

**ORDINANCE NO. 1129 – 2022**

**AN ORDINANCE OF THE CITY OF MIAMI SPRINGS,  
FLORIDA, ADOPTING AN AMENDMENT TO THE WATER  
SUPPLY FACILITIES WORK PLAN; PROVIDING FOR  
TRANSMITTAL; PROVIDING FOR CONFLICTS;  
PROVIDING FOR SEVERABILITY; AND PROVIDING FOR  
AN EFFECTIVE DATE.**

**WHEREAS**, Section 163.3167(9), Florida Statutes requires all local governments to address in its comprehensive plan, the water supply sources necessary to achieve the existing and projected water use demand for an established planning period; and

**WHEREAS**, Section 163.3177(4)(a), Florida Statutes requires coordination of the local comprehensive plan with the applicable water management district's regional water supply plan; and

**WHEREAS**, the City of Miami Springs (the "City") recognizes the need for integration between land use planning and water supply planning; and

**WHEREAS**, Section 163.3177(6)(c), Florida Statutes requires that local governments prepare and adopt a water supply facilities work plan covering at least a ten (10) year planning period and amend their comprehensive plan within eighteen (18) months after the applicable regional water management district approves a regional water supply plan or its update; and

**WHEREAS**, South Florida Water Management District updated and approved its regional water supply plan entitled the Lower East Coast Water Supply Plan ("LEC") on November 8, 2018; and

**WHEREAS**, since November 8, 2018, the City has reviewed and proposes to now adopt amendments to its Water Supply Facilities Work Plan and related amendments in its Comprehensive Plan in order to comply with Florida law; and

**WHEREAS**, the City Council, sitting as Local Planning Agency (LPA), at a duly advertised public hearing, reviewed the proposed 10-Year Water Supply Facilities Work Plan (2022) Update attached hereto as Exhibit "A," found it consistent with the City's Comprehensive Plan and Florida law, and recommended adoption of this Ordinance to the City Council; and

**WHEREAS**, the City Council finds that this proposed Ordinance serves to further enhance the protection of the public health, safety and welfare.

**NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND CITY COUNCIL  
OF THE CITY OF MIAMI SPRINGS, FLORIDA, AS FOLLOWS:<sup>1</sup>**

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<sup>1</sup> Coding: ~~Strikethrough~~ words are deletions to the existing words. Underlined words are additions to the existing words. Changes between first and second reading are indicated with ~~double-strikethrough~~ and double underline.

**Section 1.**      **Recitals.** That the above recitals are confirmed, adopted, and incorporated herein and made a part hereof by reference.

**Section 2.**      **Water Supply Facility Plan Amendments Adopted.**      The City Council hereby adopts the 10-Year Water Supply Facilities Work Plan (2022) Update, attached as Exhibit “A.”

**Section 3.**      **Transmittal.**      The City Planner is authorized to transmit the Water Supply Facilities Work Plan Update adopted by this Ordinance to the Florida Department of Economic Opportunity (“DEO”) and all other units of local government or governmental agencies required by Florida Statutes, Section 163.3184.

**Section 4.**      **Conflicts.** All ordinances or parts of ordinances, and all Resolutions, or parts of Resolutions, in conflict with this Ordinance are repealed to the extent of such conflict.

**Section 5.**      **Severability.** That the provisions of this Ordinance are declared to be severable and if any section, sentence, clause or phrase of this Ordinance shall for any reason be held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining sections, sentences, clauses, and phrases of this Ordinance but they shall remain in effect, it being the legislative intent that this Ordinance shall stand notwithstanding the invalidity of any part.

**Section 6.**      **Effective Date.** That this Ordinance shall be effective immediately upon passage by the City Council on second reading, except that the effective date of the comprehensive plan amendments approved by this Ordinance shall be the date a final order is issued by the Florida DEO or Administrative Council finding the plan amendments in compliance in accordance with Section 163.3184, Florida Statutes, whichever occurs earlier. The DEO notice of intent to find the plan amendments in compliance shall be deemed to be the final order if no timely petition challenging the plan amendment is filed.

**PASSED ON FIRST READING** on the 22nd day of August, 2022, on a motion made by Councilman Best and seconded by Councilman Vazquez.

**PASSED AND ADOPTED ON SECOND READING** this 14th day of November, 2022, on a motion made by Councilman Fajet and seconded by Councilwoman Bravo.

Upon being put to a roll call vote, the vote was as follows:

Vice Mayor Dr. Victor Vazquez	<u>YES</u>
Councilman Bob Best	<u>YES</u>
Councilwoman Jacky Bravo	<u>YES</u>
Councilman Dr. Walter Fajet	<u>YES</u>
Mayor Maria Puente Mitchell	<u>YES</u>



MARIA PUENTE MITCHELL  
MAYOR

ATTEST:

  
ERIKA GONZALEZ, MMC  
CITY CLERK



APPROVED AS TO FORM AND LEGAL SUFFICIENCY  
FOR THE USE AND RELIANCE OF THE CITY OF MIAMI SPRINGS ONLY:

  
WEISS SEROTA HELFMAN COLE & BIERMAN, P.L.  
CITY ATTORNEY

**EXHIBIT A**

**WATER SUPPLY FACILITIES WORK PLAN (2022) UPDATE**

# Exhibit

## Draft Water Supply Plan

**CITY OF  
MIAMI SPRINGS, FLORIDA**

**10-YEAR  
WATER SUPPLY FACILITIES  
WORK PLAN 2022~~2017~~  
UPDATE**

## **ACKNOWLEDGEMENTS**

### **City Council**

Mayor Maria Puente Mitchell  
Councilman Bob Best  
Councilwoman Jackie Bravo  
Councilman Walter Fajet  
Councilman Victor Vasquez

### **City Staff**

William Alonso, City Manager  
Erika Gonzalez-Santamaria, City Clerk  
Chris Heid, City Planner

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## 1.0 Introduction

The purpose of the City of Miami Springs Water Supply Facilities Work Plan Update (Work Plan Update) adopted on XXXXXX XX, 2022 is to identify and plan for the water supply sources and facilities needed to serve existing and new development within the City's jurisdiction. The City's first Work Plan was adopted



on August 8, 2008 while the first Update was adopted with an update adopted on August 14, 2017. This is the second update to the City's original 20-Year Water Supply Facilities Work Plan.

~~This is an update to the first Water Supply Facilities Work Plan that was adopted on August 8, 2008. Chapter 163, Part II, F.S., requires local governments to prepare and adopt Work Plans into their comprehensive plans within 18 months after the water management district approves a regional water supply plan or its update. The 2018 Lower East Coast Water Supply Plan Update was approved by the South Florida Water Management District (SFWMD) on October 10, 2013 November 8, 2018. Therefore, the deadline for local governments within the Lower East Coast jurisdiction to amend their comprehensive plans to adopt a Work Plan is March 13, 2015.~~

As a retail customer, City residents ~~of the~~ obtain their water directly from the Miami-Dade County Water and Sewer Department (WASD), which is responsible for ensuring that enough capacity is available for existing and future customers.

The City acknowledges the importance of water conservation and reuse and has included policies in its Comprehensive Plan to assist in implementing related strategies. The City recognizes that to maintain a water supply system and conservation program there must be effective coordination with Miami-Dade County Water and Sewer Department (WASD). The City has an excellent working relationship with WASD in ensuring compliance with all regulations and guidelines. City staff also coordinates with WASD during the development review process to ensure enough capacity is available for existing and future customers and supporting infrastructure is adequately maintained.

Starting with this Work Plan Update, the Miami-Dade County Water Supply Facilities Work Plan will have a 10-year planning horizon. The City Work Plan will reference the initiatives already identified in Miami-Dade County's 2010-year Work Plan Update, which was adopted on February 4, 2015, since the City is a retail buyer. To date, Miami-Dade County's 2020 10-Year Water Supply Facilities Work Plan Update has not been adopted, therefore this Work Plan Update will rely on the most current available data that may become available found in the Draft Miami-Dade Water and Sewer Department 10-Year Water Supply Facilities Work Plan October 2020, revised April 2021. According to state guidelines, the Work Plan and the comprehensive plan amendment must address the development of traditional and alternative water supplies, bulk sales agreements and conservation and reuse programs that are necessary to serve existing and new development for at least a 10-year planning period. The City's Work Plan has the same planning timeframe as Miami-Dade County's 2010-year Work Plan.

The City's Work Plan is divided into six sections:

- Section 1 - Introduction
- Section 2 - Background Information
- Section 3 - Data and Analysis
- Section 4 - Intergovernmental Coordination
- Section 5 - Capital Improvement Elements
- Section 6 - Conclusion

## 1.1 Statutory History

The Florida Legislature enacted bills in the 2002, 2004, 2005 ~~and~~ 2011, 2012, 2015 and 2016 sessions to address the state's water supply needs. These bills, especially Senate Bills 360 and 444 (2005 legislative session), significantly changed Chapters 163 and 373 Florida Statutes (F.S.) by strengthening

the statutory links between the regional water supply plans prepared by the water management districts and the comprehensive plans prepared by local governments. In addition, these bills established the basis for improving coordination between-local land use planning and water supply planning.

## 1.2 Statutory Requirements

The City has considered the following statutory provisions when updating its Water Supply Facilities Work Plan Update (Work Plan Update):

1. Coordinate its comprehensive plan with the appropriate water management district's regional water supply plan, [163.3177(4)(a), F.S.]
2. Ensure that its future land use plan is based upon availability of adequate water supplies and public facilities and services [s.163.3177(6)(a),F.S . Data and analysis demonstrating that adequate water supplies and associated public facilities will be available to meet projected growth demands must accompany all proposed Future Land Use Map amendments submitted for review.
3. Ensure that adequate water supplies and 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 and consult with the applicable water supplier to determine whether adequate water supplies will be available to serve the development by the anticipated issuance date of the certificate of occupancy [s.163.3180(2)(a),F.S.
4. For local governments subject to a regional water supply plan, revise the General Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge Element (the "Infrastructure Element"), within 18 months after the water management district approves an updated regional water supply plan, to:
  - a. Identify and incorporate the alternative water supply project(s) selected by the local government from projects identified in the updated-SFWMD Regional Water Supply Plan, or the alternative project(s) proposed by the local government under [s. ~~373707(7)~~709(8)(b),F.S. [s.163.3177(6)(c),F.S.];
  - b. Identify the traditional and alternative water supply projects, and the conservation and reuse programs necessary to meet water needs identified in the SFWMD Regional Water Supply Plan within the local government's jurisdiction [s. 163.3177(6)(c), F.S.]; and
  - c. Update the Work Plan for at least a 10-year planning period for constructing the public, private, and regional water supply facilities identified in the element as necessary to serve existing and new development. [s.163.3177(6)(c),F.S.].
5. Revise the Five-Year Schedule of Capital Improvements to include any water supply, reuse, and conservation projects and programs to be implemented during the five-year period [s. 163.3177(3)(a)4, F.S.].
6. To the extent necessary to maintain internal consistency after making changes described in Paragraph 1 through 5 above, revise the Conservation Element to assess projected water needs and sources for at least a 10-year planning period, considering the SFWMD Regional Water Supply Plan, the SFWMD Water Management Plan, as well as applicable consumptive use

permit(s). [s.163.3177(6)(d),F.S.]. The plan must address the water supply sources necessary to meet and achieve the existing and projected water use and demand for the established planning period, considering the SFWMD Regional Water Supply Plan. [s.163.3167(943),F.S.].

7. To the extent necessary to maintain internal consistency after making changes described in Paragraphs 1 through 5 above, revise the Intergovernmental Coordination Element to ensure coordination of the comprehensive plan with the SFWMD Regional Water Supply Plan [s.163.3177(6)(h)1.F.S.].
8. While an Evaluation and Appraisal Report is not required, local governments are encouraged to comprehensively evaluate, and as necessary, update comprehensive plans to reflect changes in local conditions. The evaluation could address the extent to which the local government has implemented the need to update their Work Plan, including the development of alternative water supplies, and determine whether the identified alternative water supply projects, traditional water supply projects, and conservation and reuse programs are meeting local water use demands [s.163.3191(3), F.S.].
9. A local government that does not own, operate, or maintain its own water supply facilities, including, but not limited to, wells, treatment facilities, and distribution infrastructure, and is served by a public water utility with a permitted allocation of greater than 300 million gallons per day is not required to amend its comprehensive plan in response to an updated regional water supply plan or to maintain a work plan if any such local government's usage of water constitutes less than 1 percent of the public water utility's total permitted allocation. However, any such local government is required to cooperate with, and provide relevant data to, any local government or utility provider that provides and natural groundwater aquifer recharge element updated in accordance with s. 163.3191. Any local government may verify its qualifications for the exemption with the Florida Department of Economic Opportunity (DEO) [s.163.3177(6)(c)4., F.S.].

