (March), Quarter 2 (June), Quarter 3 (September) and Quarter 4 (December). The permitted Titusville production and monitoring wells along with the required sampling parameters are included in the quarterly monitoring program listed in Figure 1.

    Sample Collection

    All groundwater samples must be collected in accordance with the Florida Department of Environmental Protection's (FDEP) standard operating procedures (SOP), DEP-SOP-001/01, DEP Quality Assurance Rule, 62-160, F.A.C.

    Wells must be purged in accordance with the appropriate procedure in DEP-SOP-001/01, as necessary to evacuate water from the well column and induce groundwater representative of the hydrogeologic formation into the well prior to sampling. Purged water must be sampled and analyzed in the field for the following parameters:

    Water Temperature (^{o}C)
    pH (SU)
    Specific Conductance (umhos/cm or uS/cm)
    Turbidity (NTU)

    Purging must be documented using the Groundwater Sampling Log form referenced in the FDEP SOP or equivalent.

    Water samples must be stored on ice immediately after collection, and remain on ice until received by the laboratory. It is recommended that sample duplicates be taken to allow for laboratory errors or data loss, and these samples be stored by the laboratory

for a minimum of 60 days to ensure backup sample availability should re-analyses be required.

Laboratory Analyses

Water samples must be analyzed in the laboratory for limited parameters or major ions as required in Figure 1.

Limited Parameter Chemical Analyses

Limited parameter chemical analyses shall include the following:

Chloride (mg/L)
Sulfate (mg/L)
Total Dissolved Solids (mg/L)
Specific Conductance (umhos/cm or uS/cm)

If the District determines that results for limited parameter analyses indicate that changes in groundwater geochemistry at any of the permitted production wells or monitoring wells may be trending towards a chloride concentration or hydrochemistry significantly different from background levels and indicating potential saline water intrusion, the District will notify the permittee within 90 days that major ion analyses will be required for the identified production well(s) for the permit duration.

Major Ion Chemical Analyses

Major ion chemical analyses shall include the following:

Calcium (mg/L)
Magnesium (mg/L)
Potassium (mg/L)
Sodium (mg/L)
Total iron (mg/L)
Chloride (mg/L)
Sulfate (mg/L)
Bicarbonate Alkalinity (as mg/L $CaCO_3$)
Carbonate Alkalinity (as mg/L $CaCO_3$)
Total Dissolved Solids (mg/L)
Specific Conductance (umhos/cm or uS/cm)

Quality Assurance

The permittee must provide documentation that field instruments were properly calibrated prior to obtaining field measurements during purging and sampling.

All water quality analyses must be performed by a laboratory certified by the Florida Department of Health (FDOH) and the National Environmental Laboratory Accreditation Program (NELAP). All laboratory analyses must be by methods for which the laboratory has FDOH certification. All laboratory analyses must be completed within EPA holding times. If data is lost or a laboratory error occurs and the EPA holding time for an analysis has expired, the permittee must have the well re-sampled within 15 days of notification from the laboratory that a loss or laboratory error has occurred. The resample shall be collected according to the procedures described above, and analyzed for the field parameters and the major ion suite listed above.

With the exception of pH, laboratory analyses utilizing selective ion electrodes are not acceptable due to the inadequate sensitivity of these methods. Analyses utilizing test kits typically used for field screening (e.g., Hatch and LaMotte) are also not acceptable for the same reason.

All major ion analyses must be checked for anion-cation balance (equivalent concentration in meq/L), and must not exceed 5% difference. If the ion balance exceeds 5% difference, the permittee must review the data and include in the report submitted to the District, a discussion of the cause or explanation of the imbalance. The permittee may also be required to have the sample re-analyzed if it is within acceptable holding times or have the well re-sampled. The resample shall be collected according to the procedures described above, and analyzed for the four field parameters and the major ion suite.

Reports

A report must be submitted to the District no later than the last day of the month after the sampling (for example, the report for samples collected in April must be submitted to the District no later than May 31). The report must include the following:

Table summarizing results for field measurements and laboratory chemical analyses
Well sampling log
Field instrument calibration verification
Chain of custody forms (if outso urced)
Laboratory analytical report (if outsourced)

All data must be submitted to the District in a District-approved electronic format readable by the District's computerized database.

FIGURE 1
Titusville Groundwater Monitoring Network
Quarterly Water Quality and Water Level Monitoring Schedule

WELLFIELD	MAJOR ION SUITE[1] Titusville Well Name (District Station ID)	LIMITED PARAMETERS[2] Titusville Well Name (District Station ID)	WATER LEVELS[3] Titusville Well Name (District Station ID)
Area II	6 (3900)		6 (3900)
	49A (3860)		49A (3860)
	52 (20093)		52 (20093)
	36A (3847)		36A (3847)
	33A (3844)		33A (3844)
	3A (3891)		3A (3891)
	4A (3898)		4A (3898)
	32A (3843)		32A (3843)
	53 (20094)		53 (20094)
	34A (3845)		34A (3845)
	31A (3842)		31A (3842)
	42 (3853)		42 (3853)
	20 (3914)		20 (3914)
	37A (3848)		37A (3848)
	18 (3912)		18 (3912)
	9 (3903)		9 (3903)
	AII-1A (409902)		AII-1A (409902)
	AII-2A (409901)		AII-2A (409901)

	AII-2B (409900)		AII-2B (409900)
		24 (3918)	24 (3918)
		30 (3841)	30 (3841)
		8 (3902)	8 (3902)
		5A (3899)	5A (3899)
		35A (3846)	35A (3846)
		46A (3857)	46A (3857)
		17 (3911)	17 (3911)
		40 (3851)	40 (3851)
		48 (3859)	48 (3859)
		51(20092)	51(20092)

WELLFIELD	MAJOR ION SUITE[1] Titusville Well Name (District Station ID)	LIMITED PARAMETERS[2] Titusville Well Name (District Station ID)	WATER LEVELS[3] Titusville Well Name (District Station ID)
Area III		319 (3873)	319 (3873)
		313 (3867)	313 (3867)
		311 (3865)	311 (3865)
		316 (3870)	316 (3870)
		345 (3897)	345 (3897)
		344 (3896)	344 (3896)
		317 (3871)	317 (3871)
		305 (3862)	305 (3862)
		320 (3874)	320 (3874)
		332 (3886)	332 (3886)
Area II		50 (20091)	50 (20091)
		38A (3849)	38A (3849)
		47 (3858)	47 (3858)
		45A (3856)	45A (3856)
		44 (3855)	44 (3855)
		39A (3850)	39A (3850)
		16 (3910)	16 (3910)
		13 (3907)	13 (3907)
		2A(3864)	2A(3864)
Area III	329 (3883)		329 (3883)
	335 (3889)		335 (3889)
	323 (3877)		323 (3877)
	334 (3888)		334 (3888)
	333 (3887)		333 (3887)
	312 (3866)		312 (3866)
	304 (3861)		304 (3861)
	315 (3869)		315 (3869)
	340 (3892)		340 (3892)
	310 (3863)		310 (3863)< /tr>
	343 (3895)		343 (3895)
	314 (3868)		314 (3868)
	339 (3890)		339 (3890)
	AIII-1B (409899)		AIII-1B (409899)
		341 (3893)	341 (3893)
		318 (3872)	318 (3872)
		330 (3884)	330 (3884)

		342 (3894)	342 (3894)
		328 (3882)	328 (3882)

Water samples must be collected quarterly as follows: Quarter 1 (March), Quarter 2 (June), Quarter 3 (September) and Quarter 4 (December). Results must be submitted to the District quarterly no later than the last day of the month following the last month of the quarter (for example, results for Quarter 1 must be submitted to the District no later than April 30).

All water samples must include the following field measurements: Water Temperature (^{o}C), pH (SU), Specific Conductance (umhos/cm or uS/cm) and Turbidity (NTU).

[1]Major Ion Suite – must be analyzed in the laboratory for Calcium (mg/L), Magnesium (mg/L), Potassium (mg/L), Sodium (mg/L), Total Iron (mg/L), Chloride (mg/L), Sulfate (mg/L), Bicarbonate Alkalinity (as mg/L $CaCO_3$), Carbonate Alkalinity (as mg/L $CaCO_3$), Total Dissolved Solids (mg/L) and Specific Conductance (umhos/cm or uS/cm).

[2]Limited Parameters – must be analyzed in the laboratory for Chloride (mg/L), Sulfate (mg/L), Total Dissolved Solids (mg/L) and Specific Conductance (umhos/cm or uS/cm).

[3]Groundwate r Levels – must be measured for both stabilized pumping conditions and static water levels, corrected to compensate for changes in barometric pressure (if required), converted to elevations relative to the North American Vertical Datum (NAVD) of 1988 and submitted to the District quarterly no later than the last day of the month following the month that the measurements were obtained (for example, the results for groundwater level elevations measured in March must be submitted to the District no later than April 30).

25. If the quarterly water sample for any well, with the exception of well 8 (ID No. 3902), 18 (ID No. 3912), 311 (ID No. 3865), 328 (ID No. 3882), and 333 (ID No. 3887), exceeds a chloride concentration of 250 mg/l, that well must be taken out of service. If continued sampling of the above referenced wells, which exceeded 250 mg/l shows that the chloride concentration has fallen below 200 mg/l, then the well(s) may be placed back in service. If the chloride concentration of the above referenced wells is within the range of 200 mg/l to 250 mg/l, then the pumping schedule will be restricted to 8 hours per day. A minimum of 8 hours recovery must occur between pumping cycles. If after a period of two years the chloride concentration has not fallen below 250 mg/l, then the well must be used only for emergency use. Any emergency use other than fire protection, must be approved by the District prior to use. Any emergency use well must be backplugged or a District approved replacement must be constructed to ensure that chloride concentrations are below 200 mg/l before the well can be place back into production.

26. Wells 8 (ID No. 3902), 18 (ID No. 3912), 311 (ID No. 3865), 328 (ID No. 3882), and 333 (ID No. 3887) can be used as blending wells, without restrictions as long as their chloride concentrations do not exceed 325 mg/l. If the chloride concentration of the above referenced wells exceeds 325 mg/l, then the pumping schedule will be restricted to 8 hours per day. A minimum of 8 hours recovery must occur between pumping cycles.

27. The permittee must continue to measure the quantity of water withdrawn from wells 2-A (#3864), 3-A (#3891), 31-A (#3842) through 39-A (#3850), 45-A (#3856), 46-A (#3857), 49-A (3860) through 57 (#20098), 304 (#3861), 305 (#3862), 310 (#3863) through 319 (#3873), 323 (#3877), 328 (#3882) through 330 (#3884), 332 (#3886) through 335 (#3889), and 339 (#3890) through 345 (#3897), as listed in the file, by in-line totalizing flow meters. The totalizing flow meters must maintain 95% accuracy, be verifiable, and be installed according to manufacturer specifications.

28. Wells 6 (#3900), 8 (#3902), 9 (#3903), 16 (#3910) through 18 (#3918), 20 (#3914), 30 (#3841), 40 (#3851), 42(#3853), 44 (#3855), 47 (#3858), and 48 (#3859) must each be equipped with totalizing flowmeters, or an alternative method for measuring flow must be implemented. The permittee has elected to implement an alternative method for wells 6 (#3900), 8 (#3902), 9 (#3903), 16 (#3910) through 18 (#3918), 20 (#3914), 30 (#3841), 40 (#3851), 42(#3853), 44 (#3855), 47 (#3858), and 48 (#3859) which utilizes master metering in conjunction with the measured flow rate (which is checked quarterly) and a run time log book for each well as a basis for calculating the quantity of water withdrawn from the wells. The permittee may not alter the approved alternative method without prior written approval from the District. The method must maintain 90% accuracy and be verifiable. If after a period of one year, the selected alternative does not meet the accuracy criteria, totalizing flow meters or another District-approved alternative must be used. If flow meters are used, the meters must maintain 95% accuracy, be verifiable and be installed according to manufacturer specifications. Documentation of proper installation of flow meters may be accomplished by a site visit by District staff, or by submitting a copy of the manufacturer's specifications and a photograph within 30 days of meter installation.

29. The Permittee must maintain the meter or float valves. In case of failure or breakdown of any meter or float valve, the District must be notified in writing within 5 days of its discovery. A defective meter, or float valve, must be repaired or replaced within 30 days of its discovery.

30. The permittee must continue to send an annual reuse report to the District describing the distribution of reclaimed water within Titusville's service area that has occurred during the previous year. In addition, the permittee must submit an annual update of the alternative sources in use, to be used, or under evaluation in the current year. These reports must be submitted to the District annually on January 31 starting in 2013.

31. The Permittee must continue to maintain the existing leak detection program and continue auditing line flushing, fire hydrant use and testing, line breaks, and street cleaning. These reports must be submitted to the District annually starting on January 31, 2013 with the water use reports.

32. The permittee must continue to conduct hydrologic and photo monitoring at each of the ten (10) wetland areas listed below;

    a. PZ1 (ID 411331), AII-S1 Marsh in Salt Lake WMA, (Sec 26, T. 21 S., R. 34 E.),
    b. PZ2 (ID 411332), AII-S2 NW corner of Garden St and I-95, (Sec 31, T. 21 S., R. 35 E.),
    c. PZ3 (ID 411333), AII-S4 Parkland wetland, (Sec 32, T. 21 S., R. 35 E.),
    d. PZ4 (ID 411334), AII-S5 Silver Lake N of Thal Rd, (Sec 7, T. 22 S., R. 35 E.),
    e. PZ5 (ID 411335), AII-S6 Forested wetland S of 405, (Sec 4, T. 22 S., R. 35 E.),
    f. PZ6 (ID 411336), AIII-S1 Sawgrass marsh W of Barna, (Sec 28 & 33, T. 22 S., R. 35 E.),
    g. PZ7 (ID 411337), AIII-S2 Marsh W of Sisson Rd, (Sec 34, T. 22 S., R. 35 E.),
    h. PZ8 (ID 411338), AIII-S3 Shrub swamp N of 405 & 407, (Sec 33, T. 22 S., R. 35 E.),
    i. PZ9 (ID 411339), AIII-S4 Forested wetland W of Barna, (Sec 21, T. 22 S., R. 35 E.),
    j. PZ10 (ID 411340), AIII-S5 Wet prairie W of Perimeter Rd, (Sec 3, T. 23 S., R. 35 E.).

33. Wetland Monitoring Data must be submitted electronically every six months in a District-approved computer accessible format. Specifically, data collected January through June must be submitted on or before July 31st of each year and data collected July through December must be submitted on or before January 31st of each year. Data submittal will start on January 31st, 2012. Water level data (measured weekly without data loggers or daily at noon with data loggers) must be recorded by the permittee for each wetland monitoring site and must be reported as elevation relative to the North American Vertical Datum (NAVD) of 1988.

34. The permittee must calibrate and maintain in working order all data loggers and probes used for measuring water levels in monitor wells. A defective data logger and/or probe must be reported to the District and repaired or replaced and recalibrated within 30 days of its discovery.

35. On or before March 31st, starting in 2012, the permittee must submit a Wetland Annual Report summarizing the wetland monitoring efforts and comparing all of the wetland monitoring data recorded for the last calendar year and previous years. The report must include panoramic photographs taken in September at the established photo stations and graphs summarizing the water level data and available District radar rainfall data. The elevation of the upland/wetland interface must be indicated on the graphs. In addition, the report will include a brief analysis and discussion of trends and wetland health.

36. If the permittee is unable to obtain or maintain legal access to any of the monitoring sites referenced above, the permittee must notify SJRWMD in writing within 15 days of concluding that access to any specific site is not possible. Within 45 days of this notification, the permittee must submit an alternative site to modify the monitoring network. Within six months of SJRWMD approval of the monitoring network modification, the permittee must implement the approved change(s).

37. The permittee's consumptive use shall not adversely impact wetlands, lakes, streamflows, and springflows, or cause or contribute to a violation of minimum flows and levels adopted in Chapter 40C-8, except as authorized by a District-approved minimum flow or level (MFL) prevention/recovery strategy. The District shall revoke the permit in whole or in part to curtail or abate the adverse impacts, if the permittee fails to implement its portion of any Board-approved prevention/recovery strategy.

38. On or before December 31, 2015, the permittee shall submit a report to the District analyzing the effect of the proposed stormwater hydration project on the yield of the Area III Wellfield and/or any other Area II or Area III well or wellfield rehabilitation project. The report shall provide the estimated yield of the Area II and Area III wellfields based upon the proposed stormwater rehydration project and any other wellfield rehabilitation actions. The report shall also address whether the permittee will continue to rely on all the existing sources of water and whether any adjustment in permitted allocation is needed. In addition, the permittee shall submit to District staff for review and approval an action plan to implement any proposed changes to the permitted allocation or water obtained from other sources.

39. The permittee must submit a compliance report to the District under subsection 373.236(4), of the Florida Statutes. The permittee must submit the report by January 10, 2022. The report shall contain sufficient information to demonstrate that the permittee's use of water will continue, for the remaining duration of the permit, to meet the conditions for permit issuance set forth in the District rules that existed at the time the permit was issued for 20 years by the District. In providing such assurance, the compliance report must meet the submittal requirements of section 6.5.5 of the Applicant's Handbook: Consumptive Uses of Water, December 27, 2010.

CONSUMPTIVE USE PERMIT APPLICATION

St. Johns River Water Management District

4049 Reid Street • P.O. Box 1429 • Palatka, FL 32178-1429 • (386) 329-4500

Application forms may also be submitted electronically at *floridaswater.com*.

SECTION I – CONTACT INFORMATION

If necessary, attach additional sheets if there are multiple applicants, owners, agents, etc.

1. **APPLICANT** (Complete legal name in which permit should be issued)

NAME: **City of Melbourne**

If applicant is a business, provide a contact person: ***Harold Nantz***

ADDRESS: **2885 Harper Rd**

CITY, STATE, ZIP: **Melbourne FL 32904-1154**

PHONE: **321-608-5000** CELL PHONE:

EMAIL ADDRESS: **hnantz@mlbfl.org**

Do you want all correspondence to be transmitted electronically to this email address? ☐ Yes ☐ No

Applicant is: ☐ Owner ☐ Lessee* ☐ Other (explain)

*Attach copy of current lease, or written authorization from property owner

2. **OWNER** (If different than applicant)

NAME: **Harold Nantz, City of Melbourne**

ADDRESS: **2885 Harper Rd**

CITY, STATE, ZIP: **Melbourne FL 32904-1154**

PHONE: **321-608-5000** CELL PHONE:

EMAIL ADDRESS: **hnantz@mlbfl.org**

3. **AGENT OR CONSULTANT** Address all correspondence to the person below? ☐ Yes ☐ No

NAME:

COMPANY NAME (if applicable):

ADDRESS:

CITY, STATE, ZIP:

PHONE: CELL PHONE:

EMAIL ADDRESS:

4. **COMPLIANCE CONTACT** (Person responsible for ensuring that the permit conditions are met)

NAME: **Dave Phares**

ADDRESS: **6055 Lake Washington Rd**

CITY, STATE, ZIP: **Melbourne FL 32934-7890**

PHONE: **321-255-4622** CELL PHONE:

EMAIL ADDRESS: **david.phares@mlbfl.org**

SECTION II – APPLICATION INFORMATION

For permit application guidance, please refer to the Applicant's Handbook, Consumptive Uses of Water, which is incorporated by reference in Rule 40C-2.101(1)(a), F.A.C. (A.H.). Please complete all fields. Enter N/A for any fields that are not applicable.

