

# City of South Daytona

## Community Development Department

1672 S. Ridgewood Avenue • South Daytona, FL 32119 • 386/322-3022 • Fax 386/322-3018



To: James L. Gillis Jr., City Manager

From: S. Laureen Kornel, Community Development Director

Date: June 1, 2023

Re: **First Reading of Ordinance No. 2023-08 to transmit a Large-Scale Comprehensive Plan Amendment to adopt the 2023-2032 Water Supply Facilities Work Plan and associated amendments to the Public Facilities and Intergovernmental Coordination Elements of the Comprehensive Plan**

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**Overview:** This is an administrative request to adopt Ordinance No. 2023-08 requesting the City Council transmit the 2023-2032 Water Supply Facilities Work Plan Update and associated Comprehensive Plan amendments attached to this memorandum. Included are text amendments to the Intergovernmental Coordination and Public Facilities Elements. To promote consistency among local government comprehensive plans, the subject 2023-2032 Water Supply Facilities Work Plan and proposed amendments are requirements by the State of Florida pursuant to Section 163.3177(6)(c)3, F.S.

**Background:** In 2005, the Florida Legislature made significant changes to Chapters 163 and 373, F.S., to strengthen the link between land use and water supply planning. These changes were included in Senate Bill 360 (Chapter 2005-290, Laws of Florida) and Senate Bill 444 (Chapter 2005-291, Laws of Florida). The legislative changes encourage cooperation in the development of alternative water supplies and reemphasize the need for conservation and reuse. Local governments in Florida are required to update their comprehensive plans to identify alternative and traditional water supply projects, conservation and reuse necessary to meet the water needs in their jurisdictions, and to include a Water Supply Work Facilities Plan for building public water supply facilities necessary to meet water needs. The Water Supply Facilities Work Plan acts as a support document for the Comprehensive Plan amendments, identifying existing conditions, future needs, and plan implementation.

As required by Policy 2-9 of the Comprehensive Plan and Section 163.3177(6)(c)3, F.S., the subject 2023-2032 Water Supply Facilities Work Plan and Comprehensive Plan amendments must be adopted 18 months after the respective water management districts approve the latest update to their regional water supply plan. For local governments in Volusia County, the timeframe to adopt the Comprehensive Plan amendments and Water Supply Work Plan commenced with the St. Johns River Water Management District's (SJRWMD) approval of the update to the District Water Supply Plan in February 2022. This means that all local governments in the District are required to have adopted their Water Supply Facilities Work Plan and Comprehensive Plan amendments by August 2023, to comply with the water supply legislation. Without the adoption of the work plan and amendments, future comprehensive plan amendments may be held in abeyance until the Water Supply Facilities Work Plan and associated amendments are adopted.

**Discussion:** The City of Daytona Beach is the wholesale water supplier for the City of South Daytona. This fact limits the requirements of the City's Water Supply Facilities work plan regarding supply sources and lies under the umbrella of the City of Daytona Beach for water and wastewater services. South Daytona's water system is limited to only the distribution mains having no booster stations nor storage. The City continues to maintain a stable population and is considered substantially built out. Overall water demand has not changed along with minimal growth in terms of future development.

The City of South Daytona unanimously voted to adopt Resolution No. 2023-06 to authorize the Mayor and the City Manager to execute the new Wholesale Water, Wastewater, and Reuse Services Agreement between the City and the City of Daytona Beach. Once the City of Daytona signs the agreement, the agreement will be attached to the Water Supply Work Plan and sent to the Department of Economic Development Opportunity as part of the required amendment.

Staff has worked closely with the St. John's River Water Management District (SJRWMD) in the preparation of the proposed Work Plan and amendments. The Public Works Facilities element proposes to update the narrative section of the element to remove Table P-6 as it is redundant to include the table since the updated table is already provided within the proposed 2023-2032 Water Supply Facilities Work Plan. In addition, as recommended by the SJRWMD Policy 1-9 to adopt the 2023-2032 Water Supply Facilities Work Plan has been added. Finally, the Intergovernmental Coordination Element is proposed to delete Policy 4-6 as a matter of nomenclature since the East Volusia Water Authority no longer exists. All changes are denoted in underline (added) and strike through (deleted) within the proposed ordinance. The 2023-2032 Water Supply Facilities Work Plan qualifies as the 10-year plan and includes the necessary amendments to the Goals, Objectives, and Policies that must also be adopted by the City Council for transmittal to the Florida Department of Economic Opportunity at a public hearing.