## 2.0 BACKGROUND INFORMATION

### 2.1 Overview

The City of Miami Springs was founded by Glenn H. Curtiss, in 1926, and was originally known as Country Club Estates. The area we now know as Miami Springs was originally 17,000 acres of land bought by Curtiss to create a flight school for the growing air travel from Miami. From the original 128 residences that occupied the area, the City grew with the expansion of Miami's air travel needs. Today, Miami Springs has approximately 14,000 ~~44,500~~ residents.

Historically, the development of Miami Springs has been tied to Miami International Airport, and this still serves as the largest economic engine within the City. Over time Miami Springs has developed a more diversified economy that caters to the needs of its residents and to the people living within the surrounding area.

Due to Glenn H. Curtiss' planning, Miami Springs has developed in a relatively planned and organized manner, providing its residents with green space, schools, and easily serviceable areas. While Miami Springs has experienced growth, it is important to note that it has not shown the same aggressive growth as other cities or as the County. As a substantially built out community the City will not have significant population growth during the planning period. The City's first Water Supply Facilities Work Plan was adopted in 2008, and was subsequently updated in 2017.

### 2.2 City Boundaries

The City is bound by N.W. 36th Street to the south, Miami River to the northeast and Ludlum Road to the west. The City also includes a 54-acre parcel of land located between the Miami River to the northeast, Le Jeune Road to the west and railroad tracks to the south and southeast. Figure 1 shows Miami Springs' location and boundaries.

### 2.3 Relevant Regional Issues

Regional issues that affect the City include minimizing pressure on the Everglades and Biscayne Bay ecosystems and, Biscayne and Floridan Aquifers. To that end, the Comprehensive Everglades Restoration Plan (CERP) is providing the foundation for one of the largest ecosystem restoration projects in the world. The SFWMD and the US Army Corps of Engineers have partnered in order to restore, protect and preserve the water resources of central and southern Florida, including the Everglades. Various projects under CERP help ensure the proper quantity, quality, timing, and distribution of waters to the Everglades and all of South Florida. The goal of CERP is to capture fresh water that now flows unused to the Atlantic Ocean and the Gulf of Mexico and redirect it to areas that need it most.

The SFWMD is the state agency responsible for water supply in the Lower East Coast planning area which includes the jurisdictional boundaries of Miami Springs. SFWMD plays a pivotal role in resource protection, through criteria used for Consumptive Use Permitting. As pressure increased on the Everglades ecosystem resource, the Governing Board initiated rulemaking to limit increased allocations dependent on the Everglades system. As a result, the Regional Water Availability Rule was adopted by the Governing Board on February 15, 2007 as part of SFWMD's water use permit program. This reduced

reliance on the regional system for future water supply needs, mandates the development of alternative water supplies, and increasing conservation and reuse.

Even with an ever increasing population, withdrawals from the Aquifers will be limited, greater conservation will be required to reduce per capita use; and, reclaimed water must continue to be an important alternative water source per the 2008 Leah G. Schad Ocean Outfall Program. The City does not have any domestic wastewater facilities which discharge into the ocean. But It supports Miami-Dade Counites efforts in reducing wastewater outflows and providing for reuse.

The Lower East Coast's ~~2018~~ 2013 Plan Update notes that a number of utilities have diversified their water supplies, including treatment and storage technologies, and water conservation programs. These alternatives include constructing brackish Floridan aquifer wells and reverse osmosis treatment plants, reclaimed water treatment and distribution facilities, and aquifer storage and recovery systems. Between 2007 and 2009, 41 MGD of potable water supply capacity was added. From 2010 to 2013, nine utilities built public water supply (PWS) projects with a capacity of 49 MGD. Approximately 14 percent of the current PWS allocation is now from an alternative water source, primarily brackish groundwater.

Intergovernmental Coordination Policy 1.1.4 provides coordination with MDWASD, RER (DERM) and the SFWMD. Intergovernmental Coordination Objective 1.4 and its implementing Policies supports climate change and sea level rise initiatives.

From FY2013 to FY2018, the SFWMD provided more than \$3 million in alternative water supply funding for 11 projects in the LEC Planning Area. Funded projects created 9.25 million gallons per day (mgd) of new reclaimed water capacity and 4.19 mgd of additional reclaimed water distribution or storage in the LEC Planning Area.

The 2018 Lower East Coast Water Supply Plan Update water supply major issues are as follows: 1. Fresh surface water and groundwater are limited; further withdrawals could have impacts on the regional system, wetlands, existing legal uses, and saltwater intrusion. As a result, additional alternative water supplies need to be developed. 2. Surface water allocations from Lake Okeechobee and the Water Conservation Areas are limited in accordance with the Lake Okeechobee Service Area RAA criteria. 3. Construction of additional storage systems (e.g., reservoirs, aquifer storage and recovery systems) to capture wet season flow volumes will be necessary to increase water availability during dry conditions and attenuate damaging peak flow events from Lake Okeechobee. 4. Expanded use of reclaimed water is necessary to meet future water supply demands and the Ocean Outfall Law. 5. Expanded use of brackish groundwater from the Floridan aquifer system requires careful planning and wellfield management to prevent undesirable changes in water quality.

Policies are also in place to assist in the protection of surface and ground waters and, requirements that private development and public infrastructure projects maintain required surface water quality standards.

Through Conservation Objectives 1.2, 1.3 and Infrastructure Objectives 1.1, 1.3, 1.5 and its implementing policies, the City supports the protection and conservation of surface and groundwater. It also and maintains required surface water quality standards. Additionally, Intergovernmental Coordination, through its implementing Polices under Objectives 1.1 requires coordination with MDWASD and SFWMD.

As further outlined in Section 3.7 of this Plan the City of Miami Springs supports and assists Miami-Dade County and SFWMD in implementing programs and incentive for water conservation.

## 3.0 DATA AND ANALYSIS

The intent of the Data and Analysis section of the Work Plan is to describe the information that local governments need to provide to state planning and regulatory agencies as part of their proposed comprehensive plan amendments, particularly those that would change the Future Land Use Map (FLUM) to increase density and/or intensity. Additionally, population projections should be reviewed for consistency between the County and the SFWMD's Water Supply Plan Update.

### 3.1 Population Information

According to the ~~2010~~ 2020 Census, the City ~~had~~ has a population of ~~13,859~~ 13,809 residents. The July 2015-2010 estimate count was 14,490 13,809. This is a ~~4.9~~ 0.8% percent increase in population within that timeframe.

The City's existing and future population (Years 2015-2035) figures were derived from the MDWASD Retail Customers estimate. Below is a comparison in tabular format. For the purpose of water supply planning the LEC projections will be utilized. ~~As shown in Table 1, the LEC Update states that the MDWASD Service Area has a population of 2,239,773.~~

The total ~~2010-2020~~ population of Miami-Dade County, in which the City's population is included, was ~~2,861,401 2,496,435~~ (Table A-7.B-1 ~~PWS and DSS Service area~~ population projections for the LEC Planning Area, ~~2013-2018~~ LEC Water Supply Plan Update).

Of that total the Miami-Dade WASD serviced ~~2,141,885~~ 2,487,983 residents.

**Table 1. City vs. Miami-Dade County Population Comparison**

	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>
<b><u>City of Miami Springs</u></b>	14,490	<u>14,473</u> <u>15,069</u>	<u>14,672</u> <u>15,447</u>	<u>14,871</u> <u>15,825</u>	<u>15,070</u> <u>16,203</u>	<u>16,581</u>
<b><u>MDWASD Service Area</u></b>	<u>2,266,092</u>	<u>2,370,769</u> <u>2,487,983</u>	<u>2,475,446</u> <u>2,647,294</u>	<u>2,580,123</u> <u>2,792,869</u>	<u>2,642,929</u> (2033) <u>2,93,543</u>	<u>3,043,340</u>
<b><u>Miami-Dade County Total Pop.</u></b>	<u>2,631,629</u>	<u>2,766,823</u> <u>2,861,401</u>	<u>2,902,018</u> <u>3,048,599</u>	<u>3,037,212</u> <u>3,222,001</u>	<u>3,118,328</u> (2033) <u>3,374,199</u>	<u>3,515,800</u>

Source: Draft Miami-Dade WASD 10-Year Water Supply Facilities Plan October 2020 and 2018 LEC Water Supply Plan Update.

### 3.2 Miami Springs' Water Service Area

In September 2008, Miami Springs became a retail water customer of Miami-Dade WASD. Previously the City had been a wholesale customer. Figure 2 depicts current and future water service areas of the City. MDWASD is the only service provided to customers within the City's municipal boundaries. The City



is currently undergoing applications for annexation of unincorporated Miami-Dade County areas; however, this is still pending final decisions. The proposed annexation area will continue to be served by MDWASD.

### 3.3 Potable Water Level of Service Standard

Policy 4-5-2 1.2.1 of the Infrastructure Capital Improvements Element of the City's Comprehensive plan contains the City's Level of Service (LOS) standard for potable water.

The City shall secure adequate potable water supply from the Miami-Dade Water and Sewer Department in order to provide an average of ~~96~~ 94 gallons of potable water per capita per day. In addition, the City shall enforce the following standards through its interlocal agreement with the Miami-Dade Water and Sewer Department:

- (a) The regional treatment system shall operate with a rated maximum daily capacity of no less than 2 percent above the maximum daily flow for the preceding year, and an average daily capacity 2 percent above the average daily system demand for the preceding 5 years. The maximum daily flow shall be determined by calculating the average of the highest five single day flows for the previous 12 months.
- (b) Water shall be delivered to users at a pressure of no less than 20 pounds per square inch (psi) and no greater than 100 psi. Unless otherwise approved by the Miami-Dade Fire Department, minimum fire flows based on the land use served shall be maintained as follows:

<b>Land Use Min.</b>	<b>Fire Flow (gpm)</b>
Single Family Residential Estate	500
Single Family and Duplex; (Residential on minimum lots of 7,500 sf)	750
Multi-Family Residential; Semiprofessional Offices	1,500
Hospitals; Schools	2,000
Business and Industry	3,000

- (c) Water quality shall meet all federal, state, and county primary standards for potable water.
- (d) Countywide storage capacity for finished water shall equal no less than 15 percent of the Countywide average daily demand.

The City will continue to encourage the reduction of annual average per person demand pursuant to policies in the comprehensive plan as coordinated by MDWASD and the SFWMD. As evidenced by MDWASD data, as shown in Subsection 3.4 Table 2, the City has been successful in terms of water conservation as compared to other areas of Miami-Dade County (~~96~~ 93.79 gpcd (Miami Springs) vs. 137.2 gpcd (WASD)). In the future, the City will participate with Miami-Dade County in the utilization of reclaimed/reused water when available.

### 3.4 Population and Potable Water Demand Projections for Miami Springs

The SFWMD ~~2013~~ 2018 *Lower East Coast Water Supply Plan Update* (LEC) details the projected potable water demand for MDWASD, which includes the City of Miami Springs. Since MDWASD provides water to a number of Miami-Dade County municipalities and most of the unincorporated area, the analysis of the City's water needs is determined by the City's percentage of the overall population of the MDWASD service area population (Table 2).

**Table 2.**  
**MDWASD – Miami Springs**  
**Current and Projected Water Supply**  
(MDWASD) Water Use Permit No. 13-00017-W)

	<u>ACTUAL</u>	<u>PROJECTED</u>			
	<u>2015</u> <u>2020</u>	<u>2020</u> <u>2025</u>	<u>2025</u> <u>2030</u>	<u>2030</u> <u>2035</u>	<u>2035</u> <u>2040</u>
<u>Population</u>	<u>14,490</u> <u>15,069</u>	<u>14,473</u> <u>15,447</u>	<u>14,672</u> <u>15,825</u>	<u>14,871</u> <u>16,203</u>	<u>15,070</u> <u>16,581</u>
<u>2018 Per Capita (gallons per day finished water)</u>	<u>96</u> <u>93.79</u>	<u>96</u> <u>93.79</u>	<u>96</u> <u>93.79</u>	<u>96</u> <u>93.79</u>	<u>96</u> <u>93.79</u>
	<u>MGD</u>	<u>MGD</u>	<u>MGD</u>	<u>MGD</u>	<u>MGD</u>
<u>Potable Water Demands (daily average annual) – City of Miami Springs</u>	<u>1.34</u> <u>1.41</u>	<u>1.34</u> <u>1.45</u>	<u>1.40</u> <u>1.48</u>	<u>1.43</u> <u>1.52</u>	<u>1.45</u> <u>1.56</u>

Notes

1. Population projections and per Capita data from Draft MDWASD Retail Customers 10-Year Water Facilities Work Plan Exhibit C-7
2. ~~Per Capita data from LEC Chapter 6: Water Supply Development Projects, p. 248~~

### 3.5 Water Supply Distribution Provided by the City of Miami Springs

MDWASD is a regional water and wastewater utility that furnishes potable water service to approximately 2.6 million inhabitants and tens of thousands of commercial establishments. The service area covers numerous municipalities and most of the unincorporated areas of Miami-Dade County. The City of Miami Springs does not provide or distribute potable water to the City's residents or businesses.