1. **TYPE OF APPLICATION:** ☐ New ☐ Modification ☒ Renewal

   If this application is for a modification, please describe the modification request and the reason the modification is necessary. _____

2. **CONSUMPTIVE USE PERMIT NO.** (if application is for renewal or modification): **50301**

3. **REQUESTED PERMIT DURATION**: ☐ 20 years ☐ _____ years (up to 20 years)

   ☒ This project qualifies for a duration greater than 20 years, per Section 373.236, F.S.

4. **PROJECT NAME:** **City of Melbourne Utilities** **COUNTY:** **Brevard**

   PHYSICAL ADDRESS: _____

5. **RELATED PERMITS** (for projects other than Public Supply)

   ☐ ENVIRONMENTAL RESOURCE PERMIT: MSSW/ERP No(s): _____

   ☐ INDUSTRIAL WASTEWATER (IWW) PERMIT: IWW Permit No(s): _____

   ☐ NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT:

   NPDES Permit No(s): _____

SECTION III – USE TYPE CATEGORIES

Please check all applicable use categories associated with this application and complete the associated supplemental form(s) indicated. The **Minor Individual Supplemental Form** (Form No. 40C-2.900(2)) can be completed in lieu of Supplemental Forms A through G if all of the following criteria are met:

- Use is less than 100,000 gallons per day
- Withdrawal facilities (wells or pump intakes) are less than 8-inches diameter
- Combined withdrawal capacity is less than 1,000,000 gallons per day
- Use is not for Mining/Dewatering
- Use is for Public Supply where end users are not individually metered

Use Type Category	Supplemental Form
☐ **Agricultural** (e.g., crops, livestock, nursery, aquaculture, pasture)	Form A Form No. 40C-2.900(1)(a)
☐ **Commercial / Industrial** (e.g., service business, food and beverage production, cooling and heating, commercial attraction, manufacturing, chemical processing, power generation)	Form B Form No. 40C-2.900(1)(b)
☐ **Landscape / Recreation** (e.g., irrigation of parks, cemeteries, landscaped areas, golf courses, athletic fields, playgrounds)	Form C Form No. 40C-2.900(1)(c)
☐ **Mining / Dewatering** (e.g., water use or removal associated with construction or excavation)	Form D Form No. 40C-2.900(1)(d)
☒ **Public Supply** (e.g., public or privately owned potable water supply utility)	Form E Form No. 40C-2.900(1)(e)
☐ **Environmental / Other** (e.g., aquifer remediation, environmental enhancement, or the use of water for other purposes)	Form F Form No. 40C-2.900(1)(f)
☐ **Institutional** (e.g., hospital, university, military base, correctional facility)	Form G Form No. 40C-2.900(1)(g)

SECTION IV – SOURCES OF WATER

(please attach additional facility tables if necessary)

SUMMARY OF GROUNDWATER (WELL) FACILITIES

Site or Wellfield Name[1]	District ID (if available)	Florida Unique Well ID (if available)	Owner's Well Name	Capacity (gpm)	Pump Type[2]	Casing Diameter (inches)[3]	Casing Depth (feet)	Total Depth (feet)	Status[4] (include date if proposed)	Type of Water Use Accounting Method[5]	Last Meter Check / Method Validation[6]	Type of Water Use (refer to Section III)
City of Melbourne Utilities	1019		Well 1	2500	Turbine	16	250	844	Active	Flow Meter		
City of Melbourne Utilities	1020		Well 2	2500	Turbine	16	250	867	Active	Flow Meter		
City of Melbourne Utilities	1022		Well 3A	2500	Submersible	16	251	Unknown	Active	Flow Meter		
City of Melbourne Utilities	1023		Well 4	2500	Turbine	16	177	563	Active	Flow Meter		
City of Melbourne Utilities	1024		Well 5	2500	Turbine	16	250	850	Proposed	Flow Meter		
City of Melbourne Utilities	1025		Well 6	2500	Turbine	16	250	850	Proposed	Flow Meter		

1 If project consists of separate or non-contiguous pieces of property or wellfields

2 Centrifugal (impeller located above water level), submersible (pump set below water level), turbine (motor at ground surface that drives an impeller below water level), vacuum underdrain (typically used for dewatering), well point system (typically used for dewatering), or other (any pump that does not fall into one of the categories previously listed)
3 The casing diameter is defined as the largest permanent water-bearing casing of the well at land surface.
4 Active (currently in use), Inactive (capped, does not have power, or the connection to the water supply system has been severed), Abandoned (plugged and abandoned in accordance with 40C-3, Florida Administrative Code), or Proposed (include anticipated construction date)
5 Flow Meter, Time Clock / Pump Run Time, Hour Meter, Digital Electric Meter, Analog Electric Meter
6 Enter the date of the last flow meter accuracy check or alternative method validation

SUMMARY OF SURFACE WATER (PUMP) FACILITES

Site Name[1]	District ID (if available)	Owner's Pump Name	Pump Capacity (gpm)	Pump Intake Diameter (inches)	Pump Type[2]	Name of Surface Water Body	Type of Surface Water Body[3]	Status[4] (include date if proposed)	Type of Water Use Accounting Method[5]	Last Meter Check / Method Validation[6]	Type of Water Use (refer to Section III)
City of Melbourne Utilities	0	1026 - South Pump Station	18000	0	Centrifugal		Lake/Pond (Natural)	Active	Flow Meter	15-AUG-18	Public Supply
City of Melbourne Utilities	0	1027 - North Pump Station	0	0	Centrifugal		Lake/Pond (Natural)	Inactive	Flow Meter		Public Supply

1 If project consists of separate or non-contiguous pieces of property or wellfields
2 Centrifugal (impeller located above water level), submersible (pump set below water level), turbine (motor at ground surface that drives an impeller below water level), hydraulic dredge pump (typically used for mining), hydraulic dewatering pump (typically used for construction or mining), other (any pump that does not fall into one of the categories previously listed)
3 Ditch/canal, lake/pond (natural), lake/pond (artificial), river/creek, spring, mining/borrow pit
4 Active (currently in use), Inactive (does not have power, or the connection to the water supply system has been severed), Proposed
5 Flow Meter, Time Clock / Pump Run Time, Hour Meter, Digital Electric Meter, Analog Electric Meter
6 Enter the date of the last flow meter accuracy check or alternative method validation

SUMMARY OF CONNECTION POINT FACILITIES

Connection points include locations where potable or non-potable water (including reclaimed water) purchased from a water supplier enters a project site.

Site Name[1]	District ID (if available)	Owner's Connection Point Name	Water Supplier Name[2]	Type of Surface Water Body[3]	Status[4] (include date if proposed)	Type of Water Use Accounting Method[5]	Last Meter Check / Method Validation[6]	Type of Water Use (refer to Section III)

1 If project consists of separate or non-contiguous pieces of property or wellfields
2 Name of water supplier that provides water to the project through the connection point
3 Reclaimed water holding pond, stormwater management system
4 Active (currently in use), Inactive (the connection to the water supply system has been severed), Proposed
5 Flow Meter, Time Clock / Pump Run Time, Hour Meter, Digital Electric Meter, Analog Electric Meter
6 Enter the date of the last flow meter accuracy check or alternative method validation

SECTION V –
USE OF LOWEST QUALITY WATER AND EVALUATION OF RECLAIMED WATER FEASIBILITY

The applicant may be required to evaluate the feasibility of utilizing reclaimed water and/or other lower quality water sources. The feasibility analysis must be completed as outlined in Section 2.3.3(e), A.H.

SECTION VI – SUMMARY OF REQUESTED WATER USE

Summarize the requested water use from each supplemental form (Agricultural, Public Supply, Commercial / Industrial, etc.) in the table below. Provide projections for each source, at five-year intervals, for the requested permit duration. If the requested permit duration exceeds 20 years, please attach a supplemental sheet providing additional five-year projections for each source.

Year	Requested Amounts and Source(s) of Water				
	____ (mgy[2])	_____ (mgy)	_____ (mgy)	_____ (mgy)	Total Requested Water Use (mgy)

[1] Provide the name of the water source. Examples include upper Floridan aquifer, stormwater pond, surficial aquifer, Davis Lake.
[2] Million gallons per year

SECTION VII – AQUIFER STORAGE AND RECOVERY *(complete if applicable)*

ASR Facility Name	Source of Stored Water[1]	Storage Aquifer Name	Recovery Water Destination	Projected Demand Average (mgy)	Projected Demand Maximum (mgy)	Projected Injected Average (mgy)	Projected Injected Maximum (mgy)

[1] Aquifer name, surface water body, water treatment plant name.

Please describe any projected increases or decreases (from historical average) in the amounts stored or recovered.

SECTION VIII – IMPACT EVALUATION

When determining whether the permit applicant has provided reasonable assurances that the conditions for issuance in Rule 40C-2.301, F.A.C., are met, the District will consider the projected impacts of the proposed consumptive use on an individual and cumulative basis. In order to provide reasonable assurance, studies and/or impact evaluations may be required. Please refer to the Applicant's Handbook for guidance regarding the impact evaluations and attach analyses, if applicable.

SECTION IX – APPLICANT CERTIFICATION

I certify that to the best of my knowledge and belief, all of the information provided on this form and in any attachment to it is correct. I also certify that I have legal authority to execute this application for the applicant and certify that the applicant will have sufficient legal authority to undertake the activities described herein. I understand that any material false statement in an application to continue, initiate, or modify a use, or any material false statement in any report or statement of fact required of the permittee, may result in revocation, in whole or in part, of the permit (Section 373.243(1), F.S.). With advance notice, I agree to provide St. Johns River Water Management District staff, with proper identification, entry to the project site for the purpose of performing analyses of the site for determining whether the conditions for issuance will be met. Further, if a permit is granted, I agree that, with advance notice, District staff with proper identification shall have permission to enter, inspect, collect samples, and take measurements of permitted facilities to determine compliance with the permit conditions and permitted plans and specifications.

(If applicable) I authorize _____ to act as my agent for permit application coordination.

Harold Nantz		**10-MAY-19**
APPLICANT'S NAME (print or type)	APPLICANT'S SIGNATURE	DATE
AUTHORIZED AGENT'S NAME (print or type)	AUTHORIZED AGENT'S SIGNATURE	DATE

When an application that will be considered by the District's Governing Board is complete, the applicant will be notified of the date of the hearing (Governing Board meeting) at which the application will be considered at least 14 days in advance. The Governing Board normally meets on the second Tuesday of the month.

SECTION X – APPLICANT CHECKLIST

The following items must be included with the permit application submittal:

- ☐ Proof of Property Control (e.g., deed, lease), if not already on file with the District
- ☐ Application Fee (refer to online fee schedule or Applicant's Handbook)
- ☐ Location/Site Map
- ☐ Supplemental Form(s) and associated supporting information (e.g., maps, calculations)
- ☐ Water Conservation Plan

Additional Addresses

Applicant	

Land Owner	

Agent	

Compliance Contact	Shaniese Alexander 6055 Lake Washington Rd Melbourne FL 32934-7890

Consultant	

Water Use Reporting (EN-50) Contact	David Phares

	6055 Lake Washington Rd Melbourne FL 32934-7890

Attorney	

CONSUMPTIVE USE PERMIT APPLICATION

St. Johns River Water Management District
4049 Reid Street • P.O. Box 1429 • Palatka, FL 32178-1429 • (386) 329-4500
Application forms may also be submitted electronically at *floridaswater.com*.

SECTION I – CONTACT INFORMATION

If necessary, attach additional sheets if there are multiple applicants, owners, agents, etc.

1. **APPLICANT** (Complete legal name in which permit should be issued)

NAME: **City of Cocoa**

If applicant is a business, provide a contact person: ***Jack Walsh***

ADDRESS: **351 Shearer Blvd**

CITY, STATE, ZIP: **Cocoa FL 32922-7203**

PHONE: **321-433-8700** CELL PHONE:

EMAIL ADDRESS:

Do you want all correspondence to be transmitted electronically to this email address? ☐ Yes ☐ No

Applicant is: ☐ Owner ☐ Lessee* ☐ Other (explain)

*Attach copy of current lease, or written authorization from property owner

2. **OWNER** (If different than applicant)

NAME: **Jack Walsh, City of Cocoa**

ADDRESS: **351 Shearer Blvd**

CITY, STATE, ZIP: **Cocoa FL 32922-7203**

PHONE: **321-433-8700** CELL PHONE:

EMAIL ADDRESS:

3. **AGENT OR CONSULTANT** Address all correspondence to the person below? ☐ Yes ☐ No

NAME: **Mark Farrell, P.E.**

COMPANY NAME (if applicable): **WRA**

ADDRESS: **4260 W Linebaugh Ave**

CITY, STATE, ZIP: **Tampa FL 33624-5241**

PHONE: **(813) 265-3130** CELL PHONE:

EMAIL ADDRESS: **mfarrell@wraengineering.com**

4. **COMPLIANCE CONTACT** (Person responsible for ensuring that the permit conditions are met)

NAME: **James Mitchell, City of Cocoa Dyal Water Treatment Plant**

ADDRESS: **65 Stone St.**

CITY, STATE, ZIP: **Cocoa FL 32922**

PHONE: **321-635-7772** CELL PHONE:

EMAIL ADDRESS: **jmitchell@cocoafl.org**

SECTION II – APPLICATION INFORMATION

For permit application guidance, please refer to the Applicant's Handbook, Consumptive Uses of Water, which is incorporated by reference in Rule 40C-2.101(1)(a), F.A.C. (A.H.). Please complete all fields. Enter N/A for any fields that are not applicable.

1. **TYPE OF APPLICATION:** ☐ New ☐ Modification ☒ Renewal

   If this application is for a modification, please describe the modification request and the reason the modification is necessary. _____

2. **CONSUMPTIVE USE PERMIT NO.** (if application is for renewal or modification): **50245**

3. **REQUESTED PERMIT DURATION**: ☐ 20 years ☐ _____ years (up to 20 years)

   ☒ This project qualifies for a duration greater than 20 years, per Section 373.236, F.S.

4. **PROJECT NAME:** **City of Cocoa** **COUNTY:** **Orange**

   PHYSICAL ADDRESS: **351 Shearer Boulevard Cocoa, Florida 32922 Cocoa 32922**

5. **RELATED PERMITS** (for projects other than Public Supply)

   ☐ ENVIRONMENTAL RESOURCE PERMIT: MSSW/ERP No(s): _____

   ☒ INDUSTRIAL WASTEWATER (IWW) PERMIT: IWW Permit No(s): **FL0021521**

   ☐ NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT:

   NPDES Permit No(s): _____

SECTION III – USE TYPE CATEGORIES

Please check all applicable use categories associated with this application and complete the associated supplemental form(s) indicated. The **Minor Individual Supplemental Form** (Form No. 40C-2.900(2)) can be completed in lieu of Supplemental Forms A through G if all of the following criteria are met:

- Use is less than 100,000 gallons per day
- Withdrawal facilities (wells or pump intakes) are less than 8-inches diameter
- Combined withdrawal capacity is less than 1,000,000 gallons per day
- Use is not for Mining/Dewatering
- Use is for Public Supply where end users are not individually metered

Use Type Category	Supplemental Form
☐ **Agricultural** (e.g., crops, livestock, nursery, aquaculture, pasture)	Form A Form No. 40C-2.900(1)(a)
☐ **Commercial / Industrial** (e.g., service business, food and beverage production, cooling and heating, commercial attraction, manufacturing, chemical processing, power generation)	Form B Form No. 40C-2.900(1)(b)
☐ **Landscape / Recreation** (e.g., irrigation of parks, cemeteries, landscaped areas, golf courses, athletic fields, playgrounds)	Form C Form No. 40C-2.900(1)(c)
☐ **Mining / Dewatering** (e.g., water use or removal associated with construction or excavation)	Form D Form No. 40C-2.900(1)(d)
☒ **Public Supply** (e.g., public or privately owned potable water supply utility)	Form E Form No. 40C-2.900(1)(e)
☐ **Environmental / Other** (e.g., aquifer remediation, environmental enhancement, or the use of water for other purposes)	Form F Form No. 40C-2.900(1)(f)
☐ **Institutional** (e.g., hospital, university, military base, correctional facility)	Form G Form No. 40C-2.900(1)(g)

SECTION IV – SOURCES OF WATER

(please attach additional facility tables if necessary)

SUMMARY OF GROUNDWATER (WELL) FACILITIES

Site or Wellfield Name[1]	District ID (if available)	Florida Unique Well ID (if available)	Owner's Well Name	Capacity (gpm)	Pump Type[2]	Casing Diameter (inches)[3]	Casing Depth (feet)	Total Depth (feet)	Status[4] (include date if proposed)	Type of Water Use Accounting Method[5]	Last Meter Check / Method Validation[6]	Type of Water Use (refer to Section III)
City of Cocoa	11720		6T	156		10	75	155	Active			
City of Cocoa	11721		1	486		20	316	374	Active			
City of Cocoa	11722		5T	70		10	95	165	Active			
City of Cocoa	11723		8T	740		10	75	150	Active			
City of Cocoa	11724		9T	35		10	75	150	Active			
City of Cocoa	11725		10T	205		10	80	150	Active			
City of Cocoa	11726		11T	100		10	70	140	Active			
City of Cocoa	11727		12T	135		10	50	125	Active			
City of Cocoa	11728		13T	70		10	70	140	Active			
City of Cocoa	11729		14T	90		10	60	120	Active			
City of Cocoa	11730		15T	30		10	60	120	Active			
City of Cocoa	11731		16T	27		10	60	120	Active			

City of Cocoa	11732		38			8	334	440	Active			
City of Cocoa	11733		39	300		8	325	440	Active			
City of Cocoa	11734		40			8	327	420	Active			
City of Cocoa	11735		41	300		8	324	440	Active			
City of Cocoa	11736		42		Submersible	8	323	400	Active			
City of Cocoa	11737		43	400	Submersible	8	327	423	Active			
City of Cocoa	11738		44	485	Submersible	8	306	418	Active			
City of Cocoa	11739		20	2430		16	290	530	Active			
City of Cocoa	11740		21			10	315	500	Active			
City of Cocoa	11741		22				295	602	Active			
City of Cocoa	11742		25	2430		16	300	600	Active			
City of Cocoa	11743		24				315	603	Active			
City of Cocoa	11744		23			10	326	540	Active			
City of Cocoa	11745		R-1	694		16	315	356	Active			
City of Cocoa	11746		R-2	694		16	280	370	Inactive			
City of Cocoa	11747		2	415		8	271	450	Active			

City of Cocoa	11748		R-3	694		16	300	370	Active			
City of Cocoa	11749		R-4	694		16	300	370	Active			
City of Cocoa	11750		R-5	694		16	300	370	Active			
City of Cocoa	11751		R-6	694		16	300	370	Active			
City of Cocoa	11752		3	415		12	266	450	Active			
City of Cocoa	11753		2T			16	Unknown	160	Active			
City of Cocoa	11754		1T	200		12	85	200	Active			
City of Cocoa	11755		3T	139		10	75	140	Active			
City of Cocoa	11756		4	1250		12	251	524	Active			
City of Cocoa	11757		4A1	1250		18	266	527	Active			
City of Cocoa	11758		4T	0		10	75	120	Inactive			
City of Cocoa	11759		5	347		12	251	409	Active			
City of Cocoa	11760		7	417		12	285	399	Active			
City of Cocoa	11761		7T	694		12	75	115	Active			
City of Cocoa	11762		8R	415		12	275	400	Active			
City of Cocoa	11763		9	347		12	230	385	Active			