**Conclusion:** The amendment is considered a large-scale Comprehensive Plan Amendment eligible for expedited State review pursuant to Section 163.3184, F.S. The amendment also requires a Volusia Growth Management Commission (VGMC) consistency determination. The City Council adoption hearing (second reading of the Ordinance) will be scheduled after the Department of Economic Opportunity (DEO) and VGMC certification of the amendment, likely in July or August. The attached ordinance includes the proposed Private Property Rights Comprehensive Plan Element in underline.

**Recommendation:** Staff recommends that the City Council **APPROVE** at first reading, Ordinance No. 2023-08, an administrative request for a Large-scale Comprehensive Plan amendment, as specified in underline in the attached ordinance, to adopt the 2023-2032 Water Supply Facilities Work Plan and associated Comprehensive Plan amendments and to authorize staff to transmit the amendment to the DEO and the VGMC.

Attachment: Ordinance No. 2023-08

**ORDINANCE NO. 2023-08**

**AN ORDINANCE OF THE CITY OF SOUTH DAYTONA, FLORIDA, RELATING TO COMPREHENSIVE PLANNING; ADOPTING A 2023-2032 WATER SUPPLY FACILITIES WORK PLAN; PROVIDING FOR AMENDMENTS TO THE CITY OF SOUTH DAYTONA COMPREHENSIVE PLAN TO INCORPORATE BY REFERENCE THE 2023-2032 WATER SUPPLY FACILITIES WORK PLAN; AMENDING THE INTERGOVERNMENTAL COORDINATION ELEMENT AND PUBLIC FACILITIES ELEMENT OF THE CITY OF SOUTH DAYTONA COMPREHENSIVE PLAN RELATING TO WATER SUPPLY PLANNING; AND PROVIDING FOR FINDINGS, ADMINISTRATIVE ACTIONS, CODIFICATION, CONFLICTS, SEVERABILITY, AND AN EFFECTIVE DATE.**

**WHEREAS**, the City of South Daytona has adopted a Comprehensive Plan in accordance with the State of Florida Community Planning Act; and

**WHEREAS**, in 2005, the Florida Legislature made significant changes to Chapters 163 and 373, F.S., to strengthen the link between land use and water supply planning, and such changes were included in Senate Bill 360 (Chapter 2005-290, Laws of Florida) and Senate Bill 444 (Chapter 2005-291, Laws of Florida); and

**WHEREAS**, to promote consistency among local government comprehensive plans and the Central Springs/East Coast Regional Water Supply Plan, Section 163.3177(6)(c)(3), Florida Statutes, requires each local government within the Central Springs/East Coast Regional Water Supply Plan planning area to amend its comprehensive plan to adopt an updated Water Supply Facilities Work Plan within 18 months of governing board approval of the 2022 Central Springs/East Coast Regional Water Supply Plan; and

**WHEREAS**, the City of South Daytona is required to amend the City's Comprehensive Plan to include an updated Water Supply Facilities Work Plan that is consistent with and reflects changes mandated by State law; and

**WHEREAS**, the City of South Daytona, Florida has the authority to amend its Comprehensive Plan pursuant to Chapter 163, Part II, Florida Statutes; and

**WHEREAS**, on May 17, 2023, the City of South Daytona Planning and Appeals Board, serving as the local planning agency, held a public hearing on the proposed amendments to the City of South Daytona Comprehensive Plan in accordance with Chapter 163, Florida Statutes, and recommended adoption of the proposed 2023-2032 Water Supply Facilities Work Plan and associated comprehensive plan amendments to the City Council; and

**WHEREAS**, the City Council has held public hearings concerning the comprehensive plan amendment in accordance with Chapter 163, Florida Statutes; and

**WHEREAS**, the proposed amendment was submitted to the Volusia Growth Management Commission (the "VGMC") for review, and following said review, the VGMC issued a Consistency Certification thereon; and