~~After review of County records it has been determined they are incomplete with respect to self-supply systems.~~



### 3.6 Water Supply Provided by Miami-Dade Water and Sewer Department

The City receives its entire water supply from the Miami-Dade Water and Sewer Department. In 2007, the City indicated their desire to pursue the transfer of its water and sewer department to the County; said transfer was approved by the Miami-Dade County Commissioners (BCC) on July 17, 2008. In the Miami-Dade County 20-Year Water Supply Facilities Work Plan, the WASD committed to meet the water demand for the municipalities within the service area.

The MDWASD System supplies potable water to over 2.6 million persons, including residents and businesses within a number of municipalities, and is an interconnected system of three subareas. The WASD's service area includes all portions of Miami-Dade County within the Urban Development Boundary (UDB), excluding all or portions of North Miami, North Miami Beach, Miami Gardens, Homestead and the Florida City service area. Miami Springs is located in the Hialeah-Preston Subarea, which serves the northern part of Miami-Dade County.

The City of Miami Springs is served by the Hialeah-Preston sub-area water treatment plant. The sub-area is comprised of dedicated low-pressure pipelines, remote storage tanks, pumping facilities and high pressure systems. This system delivers water to Hialeah, Miami Springs, the City of Miami and other portions of northeastern Miami-Dade County, generally north of Flagler Street. The Hialeah Reverse Osmosis (R.O.) plant was completed in October 2013 and is providing water to the City of Hialeah and unincorporated Miami-Dade County.

The information contained in the Comprehensive Development Master Plan Amendments adopted February 4, 2015 and the draft Miami-Dade WASD 10-year Water Supply Facilities Work Plan ~~Miami-Dade WASD 20-year Water Supply Facilities Work Plan~~ (2014-2033) Support Data (November 2014), the ~~2013~~ 2018 Lower East Coast Water Supply Plan Update (LEC) approved by the SFWMD on ~~October 40, 2013~~ November 8, 2018 and additional information found within Water Use Permit 13-00017-W are herein incorporated by reference. The Water Use Permit which was modified and approved by the SFWMD on February 9, 2015, will expire on February 9, 2035.

The following Miami-Dade County Comprehensive Development Master Plan Policy supports the coordination with the SFWMD LEC Update:

WS-6D. In the development of its future potable water supplies, Miami-Dade County shall, to the maximum extent feasible, utilize methods which preserve the integrity of the Biscayne Aquifer, protect the quality of surface water and related ecosystems, consider and are compatible with the South Florida Water Management District's Lower East Coast Regional Water Supply Plan and the current Water Use Permit, and comply with the land use and environmental protection policies of the Miami-Dade County CDMP, the Strategic Regional Policy Plan for South Florida, and the State Comprehensive Plan.

### 3.7 Conservation

The 2018 LEC Water Supply Plan update suggests that Miami-Dade County may be able to save approximately 40 mgd by 2040 if urban and agricultural conservation practices are followed.

Water conservation is the key to maintaining the health and productivity of the ~~Surficial~~ surficial and Floridan Aquifers. Promoting water conservation equipment, techniques, and practices will benefit customers economically and maintain a realistic water demand picture for utilities. Protection of the aquifer system and wellfields (Figure 3.) through conservation and reuse, recharge enhancement,

limitations on withdrawal, regulation of land use, and maintenance of minimum flows and levels will ensure the availability of an adequate water supply for all competing demands, maintain and enhance the functions of natural systems and preserve water quality.

The City works in coordination with and supports MDWASD, SFWMD and state efforts aimed at promoting conservation through a variety of means including working with community groups to promote education and water conservation techniques. For example, the Miami Springs Woman's Club hosted a free educational session "Water: Our Most Precious Resource" on April 24, 2017. The City website includes links to the Miami-Dade County water restriction and water conservation website. In 2007, the City removed water meters and discontinued irrigation to City owned properties, including landscaped medians, downtown and City parks. The City provides free water-efficient showerheads to the residents in an exchange program. In 2016, the Miami Springs golf course replaced its entire irrigation system with a modern, water efficient system.

Beyond educating the business and residential community, the City promotes water conservation through conformance with and use of the Miami-Dade County Landscape Ordinance. All landscape projects are required to conform with these standards which are enforced during the development review process. The City also promotes outdoor conservation through the Miami Springs Ecology Board which promotes Florida-friendly landscaping, composting and other water saving techniques. City sponsored projects include water efficient landscape techniques as well. The new Westward Drive Bike Path was designed with drought tolerant plants which will be an improvement to medians currently landscaped with grass.

The City implements mandatory year-round landscape irrigation conservation per FAC 40E-24 by distribution of an educational flyer. The flyer is available on the City's website, at City Hall and is provided to violators by the City's code enforcement team. In addition to the flyer, the City website contains a link to the Miami-Dade County webpage detailing the rules pertaining to yard watering restrictions.

The City does not currently have reclaimed water capability or infrastructure.

### **3.7.1 County-wide Issues**

Section 4.5 Water Conservation and Reuse of the Miami-Dade WASD 20-year Water Supply Facilities Work Plan (2014-2033) Support Data (November 2014) outlines additional MDWASD efforts. (pages 4-6 and 7).

Miami-Dade Consolidated PWS Water Use Permit No. 13-00017-W Water Conservation Plan 2020 Annual Report Section I states BMPs implemented since the plan inception resulted in declining per capita water consumption. Because of public outreach efforts as of December 31, 2020, the County is currently experiencing actual finished water demands of 324.26 MGD, which is approximately 17 MGD lower than 2006 actual finished water demands of 341.58 MGD (as of 12/31/2006), the year prior to implementation of the WUE Plan).

Presently, water utilities are saving substantial amounts of water through strategic water-efficiency programs and Best Management Practices (BMP) included in their Water Use Efficiency Plan. The savings from water conservation often translate into more potable water available for residential and non-residential use, capital and operating savings, which allow systems to defer or avoid significant expenditures for water supply facilities and wastewater facilities.

The City continues to remain in full support of the water conservation initiatives adopted by SFWMD and Miami-Dade County.

While the City is not responsible for the Comprehensive Everglades Restoration Project, it is supportive of the regional water conservation efforts related to this regional rehydration of the Florida Everglades. The City is also supportive of mandating yard water restrictions that have been directed by the South Florida Regional Water Management District. There are no water conservation projects identified in the City's Capital Improvements Element or Capital Improvements Program.

The City will continue to coordinate future water conservation efforts with WASD and SFWMD to ensure that proper techniques are applied. The City will continue to actively support SFWMD and Miami-Dade County in the implementation of new regulations or programs that are designed to conserve water. The City provides a link to the County webpage related to conservation and water restriction policies.

### Reuse

~~For the past several years, t~~ The State of Florida is leading the nation in water reuse. The water reuse effort in the state is primarily led by utilities, local governments, the water management districts and state agencies. The intent of their efforts is to implement water reuse programs that increase the volume of reclaimed water used and promotes public acceptance of reclaimed water. While the City does not own or maintain the water infrastructure, the City is in full support of the water reuse initiatives under consideration by both the SFWMD and Miami-Dade County. ~~The County has committed to implement a total of 117.5 mgd of water reuse as noted in the County's 20-year water use permit.~~

Currently, WASD is implementing a total of 16.49 MGD of reuse at each of the Wastewater Treatment Plants, primarily for in-plant (process water) use. In addition, WASD will be providing up to 15 MGD of reclaimed water from the South District Wastewater Treatment Plant to the FPL facilities at Turkey Point, per Miami-Dade County Resolution No. R-579-20 approved by the BCC on June 16, 2020. At this time, WASD does not have additional reuse projects that are technically, environmentally, and economically feasible as defined in the Florida Statute.

### **3.7.2 Local Government Specific Actions, Programs, Regulations, or Opportunities**

The City will coordinate future water conservation efforts with the WASD and the SFWMD to ensure that proper techniques are applied. In addition, the City will continue to support and expand existing goals, objectives and policies in the comprehensive plan that promote water conservation in a cost-effective and environmentally sensitive manner. The City will continue to actively support the SFWMD and Miami- Dade County in the implementation of new regulations or programs that are designed to conserve water. The City will also continue to comply with all the Water Use Efficiency requirements included in the Miami- Dade County Code. Finally, the City will administer its own water conservation policies and programs.

The City implements mandatory year-round landscape irrigation conservation per FAC 40E-24 by distribution of an educational flyer. The flyer is available on the City's website, at City hall and is provided to violators by the City's code enforcement team. In addition to the flyer, the City website contains a link to the Miami-Dade County webpage detailing the rules pertaining to yard watering restrictions.

### **3.7.3 MDWASD Specific Regulations**

MDWASD, and therefore the City of Miami Springs, implement water conservation through the following Ordinances: Irrigation Hours, Florida-Friendly Landscape, ~~Ultralow Volume~~ High Efficiency Fixtures, Rain Sensor, Water Conservation Rate Structure, Leak Detect & Repair Program and Public Education Program. The City will also continue to comply with all the Water Use Efficiency requirements included in the Code of Miami-Dade County.

## **3.8 Reuse**

### **3.8.1 Regional and County-wide Issues**

State law supports reuse efforts. For the past years, Florida's utilities, local governments and water management districts have led the nation in implementing water reuse programs that increase the quantity of reclaimed water used and public acceptance of reuse programs. Section 373.250( 1) F.S. provides that "The encouragement and promotion of water conservation and reuse of reclaimed water, as defined by the department and used in this chapter, are state objectives and considered to be in the public interest." In addition, Section 403.064(1), F.S., provides that "reuse is a critical component of meeting the state's existing and future water supply needs while sustaining natural systems."

The City supports water reuse initiatives under consideration by both the SFWMD and Miami-Dade County. The County has committed to implement a total of 117.5 MGD of water reuse as noted in the County's 20-year water use permit. ~~In the~~ According to the 20 10-year Work Plan, "the County's projected finished water demands are now markedly lower than anticipated when the first 20-year water use permit application as submitted. As such, wastewater reuse to address water supply demands is no longer required, and other alternative water supplies (Floridian aquifer, water conservation, C-51 reservoir, etc.) have been determined to be more viable and shall be considered in the future." ~~identified a number of water reuse projects and their respective schedules. According to the Plan, "reuse projects to recharge the aquifer with highly treated, reclaimed water will be in place before additional withdrawals over the base condition water use are made from the Alexander Orr and South Dade subarea wellfields. In addition, reuse irrigation projects are anticipated for the North and Central District Wastewater Treatment Plants. These projects will be implemented in the Cities of North Miami and North Miami Beach and are currently under construction for Key Biscayne."~~

### **3.8.2 Local Government Specific Actions, Programs, Regulations, or Opportunities**

The City will support the SFWMD and Miami-Dade County water reuse projects, and implementation of new regulations or programs designed to increase the volume of reclaimed water used and public acceptance of reclaimed water.

## **4.0 INTERGOVERNMENTAL COORDINATION**

The provision of water supply needs in the City is achieved in coordination with local, county, and regional partners including Miami-Dade County WASD and SFWMD. MDWASD is the City's primary water partner as they provide the City its water service utilities. MDWASD ensures that water supply services are provided to the majority of residents of Miami-Dade County in the most efficient and effective manner. SFWMD acts to protect the region's water supply resources and coordinates the implementation of state water regulations and policies through local water planning efforts and water supply services.

In this update of the Water Supply Plan, the City has reviewed its water supply related Comprehensive Plan Objectives and Policies and updated them as necessary. Changes to the Comprehensive Plan Objectives and Policies are set forth in the amended Comprehensive Plan which is incorporated herein. Some of the policies included in the amended Comprehensive Plan which detail coordination efforts between the City and both MDWASD and SFWMD, to provide sufficient water to its residents, are:

- Capital Improvements Element
  - Goal 1, Objective 1.2, Policy 1.2.1 –
  - Goal 1, Objective 1.2, Policy 1.2.3 –
  - Goal 1, Objective 1.2, Policy 1.2.4 –
- Conservation Element
  - Goal 1, Objective 1.2, Policy 1.2.1 –
  - Goal 1, Objective 1.2, Policy 1.2.3 –
  - Goal 1, Objective 1.3, Policy 1.3.1 –
- Intergovernmental Coordination Element
  - Goal 1, Objective 1.1, Policy 1.1.4 –
  - Goal 1, Objective 1.1, Policy 1.1.5 –
  - Goal 1, Objective 1.4, Policy 1.4.1 –
  - Goal 1, Objective 1.4, Policy 1.4.2 –
  - Goal 1, Objective 1.4, Policy 1.4.3 –
- Infrastructure Element
  - Goal 1, Objective 1.1, Policy 1.1.2; Policy 1.1.3; and Policy 1.1.4
  - Goal 1, Objective 1.3, Policy 1.3.1; Policy 1.3.2; Policy 1.3.3; and Policy 1.3.4
  - Goal 1, Objective 1.4, Policy 1.4.2; Policy 1.4.3
  - Goal 1, Objective 1.5, Policy 1.5.1; Policy 1.5.2; Policy 1.5.3; Policy 1.5.4; Policy 1.5.5

As a retail customer, the City must coordinate the adequate supply of water and conservation practices with MDWASD and implement the requirements of County Code.