City of Cocoa	11764		10	208		12	229	350	Active			
City of Cocoa	11765		11	694		12	323	580	Active			
City of Cocoa	11766		12A	1250		12	275	600	Active			
City of Cocoa	11767		12B	1250		12	260	519	Active			
City of Cocoa	11768		7A		Submersible	9	260	525	Active			
City of Cocoa	11769		13R	466		16	270	400	Active			
City of Cocoa	11770		14	2153		12	252	761	Active			
City of Cocoa	11771		15	2292		12	262	702	Active			
City of Cocoa	11772		16	2292		12	255	600	Active			
City of Cocoa	11773		17	2292		12	252	600	Active			
City of Cocoa	11774		18	2430		16	254	600	Active			
City of Cocoa	11775		19	2430		16	254	600	Active			
City of Cocoa	34077		17T	120		10	75	150	Proposed			
City of Cocoa	34078		18T	120		10	75	150	Proposed			
City of Cocoa	34079		19T	120		10	75	150	Proposed			
City of Cocoa	34080		R-7	694		16	300	370	Active			

City of Cocoa	34081		R-8	694		16	300	370	Active			
City of Cocoa	34082		R-9	694		16	300	370	Active			
City of Cocoa	34083		R-10	694		16	300	370	Active			
City of Cocoa	243924		Taylor Creek Downstream Transect 8 - PZ1				Unknown	Unknown	Active			
City of Cocoa	243926		Taylor Creek Downstream Transect 5 - PZ2				Unknown	Unknown	Active			
City of Cocoa	243928		Taylor Creek Downstream Transect 5 - PZ1				Unknown	Unknown	Active			
City of Cocoa	243929		Taylor Creek Downstream Transect 3 - PZ1				Unknown	Unknown	Active			
City of Cocoa	243930		Well 38				1	3	Active			
City of Cocoa	243931		Well 10T				1.5	3.5	Active			

City of Cocoa	243932		Well 16T				1.8	3.8	Active			
City of Cocoa	243933		Well 5T				1.7	3.7	Active			
City of Cocoa	243934		Jim Creek Reference Transect 2 - PZ1				Unknown	Unknown	Active			
City of Cocoa	243935		Jim Creek Reference Transect 2 - SW				Unknown	Unknown	Active			
City of Cocoa	243936		Jim Creek Reference Transect 1 - SW				Unknown	Unknown	Active			
City of Cocoa	243937		Jim Creek Reference Transect 1 - PZ2				Unknown	Unknown	Active			
City of Cocoa	243974		Well 14T				1.2	3.2	Active			
City of Cocoa	243975		Well 11T				1.4	3.4	Active			
City of Cocoa	243976		Well 12T-1				1	3	Active			

City of Cocoa	243977		Well 9T				.5	2.5	Active			
City of Cocoa	243978		Well 12T-2				.8	2.8	Active			
City of Cocoa	243979		Well 13T				1.4	3.4	Active			
City of Cocoa	243980		Well 15T				Unknown	Unknown	Active			
City of Cocoa	243997		Taylor Creek Downstream Transect 3 - PZ2				Unknown	Unknown	Active			
City of Cocoa	243999		Jim Creek Reference Transect 2 - PZ2				Unknown	Unknown	Active			
City of Cocoa	244000		Jim Creek Reference Transect 1 - PZ1				Unknown	Unknown	Active			
City of Cocoa	244055		Taylor Creek Downstream Transect 8 - PZ2				Unknown	Unknown	Active			
City of Cocoa	244057		Well 44				Unknown	Unknown	Active			

City of Cocoa	442332		1T			2	5	15	Active			
City of Cocoa	442333		2T			2	5	15	Active			
City of Cocoa	442334		7A			2	5	15	Active			
City of Cocoa	442335		21			2	5	15	Active			
City of Cocoa	442337		Taylor Creek Downstream Transect 3-SW				Unknown	Unknown	Active			
City of Cocoa	442338		Taylor Creek Downstream Transect 5-SW				Unknown	Unknown	Active			
City of Cocoa	442339		Taylor Creek Downstream Transect 8-SW				Unknown	Unknown	Active			
City of Cocoa	447242		G			6	8	8	Active			

1 If project consists of separate or non-contiguous pieces of property or wellfields
2 Centrifugal (impeller located above water level), submersible (pump set below water level), turbine (motor at ground surface that drives an impeller below water level), vacuum underdrain (typically used for dewatering), well point system (typically used for dewatering), or other (any pump that does not fall into one of the categories previously listed)
3 The casing diameter is defined as the largest permanent water-bearing casing of the well at land surface.
4 Active (currently in use), Inactive (capped, does not have power, or the connection to the water supply system has been severed), Abandoned (plugged and abandoned in accordance with 40C-3, Florida Administrative Code), or Proposed (include anticipated construction date)
5 Flow Meter, Time Clock / Pump Run Time, Hour Meter, Digital Electric Meter, Analog Electric Meter
6 Enter the date of the last flow meter accuracy check or alternative method validation

SUMMARY OF SURFACE WATER (PUMP) FACILITES

Site Name[1]	District ID (if available)	Owner's Pump Name	Pump Capacity (gpm)	Pump Intake Diameter (inches)	Pump Type[2]	Name of Surface Water Body	Type of Surface Water Body[3]	Status[4] (include date if proposed)	Type of Water Use Accounting Method[5]	Last Meter Check / Method Validation[6]	Type of Water Use (refer to Section III)
City of Cocoa	34084	P1	4167	0	Centrifugal	Taylor Creek Reservoir	Lake/Pond (Natural)	Active			
City of Cocoa	34085	P2	4167	0	Centrifugal	Taylor Creek Reservoir	Lake/Pond (Natural)	Active			
City of Cocoa	34086	P3	4167	0	Centrifugal	Taylor Creek Reservoir	Lake/Pond (Natural)	Active			
City of Cocoa	34087	P4	4167	0	Centrifugal	Taylor Creek Reservoir	Lake/Pond (Natural)	Proposed			
City of Cocoa	34088	P5	4167	0	Centrifugal	Taylor Creek Reservoir	Lake/Pond (Natural)	Proposed			

1 If project consists of separate or non-contiguous pieces of property or wellfields
2 Centrifugal (impeller located above water level), submersible (pump set below water level), turbine (motor at ground surface that drives an impeller below water level), hydraulic dredge pump (typically used for mining), hydraulic dewatering pump (typically used for construction or mining), other (any pump that does not fall into one of the categories previously listed)
3 Ditch/canal, lake/pond (natural), lake/pond (artificial), river/creek, spring, mining/borrow pit
4 Active (currently in use), Inactive (does not have power, or the connection to the water supply system has been severed), Proposed
5 Flow Meter, Time Clock / Pump Run Time, Hour Meter, Digital Electric Meter, Analog Electric Meter
6 Enter the date of the last flow meter accuracy check or alternative method validation

SUMMARY OF CONNECTION POINT FACILITIES

Connection points include locations where potable or non-potable water (including reclaimed water) purchased from a water supplier enters a project site.

Site Name[1]	District ID (if available)	Owner's Connection Point Name	Water Supplier Name[2]	Type of Surface Water Body[3]	Status[4] (include date if proposed)	Type of Water Use Accounting Method[5]	Last Meter Check / Method Validation[6]	Type of Water Use (refer to Section III)

1 If project consists of separate or non-contiguous pieces of property or wellfields
2 Name of water supplier that provides water to the project through the connection point
3 Reclaimed water holding pond, stormwater management system
4 Active (currently in use), Inactive (the connection to the water supply system has been severed), Proposed
5 Flow Meter, Time Clock / Pump Run Time, Hour Meter, Digital Electric Meter, Analog Electric Meter
6 Enter the date of the last flow meter accuracy check or alternative method validation

SECTION V – USE OF LOWEST QUALITY WATER AND EVALUATION OF RECLAIMED WATER FEASIBILITY

The applicant may be required to evaluate the feasibility of utilizing reclaimed water and/or other lower quality water sources. The feasibility analysis must be completed as outlined in Section 2.3.3(e), A.H.

SECTION VI – SUMMARY OF REQUESTED WATER USE

Summarize the requested water use from each supplemental form (Agricultural, Public Supply, Commercial / Industrial, etc.) in the table below. Provide projections for each source, at five-year intervals, for the requested permit duration. If the requested permit duration exceeds 20 years, please attach a supplemental sheet providing additional five-year projections for each source.

Year	Requested Amounts and Source(s) of Water				
	IAS ____ (mgy[2])	**TCR** _____ (mgy)	**UFA** _____ (mgy)	_____ (mgy)	Total Requested Water Use (mgy)
Other/Unknown	1095	3223	10220		14538

[1] Provide the name of the water source. Examples include upper Floridan aquifer, stormwater pond, surficial aquifer, Davis Lake.
[2] Million gallons per year

SECTION VII – AQUIFER STORAGE AND RECOVERY *(complete if applicable)*

ASR Facility Name	Source of Stored Water[1]	Storage Aquifer Name	Recovery Water Destination	Projected Demand Average (mgy)	Projected Demand Maximum (mgy)	Projected Injected Average (mgy)	Projected Injected Maximum (mgy)
Dyal Plant	Treated Water	Floridan	Drought Use	0	0	0	0

[1] Aquifer name, surface water body, water treatment plant name.

Please describe any projected increases or decreases (from historical average) in the amounts stored or recovered.

The treated water is either pumped into the distribution system or to a 10-well aquifer storage and recovery (ASR) system at the Dyal plant which can store in excess of 1 billion gallons of water for later use during drought periods.

SECTION VIII – IMPACT EVALUATION

When determining whether the permit applicant has provided reasonable assurances that the conditions for issuance in Rule 40C-2.301, F.A.C., are met, the District will consider the projected impacts of the proposed consumptive use on an individual and cumulative basis. In order to provide reasonable assurance, studies and/or impact evaluations may be required. Please refer to the Applicant's Handbook for guidance regarding the impact evaluations and attach analyses, if applicable.

SECTION IX – APPLICANT CERTIFICATION

I certify that to the best of my knowledge and belief, all of the information provided on this form and in any attachment to it is correct. I also certify that I have legal authority to execute this application for the applicant and certify that the applicant will have sufficient legal authority to undertake the activities described herein. I understand that any material false statement in an application to continue, initiate, or modify a use, or any material false statement in any report or statement of fact required of the permittee, may result in revocation, in whole or in part, of the permit (Section 373.243(1), F.S.). With advance notice, I agree to provide St. Johns River Water Management District staff, with proper identification, entry to the project site for the purpose of performing analyses of the site for determining whether the conditions for issuance will be met. Further, if a permit is granted, I agree that, with advance notice, District staff with proper identification shall have permission to enter, inspect, collect samples, and take measurements of permitted facilities to determine compliance with the permit conditions and permitted plans and specifications.

(If applicable) I authorize **Mark Farrell, P.E.** to act as my agent for permit application coordination.

Jack Walsh		**08-FEB-22**
APPLICANT'S NAME (print or type)	APPLICANT'S SIGNATURE	DATE
Mark Farrell, P.E.		**08-FEB-22**
AUTHORIZED AGENT'S NAME (print or type)	AUTHORIZED AGENT'S SIGNATURE	DATE

When an application that will be considered by the District's Governing Board is complete, the applicant will be notified of the date of the hearing (Governing Board meeting) at which the application will be considered at least 14 days in advance. The Governing Board normally meets on the second Tuesday of the month.

SECTION X – APPLICANT CHECKLIST

The following items must be included with the permit application submittal:

- ☐ Proof of Property Control (e.g., deed, lease), if not already on file with the District
- ☐ Application Fee (refer to online fee schedule or Applicant's Handbook)
- ☐ Location/Site Map
- ☐ Supplemental Form(s) and associated supporting information (e.g., maps, calculations)

☐ Water Conservation Plan

Additional Addresses

Applicant	

Land Owner	

Agent	

Compliance Contact	

Consultant	

Water Use Reporting (EN-50) Contact	David Fisher Dyal Water Plant, 351 Shearer Blvd

	Cocoa FL 32922-7203

Attorney	

APPENDIX D

Utility Services Department

Program Name: COUNTY WATER AND WASTEWATER
Project Name: Mims: Water Main Replacement of Asbestos Cement Pipe
Project Total: $11,229,439
Project Timeline: October 1, 2019 through September 30, 2027
Funded Program: 6980111
District(s): 1

Project Description, Milestones and Service Impact

This project will replace the asbestos cement and thin-walled P V C pipe in the Mims water distribution system and includes changing over the water service connections from the existing pipes to the new pipes. This project will take place in seven phases. The Mims water distribution system piping includes asbestos-cement and thin-walled P V C water pipes that were installed in the 1960's. The current pipe material is conducive to breaking thus the replacement of the pipe to better material will ensure the integrity of the water system.

Revenue or Expense Category	All Prior Fiscal Years	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027 & Future	Total Revenue
Charges For Services Revenue	$ 222,192	$ 13,915	$ 225,000	$ 2,223,370	$ 2,573,027	$ 2,882,903	$ -	$ 8,140,407
Other Finance Sources Revenue	$ 3,089,032	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,089,032
Other Transfers Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Permit/Fees Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Unfunded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenue	**$ 3,311,224**	**$ 13,915**	**$ 225,000**	**$ 2,223,370**	**$ 2,573,027**	**$ 2,882,903**	**$ -**	**$ 11,229,439**
Land Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Planning/Design Expense	$ -	$ -	$ -	$ 224,070	$ 109,007	$ -	$ -	$ 333,077
Construction Expense	$ 3,311,224	$ 13,915	$ 225,000	$ 1,999,300	$ 2,464,020	$ 2,882,903	$ -	$ 10,896,362
Other Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Expense	**$ 3,311,224**	**$ 13,915**	**$ 225,000**	**$ 2,223,370**	**$ 2,573,027**	**$ 2,882,903**	**$ -**	**$ 11,229,439**

Utility Services Department

Program Name: COUNTY WATER AND WASTEWATER
Project Name: Mims: Plant Mixing Improvements
Project Total: $380,000
Project Timeline: October 1, 2019 through September 30, 2024
Funded Program: 6540116
District(s): 1

Project Description, Milestones and Service Impact

This project consists of replacing the chlorine and ammonia mixing system at the Mims water treatment plant. The system has reached its useful life and requires replacement in order to meet FDEP compliance.

Revenue or Expense Category	All Prior Fiscal Years	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027 & Future	Total Revenue
Charges For Services Revenue	$ -	$ 175,000	$ 5,000	$ 200,000	$ -	$ -	$ -	$ 380,000
Other Finance Sources Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Transfers Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Permit/Fees Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Unfunded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenue	**$ -**	**$ 175,000**	**$ 5,000**	**$ 200,000**	**$ -**	**$ -**	**$ -**	**$ 380,000**
Land Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Planning/Design Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Construction Expense	$ -	$ -	$ 180,000	$ 200,000	$ -	$ -	$ -	$ 380,000
Other Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Expense	**$ -**	**$ -**	**$ 180,000**	**$ 200,000**	**$ -**	**$ -**	**$ -**	**$ 380,000**

Utility Services Department

Program Name: COUNTY WATER AND WASTEWATER
Project Name: Mims: Clarifier Replacement
Project Total: $1,916,000
Project Timeline: October 1, 2019 through September 30, 2024
Funded Program: 6540118
District(s): 1

Project Description, Milestones and Service Impact

Major upgrade that will increase performance/efficiencies of asset 640041 at the Mims Water treatment plant. The clarifier treatment unit was built in the early 1960's and has exceeded its useful life. New turbine, rakes, stilling well and any additional steel components inside the concrete tank will have to be replaced.

Revenue or Expense Category	All Prior Fiscal Years	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027 & Future	Total Revenue
Charges For Services Revenue	$ -	$ -	$ 200,000	$ 1,716,000	$ -	$ -	$ -	$ 1,916,000
Other Finance Sources Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Transfers Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Permit/Fees Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Unfunded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenue	**$ -**	**$ -**	**$ 200,000**	**$ 1,716,000**	**$ -**	**$ -**	**$ -**	**$ 1,916,000**
Land Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Planning/Design Expense	$ -	$ -	$ 200,000	$ -	$ -	$ -	$ -	$ 200,000
Construction Expense	$ -	$ -	$ -	$ 1,716,000	$ -	$ -	$ -	$ 1,716,000
Other Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Expense	**$ -**	**$ -**	**$ 200,000**	**$ 1,716,000**	**$ -**	**$ -**	**$ -**	**$ 1,916,000**

Utility Services Department

Program Name: COUNTY WATER AND WASTEWATER
Project Name: Mims: Plant Additional Wells
Project Total: $3,200,500
Project Timeline: October 1, 2019 through September 30, 2024
Funded Program: 6983105
District(s): 1

Project Description, Milestones and Service Impact

This project consists of installing new water wells to the Mims water system. Current wells have been underperforming in their water withdrawal resulting in the installation of new wells to meet customer water demand.

Revenue or Expense Category	All Prior Fiscal Years	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027 & Future	Total Revenue
Charges For Services Revenue	$ 785,774	$ 614,726	$ -	$ -	$ -	$ -	$ -	$ 1,400,500
Other Finance Sources Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Transfers Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Permit/Fees Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Unfunded	$ -	$ -	$ 1,800,000	$ -	$ -	$ -	$ -	$ 1,800,000
Total Revenue	**$ 785,774**	**$ 614,726**	**$ 1,800,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 3,200,500**
Land Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Planning/Design Expense	$ -	$ 11,761	$ -	$ -	$ -	$ -	$ -	$ 11,761
Construction Expense	$ 785,774	$ 2,965	$ 300,000	$ 2,100,000	$ -	$ -	$ -	$ 3,188,739
Other Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Expense	**$ 785,774**	**$ 14,726**	**$ 300,000**	**$ 2,100,000**	**$ -**	**$ -**	**$ -**	**$ 3,200,500**

Utility Services Department

Program Name: COUNTY WATER AND WASTEWATER
Project Name: South Beaches: Deep Injection Well Improvements
Project Total: $1,600,000
Project Timeline: October 1, 2019 through September 30, 2024
Funded Program: 6540318
District(s): 3

Project Description, Milestones and Service Impact

Replacement of existing Deep Injection Well (D I W) pumps, electrical, controls, instrumentation and building improvements and associated infrastructure which is a substantial improvement to increase performance. This will increase the pumping capacity down the deep injection well. Improvements will be made to/for asset 640767.

Revenue or Expense Category	All Prior Fiscal Years	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027 & Future	Total Revenue
Charges For Services Revenue	$ -	$ -	$ 100,000	$ 1,500,000	$ -	$ -	$ -	$ 1,600,000
Other Finance Sources Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Transfers Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Permit/Fees Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Unfunded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenue	**$ -**	**$ -**	**$ 100,000**	**$ 1,500,000**	**$ -**	**$ -**	**$ -**	**$ 1,600,000**
Land Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Planning/Design Expense	$ -	$ -	$ 100,000	$ -	$ -	$ -	$ -	$ 100,000
Construction Expense	$ -	$ -	$ -	$ 1,500,000	$ -	$ -	$ -	$ 1,500,000
Other Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Expense	**$ -**	**$ -**	**$ 100,000**	**$ 1,500,000**	**$ -**	**$ -**	**$ -**	**$ 1,600,000**

Utility Services Department

Program Name: COUNTY WATER AND WASTEWATER
Project Name: South Beaches: Flow Meter Replacement
Project Total: $75,000
Project Timeline: October 1, 2019 through September 30, 2024
Funded Program: 6540502
District(s): 3

Project Description, Milestones and Service Impact

This project will change the orientation of the pipe from above ground to below ground and will improve the measuring accuracy of the FDEP required flow meter. The current flow meter configuration allows for inaccurate readings due to air entrapment.