**WHEREAS**, the City Council has considered the proposed 2023-2032 Water Supply Facilities Work Plan and comprehensive plan amendment, finds that adoption thereof is in the best interest and welfare of the citizens of the City as it complies with state law, and has determined that all conditions required for the adoption of this amendment have been met, including the necessary hearings and public notices, in conformity with the procedural and substantive requirements of Florida Statutes, the City of South Daytona Land Development Code, and the Comprehensive Plan, as amended hereby; and

**WHEREAS**, for purposes of this Ordinance, underlined type shall constitute additions to the original text, \*\*\* shall constitute ellipses to the original text and ~~strikethrough~~ shall constitute deletions to the original text.

**NOW THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SOUTH DAYTONA, VOLUSIA COUNTY, FLORIDA THAT:**

**SECTION 1. Recitals.** The above recitals are true and correct and are incorporated herein by reference.

**SECTION 2. Adoption of 2023-2032 Water Supply Facilities Work Plan.** The City Council of the City of South Daytona hereby adopts the 2023-2032 Water Supply Facilities Work Plan attached hereto as Exhibit "A".

**SECTION 3. Adoption of Comprehensive Plan Amendments.** The Public Facilities Element and the Intergovernmental Coordination Element of the City of South Daytona Comprehensive Plan are hereby amended as follows:

## **PUBLIC FACILITIES ELEMENT**

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### **NEEDS ASSESSMENT**

The water system needs assessment is drawn from the potable water supply plan incorporated by reference by Policy 1-9 of this Element ~~adopted in 2009~~ and addresses demand, supply and water quality considerations. The historical and projected potable water usage is provided within the Water Supply Facilities Work Plan.

~~Table P-6 below provides the historical and projected potable water usage.~~

TABLE P-6				
CITY OF SOUTH DAYTONA				
EXISTING AND PROJECTED POPULATIONS				
WITH RECORDED AND PROJECTED POTABLE WATER USAGE				
YEAR	POPULATION	PROJECTED POPULATION	WATER USAGE	PROJECTED USAGE**
2005	13,955		1,059,189 gal.	
2008	13,148		1,051,856 gal.	
2010	12,252		1,019,726 gal.	
2015	12,558		1,035,457 gal.	
2020		12,941		1,033,620 gal.
2025		13,324		1,096,668 gal.
2030		13,707		1,128,192 gal.
2035		14,090		1,159,715 gal.
** Based on 2.6 persons per ERC and 214 gpd/ERC				

The well field firm capacity for the City of Daytona Beach is 28.2 MGD, the water treatment plant capacity is 24 MGD and the current CUP allocation is ~~46.16~~ 18.0 MGD. Using the water treatment plant capacity of 24 MGD. The needed capacity will be met through the 2035 projected growth.

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**Policy 1-9** The City's 2023-2032 Water Supply Facilities Work Plan is adopted by reference and incorporated herein. The 2023-2032 Water Supply Facilities Work Plan shall remain on file with the City Clerk and available for public inspection.

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## INTERGOVERNMENTAL COORDINATION ELEMENT

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~~Policy 4.6: The City shall support the work of the East Volusia Regional Authority, in planning solutions for the regional management of water resources.~~

**SECTION 4. Administrative Actions.** The City Manager, or designee, is hereby authorized and directed to implement the provisions of this Ordinance and to take any and all necessary administrative actions to include, but not be limited to, the adoption of administrative

forms, policies, procedures, processes and rules.

**SECTION 5. Codification.** The provisions of Section 3 of this Ordinance shall become and be made a part of the City of South Daytona Comprehensive Plan, and the contents of this Ordinance may be re-numbered or re-lettered to accomplish such intention and the word "Ordinance", or similar words, may be changed to "Section," "Article", or other appropriate word; sections other than those specified shall not be codified. The Code codifier is granted liberal authority to codify the provisions of this Ordinance.

**SECTION 6. Conflicts.** All ordinances or parts thereof in conflict with this Ordinance are hereby repealed to the extent of such conflict.