## 5.0 CAPITAL IMPROVEMENTS

The information contained in the Comprehensive Development Master Plan Amendments ~~adopted February 4, 2015~~ and the Miami-Dade WASD ~~2010~~-year Water Supply Facilities Work Plan (2014-2033 ~~October 2020~~), ~~Support Data (November 2014)~~, the ~~2013-2018~~ *Lower East Coast Water Supply Plan Update* (LEC) approved by the SFWMD on ~~October 10, 2013~~ November 8, 2018 and additional information found within Water Use Permit 13-00017-W are herein incorporated by reference. The Water Use Permit which was modified and approved by the SFWMD on February 9, 2015, will expire on February 9, 2035. WASD has requested an extension of the permit to 2040.

As a retail customer the City of Miami Springs is not responsible for the provision of infrastructure for potable water treatment and distribution. There are no water facility projects in the City's Capital Improvements Program during this planning period. Below is a partial list of MDWASD projects and changes to its Capital Improvement Schedule.

As stated previously in Section 3.6, Miami Springs is located within the Hialeah-Preston (H-P) subarea and is comprised of dedicated low-pressure pipelines, remote storage tanks, pumping facilities and high-pressure systems. This system delivers water to Hialeah, Miami Springs, Virginia Gardens, the City of Miami and other portions of northeastern Miami-Dade County, generally north of Flagler Street. The Hialeah Reverse Osmosis (R.O.) plant was completed in October 2013 and is providing water to the City of Hialeah and unincorporated Miami-Dade County.

### City Capital Improvements Projects

#### City of Miami Springs

#### Capital Improvements 2022 -2027 Stormwater

	FUNDING	2022-23	2023-24	2024-25	2025-26	2026-27	Totals
<b>STORMWATER</b>							
<u>O&amp;M Stormwater system</u>	<u>Revenues</u>	<u>100,000</u>	<u>100,000</u>	<u>100,000</u>	<u>100,000</u>	<u>100,000</u>	<u>500,000</u>
<u>Oakwood/East Drive Stormwater Project</u>	<u>ARPA</u>	<u>5,192,476</u>	-	-	-	-	<u>5,192,476</u>
<u>NRP Median/Stormwater Project</u>	<u>ARPA</u>	<u>2,348,721</u>	-	-	-	-	<u>2,348,721</u>
<b>TOTAL ENTERPRISE FUNDS</b>		<u>7,716,197</u>	<u>100,000</u>	<u>331,000</u>	<u>185,000</u>	<u>185,000</u>	<u>8,517,197</u>
<b>TOTAL ALL FUNDS</b>		<u>16,862,510</u>	<u>1,208,946</u>	<u>2,427,420</u>	<u>2,320,866</u>	<u>3,462,184</u>	<u>26,146,926</u>

The following major Capital Improvements Projects may impact the City and are as further described in the Miami-Dade WASD ~~2010~~-year Water Supply Facilities Work Plan (2014-2033) ~~Support Data (November 2014)~~ Table 12-5-1:

- 1) Systemwide Wellfield Improvements;
- 2) Systemwide Water Main Extensions;
- 3) Central M-D Water Transmission Mains Improvements: and,



4) Alexander Orr, Jr. Water Treatment Plant Expansion.

Alternative Water Supply Projects

10 MGD Hialeah RO WTP Phase 1 – Operational October 2013 (7.5 MGD well capacity constructed, increased to 10 MGD by end of 2020 when well completed.)

20 MGD South Miami Heights WTP – under design (17.5 MGD ~~Biscayne~~ Florida Aquifer/2.5 MGD Florida Biscayne Aquifer)

Alternative Water Supply Project's – ~~anticipated to be completed by December 31, 2018~~

~~Hialeah RO WTP Phase 2 and 3~~

~~Hialeah Floridan Aquifer RO WTP Phase 1-b, 4 Florida Aquifer supply plans.~~

South Miami Heights WTP Phase 1 (RO Portion) – anticipated completion date 12/31/2026

South Miami Heights WTP Phase 2 (RO Portion) – anticipated completion date 12/31/2031

~~Graham Wells Construction~~

~~Blending and canal recharge projects~~

~~Reuse Projects~~

~~Updated Reuse Projects~~

~~Existing Reuse at Three Wastewater Treatment Plants~~

~~Biscayne Bay Coastal Wetlands Rehydration~~

~~———— Pilot Completed~~

~~———— Full Scale capacity~~

~~90 MGD FPL for new cooling towers~~

~~CDWWTP, SDWWTP, New WDWTP Florida Aquifer re-charge to meet Ocean Outfall~~

~~Legislation (Total 27.6 MGD)~~

~~CANCELLED Reuse Projects~~

~~Phase 1 and 2 Canal Re-charge for Alexander Orr WTP~~

Water Treatment Plants

Hialeah RO WTP

On-line October 2013 2020

10 MGD (7.5 MGD Operational)

50% MDWASD/50% Hialeah

South Miami Heights


On-line by December 31, 2019 2026

17.5 MGD Finished Water from Florida Aquifer

2.55 MGD Finished Water from Biscayne Aquifer (to be completed 12/31/2031)

Expenditures and Revenues associated with the above referenced projects, and others, are found in Table 3 on the following page.

**Table 3.**  
**MDWASD – Water Supply CIE Projects**  
**City of Miami Springs**



Miami-Dade Water and Sewer Department

PROPOSED 2020-2029 CAPITAL BUDGET AND MULTI-YEAR CAPITAL PLAN

Projection by Project Sub-Project by Year - Water

As of: 9/30/2019

Version 5 - Adopted MYCIP FY20-26 - After OMB Adjustments

Active and Future projects

Proj	Sub-Project	Current Bond/Fund Allocation	Expenditures As of 9/30/2019	Remaining Bond/Fund Allocation	PROJECTIONS												Total
					2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	Future		
1050	101711 HIALEAH/PRESTON WTP - DESIGN AND ENGINEERING ON REDUNDANT 72-INCH WATER MAIN	17,694,282	636,418	17,057,864	400,000	7,552,000	4,745,719	2,860,145	1,500,000	0	0	0	0	0	0	17,057,864	
	102104 FILTER BACKWASH ELEVATED TANK REPLACEMENT SYSTEM FOR HIALEAH WTP	3,000,000	0	3,000,000	3,000,000	0	0	0	0	0	0	0	0	0	0	3,000,000	
	102106 HYPOCHLORITE FEED/STORAGE AT PRESTON/HIALEAH WTP	6,054,178	554,178	5,500,000	2,500,000	3,000,000	0	0	0	0	0	0	0	0	0	5,500,000	
	102110 HIALEAH/PRESTON REPLACEMENT OF UNDERDRAIN FILTERS	3,200,000	0	3,200,000	3,200,000	0	0	0	0	0	0	0	0	0	0	3,200,000	
	102127 REPLACEMENT/UPGRADE OF LIME FEED SYSTEM	4,967,242	1,096,072	3,871,170	3,871,170	0	0	0	0	0	0	0	0	0	0	3,871,170	
	102134 PURCHASE OF LAKE PROPERTY ADJACENT TO NORTHWEST WELLFIELD	7,604,457	5,545,906	2,058,551	2,058,551	0	0	0	0	0	0	0	0	0	0	2,058,551	
	102170 HIALEAH/PRESTON WTP FEEDER/MOTOR EAST & WEST CONTROL CENTER	2,000,000	0	2,000,000	2,000,000	0	0	0	0	0	0	0	0	0	0	2,000,000	
	102171 HIALEAH/PRESTON WTP TRANSFORMER	1,500,000	0	1,500,000	0	0	489,208	1,010,792	0	0	0	0	0	0	0	1,500,000	
	102173 PRESTON WTP HS PUMP ROOM SWITCHGEAR	12,819,000	0	12,819,000	900,000	600,000	4,527,600	6,791,400	0	0	0	0	0	0	0	12,819,000	
	TOTAL - 1050	58,839,159	7,832,574	51,006,585	17,929,721	11,152,000	9,762,527	10,662,337	1,500,000	0	0	0	0	0	0	51,006,585	
1051	101577 ORR WTP - 48" FINISHED WATER LINE (AREA M)	64,218,739	247,935	63,970,804	0	2,521,160	2,790,046	10,818,804	24,902,747	22,938,047	0	0	0	0	0	63,970,804	
	101579 ORR WTP - PUMPING UNIT No. 6 HIGH SERVICE PUMP - EAST PUMP ROOM	11,161,990	1,896,826	9,265,164	5,765,164	2,000,000	1,500,000	0	0	0	0	0	0	0	0	9,265,164	
	101694 ORR WTP - SWITCHGEAR BUILDING AND DUCT BANK W/30 PHASE 1 AND PHASE 2	14,310,516	13,441,087	869,429	803,929	65,500	0	0	0	0	0	0	0	0	0	869,429	
	101882 4 LIME SLAKERS FOR ALEXANDER ORR, JR. WTP	18,103,746	381,746	17,722,000	300,000	400,000	6,808,800	10,213,200	0	0	0	0	0	0	0	17,722,000	
	101883 ALEXANDER ORR, JR. LIME PLANT REHABILITATION	846,054	345,427	500,627	500,627	0	0	0	0	0	0	0	0	0	0	500,627	
	101945 HIGH SERVICE PUMP AND MOTOR IMPROVEMENTS WEST ROOM - VFD	11,256,345	0	11,256,345	700,000	300,000	4,102,538	6,153,807	0	0	0	0	0	0	0	11,256,345	

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Miami-Dade Water and Sewer Department  
PROPOSED 2020-2029 CAPITAL BUDGET AND MULTI-YEAR CAPITAL PLAN  
Projection by Project Sub-Project by Year - Water  
As of: 9/30/2019

Version 5 - Adopted MYCIP FY20-26 - After OMB Adjustments  
Active and Future projects

		Current Bond/Fund Allocation	Expenditures As of 9/30/2019	Remaining Bond/Fund Allocation	PROJECTIONS												
Proj	Sub-Project				2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	Future	Total	
	101946	HYDROTREATOR DRIVES ASSEMBLES AND MOTORS	1,500,000	584,413	915,587	915,587	0	0	0	0	0	0	0	0	0	915,587	
	102107	HYPOCHLORITE FEED/STORAGE AT ORR WTP	7,054,655	127,655	6,927,000	500,000	300,000	2,450,800	3,676,200	0	0	0	0	0	0	6,927,000	
	102167	A. ORR WTP LIME KILN SWITCH GEAR BUILDING AND FEEDERS	8,400,000	390,903	8,009,097	5,755,284	2,253,813	0	0	0	0	0	0	0	0	8,009,097	
	102169	A. ORR WTP PUMP ROOM FOR SOFTENER CLUSTERS 1-8 AND 11- 14	700,000	330,042	369,958	369,958	0	0	0	0	0	0	0	0	0	369,958	
	102175	ALEXANDER ORR WATER TESTING LABORATORY	10,858,453	304,694	10,553,759	2,972,710	4,452,992	3,128,057	0	0	0	0	0	0	0	10,553,759	
TOTAL - 1051			148,410,498	18,050,728	130,359,770	18,583,259	12,293,465	20,780,241	30,862,011	24,902,747	22,938,047	0	0	0	0	130,359,770	
1053	102116	20-INCH WATER MAIN - BISCAYNE BLVD - AREA L	1,006,056	59,931	946,125	0	0	0	8,138	551,494	386,493	0	0	0	0	946,125	
	102197	PORT OF MIAMI WATER SUPPLY LINE	29,311,465	21,957,974	7,353,491	5,000,000	2,353,491	0	0	0	0	0	0	0	0	7,353,491	
	102227	INSTALL OF 54-INCH WM ALONG RED ROAD (W 4TH AVE), FROM W 21ST ST TO W 53RD ST	42,599,093	580,956	42,018,137	445,000	1,183,515	5,246,219	7,143,403	14,000,000	9,000,000	5,000,000	0	0	0	42,018,137	
	103004	REPLACEMENT OF 6,000 LF OF CORRODED 8", 12", 16" WM ALONG NE 36 CT / TURNBERRY WAY FROM WILLIAM LEHMAN	2,845,528	78,708	2,766,820	350,000	751,000	1,665,820	0	0	0	0	0	0	0	2,766,820	
TOTAL - 1053			75,762,142	22,677,569	53,084,573	5,795,000	4,288,006	6,912,039	7,151,541	14,551,494	9,386,493	5,000,000	0	0	0	53,084,573	
1054	101441	54" REPLACEMENT OF LOW PRESSURE WATER MAIN IN NW 62 ST (NW 37 AVE - 10 AVE)	10,710,779	265,636	10,445,143	0	0	254,069	699,823	1,000,000	4,219,985	4,271,266	0	0	0	10,445,143	
TOTAL - 1054			10,710,779	265,636	10,445,143	0	0	254,069	699,823	1,000,000	4,219,985	4,271,266	0	0	0	10,445,143	
1055	102016	VARIOUS WATER TRANSMISSION MAINS (20 AND 24 INCHES)	5,163,420	0	5,163,420	450,000	829,328	3,735,428	148,664	0	0	0	0	0	0	5,163,420	
TOTAL - 1055			5,163,420	0	5,163,420	450,000	829,328	3,735,428	148,664	0	0	0	0	0	0	5,163,420	
1056	101474	SPECIAL CONSTRUCTION - WATER IMPROVEMENTS - LOCKER ROOMS	4,057,774	557,774	3,500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	0	0	0	3,500,000	
TOTAL - 1056			4,057,774	557,774	3,500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	0	0	0	3,500,000	