Revenue or Expense Category	All Prior Fiscal Years	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027 & Future	Total Revenue
Charges For Services Revenue	$ -	$ 75,000	$ -	$ -	$ -	$ -	$ -	$ 75,000
Other Finance Sources Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Transfers Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Permit/Fees Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Unfunded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenue	**$ -**	**$ 75,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 75,000**
Land Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Planning/Design Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Construction Expense	$ -	$ -	$ 75,000	$ -	$ -	$ -	$ -	$ 75,000
Other Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Expense	**$ -**	**$ -**	**$ 75,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 75,000**

Utility Services Department

Program Name: COUNTY WATER AND WASTEWATER
Project Name: South Central: Additional Plant Reject Pond
Project Total: $1,600,000
Project Timeline: October 1, 2019 through September 30, 2024
Funded Program: 6540423
District(s): 4

Project Description, Milestones and Service Impact

Install additional reject pond and pumping system north of the two existing storage ponds needed to optimize reclaimed water production at SCWWTP and provide additional capacity. Includes self contained pump equipment with filtering & chlorination.

Revenue or Expense Category	All Prior Fiscal Years	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027 & Future	Total Revenue
Charges For Services Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Finance Sources Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Transfers Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Permit/Fees Revenue	$ -	$ 200,000	$ 1,400,000	$ -	$ -	$ -	$ -	$ 1,600,000
Unfunded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenue	**$ -**	**$ 200,000**	**$ 1,400,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,600,000**
Land Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Planning/Design Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Construction Expense	$ -	$ -	$ 1,600,000	$ -	$ -	$ -	$ -	$ 1,600,000
Other Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Expense	**$ -**	**$ -**	**$ 1,600,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,600,000**

Utility Services Department

Program Name: COUNTY WATER AND WASTEWATER
Project Name: South Central: Flow Meter Replacement
Project Total: $75,000
Project Timeline: October 1, 2019 through September 30, 2024
Funded Program: 6540420
District(s): 4

Project Description, Milestones and Service Impact

This project will change the orientation of the pipe from above ground to below ground and will improve the measuring accuracy of the FDEP required flow meter. The current flow meter configuration allows for inaccurate readings due to air entrapment.

Revenue or Expense Category	All Prior Fiscal Years	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027 & Future	Total Revenue
Charges For Services Revenue	$ -	$ 75,000	$ -	$ -	$ -	$ -	$ -	$ 75,000
Other Finance Sources Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Transfers Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Permit/Fees Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Unfunded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenue	**$ -**	**$ 75,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 75,000**
Land Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Planning/Design Expense	$ -	$ -	$ 75,000	$ -	$ -	$ -	$ -	$ 75,000
Construction Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Expense	**$ -**	**$ -**	**$ 75,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 75,000**

Utility Services Department

Program Name: COUNTY WATER AND WASTEWATER
Project Name: South Central: Replace Plant Reuse Transfer Pumps and Controls
Project Total: $900,000
Project Timeline: October 1, 2019 through September 30, 2025
Funded Program: 6540421
District(s): 4

Project Description, Milestones and Service Impact

Transfer pumps and controls have exceeded the design service life and are becoming more prone to failure. Replacement parts are hard to find due to age.

Revenue or Expense Category	All Prior Fiscal Years	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027 & Future	Total Revenue
Charges For Services Revenue	$ -	$ 614,725	$ -	$ -	$ 285,275	$ -	$ -	$ 900,000
Other Finance Sources Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Transfers Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Permit/Fees Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Unfunded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenue	**$ -**	**$ 614,725**	**$ -**	**$ -**	**$ 285,275**	**$ -**	**$ -**	**$ 900,000**
Land Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Planning/Design Expense	$ -	$ -	$ 100,000	$ -	$ -	$ -	$ -	$ 100,000
Construction Expense	$ -	$ -	$ -	$ -	$ 800,000	$ -	$ -	$ 800,000
Other Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Expense	**$ -**	**$ -**	**$ 100,000**	**$ -**	**$ 800,000**	**$ -**	**$ -**	**$ 900,000**

Utility Services Department

Program Name: COUNTY WATER AND WASTEWATER
Project Name: South Central: Reuse Flow Meter Replacement
Project Total: $100,000
Project Timeline: October 1, 2019 through September 30, 2024
Funded Program: 6986409
District(s): 4

Project Description, Milestones and Service Impact

This project will change the orientation of the pipe from above ground to below ground and will improve the measuring accuracy of the FDEP required flow meter. The current flow meter configuration allows for inaccurate readings due to air entrapment.

Revenue or Expense Category	All Prior Fiscal Years	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027 & Future	Total Revenue
Charges For Services Revenue	$ -	$ 75,000	$ 25,000	$ -	$ -	$ -	$ -	$ 100,000
Other Finance Sources Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Transfers Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Permit/Fees Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Unfunded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenue	**$ -**	**$ 75,000**	**$ 25,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 100,000**
Land Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Planning/Design Expense	$ -	$ -	$ 100,000	$ -	$ -	$ -	$ -	$ 100,000
Construction Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Expense	**$ -**	**$ -**	**$ 100,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 100,000**

Utility Services Department

Program Name: COUNTY WATER AND WASTEWATER
Project Name: South Central: Reuse System Optimization Improvements
Project Total: $440,733
Project Timeline: October 1, 2019 through September 30, 2024
Funded Program: 6540409
District(s): 4

Project Description, Milestones and Service Impact

This project involves several projects to improve the level of service, integrity and operation of the South Central reclaimed water system. Performing these projects will increase the level of service to the reuse customers within this service area.

Revenue or Expense Category	All Prior Fiscal Years	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027 & Future	Total Revenue
Charges For Services Revenue	$ 197,250	$ 243,483	$ -	$ -	$ -	$ -	$ -	$ 440,733
Other Finance Sources Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Transfers Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Permit/Fees Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Unfunded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenue	**$ 197,250**	**$ 243,483**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 440,733**
Land Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Planning/Design Expense	$ 4,150	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,150
Construction Expense	$ 193,100	$ 68,483	$ 175,000	$ -	$ -	$ -	$ -	$ 436,583
Other Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Expense	**$ 197,250**	**$ 68,483**	**$ 175,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 440,733**

Utility Services Department

Program Name: COUNTY WATER AND WASTEWATER
Project Name: South Central: Viera Wetlands - Improvements To Pump Station and Effluent Electrical
Project Total: $2,577,928
Project Timeline: October 1, 2019 through September 30, 2024
Funded Program: 6538429
District(s): 4

Project Description, Milestones and Service Impact

This project involves the replacement of the Viera Wetlands pumping station. Not only is this pump station not performing to expectation but is visible to those visiting the wetland. This project will address its performance and esthetics. Current electrical feed to the wetlands pump is insufficient for the pump size/ horse power required for operation. This project brings upgraded power from existing FPL transformers to the pump site. Presently, if the pumps must be operated, they are powered by portable generators. Completion of the project will also reduce the total hours of generator operation and free another generator for use during storm events. Existing wetland equipment is failing and is in need of replacement. Improvements to include a structure to move the equipment out of the elements

Revenue or Expense Category	All Prior Fiscal Years	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027 & Future	Total Revenue
Charges For Services Revenue	$ 4,928	$ 362,000	$ -	$ 111,000	$ 700,000	$ 700,000	$ 700,000	$ 2,577,928
Other Finance Sources Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Transfers Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Permit/Fees Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Unfunded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenue	**$ 4,928**	**$ 362,000**	**$ -**	**$ 111,000**	**$ 700,000**	**$ 700,000**	**$ 700,000**	**$ 2,577,928**
Land Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Planning/Design Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Construction Expense	$ 4,928	$ -	$ 173,000	$ 300,000	$ 700,000	$ 700,000	$ 700,000	$ 2,577,928
Other Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Expense	**$ 4,928**	**$ -**	**$ 173,000**	**$ 300,000**	**$ 700,000**	**$ 700,000**	**$ 700,000**	**$ 2,577,928**

Utility Services Department

Program Name: COUNTY WATER AND WASTEWATER
Project Name: Sykes: Effluent Pump Station Building Replacement
Project Total: $5,765,000
Project Timeline: October 1, 2023 through September 30, 2024
Funded Program: 6520204
District(s): 2

Project Description, Milestones and Service Impact

Construct a new pump station building with pump station inside for the filter feed pumps and deep injection well pumps; minor filter backwash strainer improvements; and new electrical gear including replacements for automatic transfer switches 1-3 and master distribution panels. Replaces asset 640636.

Revenue or Expense Category	All Prior Fiscal Years	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027 & Future	Total Revenue
Charges For Services Revenue	$ -	$ -	$ 665,000	$ 5,100,000	$ -	$ -	$ -	$ 5,765,000
Other Finance Sources Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Transfers Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Permit/Fees Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Unfunded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenue	**$ -**	**$ -**	**$ 665,000**	**$ 5,100,000**	**$ -**	**$ -**	**$ -**	**$ 5,765,000**
Land Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Planning/Design Expense	$ -	$ -	$ 665,000	$ -	$ -	$ -	$ -	$ 665,000
Construction Expense	$ -	$ -	$ -	$ 5,100,000	$ -	$ -	$ -	$ 5,100,000
Other Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Expense	**$ -**	**$ -**	**$ 665,000**	**$ 5,100,000**	**$ -**	**$ -**	**$ -**	**$ 5,765,000**

Utility Services Department

Program Name: COUNTY WATER AND WASTEWATER
Project Name: Sykes: Reclaimed Water Improvements
Project Total: $992,741
Project Timeline: October 1, 2019 through September 30, 2024
Funded Program: 6300236
District(s): 2

Project Description, Milestones and Service Impact

This is phase 1 of a 3 phase project which will provide necessary improvements to the reclaimed water production facility to meet future demands of a growing population in the north Merritt Island region.

Revenue or Expense Category	All Prior Fiscal Years	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027 & Future	Total Revenue
Charges For Services Revenue	$ 292,741	$ 700,000	$ -	$ -	$ -	$ -	$ -	$ 992,741
Other Finance Sources Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Transfers Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Permit/Fees Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Unfunded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenue	**$ 292,741**	**$ 700,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 992,741**
Land Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Planning/Design Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Construction Expense	$ 292,741	$ -	$ 600,000	$ 100,000	$ -	$ -	$ -	$ 992,741
Other Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Expense	**$ 292,741**	**$ -**	**$ 600,000**	**$ 100,000**	**$ -**	**$ -**	**$ -**	**$ 992,741**

Utility Services Department

Program Name: COUNTY WATER AND WASTEWATER
Project Name: Sykes: Sodium Hypochlorite Improvements
Project Total: $5,600,000
Project Timeline: October 1, 2023 through September 30, 2024
Funded Program: 6300239
District(s): 2

Project Description, Milestones and Service Impact

Install new dual chamber chlorine contact tank to replace the one wrapped around the north ground storage tank; install a transfer pump station sized to pump up to the future height of the ground storage tanks; install new sodium hypochlorite storage facility including a new building.

Revenue or Expense Category	All Prior Fiscal Years	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027 & Future	Total Revenue
Charges For Services Revenue	$ -	$ -	$ 600,000	$ 5,000,000	$ -	$ -	$ -	$ 5,600,000
Other Finance Sources Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Transfers Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Permit/Fees Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Unfunded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenue	**$ -**	**$ -**	**$ 600,000**	**$ 5,000,000**	**$ -**	**$ -**	**$ -**	**$ 5,600,000**
Land Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Planning/Design Expense	$ -	$ -	$ 600,000	$ -	$ -	$ -	$ -	$ 600,000
Construction Expense	$ -	$ -	$ -	$ 5,000,000	$ -	$ -	$ -	$ 5,000,000
Other Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Expense	**$ -**	**$ -**	**$ 600,000**	**$ 5,000,000**	**$ -**	**$ -**	**$ -**	**$ 5,600,000**

Utility Services Department

Program Name: BAREFOOT BAY WATER AND WASTEWATER
Project Name: Barefoot Bay Water: Center Drive Replacement
Project Total: $647,000
Project Timeline: October 1, 2023 through September 30, 2024
Funded Program: 6540315
District(s): 3

Project Description, Milestones and Service Impact

Original Drive Equipment is 20 years old and has reached its useful life. The drive is rusting and sweeping corner drives are worn and leaking. This component is major component of the water production plant.

Revenue or Expense Category	All Prior Fiscal Years	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027 & Future	Total Revenue
Charges For Services Revenue	$ -	$ -	$ 75,000	$ 572,000	$ -	$ -	$ -	$ 647,000
Other Finance Sources Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Transfers Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Permit/Fees Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Unfunded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenue	**$ -**	**$ -**	**$ 75,000**	**$ 572,000**	**$ -**	**$ -**	**$ -**	**$ 647,000**
Land Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Planning/Design Expense	$ -	$ -	$ 75,000	$ -	$ -	$ -	$ -	$ 75,000
Construction Expense	$ -	$ -	$ -	$ 572,000	$ -	$ -	$ -	$ 572,000
Other Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Expense	**$ -**	**$ -**	**$ 75,000**	**$ 572,000**	**$ -**	**$ -**	**$ -**	**$ 647,000**

Utility Services Department

Program Name: BAREFOOT BAY WATER AND WASTEWATER
Project Name: Barefoot Bay Water: Chlorine & Ammonia Feed Systems At The Booster Pump Station And Soft Starters Installation
Project Total: $1,431,964
Project Timeline: October 1, 2019 through September 30, 2024
Funded Program: 513868
District(s): 3

Project Description, Milestones and Service Impact

This project consists of installing a chlorine and ammonia feed system at the Barefoot Bay water booster station. Included in this project are upgrades to the pumping and electrical systems that would be tied into this project. Doing this project will assure that we continually meet the Clean Water Act requirements associated with potable water.

Revenue or Expense Category	All Prior Fiscal Years	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027 & Future	Total Revenue
Charges For Services Revenue	$ 68,354	$ 146,100	$ 35,510	$ -	$ -	$ -	$ -	$ 249,964
Grant Revenue	$ -	$ -	$ 1,182,000	$ -	$ -	$ -	$ -	$ 1,182,000
Other Transfers Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Permit/Fees Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Unfunded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenue	**$ 68,354**	**$ 146,100**	**$ 1,217,510**	**$ -**	**$ -**	**$ -**	**$ -**	**1,431,964**
Land Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Planning/Design Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Construction Expense	$ -	$ -	$ 1,182,000	$ -	$ -	$ -	$ -	$ 1,182,000
Other Expense	$ 68,354	$ 81,610	$ 100,000	$ -	$ -	$ -	$ -	$ 249,964
Total Expense	**$ 68,354**	**$ 81,610**	**$ 1,282,000**	**$ -**	**$ -**	**$ -**	**$ -**	**1,431,964**

Utility Services Department

Program Name: BAREFOOT BAY WATER AND WASTEWATER
Project Name: Barefoot Bay Wastewater: Clarifier Rehabilitation
Project Total: $375,000
Project Timeline: October 1, 2021 through September 30, 2023
Funded Program: 6540314
District(s): 3

Project Description, Milestones and Service Impact

This project involves the rehabilitation of clarifier #1 (West), asset #640020. The current clarifier is not in operation. This project will address the age and the performance of the equipment. Doing so will assure we maintain compliance with the FDEP.

Revenue or Expense Category	All Prior Fiscal Years	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027 & Future	Total Revenue
Charges For Services Revenue	$ -	$ 375,000	$ -	$ -	$ -	$ -	$ -	$ 375,000
Other Finance Sources Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Transfers Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Permit/Fees Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Unfunded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenue	**$ -**	**$ 375,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 375,000**
Land Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Planning/Design Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Construction Expense	$ -	$ -	$ 375,000	$ -	$ -	$ -	$ -	$ 375,000
Other Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Expense	**$ -**	**$ -**	**$ 375,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 375,000**

Utility Services Department

Program Name: BAREFOOT BAY WATER AND WASTEWATER
Project Name: Barefoot Bay Water: Carbon Dioxide Replacement
Project Total: $260,000
Project Timeline: October 1, 2022 through September 30, 2023
Funded Program: 6540316
District(s): 3

Project Description, Milestones and Service Impact

The current CO2 system is undersized and replacement is needed to have better pH control to compensate for variability of lime slaker at the water production plant.

Revenue or Expense Category	All Prior Fiscal Years	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027 & Future	Total Revenue
Charges For Services Revenue	$ -	$ -	$ 260,000	$ -	$ -	$ -	$ -	$ 260,000
Other Finance Sources Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Transfers Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Permit/Fees Revenue	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Unfunded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenue	**$ -**	**$ -**	**$ 260,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 260,000**
Land Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Planning/Design Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Construction Expense	$ -	$ -	$ 260,000	$ -	$ -	$ -	$ -	$ 260,000
Other Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Expense	**$ -**	**$ -**	**$ 260,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 260,000**

"Exhibit B"

Conservation

NEW Policy 10.7 Brevard County should include LID and GSI design principles in public capital projects and prioritize stormwater retention projects that seek to recharge the aquifer where feasible and fiscally prudent.

NEW Policy 10.8 Brevard County shall review its public facilities infrastructure and operations for potable water conservation opportunities.

Potable Water

Policy 1.2 ~~By 2011, t~~The County shall include the following provisions within Land Development Regulations as they pertain to subdivision and site plan reviews in an effort to reduce per capita consumption:

A. New ~~I~~irrigation systems ~~installed after January 1, 2010,~~ shall be designed to use non-potable water or reclaimed water as the source when a reclaimed water supply source is available~~. Connection to a reclaimed water system is required when available,~~ in accordance with Potable Water Element Policy 1.4

B. New industrial or commercial development that does not require water meeting potable water quality standards shall be designed to use non-potable water or reclaimed water when a non-potable water or reclaimed water supply source is available~~. Connection to a reclaimed water system is required when available,~~ in accordance with Potable Water Element Policy 1.4

C. New ~~I~~irrigation systems ~~installed after January 1, 2010,~~ shall utilize micro-irrigation techniques to the greatest extent practical.

D. Landscaping for new development shall utilize waterwise landscaping principles including limits on the use of landscaping that requires irrigation.

E. Brevard County shall maintain at a minimum, but not limited to, the following practices and provisions:

   a. Showerhead exchange program;
   b. Toilet rebate program;
   c. ~~Maintain w~~ Water main replacement program;
   d. Require low flow plumbing fixtures;
   e. Require dual piping for reclaimed water in reclamation areas~~.~~;
   f. Provision of leak detection/water conservation kits;
   g. Provision of water conservation and restriction messages on utility bills.

Policy 1.5 ~~By 2011,~~ Brevard County shall continue to collaborate with SJRWMD and consider ~~adopt~~ land development regulations aimed at ~~to~~ conserving water and ~~further~~ reducing ~~per capita consumption~~ demand of potable water**.**

NEW Policy 1.7 Brevard County shall conserve water by continually seeking ways to improve efficiency in the design, maintenance, operation of its public water facilities.

NEW Policy 1.8 The County shall cooperate with St. Johns River Water Management District (SJRWMD) during declared water shortage emergencies by conserving water resources and assisting SJRWMD with enforcement of water shortage emergency declaration, orders, and plans (Rule 40C-21, F.A.C., SJRWMD water shortage plan).

NEW Policy 1.9 The County shall continue to implement its Water Conservation Plan submitted to SJRWMD as part of the consumptive use permitting process.

Policy 3.1 The following acceptable level of service (LOS) standards ~~based on the maximum daily demand~~ are hereby adopted, and shall be used as the basis for determining the availability of facility capacity and the demand generated by a development within the respective service areas. Potable water service areas are those areas depicted in Map 1.

POTABLE WATER SERVICE AREA	LEVEL OF SERVICE STANDARD
~~MIMS Residential~~	~~400 gal/residential unit /day~~
~~Non-Residential~~	~~250 gal/equivalent unit/day~~
~~TITUSVILLE~~	~~104 gal/capita/day~~
~~COCOA~~	~~234 gal/ERC/day~~
~~SOUTH BREVARD~~	~~125 gal/capita /day~~
BCUSD	200 gal/ERC/day
Barefoot Bay Water & Sewer District	150 gal/ERC/day
City of Cocoa	340 gal/ERC/day or 122 gal/capita/day
City of Melbourne	100 gal/capita/day
City of Palm Bay	225 gal/ERC/day
City of Titusville	96.4 gal/capita/day
City of West Melbourne	210 gal/ERC/day

Policy 3.3 Recognizing that acceptable level of service standards may not be achieved in practice and to avoid the possibility of curtailment of potable water service, the Brevard County water service agency shall initiate action (including introduction into the Capital Improvement Element), utilizing a lead time based on a calculated number of years before the design capacity has been reached using the following formulas to ensure additional capacity is on-line within five years:

(design capacity - actual capacity)/growth rate = # of years to design capacity

 # years to design capacity - 5 years = # of years before necessary inclusion within the CIE

growth rate = percentage capacity increase per year.