**SECTION 7. Severability.** If any section, subsection, sentence, clause, phrase, or portion of this Ordinance, or application hereof, is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion or application shall be deemed a separate, distinct, and independent provision and such holding shall not affect the validity of the remaining portions thereof.

**SECTION 8. Effective Date.** In accordance with Section 163.3184(3)(c)(4), Florida Statutes, the comprehensive plan amendment set forth herein shall not become effective until 31 days after the state land planning agency notifies the City that the plan amendment package is complete. If timely challenged, the comprehensive plan amendment set forth in this Ordinance shall not become effective until the state land planning agency or the Administration Commission enters a final order determining the adopted comprehensive plan amendment to be in compliance with controlling state law.

**APPROVED** upon first reading on the 13<sup>th</sup> day of June, 2023 at a regular meeting of the City Council of the City of South Daytona.

**APPROVED AND ADOPTED** upon second and final reading on the \_\_\_\_ day of \_\_\_\_\_, 2023 at a regular meeting of the City of South Daytona City Council.

ATTEST:

\_\_\_\_\_  
James L. Gillis, Jr., City Manager

\_\_\_\_\_  
William C. Hall, Mayor

CERTIFIED AS TO FORM:

\_\_\_\_\_  
Wade C. Vose, City Attorney

# **2023-2032**

# **CITY OF SOUTH DAYTONA**

# **WATER SUPPLY FACILITIES**

# **WORK PLAN**



Prepared by Community Development  
and Public Works Departments

# Table of Contents

I.	Introduction.....	3
II.	Statutory Requirements and Data Analysis.....	4
A.	Statutory Requirements.....	4
B.	Data Analysis .....	5
III.	Water Supply Infrastructure Needs .....	9
IV.	Schedule of Capital Improvements.....	9
V.	Goals, Objectives, and Policies .....	100
VI.	Water Supply Reuse and Conservation Practices.....	10



## I. Introduction

All water management districts have determined that portions of their districts will have insufficient supplies of water from traditional sources (typically groundwater) over the next 20 years to meet the demands of both their growing population and the environment and agriculture. To ensure adequate water supplies, the Legislature has established a coordinated planning process between regional water supply plans prepared by the water management districts pursuant to Chapter 373, Florida Statutes (F.S.), and comprehensive plans prepared by local governments pursuant to Chapter 163, Part II, F.S. Under these laws, local governments must address in their comprehensive plans the water supply sources necessary to meet and achieve existing and projected water use demand for the established planning period, considering the applicable regional water supply plan prepared pursuant Section 373.709, F.S. [Section 163.3167(9), F.S.] Section 163.3177(6)(c)3, F.S., requires local governments within areas projected to have insufficient supplies of water from traditional sources to amend their comprehensive plan:

- (1) to 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); and
- (2) to adopt a work plan, covering at least a 10-year planning period, for building public, private, and regional water supply facilities, including the development of alternative water supply projects and conservation and reuse, which are necessary to serve existing and new development. Once adopted, the work plan must be updated within 18 months after the water management district updates the regional water supply plan, which typically occurs every five years.

Currently and for the foreseeable future, The City of South Daytona purchases all finished potable water from the City of Daytona Beach. This fact limits the requirements of this report regarding supply sources and makes South Daytona dependent on its neighboring municipalities for water and wastewater services. The City has recently renewed the agreement with Daytona Beach and a copy of the agreement is included as Appendix A. The agreement provides for an average day capacity of 1.0 MGD. The capacity allocation included as part of the agreement satisfies the City's current and projected needs as further described herein with Section II B.

South Daytona's water system is limited to only the distribution mains having no booster stations nor storage. The City's distribution mains are a combined length of approximately 40 miles and sized from 6-inch to 14-inch. Within this system, there are three metered connections joining the City of Daytona Beach to the City of South Daytona. The City also has emergency interconnects with the City of Port Orange water system for use in the event of supply or quality problems from Daytona Beach.

The City's system is classified as a consecutive water system by FDEP and has a permit with monitoring and compliance requirements. The City's permit compliance responsibilities are

defined under the terms of FAC -550.540 Monitoring of Consecutive Public Water Systems. These requirements include: microbiological monitoring, compliance with the lead and copper rule and residual disinfectant monitoring throughout the distribution system.