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Miami-Dade Water and Sewer Department  
PROPOSED 2020-2029 CAPITAL BUDGET AND MULTI-YEAR CAPITAL PLAN  
Projection by Project Sub-Project by Year - Water  
As of: 9/30/2019

Version 5 - Adopted MYCIP FY20-26 - After OMB Adjustments  
Active and Future projects

		Current Bond/Fund Allocation	Expenditures As of 9/30/2019	Remaining Bond/Fund Allocation	PROJECTIONS												
Proj	Sub-Project				2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	Future	Total	
1059	101084 MIAMI SERVICE FACILITY (PHASE 1)	1,064,685	0	1,064,685	0	0	0	0	0	0	0	0	1,064,685	0	0	1,064,685	
	101505 SOUTH MAINTENANCE CENTER	23,721,660	395,575	23,326,085	0	0	0	0	0	0	0	0	23,326,085	0	0	23,326,085	
	101507 NORTH MAINTENANCE CENTER	10,116,520	0	10,116,520	0	0	0	0	0	0	250,000	9,866,520	0	0	0	10,116,520	
	101547 MIAMI SERVICE FACILITY (PHASE 2)	12,210,998	0	12,210,998	0	0	0	0	0	0	9,281,747	2,929,251	0	0	0	12,210,998	
	101888 MIAMI GARDENS (CAROL CITY YARD) - MODULAR / STEEL BUILDING	1,300,000	0	1,300,000	0	0	0	0	0	0	135,000	1,165,000	0	0	0	1,300,000	
TOTAL - 1059		48,413,863	395,575	48,018,288	0	0	0	0	0	0	9,666,747	38,351,541	0	0	0	48,018,288	
1060	100786 WATER DISTRIBUTION SYSTEM EXTENSION	55,368,190	8,776,040	46,592,150	3,432,043	9,160,107	9,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	0	0	0	46,592,150	
	101734 WATER DISTRIBUTION SYSTEM EXTENSION FOR JPA's	70,628,952	33,415,887	37,213,065	12,530,198	3,350,944	7,035,279	6,296,644	2,000,000	2,000,000	2,500,000	1,500,000	0	0	0	37,213,065	
	102111 12/16 INCH WATER MAINS IN S. MIAMI-DADE AREA E	4,862,026	0	4,862,026	0	2,862,026	2,000,000	0	0	0	0	0	0	0	0	4,862,026	
	102140 FURNISH AND INSTALL 48-INCH WATER MAIN IN SW 117 AVE, SW 72 ST, SW 127 AVE FROM SW 68 ST. TO SW 152 ST. (AREA N)	49,153,848	20,896,793	28,257,055	15,200,000	7,000,000	5,057,055	1,000,000	0	0	0	0	0	0	0	28,257,055	
TOTAL - 1060		180,013,016	63,088,721	116,924,295	31,162,241	22,373,077	23,092,334	12,296,644	7,000,000	7,000,000	7,500,000	6,500,000	0	0	0	116,924,296	
1063	100789 FIRE HYDRANT INSTALLATION AND RELATED SYSTEM BETTERMENTS	22,634,907	2,634,907	20,000,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	0	0	0	20,000,000	
TOTAL - 1063		22,634,907	2,634,907	20,000,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	0	0	0	20,000,000	
1064	100790 MISCELLANEOUS TOOLS AND EQUIPMENT	22,091,862	6,275,115	15,816,747	2,273,622	1,543,125	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	0	0	0	15,816,747	
	101724 HEAVY CONSTRUCTION EQUIPMENT	39,197,329	9,169,885	30,027,444	4,331,038	4,196,406	4,000,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	0	0	0	30,027,444	
	101725 VEHICLES/TRANSPORTATION EQUIPMENT	27,297,582	8,975,995	18,321,587	2,194,478	1,127,109	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	0	0	0	18,321,587	
	102027 AUTOMATED METER READING (AMR)	120,288,814	288,814	120,000,000	1,500,000	2,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	95,000,000	0	0	120,000,000	
TOTAL - 1064		208,875,587	24,709,809	184,165,778	10,299,138	9,366,640	12,000,000	11,500,000	11,500,000	11,500,000	11,500,000	11,500,000	95,000,000	0	0	184,165,778	
1066	100792 WATER PLANTS REHABILITATION	53,562,683	9,334,440	44,228,243	17,930,743	9,297,500	9,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	0	0	0	44,228,243	
	101714 SECURITY PROJECTS	3,517,220	742,803	2,774,417	0	545,104	229,313	1,000,000	1,000,000	0	0	0	0	0	0	2,774,417	
TOTAL - 1066		57,079,903	10,077,243	47,002,660	17,930,743	9,842,604	9,729,313	2,500,000	2,500,000	1,500,000	1,500,000	1,500,000	0	0	0	47,002,660	

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			Current Bond/Fund Allocation	Expenditures As of 9/30/2019	Remaining Bond/Fund Allocation	PROJECTIONS											
Proj	Sub-Project					2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	Future	Total
1067	100793	WATER SYSTEM UPGRADES	177,243,086	14,671,337	162,571,749	18,185,500	23,494,750	20,891,499	20,000,000	20,000,000	20,000,000	20,000,000	20,000,000	0	0	0	162,571,749
		TOTAL - 1067	177,243,086	14,671,337	162,571,749	18,185,500	23,494,750	20,891,499	20,000,000	20,000,000	20,000,000	20,000,000	20,000,000	0	0	0	162,571,749
1070	101470	WATER TREATMENT PLANTS AND NEWFIELDS - SCADA SYSTEM	2,246,784	817,709	1,429,075	400,000	1,029,075	0	0	0	0	0	0	0	0	0	1,429,075
		TOTAL - 1070	2,246,784	817,709	1,429,075	400,000	1,029,075	0	0	0	0	0	0	0	0	0	1,429,075
1075	101891	NW NWWF HIGH SERVICE PUMP STATION	43,250,000	0	43,250,000	0	0	0	0	0	0	0	43,250,000	0	0	0	43,250,000
	102135	MIAMI SPRINGS WELLFIELD REHABILITATION - PHASE 1-3	36,180,996	4,175,742	32,005,254	5,218,254	6,487,000	8,200,000	7,100,000	3,500,000	1,500,000	0	0	0	0	0	32,005,254
	102176	MONITORING WELL INSTALLATION	1,164,456	264,456	900,000	350,000	275,000	275,000	0	0	0	0	0	0	0	0	900,000
	103026	C51- Reservoir 15 MGD Alternative Water Supply	69,000,000	0	69,000,000	0	0	0	69,000,000	0	0	0	0	0	0	0	69,000,000
		TOTAL - 1075	149,595,452	4,440,198	145,155,254	5,568,254	6,762,000	8,475,000	76,100,000	3,500,000	1,500,000	0	43,250,000	0	0	0	145,155,254
1077	102021	SOUTH MIAMI HEIGHTS - FA WELLS AND HYDROGEOLOGIC TEST PLAN	48,627,857	28,325,074	20,302,783	5,827,700	1,100,000	1,075,083	1,000,000	1,000,000	10,300,000	0	0	0	0	0	20,302,783
		TOTAL - 1077	48,627,857	28,325,074	20,302,783	5,827,700	1,100,000	1,075,083	1,000,000	1,000,000	10,300,000	0	0	0	0	0	20,302,783
1078	101368	TELEMETERING SYSTEM - WATER	8,381,144	1,004,767	7,376,377	141,000	898,300	1,337,077	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	0	0	0	7,376,377
		TOTAL - 1078	8,381,144	1,004,767	7,376,377	141,000	898,300	1,337,077	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	0	0	0	7,376,377
1080	101879	INSTALLATION OF 36 INCH DI WATER MAIN IN NW 87TH AVE. FROM NW 170 ST. TO 102 AVE.	5,818,628	4,630,186	1,188,442	1,188,442	0	0	0	0	0	0	0	0	0	0	1,188,442
	102182	CONSTRUCTION OF 4 ADDITIONAL WELLS FOR HIALEAH RO WTP	2,446,877	0	2,446,877	646,877	1,000,000	800,000	0	0	0	0	0	0	0	0	2,446,877
		TOTAL - 1080	8,265,505	4,630,186	3,635,319	1,835,319	1,000,000	800,000	0	0	0	0	0	0	0	0	3,635,319
1081	101966	INSTALLATION OF 12-INCH DIWM ON EAST DRIVE FROM NW 36 ST. TO LABARON DR.	13,910,870	9,358,024	4,552,846	3,952,846	600,000	0	0	0	0	0	0	0	0	0	4,552,846
		TOTAL - 1081	13,910,870	9,358,024	4,552,846	3,952,846	600,000	0	0	0	0	0	0	0	0	0	4,552,846
1082	101969	WATER - PIPES AND INFRASTRUCTURE PROJECTS	84,135,668	54,135,668	30,000,000	9,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	0	0	0	30,000,000
	102178	36-INCH WATER MAIN NW 106 STREET	12,573,467	877,467	11,696,000	2,760,000	7,150,000	1,786,000	0	0	0	0	0	0	0	0	11,696,000

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Active and Future projects

		Current Bond/Fund Allocation	Expenditures As of 9/30/2019	Remaining Bond/Fund Allocation	PROJECTIONS												
Proj	Sub-Project				2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	Future	Total	
102179	36-INCH WATER MAIN NW 135 STREET	15,486,255	785,732	14,700,523	6,739,001	7,961,522	0	0	0	0	0	0	0	0	0	14,700,523	
TOTAL - 1082		112,195,390	55,798,867	56,396,523	18,499,001	18,111,522	4,786,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	0	0	0	56,396,523	
1084	101678 SMALL DIAMETER WATER MAINS ENHANCEMENTS PROGRAM	25,813,824	6,046,437	19,767,387	3,113,061	4,467,399	2,664,129	2,000,000	1,757,798	1,500,000	3,200,000	1,065,000	0	0	0	19,767,387	
102136	REPLACEMENT OF 82,612 LF OF WATER MAINS IN SHENANDOAH AREA - PHASE A	15,482,652	12,502,255	2,980,397	2,980,397	0	0	0	0	0	0	0	0	0	0	2,980,397	
102137	SOUTH MIAMI HEIGHTS AREA WATER MAIN REPLACEMENT & SERVICE CONVERSIONS PROJECT - PHASE A	34,129,397	28,355,474	5,773,923	5,773,923	0	0	0	0	0	0	0	0	0	0	5,773,923	
102139	INSTALLATION OF 8-INCH DUCTILE IRON WATER MAIN PHASE I IN SW 147th AVE AND SW 157th AVE BETWEEN SW 288th ST & SW 297th ST	5,473,488	1,962,350	3,511,138	3,511,138	0	0	0	0	0	0	0	0	0	0	3,511,138	
102141	REPLACEMENT OF 82,612 LF OF WATER MAINS IN SHENANDOAH AREA - PHASE B	15,955,062	10,001,710	5,953,352	5,953,352	0	0	0	0	0	0	0	0	0	0	5,953,352	
102142	SOUTH MIAMI HEIGHTS AREA WATER MAIN REPLACEMENT & SERVICE CONVERSIONS PROJECT - PHASE B	37,899,267	20,285,975	17,613,292	4,500,000	1,000,000	6,000,000	6,113,292	0	0	0	0	0	0	0	17,613,292	
102143	REPLACE UNDERSIZED WATER MAINS DOUGHRIT HOLE	12,393,516	1,758,755	10,634,761	10,100,000	534,761	0	0	0	0	0	0	0	0	0	10,634,761	
102144	WATER COMMERCIAL CORRIDORS ECONOMIC DEVELOPMENT - REPLACEMENT OF SMALL DIAMETER PIPE PHASE 1	4,000,000	0	4,000,000	0	0	0	0	1,000,000	1,000,000	1,000,000	1,000,000	0	0	0	4,000,000	
102193	WATER MASTER PLAN	3,886,527	586,527	3,300,000	104,343	793,007	1,085,168	430,955	886,527	0	0	0	0	0	0	3,300,000	
102198	INSTALLATION OF 8-INCH DUCTILE IRON WATER MAIN PHASE II IN SW 147th AVE AND SW 152nd AVE BETWEEN SW 288th ST & SW 296th ST	2,959,573	0	2,959,573	2,959,573	0	0	0	0	0	0	0	0	0	0	2,959,573	