~~Brevard County shall pursue agreements with the other water suppliers in Brevard to adopt and utilize this or a similar procedure.~~

~~**Policy 3.4** Newly proposed service areas, expanding restricted service areas, or Public Service Commission (PSC) regulated service areas shall be reviewed and approved by Brevard County and applicable agencies.~~

Policy 3.5~~4~~ Potable water facilities and services intended to serve future development needs that are not located in the 0-20 year future potable water service area (see Map 1) shall not be permitted or provided unless the potable water service area is amended in the Potable Water Element of the

Comprehensive Plan or a non-governmental entity is the provider of the potable water facilities, so long as the private potable water service is consistent with the Brevard County Comprehensive Plan, the Water Supply Plans of the County, the St. Johns River Water Management District, the City of Cocoa, the City of Melbourne, the City of Palm Bay, the City of Titusville, and the City of West Melbourne. Nothing in this element will prevent a private property owner from utilizing on-site water sources, such as a well, for individual and personal potable water use.

Objective 4 - Provide the facilities necessary to meet the projected needs of the County-operated public water supply system for the next twenty years ~~by implementing the Brevard County Water Supply Plan dated 2009~~.

Policy 4.1 Brevard County shall continue to implement a~~n~~ wellfield expansion program ~~to increase the safe yield of the surficial aquifer in the north county area,~~ in order to provide an adequate and dependable water supply source to meet the current and future needs of the County-operated water system.

~~**Policy 4.2** Brevard County supports the efforts of the Brevard Water Supply Board to meet the future needs of Brevard County which is consistent with and supportive of the provisions found in the Brevard County Comprehensive Plan, the Water Supply Plans of the County, the St. Johns River Water Management District, the City of Cocoa, the City of Titusville, and the City of Melbourne.~~

Policy ~~4.3~~ 4.2 Brevard County shall continue cooperative efforts with other governmental entities, both within the County and outside of the County, for the planning, implementation, and management of water resources and supplies.

~~**Policy 4.4** A potable water interconnect should be established and maintained between all of the publicly owned water systems in order to provide potable water during emergencies.~~

Policy ~~4.5~~ 4.3 For potable water uses, Brevard County should utilize the highest quality water source, whenever economically and environmentally feasible.

~~**Policy 4.6** Brevard County shall evaluate the Water Supply Plan and its projections at least every five years and amend the Water Supply Plan and Comprehensive Plan as may be necessary. Brevard County shall also update the Water Supply within 18 months after the St. Johns River Water Management District approves an update to the regional water supply plan if the changes to the regional water supply plan affect Brevard County.~~

Policy ~~4.7~~ 4.4 Brevard County shall continue to participate in the development of updates to the St. Johns River Water Management District ~~Regional Water Supply Assessment and Water Supply Plan~~ Central Springs / East Coast Regional Water Supply Plan and any other water supply development- related initiatives facilitated by the District that would affect the County.

NEW Policy 4.5 The County will monitor and participate, as necessary, in its water service providers' water supply planning process to ensure that these entities account for and meet the County's current and future water needs for the respective unincorporated areas.

NEW Policy 4.6 The County shall maintain a Water Supply Facilities Work Plan (Work Plan) that is coordinated with SJRWMD's Central Springs / East Coast Regional Water Supply Plan (CSEC

RWSP). The Work Plan and related comprehensive plan policies will be updated, as necessary, within 18 months of an update of the CSEC RWSP that affects the County.

NEW Policy 4.7 The County's Water Supply Facilities Work Plan (2023-2035) is incorporated into the comprehensive plan as Appendix A of the Potable Water Element.

NEW Policy 4.8 The Water Supply Facilities Work Plan shall identify the traditional and alternative water supply projects and programs, along with the water conservation and reuse practices, necessary to meet existing and future water demands.

NEW Policy 4.9 The Water Supply Facilities Work Plan shall identify those projects (if any) contained in the CSEC RWSP and selected by the County for implementation (if any).

Sanitary Sewer

Policy 3.4 Maximize reuse of treated wastewater and ~~other~~ water conservation techniques to recover and diminish the demand for ~~fresh~~potable water.

Intergovernmental Coordination

Policy 1.6 Brevard County shall maintain active coordination and cooperation with all water service providers to the public, and continue to coordinate the provision of potable water with the St. Johns River Water Management District, the Brevard County Utility Services Department, the Cities of Titusville, Cocoa, Palm Bay, West Melbourne, and Melbourne, and the ~~Brevard Water Supply Board~~ other water suppliers within the County.

~~Criteria:~~

~~A. Maintain active coordination and cooperation with all water service providers to the public.~~

~~B. Continue to participate in the Taylor Creek Reservoir Alternative Water Supply multi-jurisdictional project.~~

~~C. Ensure the provisions of potable water services are consistent with the Water Supply Plans of Brevard County, the City of Titusville, the City of Cocoa, the City of Melbourne, and the St. Johns River Water Management District.~~

Intergovernmental Coordination

Policy 1.10 Brevard County shall continue to coordinate with municipalities to establish and maintain interlocal agreements and joint planning areas for use in coordinating public service delivery and facility maintenance subsequent to municipal annexation procedures. Interlocal planning, annexation and maintenance agreements should, at a minimum, address the topics set forth in the criteria below:

Criteria:

A. Existing and future service areas for public services and facilities.

B. Methodology for advance notification to the County by municipalities conducting annexation procedures and hearings pursuant to Chapter 171, Florida Statutes.

C. Issues of land use compatibility and consistency with the Brevard County Comprehensive Plan.

D. Public participation and notification of all affected land owners of the land to be annexed.

E. Notification of affected adjoining properties in the unincorporated areas.

F. Available level of services and facilities and identification of the provider of those services.

Policy 2.1 Annually, with respect to each municipality, Brevard County should ~~pursue~~ establish and maintain interlocal agreements~~, or the modifications of existing agreements,~~ for the purpose of refining the process of:

Criteria:

A. Reviewing land development proposals pursuant to the following:

1. Rezoning proposals within 660 feet of jurisdictional boundaries.

2. The provision of public facilities and services which are provided by other governmental entities.

B. Assessing the impact of land development proposals on traffic circulation with respect to:

1. A method of notification of the affected local government regarding traffic impacts must be established providing sufficient time for the affected local government to respond.

2. A method of "recording" or "tracking" projected trips on roadways for mutual use should be established.

3. Resolving any discrepancies in the acceptable levels of service if having different levels of service causes intergovernmental problems.

C. Standardization of all related land development regulations:

1. Standard format, language and criteria should be considered, however, modifications should be permitted to address unique local conditions.

2. Workshops should be held between the County and municipalities for the purpose of identifying and resolving problematic inconsistencies.

3. Maintain the Planning Coordination Committee.

D. Annexation and or contraction notification, review and reporting:

1. Joint planning and interlocal annexation agreements shall be encouraged for all annexation or contractions in order to support a smooth transition and enhanced development coordination.

2. Municipalities proposing a voluntary or involuntary annexation or contraction shall be encouraged to notify and coordinate a County review of the proposed annexation or contraction area prior to commencing annexation procedures. The County notification information should include:

a) A schedule of any municipal annexation or contraction public hearings including the subject municipality's schedule for amending its Comprehensive Plan.

b) The reporting prerequisites stated within Chapter 171.042, Florida Statutes or, at a minimum, a copy of the municipality's staff annexation report to be considered during municipal public hearing including:

- A metes and bounds legal description of the property(ies) to be annexed or contracted.
- The subject property's proposed future land use, zoning designations and, if possible, the intended use for the proposed annexation area.
- The limits of post-annexation municipal maintenance of adjacent street right-of-way and drainage facilities.

3. Prior to the adoption of an interlocal enclave annexation agreement between the County and any municipality under F.S. 171.046 (2A), the municipality proposing the annexation should provide written notice to property owners within 500' of the proposed enclave to be annexed no later than 30 days prior to the first public hearing in which the municipality is to consider the enclave annexation interlocal agreement.

Policy 3.2 In order to ensure efficient, cost effective, and environmentally sound public facilities and services, Brevard County should initiate and maintain interlocal agreements with the municipalities and other service providers that provide public facilities and services in the

unincorporated area, to formalize the designation of facility service areas and acceptable levels of service.

Capital Improvements

Policy 1.1 As a part of the Capital Improvements Plan (CIP) development process, Brevard County shall utilize the acceptable level of service standards for transportation, potable water, sanitary sewer, solid waste, drainage, recreation and open space, and public schools as adopted in other elements of the Comprehensive Plan and shown below to evaluate the need for public facility improvements.

B. Potable Water: Acceptable LOS Standards

SERVICE AREA	LEVEL OF SERVICE STANDARD
~~MIMS Residential - 400 gal/residential unit /day~~	
~~Non-Residential - 250 gal/equivalent unit/day~~	
~~TITUSVILLE 104 gal/capita/day~~	
~~COCOA 234 gal/ERC/day~~	
~~SOUTH BREVARD 125 gal/capita /day~~	
BCUSD	200 gal/ERC/day
Barefoot Bay Water & Sewer District	150 gal/ERC/day
City of Cocoa	340 gal/ERC/day or 122 gal/capita/day
City of Melbourne	100 gal/capita/day
City of Palm Bay	225 gal/ERC/day
City of Titusville	96.4 gal/capita/day
City of West Melbourne	210 gal/ERC/day

NEW Policy 1.5 Brevard County shall include in its CIP all projects identified in its WSFWP to commence or continue within the 5-year horizon.

NEW Policy 1.6 Brevard County shall include in its CIP all Water Resource Development, Water Supply Development, and Water Conservation Project Options identified in the SJRWMD RWSP assigned to the County as an implementing entity within the 5-year horizon.

Policy 5.5 Brevard County shall coordinate the provision of potable water from the Cities of Cocoa, Titusville, Palm Bay, West Melbourne, and Melbourne and any other applicable potable water provider, including the County itself, by requiring ~~property owners~~ development applicants located in unincorporated areas of the County to provide written verification from the applicable potable water provider that the facility capacity and adequate water supply are currently available or will be available at the time of development. Prior to approval of a building permit or its functional equivalent, Brevard County shall consult with the applicable water supplier to determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of issuance by Brevard County of a certificate of occupancy or its functional equivalent. No building or construction permit shall be issued unless the applicable potable water supplier has provided a written statement of committed capacity and water supply availability for the proposed development. Adequate water supplies and potable water facilities shall be in place

and available to serve new development no later than issuance by Brevard County of a certificate of occupancy or its functional equivalent.

Glossary

Central Springs/East Coast Regional Water Supply Plan (CSEC RWSP) - Recognizes the unique local challenges and resource constraints facing the central region springs and coastal areas of the St. Johns River Water Management District. The planning region encompasses three sub-regions that include Marion and north Lake counties, Volusia County and Brevard, Indian River and Okeechobee counties. The plan is updated every 5 years and is adopted by the by the St Johns River Water Management District Governing Board.

Florida Department of Environmental Protection (FDEP) - The Florida Department of Environmental Protection is the state's lead agency for environmental management and stewardship, protecting our air, water and land.

Green Stormwater Infrastructure (GSI) – Plants, soils systems, permeable pavement or other permeable materials that filter and absorb stormwater where it falls and reduce flows of stormwater runoff to sewer systems or into surface waters.

Low Impact Development or Design (LID) - Refers to systems and practices that use or mimic natural processes that result in the infiltration, evapotranspiration or use of stormwater to protect water quality and associated aquatic habitat. LID is used to preserve, restore and create green space using soils, vegetation, and rainwater harvest techniques. LID is an approach to land development (or re-development) that works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features and minimizing effective imperviousness to create functional and appealing site drainage that treat stormwater as a resource rather than a waste product.

St. Johns River Water Management District (SJRWMD) - An environmental regulatory agency of the state of Florida whose work is focused on ensuring a long-term supply of drinking water, and to protect and restore the health of water bodies in the district's 18 counties in northeast and east-central Florida. While the district works closely with utilities on water supply issues, the district is not a water supplier. SJRWMD was established in 1972 by the state Legislature through passage of the Water Resources Act (Chapter 373, Florida Statutes, as it may be amended from time to time).

Water Supply Facilities Work Plan (WSFWP) - A plan to establish future water demands and potential water sources and facilities to meet those demands for a 10-year planning horizon. This plan is developed in collaboration with SJRWMD, adopted by reference in the Brevard County Comprehensive Plan and must be updated within 18 months after the SJRWMD approves an update to the Regional Water Supply Plan (RWSP) affecting Brevard County.

BREVARD COUNTY WATER SUPPLY FACILITIES WORK PLAN

FOR

BREVARD COUNTY, FLORIDA

AUGUST 2023

Prepared for:

Prepared by:

BONNIE LANDRY &ASSOCIATES Professional Planning Services

Kimley»Horn
Expect More. Experience Better.

ACKNOWLDEGEMENTS

Brevard County recognizes its continued partnership with the St. Johns River Water Management District and the East Central Florida Regional Planning Council and thanks them for the collaborative effort to present a document that is consistent with their goals as well as the goals for Brevard County. Furthermore, Brevard County expresses its appreciation to all the staff who contributed to the development and production of this collaborative Water Supply Facilities Work Plan.

EXECUTIVE SUMMARY

The purpose of the Water Supply Facilities Work Plan (WSFWP) is to establish future water demands and potential water sources and facilities to meet those demands for the 2020-2040 planning horizon. Additionally, the WSFWP assists the St. Johns River Water Management District (SJRWMD) in creating a framework for the future water management decisions in the District. Brevard County's WSFWP has been prepared in accordance with Chapter 163, Part II, and Section 373.709, F.S.

Brevard County's 2020 population was approximately 606,612 and is projected to rise to 729,800 by 2040, an increase of more than 20%. Based on data from SJRWMD's 2040 Regional Water Supply Plans, Brevard County's Public Supply water demand in 2040 is projected to be 74.22 million gallons per day (MGD), an increase of more than 18% over 2020's estimated demand of 62.64 MGD.

Brevard County	2020	2040	Delta	% Increase
Total Population	606,612	729,800	123,188	20.3%
Public Water Supply Demand	62.64 MGD	74.22 MGD	11.58 MGD	18.5%

Brevard County residents are served by one of several Public Water Supply facilities, owned and operated by the Cities of Cocoa, Melbourne, Palm Bay, Titusville, and West Melbourne, as well as by Brevard County. These Water Treatment Plants (WTPs) draw and treat water from 229 wells, 34 of them being County Owned, as well as surface water from Lake Washington and Taylor Creek Reservoir. Municipal utilities maintain their own Work Plans pursuant to Florida Statutes.

Recent historical production data from County's three WTPs – Mims, Barefoot Bay, and San Sebastian – showed a total overall demand rate of 73 gallons per capita per day (GPCD), and a maximum daily demand of 90 GPCD. Applying estimated demand to projected population, this plan concludes that existing Brevard WTPs can supply their share of the increase in water demand during the 20-year planning horizon without expanding existing sources. **Mims WTP CUP will need to be revised up per previous allocation to accommodate required expansion per IRLPP.**

Brevard's currently adopted Level of Service standards (LOS) for its WTP territories are demonstrated to be sufficient to meet projected demand. As such, LOS are not recommended to be amended in substance, but rather clarified to uniformly represent per-capita demand.

However, the SJRWMD's most recent Regional Water Supply Plans (RWSP) find that traditional groundwater supply is insufficient to meet projected increasing demands region-wide. Therefore, Brevard County concurs with the SJRWMD recommendation to mitigate future demand and its impacts. This plan recommends conservation and reuse policies for the Brevard County Comprehensive Plan to support this effort, as well as preparation for investigation into eventual Alternative Water Supply. In addition to these policies, this plan also includes Capital Improvement Plan (CIP) projects necessary to ensure that the projected demand for water can be met over the planning period. CIP projects such as water main expansion will help ensure adequate future water supply to the county.

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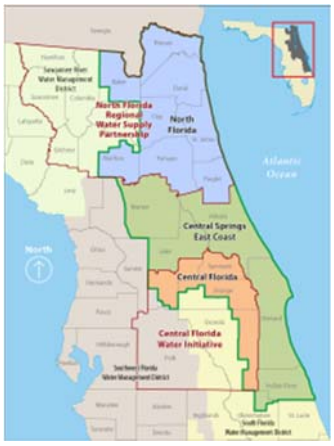
PURPOSE

The purpose of this document is to assess and plan for adequate water supply for the County's future population. This Water Supply Facilities Work Plan (WSFWP) has been prepared in accordance with Chapter 163, Part II, Florida Statutes (F.S.) and 373.709, F.S. The F.S. state that local governments must maintain a WSFWP to assess the water supply sources and facilities necessary to meet existing and projected water use demands for a minimum planning period of 10 years in coordination with the Regional Water Supply Plan (RWSP) of their Water Management District(s). This WSFWP addresses projected supply and demand for years 2020-2040.

INTRODUCTION



An important role of the St. Johns River Water Management District is to ensure there are adequate and sustainable water supplies to meet future needs while protecting the environment. In addressing water supply, the District divided its water supply planning into three plan areas: Central Florida Water Initiative (CFWI); Central Springs/East Coast (CSEC) Planning Area and North Florida Regional Water Supply Partnership. Brevard County is in the CSEC RWSP area which includes all or part of six counties — Volusia, Lake, Marion, Brevard (excluding the City of Cocoa, which is included in the CFWI), Indian River and Okeechobee counties. This plan is coordinated with the CSEC 2040 RWSP and the CFWI 2040 RWP to assess all of Brevard County including the City of Cocoa. There are five public providers of potable water for Brevard County's population: the Cities of Cocoa, Melbourne, Palm Bay, Titusville and West Melbourne, and Brevard County.

PLANNING PERIOD

The Planning Horizon for the Brevard WSFWP is 2020-2040, consistent with the most recent CSEC RWSP (2020-2040) and CFWI RSWP (2020-2040). Florida Statues require local governments plan to a 10-year horizon at minimum, but congruent planning time horizons for the local and regional plans is a best practice in Florida water supply planning.

RWSPs are based on available data at the time of plan development. The base year for both the CSEC and CFWI RWSPs is 2015, which was the most current year with population and water use data available at the time the projections were developed. RWSP demand projections were based on actual use data over the 2011-2015 period to incorporate per-capita trends. For Brevard's own WTP demand projections, more current actual use data from 2018-2023 were used.

Pursuant to Chapter 163, F.S., local governments are required to update their WSFWP and Comp Plan every 5 years within 18 months of an update to their related WMD RWSP. For governments comprising more than one RWSP area, updates must be made within 18 months of the later RWSP update. Brevard county is included in two RWSP areas: the CSEC, covering all of Brevard except for the City of Cocoa, and the CFWI, covering the City of Cocoa.

STATUTORY REQUIREMENTS

FLORIDA REGULATIONS FOR WATER SUPPLY AND FACILITY PLANNING

Brevard County is required by Florida Statutes to adopt a Water Supply Facilities Work Plan that complies with the following regulations for water supply and facility planning and related Comprehensive Elements:

I. {163.3177(4)(a), F.S.}: **Coordinate with the St. Johns River Water Management District** Coordinate aspects of the comprehensive plan with the associated regional water supply plan and adjacent utilities.