Water supply capacity for South Daytona is included within the City of Daytona Beach's Consumptive Use Permit (CUP). The CUP is issued to Daytona Beach and regulated by St. John's River Water Management District. Requisite allocations for the City's current and projected water supply needs are included within the CUP. South Daytona has no permit compliance requirements associated with the CUP.

## II. Statutory Requirements and Data Analysis

### A. Statutory Requirements

As a local government, the City of South Daytona is required to adopt a water supply work plan that complies with the following statutory requirements for water supply and facility planning. The requirements are labeled as numbers with the City's response beneath and labeled as a letter:

1. Coordinate appropriate aspects of their comprehensive plan with the appropriate water management district's regional water supply plan. [Section 163.3177(4)(a), F.S.]
  - a. Plan and revisions to be sent to St. Johns River Water Management District (SJRWMD) upon City completion.
2. Revise the Potable Water Sub-Element to adopt a water supply facilities work plan covering at least a 10-year planning period to meet existing and projected demand. The work plan should address those water supply facilities for which the local government has responsibility and include the facilities needed to develop alternative water supplies. The work plan should also identify conservation and reuse measures to meet future needs. [Section 163.3177(6)(c), F.S.]
  - a. This section of the comprehensive plan falls under the Public Facilities Element and currently covers the 10-year planning period. Therefore, no revision is required at this time.
3. Revise the Conservation Element to assess current and projected water needs and sources for at least a 10-year planning period. The analysis must consider the existing levels of water conservation, use, and protection and the applicable policies of the water management district, and the district's approved regional water supply plan. In the absence of an approved regional water supply plan, the analysis must consider the district's approved water management plan. [Section 163.3177(6)(d)3, F.S.]
  - a. The City of South Daytona still relies on the City of Daytona Beach as its source for potable water. Conservation measures are currently in place through local ordinance and education measures, as stated in the element. For these reasons,

the “water needs and sources” section of this element (included in Section V.C. of this document) has no need for revision at this time.

4. Revise the Capital Improvements Element to identify capital improvements projects to be implemented in the first 5 years of the work plan for which the local government is responsible, including both publicly and privately funded water supply projects necessary to achieve and maintain adopted level of service standards; and adopt a 5-year schedule of capital improvements to include those projects as either funded or unfunded, and if unfunded, given a level of priority for funding. [163.3177(3)(a)4, F.S.]
  - a. The existing Capital Improvement Element outlines the City’s short-term (5 year) capital improvements up to FY 22/23. It also outlines funding sources and needs as required. Therefore, the general language in this element does not require updating, but as this year closes, an updated capital improvement plan will be provided in the comprehensive plan.
5. Revise the Intergovernmental Coordination Element to adopt principles and guidelines to be used to coordinate the comprehensive plan with the regional water supply authority (if applicable) and with the applicable regional water supply plan. [163.3177(6)(h)1, F.S.]
  - a. The existing Intergovernmental Coordination Element directly addresses this requirement in Policy 2-9 (included in section V.A. below). No revision is required.
6. During the Evaluation and Appraisal review, determine if comprehensive plan amendments are necessary to reflect statutory changes related to water supply and facilities planning since the last update to the comprehensive plan. If necessary, transmit the amendments to incorporate the statutory changes as appropriate. [Section 163.3191(1) and (2), F.S.]
  - a. No known alterations are currently necessary related to statutory changes.

## B. Data Analysis

In preparing the work plan, South Daytona should coordinate with the water management district regarding population and water demand projections, areas to be served, the availability of traditional and alternative water supplies, bulk sale agreements, and water conservation and reuse strategies necessary to meet projected demand. At a minimum, population projections must be based on the medium population projections prepared by the University of Florida, Bureau of Economic and Business Research, or projections generated by the local government based upon a professionally acceptable methodology.