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		Current Bond/Fund Allocation	Expenditures As of 9/30/2019	Remaining Bond/Fund Allocation	PROJECTIONS											
Proj	Sub-Project				2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	Future	Total
102243	WATER COMMERCIAL CORRIDORS ECONOMIC DEVELOPMENT - PHASE 1	96,115,934	945,146	95,170,788	5,308,057	4,163,823	7,676,395	12,814,030	17,107,714	15,000,000	13,500,000	12,600,000	7,000,769	0	0	95,170,788
102244	LEAK DETECTION PROGRAM	40,000,000	573,425	39,426,575	5,000,000	5,000,000	4,426,575	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	0	0	0	39,426,575
103013	CONSUMER LINE RELOCATION PROJECTS	15,000,000	5,000,000	10,000,000	2,000,000	2,500,000	5,000,000	500,000	0	0	0	0	0	0	0	10,000,000
TOTAL - 1084		309,109,240	88,018,054	221,091,186	51,303,844	18,458,990	26,852,267	26,858,277	25,752,039	22,500,000	22,700,000	19,665,000	7,000,769	0	0	221,091,186
GRAND TOTAL		1,649,536,376	357,354,751	1,292,181,625	210,863,566	144,599,757	153,482,877	206,779,297	120,206,280	117,844,525	79,471,266	118,581,747	140,352,310	0	0	1,292,181,625

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MIAMI-DADE WATER AND SEWER DEPARTMENT  
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As of: 9/30/2014

Proj	Sub-Proj	Sub-Proj Description	Current Bond/Fund Allocation	Expenditures As of 9/30/2014	Remaining Bond/Fund Allocation	PROJECTIONS											
						2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	Future	Total
1050	101501	PRESTON WTP - NEW PUMP STATION EAST OF RESERVOIR	43,700,000	0	43,700,000	0	1,500,000	3,700,000	15,500,000	13,000,000	5,000,000	5,000,000	0	0	0	0	43,700,000
	101711	HI/LEAH PRESTON WTP - DESIGN AND ENGINEERING SERVICE FOR PLANT UPGRADES, REMOTE STORAGE, AND APPURTINANT WATER PRODUCTION FACILITIES	11,400,000	0	11,400,000	750,000	1,500,000	2,500,000	3,650,000	3,000,000	0	0	0	0	0	0	11,400,000
	101584	REHABILITATION PRESTON PLANT ACCELERATORS	4,500,000	0	4,500,000	500,000	1,500,000	2,500,000	0	0	0	0	0	0	0	0	4,500,000
	102062	HI/LEAH WTP LIME KILN GEAR PURCHASE	348,880	31,120	348,880	348,880	0	0	0	0	0	0	0	0	0	0	348,880
	102104	FILTER BACKWASH ELEVATED TANK REPLACEMENT SYSTEM FOR HI/LEAH WTP	3,000,000	0	3,000,000	250,000	1,000,000	1,750,000	0	0	0	0	0	0	0	0	3,000,000
	102105	HYPOCHLORITE FELD STORAGE AT PRESTON/HI/LEAH WTP	6,800,000	0	6,800,000	750,000	1,500,000	2,000,000	2,550,000	0	0	0	0	0	0	0	6,800,000
	102105	REPLACE EXISTING CATWALKS AT HI/LEAH AND PRESTON WTP	1,000,000	0	1,000,000	500,000	500,000	0	0	0	0	0	0	0	0	0	1,000,000
	102127	REPLACEMENT/UPGRADE OF LIME FELD SYSTEM	3,000,000	0	3,000,000	300,000	1,000,000	250,000	1,350,000	0	0	0	0	0	0	0	3,000,000
	102131	PURCHASE OF LAKE PROPERTY ADJACENT TO NORTHWEST WELLFIELD	10,602,669	0	10,602,669	8,602,669	2,000,000	0	0	0	0	0	0	0	0	0	10,602,669
	102170	HI/LEAH PRESTON WTP FIELDS/MOTOR CONTROL CENTER	750,000	0	750,000	0	0	0	0	0	0	0	750,000	0	0	0	750,000
	102171	HI/LEAH PRESTON WTP TRANSFORMER	1,500,000	0	1,500,000	0	0	0	0	0	0	0	1,500,000	0	0	0	1,500,000

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## **6.0 CONCLUSION**

This Work Plan is a small reflection of the larger, more detailed Miami-Dade County Water Supply Facilities Work Plan Update. This is because the City receives its entire water supply from the Miami-Dade Water and Sewer Department. The Miami-Dade County Work Plan must consider the needs of all of its service area including retail and wholesale customers. In order to be consistent with Miami-Dade County, the City has utilized the information and data supplied in the Miami-Dade County Work Plan to produce its own work plan as required by Florida Statutes. As demonstrated in both the City and County work plans, the City will have an adequate water supply to meet its projected growth through the year ~~2050~~2040.

## **Exhibit B**

### **COMPREHENSIVE PLAN AMENDMENTS**

The following section lists the Goals, Objectives and Policies being adopted into the City's Comprehensive Plan to ensure consistency between the elements in the Comprehensive Plan and the ~~2020~~~~2015~~-MDWASD ~~20~~~~10~~-year Water Supply Facilities Work Plan Update.

All references to 9J.5 are hereby deleted.

#### **CAPITAL IMPROVEMENTS ELEMENT**

##### **GOAL 1 UNDERTAKE CAPITAL IMPROVEMENTS NECESSARY TO PROVIDE ADEQUATE INFRASTRUCTURE AND A HIGH QUALITY OF LIFE, WITHIN SOUND FISCAL PRACTICES.**

###### **Objective 1.1 Annual Capital Improvements Programming Process**

*In general, use the capital improvements element as a means to existing deficiencies, accommodate desired future growth and replace obsolete or worn-out facilities. In particular, use this Element as the framework to monitor public facility needs as a basis for annual capital budget and five-year program preparation.*

###### **Objective 1.2 Coordinate Land Use, Financial Resources, and Level of Service Standards**

*To coordinate future land use decisions with existing and planned capital facilities using the adopted level of service standards contained in this Element.*

###### **Policy 1.2.1**

The following Level of Service (LOS) standards shall be maintained:

\* \* \*

**Potable Water:** The City shall secure adequate potable water supply from Miami-Dade WASD to provide an average of ~~455~~ 94 gallons of water per capita per day. In addition, the City shall enforce the following standards through its interlocal agreement with the Miami-Dade Water and Sewer Department:

- (a) The regional treatment system shall operate with a rated maximum daily capacity of no less than 2 percent above the maximum daily flow for the preceding year and an average daily capacity of 2 percent above the average daily system demand for the preceding 5 years. The maximum daily flow shall be determined by calculating the average of the highest five single day flows for the previous 12 months.

- (b) Water shall be delivered to users at a pressure no less than 20 pounds per square inch (psi) and no greater than 100 psi. Unless otherwise approved by the Miami-Dade Fire Department, minimum fire flows based on the land use served shall be maintained as follows:

<b>Land Use Min.</b>	<b>Fire Flow (gpm)</b>
Single Family Residential Estate	500
Single Family and Duplex; (Residential on minimum lots of 7,500 sf)	750
Multi-Family Residential; Semiprofessional Offices	1,500
Hospitals; Schools	2,000
Business and Industry	3,000

- (c) Water quality shall meet all federal, state, and County primary standards for potable water.
- (d) Countywide storage capacity for finished water shall equal no less than 15 percent of the Countywide average daily demand.

\* \* \*

### **Policy 1.2.3**

Miami Springs hereby adopts by reference, the Miami-Dade Water Supply Facilities Work Plan as revised April 2008, the capital projects described therein and subsequent revisions. County Comprehensive Development Master Plan Amendments adopted February 4, 2015, the Miami-Dade Water and Sewer Department 20-year Water Supply Facilities Work Plan (2014-2033) Support Data (November 2014), the 2013 2018 Lower East Coast Water Supply Plan Update (LEC) approved by the South Florida Water Management District (SFWMD) on October 10, 2013 November 8, 2018 and additional information found within Water Use Permit 13-00017-W are herein incorporated by reference. The Water Use Permit which was modified and approved by the SFWMD on February 9, 2015, will now expire on February 9, 2035. Currently, WASD is preparing to submit a WUP modification that will include updated water demand projections based on revised population data and is requesting an extension of the permit duration through the year 2040.

### **Policy 1.2.4**

Miami Springs shall adopt and implement a water supply facilities work plan for at least a ten-year planning period that reflects coordination with the South Florida Water Management District's Lower East Coast Water Supply Plan Update as required by section 163.3177(6)(c), F.S. within 18 months after updates or amendments to it are approved by the District.

### **Policy 1.2.5**

Prior to approval of a building permit or its functional equivalent, the City shall consult with



the Miami-Dade County Water and Sewer Department, the City's water supplier, to determine whether supplies to serve the new development will be available no later than the anticipated date of issuance of certificate of occupancy.

## CONSERVATION ELEMENT

### GOAL1 PRESERVE AND ENHANCE SIGNIFICANT NATURAL RESOURCES IN MIAMI SPRINGS.

#### Objective 1.2 Water Quality and Quantity

*In general, conserve, appropriately use and protect the quality and quantity of current and projected water sources and water that flow into estuarine waters or oceanic waters. In particular, upgrade the drainage system so that stormwater outfalls into the Miami River Canal fully meet National Pollution Discharge Elimination System (NPDES) standards. Upgrade on-site drainage standards to ensure that private properties retain at least the first one inch of stormwater on-site and permit no more runoff after development than before development.*

##### Policy 1.2.1

The City shall cooperate with the Miami-Dade County Water and Sewer Authority and other Miami-Dade County agencies to help ensure that wellfields and cones of influence are protected. Protection measures shall include restrictions on uses. No new facilities that use, handle, generate, transport or dispose of hazardous wastes shall be permitted within wellfield protection areas, and all existing facilities that use, handle, generate, transport or dispose of more ~~that~~ than the maximum allowable quantity of hazardous wastes (as specified in Chapter 24-12-1 of the Code of Miami-Dade County, as may be amended from time to time within wellfield protection areas shall be required to take substantial measures such as secondary containment and improved operating procedures to ensure environmentally safe operations.

##### Policy 1.2.3

The City shall ensure that the water quality in the traditional and new alternative water supply sources is protected.

#### Objective 1.3 Water Supply

*To support the City's potable water suppliers in the development of alternate water supply sources as approved by the South Florida Water Management District and to further conserve potable water during emergency situations.*

##### Policy 1.3.1

The City will continue to enforce an emergency water conservation ordinance based on



both the South Florida Water Management District model ordinance and any specific SFWMD requirements. In addition, the City will work with SFWMD to create a plan which

allows for alternative water supply development funding, more comprehensive regional water supply plans, and enhanced consumptive use permitting.

## FUTURE LAND USE ELEMENT

### GOAL 1: ACHIEVE THE FOLLOWING COMMUNITY CHARACTER:

Miami Springs should be a residential community which offers the best possible residential environment consistent with its location and development history. Development policies should protect and preserve its single-family residential character and neighborhoods by maintaining an adequate supply of safe decent and affordable housing for its current and future residents.

#### **Policy 1.1.4**

The City shall enact and enforce as part of the land development code a concurrency management system. The concurrency management system shall specify that no development permit shall be issued unless the public facilities necessitated by a development (in order to meet level of service standards specified in the Transportation, Recreation and Open Space, and Infrastructure Policies) will be in place concurrent with the impacts of the development or the permit is conditional to assure that they will be in place. The requirement that no development permit shall be issued unless public facilities necessitated by the project are in place concurrent with the impacts of development shall be effective immediately and shall be interpreted pursuant to the following:

\* \* \*

### **Objective 1.4 Ensure Protection of Natural Resources**

*In general, ensure protection of natural resources. In particular, upgrade the drainage system so that stormwater outfalls into the Miami River Canal fully meet National Pollution Discharge Elimination System (NPDES) standards-*

#### **Policy 1.4.2**

9J-5.006(3)(c)4

The City shall continue to follow all or a portion of the recommendations of the May 1995 Storm water Management Masterplan prepared by Post, Buckley Schuh & Jernigan, Inc. The policy implications of the Post, Buckley, Schuh & Jernigan, Inc. study are incorporated herein by reference.