II. {163.3177(6)(a), F.S.}: **Ensure the Future Land Use Plan is based upon availability of adequate water supplies and public facilities and services.** Data and analyses demonstrating adequate water supplies and public facilities available to meet project growth demands. **(Future Land Use)**

III. {163.3180(2), F.S.}: **Consult with the water supplier, ensure adequate water supplies and potable water facilities are available to serve new development** no later than the issuance by the local government of a certificate of occupancy or its functional equivalent. **(Future Land Use)**

IV. {163.3177(6)(c), F.S.}: **Work plan will cover at least a 10-year planning period** to meet existing and projected demand. The work plan must address those facilities that provide service within the local government jurisdiction and include any facilities needed to develop alternative water supplies. The work plan must also identify conservation and reuse measures to meet future needs identified in the RWSP. **(Potable Water)**

V. {163.3177(3)(a)4, F.S.}: **Identify water supply capital projects over next 5 years** for which the county is responsible (both publicly and privately funded) needed to achieve and maintain adopted levels of service. The projects would include funded and unfunded projects. If unfunded include the level of priority for funding. **(Capital Improvements)**

VI. {163.3177(6)(d)3, F.S.} & {163.3167(9), F.S.}: **Assess current and projected water needs and sources for at least a 10-year planning period** considering existing levels of water conservation, use and protection, and applicable policies of the water management district. Address water supply sources for existing and projected water use demand. **(Conservation)**

VII. {163.3177(6)(h)1}: **Ensure internal consistency between the Comprehensive Plan and the Water Supply Plan**. **(Intergovernmental Coordination)**

NEW FLORIDA LAWS REGARDING PERMITTING OF SEPTIC TANKS

As of July 1, 2023, Subparagraph 403.067(7)(a)9.a, Florida Statutes, specifies that local governments within a Basin Management Action Plan ("BMAP") must develop a wastewater treatment plan and an onsite sewage treatment and disposal system ("OSTDS") remediation plan containing certain information, if the Florida Department of Environmental Protection ("Department") "identifies domestic wastewater treatment facilities or onsite sewage treatment and disposal systems as contributors of at least 20 percent of point source or nonpoint source nutrient pollution or if the Department determines remediation is necessary to achieve the total maximum daily load ("TMDL").

Brevard County is located within three such BMAPs: Banana River Lagoon, North Indian River Lagoon, and Central Indian River Lagoon and must complete a "BMAP Plan" that includes plans for County-owned and operated wastewater treatment plants as well as OSTDSs located in the County. The draft plans are due to FDEP by February 1, 2024, and final drafts by August 1, 2024.

Brevard County owns and operate the following wastewater treatment facilities (WTF):

- Barefoot Bay Water Reclamation Facility
- South Beaches Wastewater Treatment Facility
- Sykes Creek Regional Wastewater Treatment Facility
- North Regional (Mims) Wastewater Treatment Facility
- Port St John Wastewater Treatment Facility

In response to this new legislation, Brevard County plans to develop a Wastewater Master Plan in Fiscal Year 2024. The related laws are:

{163.3177(3)(a)4.b.}: Include a list of projects necessary to achieve the pollutant load reduction requirements within the schedule of Capital Improvements.

{373.469 (3)(d)1.}: Beginning Jan 1, 2024, unless previously permitted, new onsite sewage treatment and disposal systems will be prohibited within the BMAP areas where publicly owned or investor-owned sewerage system is available. Where central sewer is not available, only enhanced nutrient-reducing OSTDS achieving at least 65% nitrogen reduction are authorized.

{373.469 (3)(d)2.}: By July 1, 2030, any commercial or residential property with an existing OSTDS within the BMAP areas must connect to a central sewer if available or upgrade to an enhanced nutrient-reducing OSTDS achieving at least 65% nitrogen reduction.

DATA & ANALYSIS

STATISTICAL METHODS AND ANALYTIC APPROACH

Confirmed primary-source data is the preferred set for statistical analysis in this Work Plan. Wherever possible, straight averages are avoided in favor of weighted averages. Projections are derived using the most recent and highest rates for growth and demand, to anticipate reasonable "worst-case" impacts to water supply. All internal GPD demand calculations are rounded up to the nearest whole number.

WATER INFRASTUCTURE

Potable water within the County is provided by three (3) County-Owned Water Treatment Plants in addition to municipally-owned water treatment plants which provide water to municipal residents as well as some of unincorporated Brevard County. A map of the County's current water and sewer service areas can be found in the appendices.

Municipal water utilities are planned for and managed in accordance with their respective WSFWPs. The most current Work Plan dates are summarized in ***Table 1*** below.

TABLE 1 – WATER SUPPLY FACILITIES WORK PLAN DATES

Municipal Utility	Last WSFWP
City of Cocoa	2009
City of Melbourne	2021
City of Palm Bay	N/A
City of Titusville	2023
City of West Melbourne	N/A

Due to recent changes in state law requiring regular 5-year updates to all WSFWPs, Brevard County anticipates out-of-date municipal Work Plans will be updated within the next FY.

The Brevard County-owned potable water distribution facilities include over 111.6 miles of pipe ranging from smaller than 4 inches to 24 inches in diameter. Throughout the potable water service areas identified, the existing water mains are composed mostly of PVC pipe. There are also small areas of County owned water mains constructed of ductile iron and high-density polyethylene (HDPE). Descriptions of the potable water infrastructure maintained by the municipal suppliers in Brevard County are included in their respective Work Plans.

POPULATION

By 2040, 729,800 people are projected to reside in the County, compared to the 606,612-person population in 2020. While not all of these residents will receive water from Public Supply Utilities, it can be anticipated that the Public Supply population will increase at a similar rate. This population analysis can be found later in ***Tables 5 and 6*** of this document. This WSP addresses these development trends in the population projections and anticipated demands, identifying conservation initiatives to accommodate additional users while conserving water supply.

DEMAND AND LOS

The SJRWMD RWSPs analyze prior actual use data against BEBR population projections to estimate demand into the future. The most recent RWSPs estimate through 2040 based on use data from 2011-2015. These figures represent projections for total Public Supply demand in Brevard County, served by both Municipal and County water utilities, excluding small private supply including well/septic systems. Brevard WTP figures are based on Brevard's MOR data from 2018-2023 and BEBR populations.

**Note that the RWSP projections include some overlap of the City of Cocoa service, as it falls within two planning areas; therefore, the primary value of these figures is for trend analysis.*

TABLE 2 - RWSP PUBLIC SUPPLY DEMAND 2020-2040, MILLION GALLONS PER DAY (MGD)

Planning Area	2020	2025	2030	2035	2040
CSEC (Central Springs/East Coast) - Brevard	37.51	39.00	39.95	41.07	42.11
CFWI (Central Florida Water Initiative) – City of Cocoa	25.13	29.91	30.82	31.49	32.11
*Combined RWSP – Brevard**	*62.64*	*68.91*	*70.77*	*72.56*	*74.22*
% Growth 5-Year		+ 10.0%	+ 2.7%	+ 2.5%	+ 2.3%
% Growth over 2020		+ 10.0%	+ 13.0%	+ 15.8%	+ 18.5%

Sources: CSEC 2020 RWSP, CFWI 2020 RWSP

Level of Service (LOS) standards are adopted by Brevard County to ensure sufficient water supply for existing and future development. LOS are used in land use decisions to estimate increased demand from development, and they are an important measure for estimating the necessity of utility expansion.

TABLE 3 – POTABLE WATER LEVEL OF SERVICE

Service Area	Use	Level of Service Standard	Standardized Per Capita
Mims	Residential	400 gal / residential unit / day	**172 gal / capita / day**
	Non-Residential	250 gal / equivalent unit / day	**108 gal / capita / day**
Titusville		104 gal / capita / day	**104 gal / capita / day**
Cocoa		234 gal / ERC / day	**101 gal / capita / day**
South Brevard		125 gal / capita / day	**125 gal / capita / day**

**Source: Brevard County Comprehensive Plan Chapter VI: Potable Water Element, exc. Standardized*

For consistency within the Work Plan, LOS is converted to a standardized per capita unit based upon BEBR's Households and Average Household Size in Florida. The 2021 report shows Brevard County's Average Household Size is 2.33 persons per household. Therefore, the Mims Residential LOS can be standardized to 172 GPCD, Residential and 108 GPCD, Non-Residential.

WATER USE PERMIT INFORMATION

The St. Johns River Water Management District issues Consumptive Use Permits (CUPs) authorizing withdrawal of ground and surface waters for public supply within Brevard County. A copy of the available present CUPs for each publicly owned water provider within the County can be found in the appendices.

Table 4 below is a summary of the existing consumptive use permits in Brevard County and their source allocations.

TABLE 4 - PUBLICLY OWNED WATER PROVIDERS

Provider	CUP Current Year Water Allocated (MGY)	Total # of Wells	Source	Permit #	Permitted to Serve Pop.
Barefoot Bay WTP*	291.72	10	Groundwater from surficial aquifer, with backup from Upper Floridan Aquifers (UFA)	236	10,600
MIMS WTP*	384.7	21	Groundwater from surficial aquifer	233	9,700
San Sebastian WTP*	29.15	3	Groundwater from surficial aquifer	1742	330
City of Titusville	*2,193.65*	*61*	*Groundwater from surficial aquifer*	*10647, 99052*	*63,369*
City of Palm Bay	*6,267.05*	*59*	*Groundwater from surficial aquifer and Floridan Aquifers*	*202*	*144,867*
City of Melbourne	*8,592.23*	*12*	*Surface water from Lake Washington and groundwater from the brackish Upper Floridan aquifer (UFA)*	*50301*	*233,937*
City of West Melbourne	*1,372.40*	*5*	*Groundwater from the Upper Floridan Aquifers (UFA).*	*173509*	*41,570*
City of Cocoa	*14,537.95*	*63*	*Surface water from the Taylor Creek Reservoir, Groundwater from the intermediate aquifer system and Upper Floridan Aquifer (UFA)*	*50245*	*256,385*

Source: OCULUS, FL Department of Environmental Protection (DEP) 2023 Current consumptive use permits
***** = Brevard County Owned Facilities

INVENTORY OF EXISTING WATER SUPPLY & FACILITIES

BREVARD-COUNTY OWNED WATER TREATMENT PLANTS

MIMS WATER TREATMENT PLANT (WTP) (FACID: 3050834, CUP PERMIT #: 233)

The Mims WTP is a 1.05 million gallon per day (MGD) annual average daily flow (AADF) permitted capacity potable water treatment facility. The facility treats raw water from surficial aquifer wells located in the Mims area through aeration, lime softening, secondary clarification, tertiary filtration, and high-level disinfection to generate potable water meeting all FDEP and Potable Water criteria requirements. It has a CUP authorization limit of 383.3 MGY, with source water obtained from the surficial aquifer.

BAREFOOT BAY WATER TREATMENT PLANT (WTP) (FACID: 3050057, CUP PERMIT #: 236)

The Barefoot Bay WTP is a 0.8 million gallon per day (MGD) annual average daily flow (AADF) permitted capacity potable water treatment facility. The facility treats raw water from surficial aquifer wells located in Barefoot Bay through softening, filtration, and primary disinfection to generate potable water meeting all FDEP and Potable Water criteria requirements. It has a CUP authorization limit of 291.72 MGY, with source water obtained from the surficial aquifer and Upper Floridian aquifer as a backup.

SAN SEBASTIAN WATER TREATMENT PLANT (WTP) (FACID: 3054170, CUP PERMIT #: 1742)

The San Sebastian WTP is a 0.08 million gallon per day (MGD) annual average daily flow (AADF) permitted capacity potable water treatment facility. The facility treats raw water from surficial aquifer wells located at the facility through aeration and disinfection to generate potable water meeting all FDEP and Potable Water criteria requirements. It has a CUP authorization limit of 29.15 MGY, with source water obtained from the surficial aquifer.

MUNICIPALLY OWNED WATER TREATMENT PLANTS (WTP):

CITY OF TITUSVILLE (CUP PERMIT #: 10647)

The City of Titusville owns 61 wells. It has a CUP authorization of 6.01 MGD (2,193.65 MGY) of groundwater from the surficial aquifer system and the Floridan aquifer. The city is permitted through 2031 to serve a population of 63,369.

CITY OF PALM BAY (CUP PERMIT #: 202)

The City of Palm Bay owns 59 wells. It has a CUP authorization of 4.9 MGD of groundwater from the surficial aquifer system and 12.27 MGD of groundwater from the Floridan aquifer (6267.05 MGY total). The city is permitted through 2029 to serve a population of 144,867.

CITY OF MELBOURNE (CUP PERMIT #: 50301)

The City of Melbourne owns 12 wells. It has a CUP authorization of 23.54 MGD (8,592.1 MGY) of surface water from Lake Washington and groundwater from the brackish Upper Floridan aquifer (UFA). The city is permitted through 2049 to serve a population of 233,937.

CITY OF WEST MELBOURNE (CUP PERMIT #:173509)

The City of West Melbourne owns 5 wells. It has a CUP authorization of 3.76 MGD (1372.4 MGY) of groundwater from the Upper Floridan Aquifer (UFA). The city is permitted through 2041 to serve a population of 41,570.

CITY OF COCOA (CUP PERMIT #: 50245)

The City of Cocoa owns 63 wells. It has a CUP authorization of 8.83 MGD of surface water from the Taylor Creek Reservoir, 3 MGD of groundwater from the intermediate aquifer system and 28 MGD of groundwater from the Upper Floridan Aquifer (UFA) (14,537.95 MGY total). The city is permitted through 2052 to serve a population of 256,385.

BREVARD COUNTY POPULATION ANALYSIS

As required by all Comprehensive Plan amendments, the WSFWP must be based upon data relevant to Brevard County. Per Section 163.3177, F.S., comprehensive plans shall be based upon permanent and seasonal population estimates. However, RWSPs are based on the University of Florida's Bureau of Economic and Business Research (BEBR) data. It should be noted that the population figures used in this WSFWP similarly use BEBR as an acceptable source allowed under Florida Statutes, and as such they do not include seasonal or other types of temporary residents. The projections used for this Work Plan are based upon the "Medium" BEBR projections released in April 2023 for Brevard County. ***Table 5*** provides the projected population in 5-year increments with % Growth over 5 years and overall for each period.

TABLE 5 - BREVARD COUNTY POPULATION PROJECTIONS AND OVERALL GROWTH 2020-2040

Brevard County	2020	2025	2030	2035	2040
Population (Medium)	606,612	651,600	685,200	710,300	729,800
% Growth 5-Year		+ 7.4%	+ 5.2%	+ 3.7%	+ 2.7%
% Growth over 2020		+ 7.4%	+ 13.0%	+ 17.1%	+ 20.3%

Sources: BEBR: Projections of Florida Population by County, 2025–2050, Medium, (April 2023); BEBR: FL Estimates of Population 2022 (April 2022).

The CSEC and CFWI RWSPs identify the "Public Supply Population" as a discrete portion of the overall population, since not all developments receive public water services. ***Table 6*** provides the estimated Public Supply Population in the RWSPs across the 2020 – 2040 planning horizon. Note that CFWI - City of Cocoa includes a Public Supply Population larger than the municipal population, due to its service agreements to non-Cocoa residents, including some of unincorporated Brevard County.

TABLE 6 - BREVARD COUNTY PUBLIC SUPPLY POPULATION 2020-2040

Public Supply Population	2020	2025	2030	2035	2040
CSEC (Brevard)	419,811	441,484	455,304	472,027	488,330
CFWI (City of Cocoa)	190,375	199,285	206,178	211,309	215,987
Total Brevard - All RWSP	610,186*	640,769*	661,482*	683,336*	704,317*
% Growth 5-Year		+ 5.0%	+ 3.2%	+ 3.3%	+ 3.1%
% Growth over 2020		+ 5.0%	+ 8.4%	+ 12.0%	+ 15.4%

Source: CSEC 2020 RWSP Appendix B; CFWI 2020 RSWP Appendices
**The projections for CSEC and CFWI include some overlap for the City of Cocoa, which explains the large total population. The actual total values are insignificant compared to their Growth Trend data.*

Per these projections, it is anticipated that the total Brevard County population will increase faster than the Public Supply population. This may be due to the likelihood of comparatively more rural/suburban development than infill or redevelopment within existing utility service territories. Another explanation for the discrepancy may be due to the differing BEBR data sets used; RWSP PS projections use 2017 BEBR data while Brevard's Total projections use more recent 2023 BEBR data. In any case, the highest recent growth rate projections will be used to better anticipate future demand.

BREVARD WTP POTABLE WATER PER CAPITA DEMAND

Monthly Operation Reports (MOR) covering January 2018 – April 2023 from each Water Treatment Plant (WTP) were used to establish the rates of water demand across the populations served in each service area. These figures were based on the actual water produced by each WTP by month and include the populations served by each.

MORs were analyzed for both Average and Maximum monthly production to project both typical and reasonable worst case demands over the planning horizon. Because Brevard County's adopted Level of Service standards specifically reference Maximum GPD, this Work Plan prioritizes Maximum demand projections.

Tables 7 and 8 analyze MOR data for each County-Owned WTP to establish Average and Maximum demand per capita per day.

TABLE 7 - AVERAGE DEMAND PER DAY FROM MOR DATA (2018-2023)

WTP	Average Month Demand (GPM)	Average Total WTP GPD	Average Per Capita GPD	Population Served	AADF Permitted (GPD)
MIMS	23,723,071	780,261	99	7,947	1,050,000
San Sebastian	1,417,650	46,612	320	146	80,000
Barefoot Bay	13,998,466	461,569	48	9,636	800,000
TOTAL	**39,139,187**	**1,288,442**	**73**	**17,729**	**1,930,000**

TABLE 8 - MAXIMUM DEMAND PER DAY FROM MOR DATA (2018-2023)

WTP	Maximum Month Demand (GPM)	Max Total WTP GPD	Max Per Capita GPD	Population Served	Design Capacity (GPD)
MIMS	28,907,000	932,484	118	7,947	2,400,000
San Sebastian	2,270,000	73,226	502	146	100,000
Barefoot Bay	18,244,000	588,516	62	9,636	1,000,000
TOTAL	**49,421,000**	**1,594,226**	**90**	**17,729**	**2,700,000**

**: Tables 7 & 8 were calculated using maximum demand per day from January 2018-April 2023 MOR data for each County-owned Water Treatment Plant.*

The per capita use rates were calculated by determining both the average and maximum volume of potable water produced by the County's water treatment plants from January 2018 to April 2023 and dividing it by the population served. Using this method, the Mims WTP averaged 99 GPD per capita (GPCD) with a max day of 118 GPCD; the Barefoot Bay WTP averaged 48 GPCD with a max day of 62 GPCD; and the San Sebastian WTP averaged 320 GPCD with a max day of 502 GPCD. Overall, the total demand across the three Brevard County WTPs averaged 73 GPCD with a max day of 90 GPCD.

LEVEL OF SERVICE (LOS)

Brevard County has adopted acceptable Level of Service (LOS) standards to ensure sufficient water quantity for current and future development. Per the County's Comp Plan, LOS is based on the maximum daily demand. There are separate LOS for Mims and South Brevard. Mims LOS vary across Residential and Non-Residential uses, ranging from 400 gallons per Residential Unit per day for residential uses, and 250 gallons per Equivalent Unit per day for non-residential uses. Because the scope of this Work Plan contemplates per capita consumption, Brevard's per-capita LOS can be calculated using BEBR Average Household Size for Brevard (2.33), resulting in a per-capita LOS of 171 GPCD. South Brevard LOS is a standard 125 GPCD. This Work Plan defines the South Brevard region as comprising both the Barefoot Bay and San Sebastian WTPs.