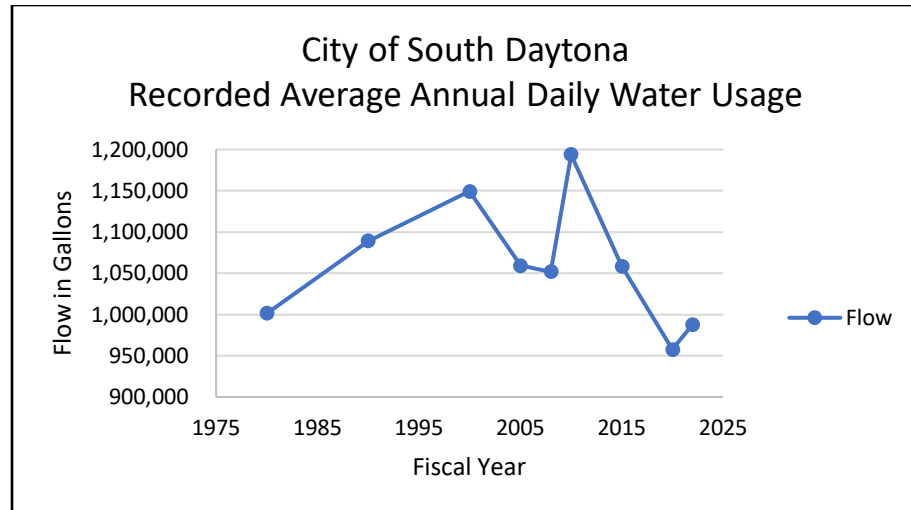
Since Daytona Beach provides finished water to South Daytona, our City is not responsible for any the water supply and facilities within its jurisdiction. However, the City still must ensure its water supply and facilities needs are adequately addressed by the provider. Daytona Beach should also include within its work plan adequate supplies and facilities to serve South Daytona.

Documentation should include any agreement that South Daytona may have with the showing that provision has been made for its existing and projected water supply and facilities' needs. South Daytona has a responsibility to adopt policies in their comprehensive plan to conserve water and to require the use of reclaimed water when it is available.

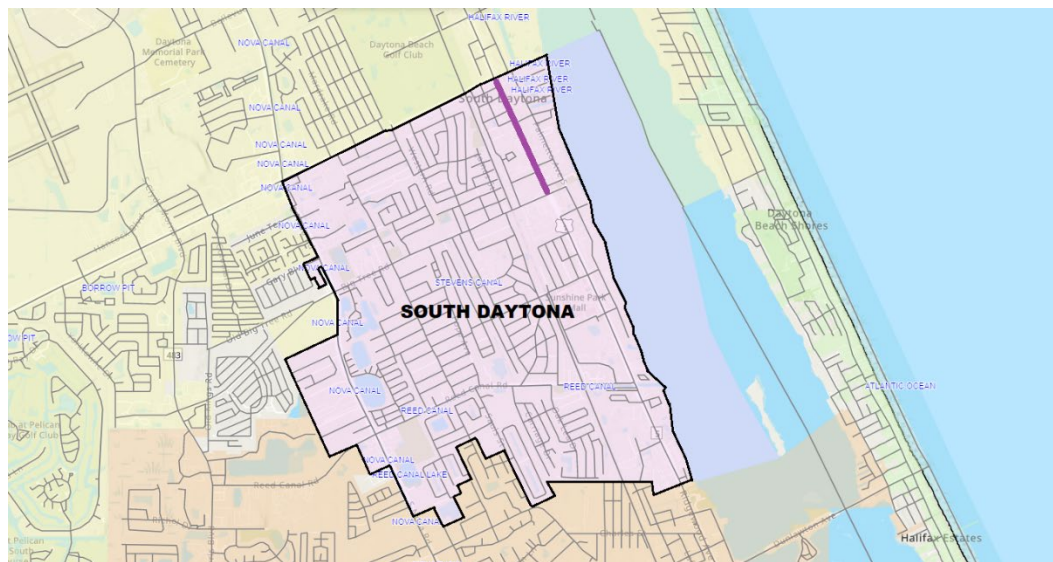
While South Daytona does not produce finished water, it does pipe the product (within the City-limits) from Daytona Beach to the residents of South Daytona. As such, the City has a responsibility for the water supply facilities serving their residents. Therefore, the data and analysis provided in this document must include:

- a. Population and Water Demand Projections – To comply, water demand should be projected for at least a 10-year period based on South Daytona's existing and future service area boundary. Since there is no expectation of any annexation at this time, the service area will be the current extents of the City. The City's reclaimed mains are limited to the northern portion of its US1 corridor. Expansion of this main would be included in improving the southern portion of US1 which is currently a requested project on the River to Sea Transportation Planning Organization's project list. The projected water demand should be based on permanent and seasonal population, it should use adopted level of service standard to project the demand, and it should be coordinated with the water management district's demand projections for the area served by the local government. The following data depicts actual and expected population and water usage:

City of South Daytona				
Populations with Potable Water Usage				
Year	Population	Projected Population	Water Usage	Projected Usage**
2000	13177		1,149,255	
2005	13955		1,059,189	
2008	13148		1,051,856	
2010	12252		1,193,626	
2015	12558		1,058,608	
2020	12865		957,769	
2022	12987		988,000	
2025		13619		1,120,955
2030		14203		1,168,997
2035		14666		1,207,086
2040		15070		1,240,337
2045		15441		1,270,941
**Based on 2.6 persons per ERC and 214 gpd/ERC				
Source: Extrapolated FL Demographic Estimating Conference, March 2021				



- b. Service Area Boundary – With no expectation of the City expanding, the existing map depicts service area boundaries, including reuse service area boundaries in purple. Daytona Beach should also include the City of South Daytona on its own service area map.



- c. Existing Water Supply and Facilities – South Daytona must Include a thorough inventory and capacity analysis of the components of the existing water supply system owned by the City. In this case, only the distribution mains should be considered. However, the City must also include Daytona Beach’s water supply work plan demonstrating that it has the capacity or plans to provide adequate capacity for the needs of South Daytona.

The City’s distribution system contains approximately 40 miles of water mains sizing from 6-inch to 14-inch. The system has three (3) metered connection points to the City of Daytona Beach’s water distribution system. Two of these connections are metered 12-inch mains and the third is a metered 14-inch main.

The City of South Daytona has been very proactive in the operation and maintenance of the potable water distribution system. The City monitors its usage and

performs leak detection services if a break is suspected or evidenced. Water loss is typically minimal and traceable <1% typically flushing.

The vast majority of the City's potable distribution system is comprised of various chemistries of plastic pipe (PVC and Polybutylene being the primary). These materials make up approximately 70% of the system. The remaining portions are asbestos cement and ductile iron at 20% and 10% respectively. The areas of ductile iron are steadily being replaced with PVC and polybutylene as the system ages and begins the telltale signs of tuberculation and other known issues of this material.

The primary source of funding for the operation and maintenance of the distribution system comes through funds generated by the sale of the very supply it provides, potable water. Other funds are occasionally available through the City's community redevelopment area and local, state, and federal grants. The recent American Rescue Plan Act guided substantial funding to the City. While the City is fully committed to using these funds to improve its utility infrastructure, more focus will be given to the wastewater side as the need is greater with higher capital assets needing to be acquired. The impact of capital cost on the City is substantially higher for wastewater due to the need for machinery such as pumps and generators to support this system. As such, the unexpected, but welcomed, influx of funding will go towards the larger ticket items that may have otherwise caused the City debt in the future. This will allow for greater focus in the far future to be placed on the water system. This leads to the next discussion point.

- d. Future Need - Based on the information currently available and regulated by the City's code of ordinances and land development code, the potable distribution system is expected to be sufficiently sized for its future needs. The majority of South Daytona is fully built out. However, this excludes the area most available for the densest development, the US1 corridor. South Daytona chose to make this corridor its community redevelopment area (CRA). As such, there is great focus on growing this area into a thriving community that can positively impact the City and its residents.