#### **Policy 1.4.3**

The City shall continue to incorporate in its capital improvements program any and all expenditures necessitated by the implementation of Policy 1.4.2 above.

#### **Policy 1.4.4**

The City will periodically test pollutant loads in its six stormwater outfalls.

**Policy 1.4.5**

The City shall update its Drainage Comprehensive Plan as necessary to ensure the continued efficacy of its provisions to upgrade the storm sewer system

**Policy 1.4.6**

The City will continue to ensure coordination between land use and future water supply planning.

**INTERGOVERNMENTAL COORDINATION ELEMENT****GOAL 1 TO MAINTAIN OR ESTABLISH PROCESSES TO ASSURE COORDINATION WITH OTHER GOVERNMENTAL ENTITIES WHERE NECESSARY TO IMPLEMENT THIS PLAN.****Objective 1.1 Coordinate with the Plans of Other Jurisdictions and Agencies**

*In general, coordinate the Miami Springs Comprehensive Plan with the plans of adjacent jurisdictions and agencies. In particular, achieve maximum feasible levels of consistency between the plans for Miami Springs, the Miami-Dade County School Board, Miami-Dade County, Virginia Gardens, Hialeah, the South Florida Water Management District, and the Florida Department of Transportation.*

The City shall coordinate the planning of potable water and sanitary sewer facilities and services and level-of-service standards with the Miami-Dade County Water and Sewer Department, Department of Regulatory and Economic Resources, and the South Florida Water Management District.

**Policy 1.1.5**

Miami Springs shall adopt and implement a water supply facilities work plan for at least a ten-year planning period that reflects coordination with the South Florida Water Management District's *Lower East Coast Water Supply Plan Update* within 18 months after updates or amendments to it are approved by the District.

**Objective 1.4 Support climate change and sea level rise initiatives.****Policy 1.4.1**

Support the Miami-Dade Water and Sewer Department and South Florida Water Management District in any efforts to evaluate the consequences of sea level rise, changing rainfall and storm patterns, temperature effects, and cumulative impacts to existing structures and existing legal uses.

**Policy 1.4.2**

Participate in the Southeast Florida Regional Climate Change Compact to support regional planning efforts and initiatives to adapt to rising sea level in the LEC Planning Area.

**Policy 1.4.3**

Work collaboratively with the Miami-Dade Water and Sewer Department, other utilities and South Florida Water Management District to identify the utility wellfields and other users at potential risk of saltwater intrusion within the LEC Planning Area.

## **INFRASTRUCTURE ELEMENT**

### **GOAL 1: PROVIDE AND MAINTAIN THE PUBLIC INFRASTRUCTURE IN A MANNER THAT WILL ENSURE WATER QUALITY, CONSERVE NATURAL RESOURCES AND PROTECT THE PUBLIC HEALTH, SAFETY AND QUALITY OF LIFE FOR MIAMI SPRINGS RESIDENTS**

#### **Objective 1.1 Correct Drainage Deficiencies Increase Drainage Capacity**

*Correct existing drainage facility deficiencies and increase drainage capacity. Upgrade the drainage system so that stormwater outfalls into the Miami River Canal fully meet National Pollution Discharge Elimination System (NPDES) standards Upgrade on site drainage standards to ensure that private properties retain at least the first one inch of stormwater on site and permit no more runoff after development than before development.*

**Policy 1.1.2**

The City shall continue to follow the recommendations of the May 1995 Stormwater Management Masterplan prepared by Post, Buckley Schuh & Jernigan as further defined in the priorities identified in the April 2001 Stormwater Master Plan Update. The policy and planning implications of the Post, Buckley, Schuh & Jernigan, Inc. studies are incorporated herein by reference.

**Policy 1.1.3**

The City will determine the need for laboratory testing of pollutant loads in its six stormwater outfalls.

**Policy 1.1.4**

The City shall update its Stormwater Management Master Plan as necessary to ensure the continued efficacy of its provisions to upgrade the storm sewer system in accordance with the specific standards of Objective 1.1 above.

#### **Objective 1.3 Correct Potable Water Deficiencies**

*To correct existing potable water system deficiencies and otherwise improve potable water service.*

#### **Policy 1.3.1**

The City shall coordinate with Miami-Dade County Water and Sewer Department to identify and correct potable water deficiencies in the City.

#### **Policy 1.3.2**

The City shall coordinate with Miami-Dade County Water and Sewer Department to plan for infrastructure improvements and expansions to serve new development and redevelopment

#### **Policy 1.3.3**

The City will support the SFWMD and Miami-Dade County water reuse projects and implementation of new regulations or programs designed to increase the volume of reclaimed water used and public acceptance of reclaimed water.

#### **Policy 1.3.4**

The City will coordinate with Miami-Dade County in the adoption and updates to the Water Supply Plan.

### **Objective 1.4 Level of Service**

*Continue to secure adequate water supply and potable water treatment capacity to meet the City's adopted level of service (LOS) standards; see policies for measurable standards.*

#### **Policy 1.4.2**

**Potable Water:** The City shall secure adequate potable water supply from the Miami-Dade Water and Sewer Department in order to provide an average of ~~155-96~~ 94 gallons of potable water per capita per day. In addition, the City shall enforce the following standards through its interlocal agreement with the Miami-Dade Water and Sewer Department:

- (a) The regional treatment system shall operate with a rated maximum daily capacity of no less than 2 percent above the maximum daily flow for the preceding year, and an average daily capacity 2 percent above the average daily system demand for the preceding 5 years. The maximum daily flow shall be determined by calculating the average of the highest five single day flows for the previous 12 months.
- (b) Water shall be delivered to users at a pressure of no less than 20 pounds per square inch (psi) and no greater than 100 psi. Unless otherwise approved by the Miami-Dade Fire Department, minimum fire flows based on the land use served shall be maintained as follows:

<b>Land Use Min.</b>	<b>Fire Flow (gpm)</b>
Single Family Residential Estate	500
Single Family and Duplex; (Residential on minimum lots of 7,500 sf)	750
Multi-Family Residential; Semiprofessional Offices	1,500
Hospitals; Schools	2,000
Business and Industry	3,000

- (c) Water quality shall meet all federal, state, and county primary standards for potable water.
- (d) Countywide storage capacity for finished water shall equal no less than 15 percent of the countywide average daily demand.

**Policy 1.4.3**

**Drainage:** All nonresidential development and redevelopment shall adequately accommodate runoff to meet all Federal, state and local requirements. Stormwater shall be treated in accordance with the state code. One inch of runoff shall be retained on site. Post-development runoff shall not exceed peak pre development runoff

**Objective 1.5 Water Conservation**

*Implement water conservation initiatives recommended by Miami-Dade County, the South Florida Water Management District, the Florida Department of Environmental Protection and the City's Utilities Department.*

**Policy 1.5.1**

The City shall promote: 1) water conservation-based irrigation; 2) water conservation-based plant species derived from the South Florida Water Management District's list of native species and other appropriate sources; 3) lawn watering restrictions; 4) mandatory use of ultra-low volume water saving devices for substantial rehabilitation and new construction; and 5) other water conservation measures, as feasible. The City will comply with water use efficiency techniques for indoor water use in accordance with Section 8-31, 32-84 and 8A-381 of the Code of Miami-Dade County. All future development will comply with the landscape standards in Sections 18-A and 18-B of Miami-Dade County Code.

**Policy 1.5.2**

The city shall promote education programs for residential, commercial and other uses which will discourage waste and conserve potable water. The City will coordinate with the Miami-Dade Water and Sewer Department on this matter whenever possible.

**Policy 1.5.3**

The City shall collaborate with the Miami-Dade County Water and Sewer Department efforts to identify and reduce non-revenue water.

**Policy 1.5.4**

The City shall coordinate future water conservation efforts with the Miami-Dade Water and Sewer Department and the South Florida Water Management District to ensure that proper techniques are applied. In addition, the City shall continue to support and expand existing goals, objectives and policies in the comprehensive plan that promote water conservation in a cost-effective and environmentally sensitive manner.

**Policy 1.5.5**

The City will continue to actively support the SFWMD and Miami-Dade County in the implementation of new regulations or programs that are designed to conserve water during the dry season. The City will also comply with the water conservation requirements of the Miami-Dade County Code.

**Policy 1.5.6**

The City shall adopt Florida Friendly Landscape principles into the Land Development Regulations.

**Policy 1.5.7**

The City shall maximize the use of native plants in City landscaping projects and large redevelopment sites utilizing Florida Friendly Landscape principles to provide and improve urban habitat and connectivity for native species.

**Policy 1.5.8**

The City shall continue to evaluate alternative potable water supply sources evaluation techniques and technologies for water capture and reuse, including rainwater harvesting, and revise its Land Development Regulations as necessary to allow for these options with local building design

**Policy 1.5.9**

The City shall continue to promote the use of ultra-low-flow high efficiency plumbing fixtures through its Showerhead Exchange Program and requires and enforces the guidelines established by the Florida Building Code, Plumbing.