TABLE 9 - CURRENT DEMAND LEVEL OF SERVICE COMPARISON

WTP	Average GPCD	Max GPCD	Level of Service GPCD	Meets LOS?
MIMS	99	118	172	Yes
South Brevard	52	68	125	Yes

**: This table was calculated using maximum demand per day over 5 years of MOR data from each County-owned Water Treatment Plant. LOS from Brevard County Comp Plan*

As shown, current maximum daily demand falls well below adopted LOS. Because of the inconsistency in unit measurement between the various geographic LOS designations, it is recommended that the Comprehensive Plan LOS reference be amended to per capita rather than per unit, and for the South Brevard LOS to be broken into two distinct service areas to reflect the different capacities of Barefoot Bay and San Sebastian WTPs.

POTABLE WATER PROJECTIONS

BEBR population figures and projections were used to establish overall growth rates in 5-year increments through 2040. These rates as shown previously in ***Table 5*** are applied to each current Brevard WTP service territory population. The projected populations are then multiplied by average and maximum per-capita demand rates from ***Tables 7 & 8*** to project a range of future finished water demands for each Water Treatment Plant. These projections can be seen in the tables and figures below.

FIGURE 1 - TOTAL BREVARD-OWNED WTP FUTURE DAILY WATER DEMAND

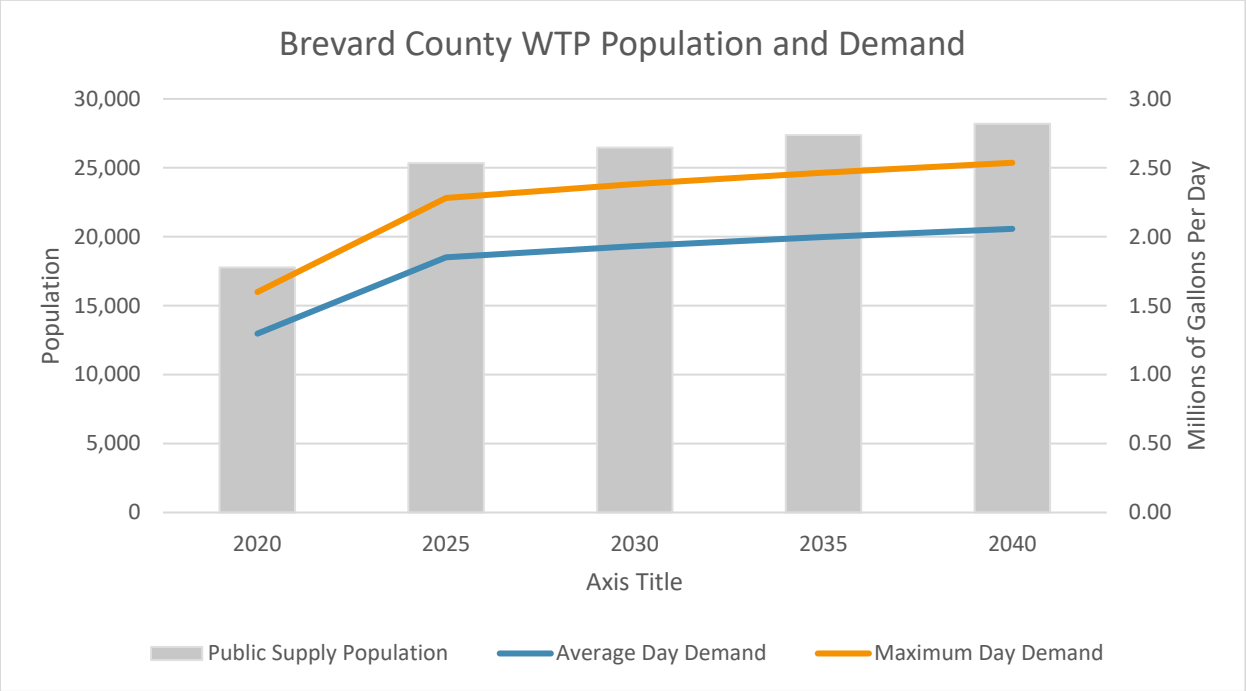


TABLE 10 - BREVARD COUNTY TOTAL WTP FUTURE POTABLE WATER DEMAND (2020-2040)

Year	Projected Public Supply Population	Average Gal. Per Capita (GPD)	Average Day Demand (MGD)	Maximum Gal. Per Capita (GPD)	Maximum Day Demand (MGD)
2020	17,769	73	1.30	90	1.60
2025	25,340	73	1.85	90	2.28
2030	26,459	73	1.93	90	2.38
2035	27,372	73	2.00	90	2.46
2040	28,190	73	2.06	90	2.54

MIMS WTP FUTURE WATER DEMAND

FIGURE 2 - MIMS WTP FUTURE DAILY WATER DEMAND

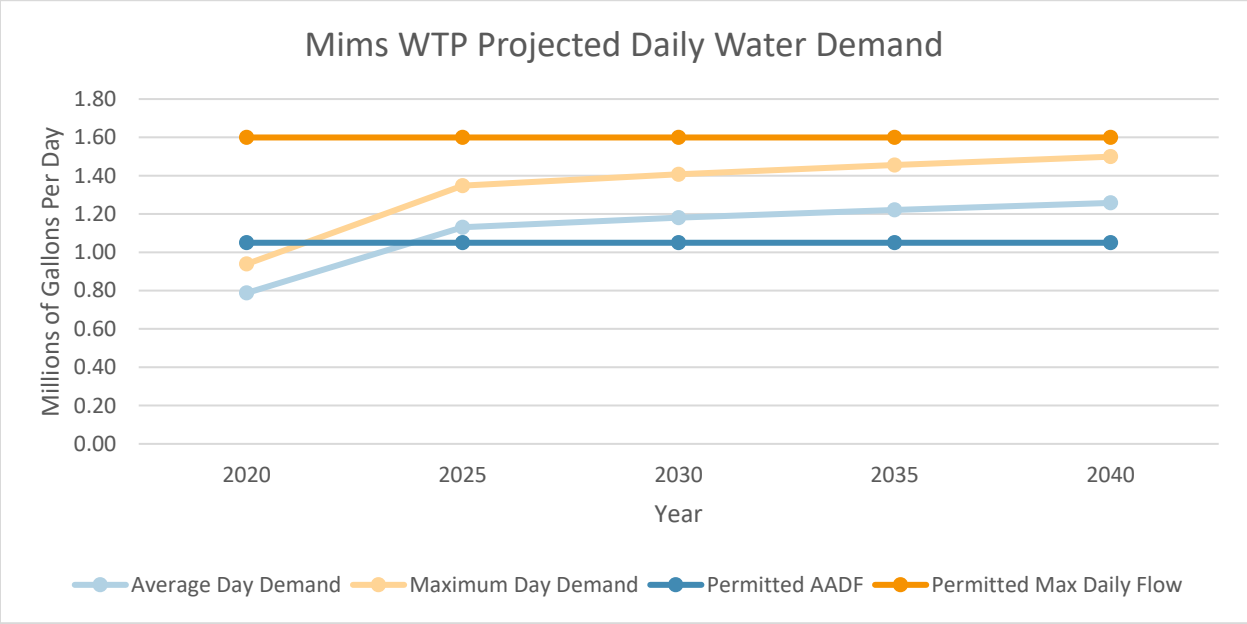


TABLE 11 - MIMS WTP FUTURE POTABLE WATER DEMAND (2020-2040)

Year	Total Population Estimated	Average Gal. Per Capita (GPD)	Average Day Demand (MGD)	Maximum Gal. Per Capita (GPD)	Maximum Day Demand (MGD)	Permitted Surplus at Average Day (MGD)	Design Surplus at Max. Day (MGD)
2020	7,958	99	0.79	118	0.94	0.26	0.66
2025	11,422	99	1.13	118	1.35	-0.08	0.59
2030	11,926	99	1.18	118	1.41	-0.13	0.54
2035	12,337	99	1.22	118	1.46	-0.17	0.50
2040	12,706	99	1.26	118	1.50	-0.21	0.47

As shown in ***Table 11***, Mims WTP is projected to have an average daily demand of 1.26 MGD and a maximum daily demand of 1.50 MGD across 12,706 customers by 2040. As it is currently permitted for 1.05 MGD AADF with design capacity of maximum 1.6 MGD through 2038, **it is not expected to be able to accommodate projected average demand** through 2040 assuming continued CUP limits. **Brevard County should work with SJRWMD to revise up its CUP per previous allocation before small area study.**

Continued conservation and reuse expansion is still recommended to help offset any potential restrictions SJRWMD may impose upon reissuance of CUP after 2038 due to regional long-range supply concerns. The Mims Wastewater Treatment Plant is allocated a significant remaining permitted reuse capacity, so further expansion of its service for non-potable uses is recommended.

BAREFOOT BAY WTP FUTURE WATER DEMAND

FIGURE 3 - BAREFOOT BAY WTP FUTURE DAILY WATER DEMAND

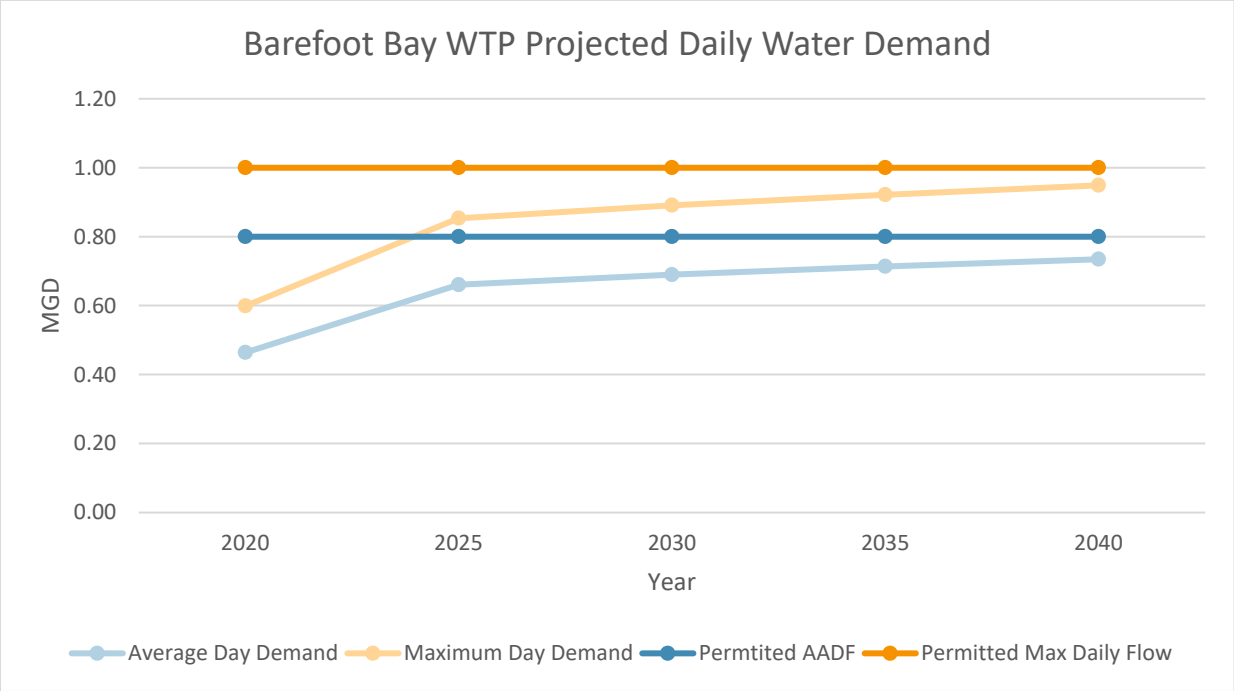


TABLE 12 - BAREFOOT BAY WTP FUTURE POTABLE WATER DEMAND (2020-2040)

Year	Total Population Estimated	Average Gal. Per Capita (GPD)	Average Day Demand (MGD)	Maximum Gal. Per Capita (GPD)	Maximum Day Demand (MGD)	Permitted Surplus at Average Day (MGD)	Design Surplus at Max. Day (MGD)
2020	9,665	48	0.46	62	0.60	0.34	0.40
2025	13,761	48	0.66	62	0.85	0.14	0.15
2030	14,368	48	0.69	62	0.89	0.11	0.11
2035	14,864	48	0.71	62	0.92	0.09	0.08
2040	15,308	48	0.73	62	0.95	0.07	0.05

As shown in ***Table 12***, the Barefoot Bay WTP is projected to have an average daily demand of 0.73 MGD and a maximum daily demand of 0.95 MGD by 2040, serving 15,308 customers. This WTP is projected to be within its current CUP water limit through 2040.

Adopted LOS are demonstrated to be maintained through 2040 based on these projections.

SAN SEBASTIAN WTP FUTURE WATER DEMAND

FIGURE 4 - SAN SEBASTIAN WTP FUTURE DAILY WATER DEMAND

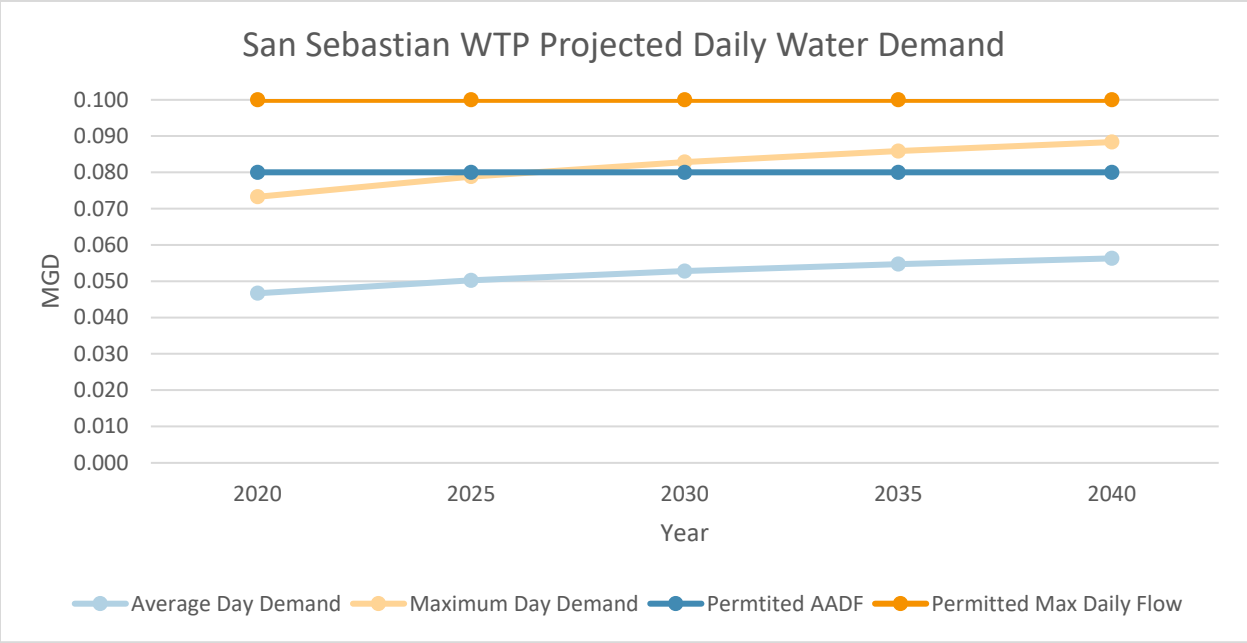


TABLE 13 - SAN SEBASTIAN WTP COUNTY FUTURE POTABLE WATER DEMAND (2020-2040)

Year	Total Population Estimated	Average Gal. Per Capita (GPD)	Average Day Demand (MGD)	Maximum Gal. Per Capita (GPD)	Maximum Day Demand (MGD)	Permitted Surplus at Average Day (MGD)	Design Surplus at Max. Day (MGD)
2020	146	320	0.047	502	0.073	0.033	0.027
2025	157	320	0.050	502	0.079	0.030	0.021
2030	165	320	0.053	502	0.083	0.027	0.017
2035	171	320	0.055	502	0.086	0.025	0.014
2040	176	320	0.056	502	0.088	0.024	0.012

As shown in ***Table 13***, the San Sebastian WTP is projected to have an average daily demand of 0.056 MGD and a maximum daily demand of 0.088 MGD by 2040, serving a projected 176 residents. As it is permitted for 0.08 MGD through 2031, it can accommodate projected future demands and is not in need of supply expansion for the foreseeable future. San Sebastian currently exceeds South Brevard LOS.

Despite the relatively small size of the San Sebastian WTP service territory, its per capita consumption is relatively high compared to other areas in Brevard County and in the region. This may be due to irrigation of large single-family lots, or other non-potable or non-residential uses. It is recommended that this per capita consumption be reduced by expansion of reuse infrastructure from neighboring Barefoot Bay WWTP to serve non-potable uses. Additional water conservation policies are recommended.

SERVICE AREA BOUNDARIES

This Water Supply Plan addresses future demands for potable water and reuse water within the established planning horizon as required by Florida Statutes. In order to determine future water service areas, the current service areas were superimposed over the county's future land use classifications, prioritizing the denser areas for potential expansion. Additionally, the Indian River Lagoon Protection Program (IRLPP), established in 2023, applies to the County. The IRLPP was created to help protect the Indian River Lagoon System from nutrient pollution, prohibiting new septic systems where sewer is available beginning January 1, 2024, and requiring hookup to sewer for existing systems by July 1, 2030. The County is looking to extend water and sewer services to the portions of the county within the BMAP that are currently not being served. Reclaimed water service areas were not redrawn for the purpose of this water supply plan. The proposed future water service area maps can be found in the appendices.

CONSERVATION MEASURES

The County has established and continues to develop a variety of incentive programs including outreach and educational programs, irrigation restrictions, leak detection audits, water reuse and restricted use of potable water for irrigation.

An anticipated growth in sewer hookups due to the 2023 IRLPP will create the possibility for more reuse programs to help offset potable water demand for non-potable uses.

The following table displays the significant remaining Reuse capacity permitted for Brevard's Wastewater Treatment Plants.

TABLE 14 - BREVARD COUNTY WASTEWATER FLOW AND REUSE INFORMATION

Wastewater Treatment Plant	Permitted AADF (MGD)	Permitted Reuse (MGD)	Reuse Average Over Last 10 Years (MGD)
Barefoot Bay	0.9	1.041	0.538
MIMS (North Brevard) aka John D. Wright	0.99	2	0.271
Port St. John	0.5	0.606	0.368
South Beaches	8	3	1.446
South Central	12	10.7	4.003
Sykes Creek	6	4.5	1.466

Source: OCULUS, FL Department of Environmental Protection (DEP) 2023

ADDITIONAL CONSERVATION PROJECTS OUTLINED IN RWSP

- Outreach and education: Water conservation outreach is common throughout the CSEC RWSP area, regarding both indoor and outdoor water use. Water conservation outreach occurs via websites, utility bill stuffers, webinars and in-person events, and through other collaborative approaches implemented by local governments, utilities, SJRWMD, and other partners. The SJRWMD WaterLess campaign launched in 2019 and SJRWMD has successfully partnered with a number of local governments and utilities in the region to expand the public reach and promote decreasing irrigation water use. The SJRWMD Utility Conservation Coordinator group meets quarterly and offers members in the region an opportunity to learn more about specific conservation strategies relevant to their service areas. Other conservation messaging includes general recommendations for efficient water use as well as advertising for existing programs such as Florida-Friendly Landscaping™, Florida Water Star℠, and the Florida Green Building Coalition. Consistent and collaborative messaging in the region is essential to the success of conservation measures.
- Water use audits for residential customers: When employed by a public supply utility, this strategy has been very effective in this region as it provides customized recommendations, includes direct contact with landowners, and can be targeted to water users with the greatest potential for savings.
- Meter reading technology: Automatic meter reading and advanced metering infrastructure are used by several utilities in the CSEC RWSP area to identify high water users or unusual increases in water use relative to historical patterns for individual customers. This technology provides a significant opportunity for water conservation savings when used to identify individual homeowners/businesses that public supply utility staff can then contact to provide technical assistance identifying and resolving the cause(s) of high water use and/or unusual increases.
- Water conservation rebate programs: This strategy offers customers either a reduced price or free replacement of a variety of indoor plumbing fixtures and outdoor irrigation devices (e.g., replacement rain sensors, soils moisture sensors, evapotranspiration controllers). Water savings is achieved one of two ways; either when the replacement fixtures and devices are more efficient than the older fixtures or when broken/malfunctioning fixtures and devices are replaced. Fixture replacement occurs in both residential and commercial customers.
- Innovative practices: Public supply utilities are also experimenting with utilization of new technology as well as data-driven approaches for targeted implementation of existing programs and technology to maximize their effectiveness.