A study was performed in 2004 to assess the future strain on the utilities in this corridor. This study specifically reviewed the wastewater needs and concluded that an additional 282,000 gallons per day (GPD) average flow could be expected. This value was derived from an assumption of a 200 GPD per living unit flow rate. It should be noted that two developments in the City are not listed, and one was completed between this document and the study. Even still, these projections can conclude that the proposed additional potable needs will at a minimum be the proposed additional sewer needs (what comes in, must go out). This study is approaching 20 years since completion with multiple changes having occurred in amenities and design standards, as well as which properties will be or were redeveloped. Per the current Florida Administrative Code Rule Chapter 64E-6, multiple family residence "per dwelling unit" flows are 100 GPD per one-bedroom unit, 200 GPD per two-bedroom unit, and 300 GPD per three-bedroom unit. Carrying these values forward with the additional amenities and increase in larger units, values of 250 GPD per dwelling unit should provide a realistic overall need. This increase corresponds to 352,500 GPD as opposed to 282,000 GPD.

To further validate this increase, the most recent plans for 2900 Ridgewood (as of August 2022 and not included on the 2004 study) state the proposed development will generate an average daily wastewater flow of 98,728 GPD. This flow allocates a per living unit flow rate of 254 GPD. This value closely relates to the newly projected flows.

### III. Water Supply Infrastructure Needs

The City of South Daytona's water supply work plan identifies facilities needed to distribute finished water over the ten-year period. Since proper use of reclaimed water can reduce use of potable water through irrigation consumption, this plan may also include improvements to the City reuse program. This document will be limited to the distribution mains as this is the only element of the water and reuse systems that is owned and maintained by the City of South Daytona. However, information on the other components will be included in the City of Daytona Beach's water supply work plan. Daytona Beach's plan should outline traditional and alternative water supply sources to meet existing and projected needs for at least a ten-year period. These needs will include the foreseeable needs of the City of South Daytona.

Currently there are no planned improvements regarding the mains within the City of South Daytona, however a dedicated plan of infrastructure rehabilitation and replacement (R&R) are being budgeted for in future CIP budgets. There are plans for future use in the Community Redevelopment Area (CRA) specifically which was discussed in detail in the previous section. This area of the City (essentially East of the FEC railroad tracks along the US1 corridor) is prime for development of larger multifamily housing. The addition of densely populated property will increase the potable capacity need in this area. The current distribution system owned by South Daytona should accommodate these needs. In addition, the wholesale agreement for finished water with the City of Daytona Beach allows for purchase of additional capacity which will be needed for the additional residents of South Daytona.

Previous plans included chlorine booster stations that were required to keep readings at acceptable levels. Cooperative work between Daytona Beach and South Daytona has eliminated the need for boosting chlorine levels and required standards have been consistently met. Therefore, there is no expectation of a need to boost chlorine levels as was previously required.

### IV. Schedule of Capital Improvements

Although the work plan is projecting a ten-year period in which capital improvements needed for South Daytona to deliver finished water are to be identified, an initial five-year schedule of capital improvements must be developed. As South Daytona does not produce the finished water, the capital improvement element should identify major capital improvements that are necessary to distribute potable water and reuse. If improvements are needed within the first 5-years of the 10-year period, they must be adopted in a 5-year schedule. The City has developed a 5-year Capital Improvement Program (CIP) scheduled for adoption commencing in the FY23/24 budget year. This CIP schedule is updated annually.

## V. Goals, Objectives, and Policies

The goals, objectives and policies of the Comprehensive Plan were adopted through the 2009 Water Supply Facilities Work Plan and the Comprehensive Plan policies were deemed sufficient at that time. The previously adopted policies continue to meet the statutory requirements. With this required update, the only changes proposed to comprehensive plan policies are related to nomenclature (the East Volusia Water Authority no longer exists) and directly adopting the 2023-2032 Water Supply Facilities Work Plan by reference as suggested by the SJRWMD. The needs assessment narrative within the Comprehensive Plan was updated to remove data (Table P6 providing historical and projected potable water usage) which is already part of the proposed update to the Water Supply Facilities Work Plan to avoid redundancy.

## VI. Water Supply Conservation and Reuse Practices

In light of the new interlocal agreement, and coincident with the elimination of a substantial portion of the Utility's debt, the City intends to undertake a rate study. Items to be considered will include enough funding to provide for regular CIP projects for the upgrade and replacement of aging infrastructure, along with punitive rates for high water users to encourage water conservation. The latter may be necessary to sustain the new 1.0 MGD Annual Daily Average.