## **Figures**

Figure 1 – Miami Springs General Location Map

Figure 2 – Miami-Dade County Water Service Area Map

Figure 3 – Miami-Dade County Wellfield Protection Cones of Influence Map

Figure 4 – Miami Springs Wellfield Protection Cones of Influence Map



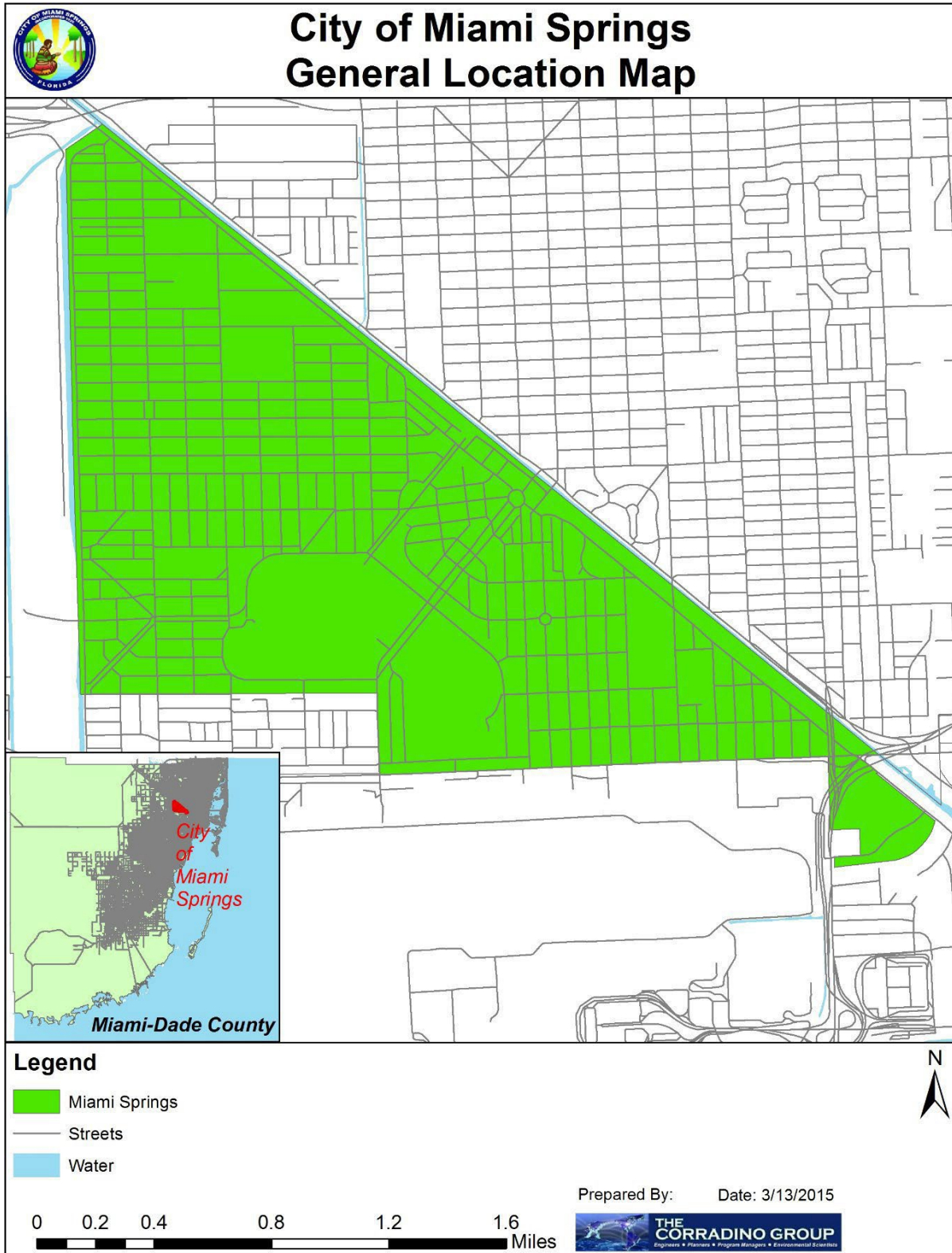


Figure 1





## Miami-Dade County Water Service Providers

Figure 2

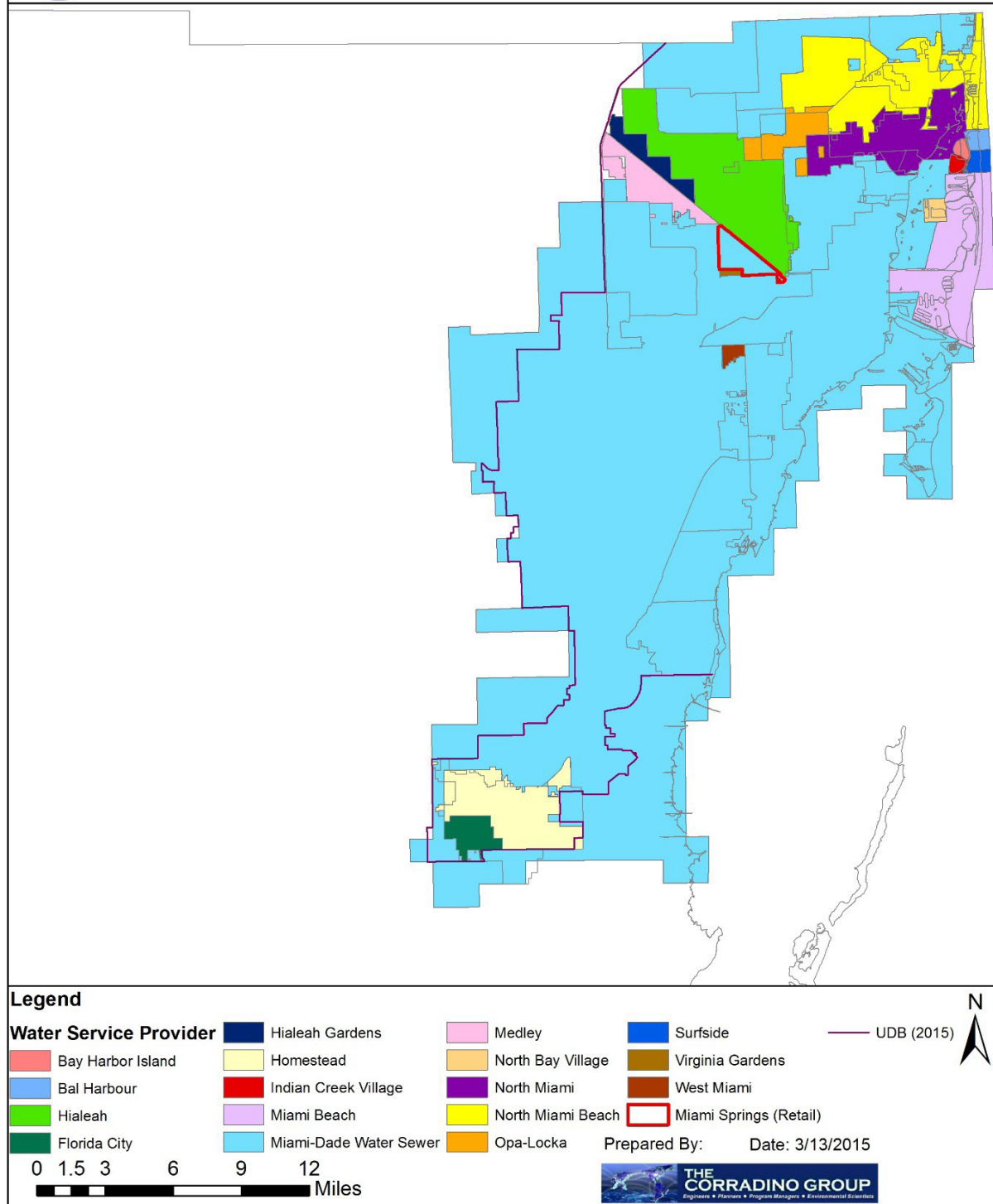


Figure 2



# Miami-Dade County Wellfield Protection Cones of Influence

Figure 3

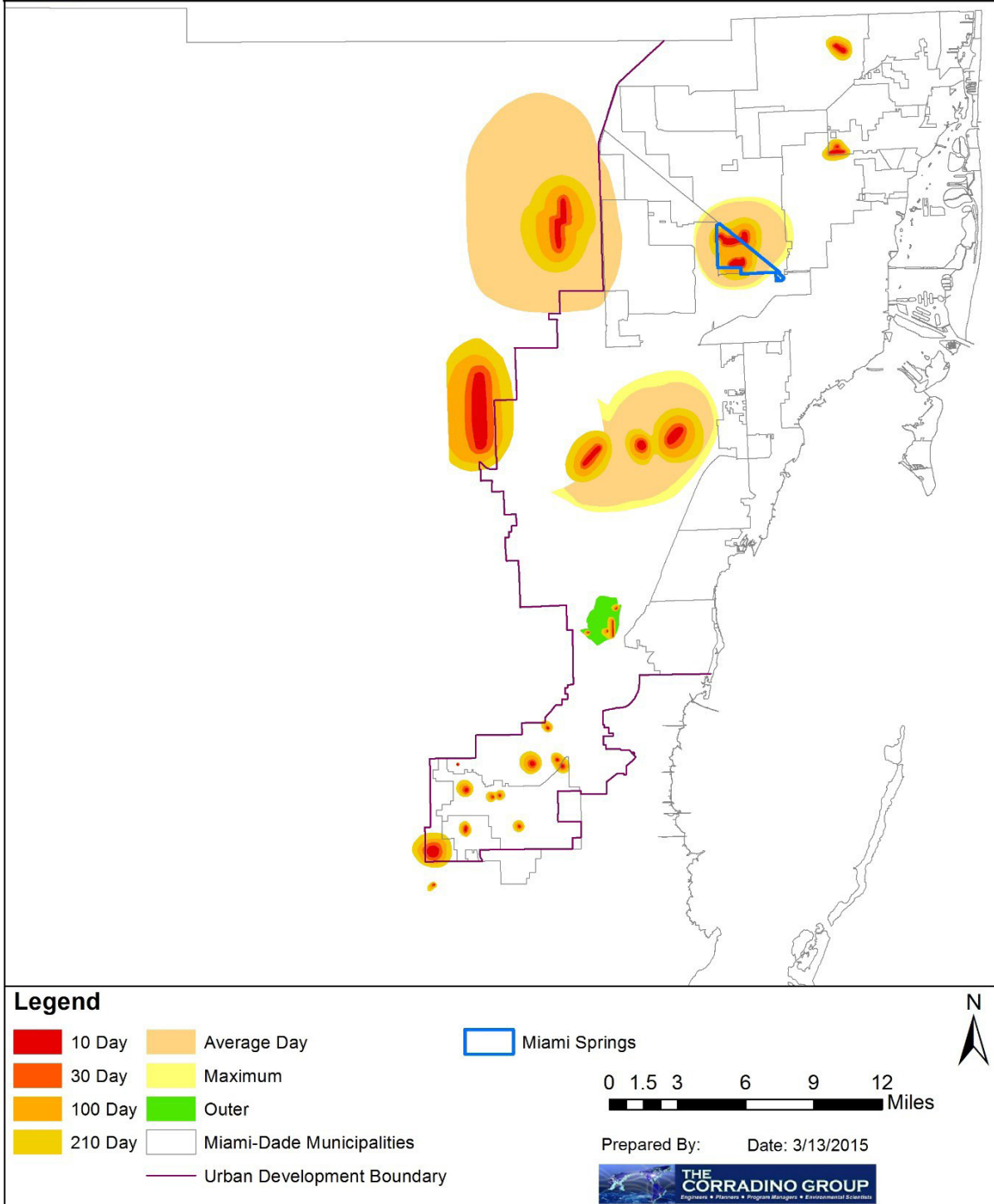
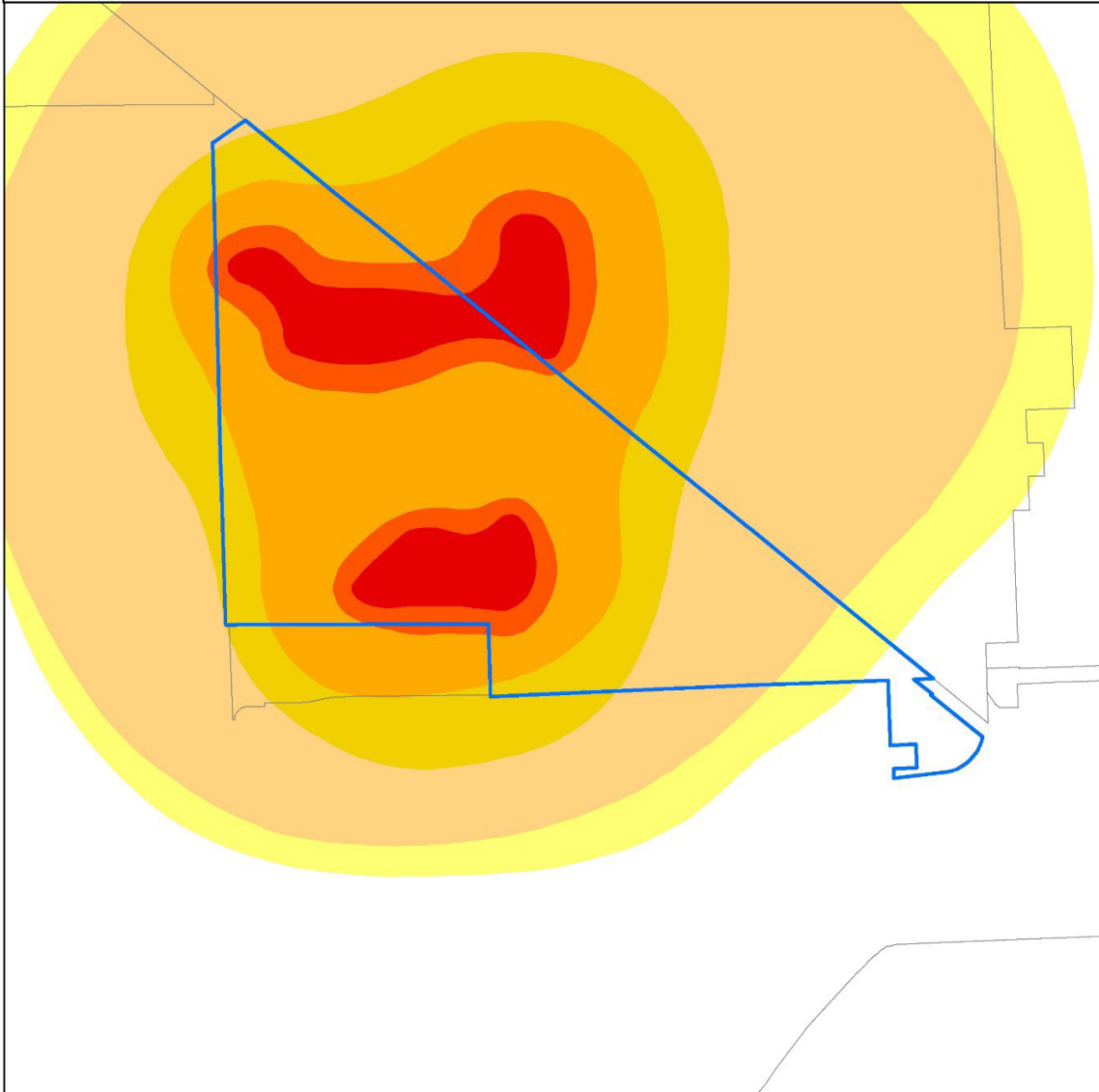


Figure 3



## City of Miami Springs Wellfield Protection Cones of Influence

Figure 4



### Legend

- 10 Day
- 30 Day
- 100 Day
- 210 Day
- Average Day
- Maximum
- Outer
- Miami-Dade Municipalities
- Urban Development Boundary

Miami Springs

0.125 0.25 0.5 0.75 1 Miles

Prepared By: Date: 3/13/2015