CAPITAL IMPROVEMENTS

The County established long-term strategies for water supply and distribution in the Annual Capital Improvement Plan for Fiscal Year 2022-2023 to Fiscal year 2026-2027. A list of potential projects was created in accordance with the Annual Capital Improvement Plan. ***Table 15*** includes relevant proposed capital improvement utility projects included in the Plan put together by Brevard County and recommended projects to meet future water. The full description of the County's CIPs is included in the appendices.

TABLE 15 - 5-YEAR CAPITAL IMPROVEMENT PLAN THROUGH FY 2027

Timeline	Project Cost	Program Name	Project Name	Project Description	Funded Program	District
Oct 2019-Sept 2027	$11,229,439	County Water and Wastewater	Mims: Water Main Replacement of Asbestos Cement Pipe	This project will replace the asbestos cement and thin-walled PVC pipe in the Mims water distribution system and includes changing over the water service connections from the existing pipes to the new pipes.	6980111	1
Oct 2019-Sept 2024	$380,000	County Water and Wastewater	Mims: Plant Mixing Improvements	This project consists of replacing the chlorine and ammonia mixing system at the Mims water treatment plant. The system has reached its useful life and requires replacement in order to meet FDEP compliance.	6540116	1
Oct 2019-Sept 2024	$1,916,000	County Water and Wastewater	Mims: Clarifier Replacement	Major upgrade that will increase performance/efficiencies of asset 640041 at the Mims Water treatment plant. The clarifier treatment unit was built in the early 1960's and has exceeded its useful life. New turbine, rakes, stilling well and any additional steel components inside the concrete tank will have to be replaced	6540118	1
Oct 2019-Sept 2024	$3,200,500	County Water and Wastewater	Mims: Plant Additional Wells	This project consists of installing new water wells to the Mims water system. Current wells have been underperforming in their water withdrawal resulting in the installation of new wells to meet customer water demand.	6983105	1
Oct 2019-Sept 2024	$1,600,000	County Water and Wastewater	South Beaches: Deep Injection Well Improvements	Replacement of existing Deep Injection Well (DIW) pumps, electrical, controls, instrumentation and building improvements and associated infrastructure which is a substantial improvement to increase performance.	6540318	3
Oct 2019-Sept 2024	$75,000	County Water and Wastewater	South Beaches: Flow Meter Replacement	This project will change the orientation of the pipe from above ground to below ground and will improve the measuring accuracy of the FDEP required flow meter. The current flow meter configuration allows for inaccurate readings due to air entrapment.	6540502	3

Timeline	Project Cost	Program Name	Project Name	Project Description	Funded Program	District
Oct 2019-Sept 2024	$1,600,000	County Water and Wastewater	South Central: Additional Plant Reject Pond	Install additional reject pond and pumping system north of the two existing storage ponds needed to optimize reclaimed water production at SCWWTP and provide additional capacity.	6540423	4
Oct 2019-Sept 2024	$75,000	County Water and Wastewater	South Central: Flow Meter Replacement	This project will change the orientation of the pipe from above ground to below ground and will improve the measuring accuracy of the FDEP required flow meter. The current flow meter configuration allows for inaccurate readings due to air entrapment.	6540420	4
Oct 2019-Sept 2025	$900,000	County Water and Wastewater	South Central: Replace Plant Reuse Transfer Pumps and Controls	Transfer pumps and controls have exceeded the design service life and are becoming more prone to failure.	6540421	4
Oct 2019-Sept 2024	$100,000	County Water and Wastewater	South Central: Reuse Flow Meter Replacement	This project will change the orientation of the pipe from above ground to below ground and will improve the measuring accuracy of the FDEP required flow meter. The current flow meter configuration allows for inaccurate readings due to air entrapment.	6986409	4
Oct 2019-Sept 2024	$440,733	County Water and Wastewater	South Central: Reuse System Optimization Improvements	This project involves several projects to improve the level of service, integrity and operation of the South Central reclaimed water system. Performing these projects will increase the level of service to the reuse customers within this service area.	6540409	4
Oct 2019-Sept 2024	$2,577,928	County Water and Wastewater	South Central: Viera Wetlands Improvements To Pump Station and Effluent Electrical	This project involves the replacement of the Viera Wetlands pumping station. Not only is this pump station not performing to expectation but is visible to those visiting the wetland. This project will address its performance and aesthetics. Current electrical feed to the wetlands pump is insufficient for the pump size/ horse power required for operation. This project brings upgraded power from existing FPL transformers to the pump site. Presently, if the pumps must be operated, they are powered by portable generators. Completion of the project will also reduce the total hours of generator operation and free another generator for use during storm events. Existing wetland equipment is failing and is in need of replacement. Improvements to include a structure to move the equipment out of the elements.	6538429	4

Timeline	Project Cost	Program Name	Project Name	Project Description	Funded Program	District
Oct 2019-Sept 2024	$5,765,000	County Water and Wastewater	Sykes: Effluent Pump Station Building Replacement	Construct a new pump station building with pump station inside for the filter feed pumps and deep injection well pumps; minor filter backwash strainer improvements; and new electrical gear including replacements for automatic transfer switches 1-3 and master distribution panels. Replaces asset 640636.	6520204	2
Oct 2019-Sept 2024	$992,741	County Water and Wastewater	Sykes: Reclaimed Water Improvements	This is phase 1 of a 3 phase project which will provide necessary improvements to the reclaimed water production facility to meet future demands of a growing population in the north Merritt Island region.	6300236	2
Oct 2019-Sept 2024	$5,600,000	County Water and Wastewater	Sykes: Sodium Hypochlorite Improvements	Install new dual chamber chlorine contact tank to replace the one wrapped around the north ground storage tank; install a transfer pump station sized to pump up to the future height of the ground storage tanks; install new sodium hypochlorite storage facility including a new building.	6300239	2
Oct 2019-Sept 2024	$647,000	Barefoot Bay Water and Wastewater	Barefoot Bay Water: Center Drive Replacement	Original Drive Equipment is 20 years old and has reached its useful life. The drive is rusting and sweeping corner drives are worn and leaking. This component is major component of the water production plant.	6540315	3
Oct 2019-Sept 2024	$1,431,964	Barefoot Bay Water and Wastewater	Barefoot Bay Water: Chlorine & Ammonia Feed Systems At The Booster Pump Station And Soft Starters Installation	This project consists of installing a chlorine and ammonia feed system at the Barefoot Bay water booster station. Included in this project are upgrades to the pumping and electrical systems that would be tied into this project. Completion of this project will assure that we continually meet the Clean Water Act requirements associated with potable water.	513868	3
Oct 2019-Sept 2023	$375,000	Barefoot Bay Water and Wastewater	Barefoot Bay Wastewater: Clarifier Rehabilitation	This project involves the rehabilitation of clarifier #1 (West), asset #640020. The current clarifier is not in operation. This project will address the age and the performance of the equipment. Doing so will assure we maintain compliance with the FDEP.	6540314	3
Oct 2019-Sept 2024	$260,000	Barefoot Bay Water and Wastewater	Barefoot Bay Water: Carbon Dioxide Replacement	The current CO2 system is undersized and replacement is needed to have better pH control to compensate for variability of lime slaker at the water production plant.	6540316	3

Timeline	Project Cost	Program Name	Project Name	Project Description	Funded Program	District
Aug 2023-Sept 2025	$1,131,200	Barefoot Bay Water and Wastewater	PROPOSED: Barefoot Bay Water: Plant Additional Wells	This proposed project consists of installing 2 new water wells to the Barefoot Bay water system in order to meet projected future customer water demand.	N/A	3
Aug 2023-Sept 2030	$33,638,768	Barefoot Bay Water and Wastewater	PROPOSED: Barefoot Bay And San Sebastian Water: Water Main Installation*	This project will install 8" PVC water mains along with corresponding fire hydrants and gate valves in accordance with the proposed expansion of the Barefoot Bay and San Sebastian water distribution systems.	N/A	3
Aug 2023-Sept 2032	$65,539,094	County Water and Wastewater	PROPOSED: Mims Water: Water Main Installation*	This project will install 8" PVC water mains along with corresponding fire hydrants and gate valves in accordance with the proposed expansion of the Mims water distribution system.	N/A	1

*Proposed projects, not obtained from Brevard County Annual Capital Improvement Plan.

RELEVANT REGIONAL WATER SUPPLY ISSUES

St. Johns River Water Management District foresees no acute issues with the Upper Floridan Aquifer, Surficial Aquifer, Lake Washington, or Taylor Creek Reservoir that would cause a shortage of public water supply in Brevard County for the planning period of this Work Plan.

Algal (Cyanobacteria) toxins are found seasonally in Lake Washington, causing the Department of Health to issue alerts not to drink, swim, wade, boat or eat fish from the lake. However, the health department has informed residents of Brevard County that there is no risk to water customers as water from the lake is treated prior to entering the water distribution system.

Although Brevard County's projected population and water demand fall within available current CUP limits, the SJRWMD does foresee long-term traditional supply concerns region-wide, primarily due to aquifer saltwater intrusion. District UFA monitoring wells, in addition to Public Utility well water quality monitoring reports show increasing salinity concentrations, especially along the Indian River Lagoon, possibly due to lateral intrusion as well as to upconing from overdraw. The District estimates that many of these wells already do or will exceed Secondary Drinking Water Standard chloride limits by 2040. While this is unlikely to result in impacts to public supply due to existing water treatment infrastructure, expanded draws may compromise water quality for neighboring domestic self-supply systems. Data from SAS public supply wells show that while saltwater intrusion is increasingly compromising this resource overall, adoption and adherence to wellfield protection plans are demonstrated to reduce and even reverse chloride concentration trends.

Brevard County is encouraged to consider expansion of alternative water supply projects including Reverse Osmosis treatment, and to continue to adopt and expand water conservation policies, wellfield protection plans, land conservation for groundwater recharge, Low-Impact Design (LID) and Green Stormwater Infrastructure (GSI) incentives and requirements, and reuse projects in line with the SJRWMD recommendations.

GOALS, OBJECTIVES AND POLICIES

To support this Plan, Brevard is recommending policy changes to the following Comprehensive Plan Elements.

These have been drafted and submitted to the county for review.

CONCLUSION AND RECOMMENDATIONS

In summary, Brevard County's population is expected to grow at nearly 1% per year through 2040, and therefore its public water demand will increase similarly. County-owned water supply resources are currently sufficient to accommodate projected future water supply demands and current adopted LOS standards. However, the County may need to modify consumptive use permits in order to be authorized to serve the increased population.

The St. Johns River Water Management District does anticipate that future regional traditional water supply will not be sufficient to meet demand given overall regional population growth in addition to other factors. While supply-source surface water Minimum Flow Levels (MFLs) are projected to be met through 2040 in Brevard County, increasing saltwater intrusion of groundwater sources will necessitate continued conservation policies, reuse expansion, and the exploration of Alternative Water Supply infrastructure including RO treatment.

GLOSSARY AND ACRONYMS

Alternative Water Supply - Water supplied by sustainable sources that can be used to help offset the use of fresh surface water and groundwater .

Aquifer - A geologic formation, group of formations, or part of a formation that contains sufficient saturated, permeable material to yield significant quantities of water to wells and springs.

Average Annual Daily Demand (AADD) – The total volume of water delivered to the system in a full year expressed in gallons. When demand fluctuates up and down over several years, an average is used. (Average Daily Demand, ADD, is the total volume of water delivered to the system over a year divided by 365 days.)

Average Annual Daily Flow (AADF) - Average flow for the individual year or multi-year period of interest. It is obtained by dividing the sum of all the individual daily flows by the number of daily flows recorded for the year.

Gallon Per Day (GPD)

Basin Management Action Plans (BMAPs) - A framework for water quality restoration that contains local and state commitments to reduce pollutant loading through current and future projects and strategies. BMAPs contain a comprehensive set of solutions, such as permit limits on wastewater facilities, urban and agricultural best management practices, and conservation programs designed to achieve pollutant reductions established by a total maximum daily load (TMDL). BMAPs are adopted by Florida Department of Environmental Protection Secretarial Order and are legally enforceable.

Bureau of Economic and Business Research (BEBR) - BEBR was founded in 1930 and is part of the University of Florida College of Liberal Arts and Sciences. BEBR began publishing the Florida Statistical Abstract in 1967. This award-winning research volume of statistical data about Florida is the standard for Comprehensive Plans data needs related to population, housing, employment, income, education, health, tourism, elections, and much more.

Central Florida Water Initiative (CFWI) – One of three water supply planning areas for St. Johns River Water Management District and includes the City of Cocoa in its Water Supply Plan adopted in November of 2020.

Central Springs/East Coast Regional Water Supply Plan (CSEC RWSP) - Recognizes the unique local challenges and resource constraints facing the central region springs and coastal areas of the district. The planning region encompasses three sub-regions that include Marion and north Lake counties, Volusia County and Brevard, Indian River and Okeechobee counties. The plan is updated every 5 years and is adopted by the by the St Johns River Water Management District Governing Board.

Consumptive Use Permit (CUP) – According to the SFWMD, this is a permit that allows the holder to withdraw a specified amount of water from the ground (aquifers) or a canal, lake or river (surface water) for reasonable-beneficial uses.

Facility Identification for the Treatment Plants (FACID)

Florida Department of Environmental Protection (FDEP) - The Florida Department of Environmental Protection is the state's lead agency for environmental management and stewardship, protecting our air, water and land.

Florida-Friendly Landscaping - A landscaping method that details nine landscape principles that conserve water, protect the environment, and promote planting native flora adaptable to local conditions.

Florida Green Building Coalition (FGBC) - Created five "Florida Green" Standards. These standards were founded by industry professionals to promote sustainability in the built environment. Florida Green Standards are designed specifically for Florida. The standards represent a scientific approach to address Florida's unique climate and resiliency needs.

Florida Water Star - A certification program for homes and commercial buildings that use less water in landscapes, irrigation systems and indoors.

Gallons Per Capita Per Day (GPCD)

High-Density Polyethylene (HDPE) - Manufactured from high-density polyethylene, a flexible, lightweight and thermoplastic material.

Indian River Lagoon Protection Program (IRLPP) - Established by Section 373.469, F.S. consists of the Banana River Lagoon Basin Management Action Plan, Central Indian River Lagoon Basin Management Action Plan, North Indian River Lagoon Basin Management Action Plan, and Mosquito Lagoon Reasonable Assurance Plan, and such plans are the components of the Indian River Lagoon Protection Program which achieve phosphorous and nitrogen load reductions for the Indian River Lagoon. The Indian River Lagoon refers to the combined Indian River Lagoon Surface Water Improvements and Management Plan (SWIM) and National Estuary Programs.

Level of Service (LOS)

Low Impact Development or Design (LID) - Refers to systems and practices that use or mimic natural processes that result in the infiltration, evapotranspiration or use of stormwater to protect water quality and associated aquatic habitat. LID is used to preserve, restore and create green space using soils, vegetation, and rainwater harvest techniques. LID is an approach to land development (or re-development) that works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat stormwater as a resource rather than a waste product.

Million Gallons Per Day (MGD) - A flow rate expressed in millions of gallons per day.

Minimum Flow Levels (MFLs)

Monthly Operation Report (MOR)

North Florida Planning Area – One of three water supply planning areas for St. Johns River Water Management District and includes 14 counties. This planning area is in the process of updating its plan. It is anticipated that this plan will be approved in the Fall of 2024.

OCULUS - The Electronic Document Management System (EDMS) used by the Florida Department of Environmental Protection (DEP) to store documents.

Onsite Sewage Treatment and Disposal Systems (OSTDS) - A system that contains a standard subsurface, filled, or mound drainfield system; an aerobic treatment unit; a graywater system tank; a laundry wastewater system tank; a septic tank; a grease interceptor; a pump tank; a solids or effluent pump; a waterless, incinerating, or organic waste-composting toilet; or a sanitary pit privy that is installed or proposed to be installed beyond the building sewer on land of the owner or on other land to which the owner has the legal right to install a system. This term does not include package sewage treatment facilities and other treatment works regulated under chapter 403 FS.

Potable Water - Water that is suitable for drinking, culinary, or domestic purposes.

Regional Water Supply Plan (RWSP)

South Brevard Water - For water supply planning purposes, South Brevard encompasses two Water Treatment Plants specifically Barefoot Bay and San Sebastian.

St. Johns River Water Management District (SJRWMD) - An environmental regulatory agency of the state of Florida whose work is focused on ensuring a long-term supply of drinking water, and to protect and restore the health of water bodies in the district's 18 counties in northeast and east-central Florida. While the district works closely with utilities on water supply issues, the district is not a water supplier. SJRWMD was established in 1972 by the state Legislature through passage of the Water Resources Act (Chapter 373, *Florida Statutes*).

Surficial Aquifer - The Surficial Aquifer System is widespread and shallow, ranging from approximately 100 to 300 feet underground. It is separated from the Floridan Aquifer System by a confining bed of soil. Surficial aquifers provide most of the public freshwater supply southwest of Lake Okeechobee and along the Atlantic coast in St. Lucie, Martin, Palm Beach, Broward and Miami-Dade counties**.**

Total Maximum Daily Load (TMDL) - A scientific determination of the maximum amount of a given pollutant that a surface water can absorb and still meet the water quality standards that protect human health and aquatic life. Waterbodies that do not meet water quality standards are identified as "impaired" for the pollutants of concern (nutrients, bacteria, mercury). The threshold limits on pollutants in surface waters (Florida's surface water quality standards on which TMDLs are based) are set forth primarily in rule 62-302, Florida Administrative Code, and the associated table of water quality criteria.

Upconing – Upward migration of mineralized or saline water as a result of pressure variation caused by withdrawals.

Upper Floridan Aquifers (UFA) - The Upper Floridan aquifer is the primary source of water supply in most of north and central Florida. In the southern portion of the state, the aquifer is deeper and contains brackish, or slightly salty water.

Water Supply Facilities Work Plan (WSFWP) - A plan to establish future water demands and potential water sources and facilities to meet those demands for a 20-year planning horizon. This plan is developed in collaboration with St. Johns River Water Management District, adopted by reference in the Brevard County Comprehensive Plan and must be updated within 18 months after the St. Johns River Water Management District approves an update to the regional water supply plans affecting Brevard County.

Water Treatment Plant (WTP)

Wastewater Treatment Plant (WWTP)

Agenda Report

2725 Judge Fran Jamieson Way
Viera, FL 32940

Public Hearing

G.2. 2/12/2024

Subject:

Christopher D. Strozier requests a change of zoning classification from RU-1-9 to RU-1-11. (23Z00086) (District 1) This item is requested to be tabled for re-advertising.

Fiscal Impact:

None

Dept/Office:

Planning and Development

Requested Action:

It is requested that the Planning and Zoning Board table the request for re-advertising.

Summary Explanation and Background:

Clerk to the Board Instructions:

None