

Town of Jupiter
10-Year Water Supply Facilities Work Plan
2019 Update



Prepared by:
Town of Jupiter Utilities Department
in association with Hazen

Hazen

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1. Introduction

The Town of Jupiter is located on the southeastern coast of Florida within Palm Beach County. **Figure 1-1** illustrates a location map of the Town. This 2019 Town of Jupiter 10-Year Water Supply Facilities Work Plan identifies water supply sources, availability and facilities needed to serve existing and new development within the local government's jurisdiction. Chapter 163, Part II, (F.S.), requires local governments to prepare and adopt 10-Year Water Supply Facilities Work Plans into their comprehensive plans within 18 months after the South Florida Water Management District

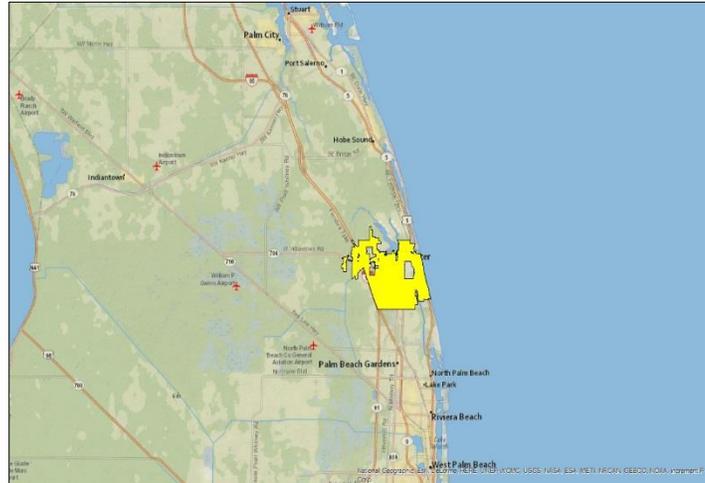


Figure 1-1: Location Map – Town of Jupiter

(SFWMD) approves a regional water supply plan or its update. The 2018 Lower East Coast Water Supply Plan Update (2018 LECWSP Update) was adopted by the SFWMD Governing Board on November 9, 2018. Therefore, local governments within the Lower East Coast Region are required to amend their comprehensive plans and include an updated 10-Year Water Supply Facilities Work Plan and related planning elements by May 9, 2020.

The State of Florida requires that the 10-Year Water Supply Facilities Work Plan - 2019 Update address the development of traditional and alternative water supplies and management strategies, including conservation and reuse. The data and analyses, including population projections, water demands, and service areas must cover at least a 10-Year planning period and be consistent to the LECWSP and the updated comprehensive plan amendment.

The Town of Jupiter's 10-Year Water Supply Facilities Work Plan - 2019 Update is divided into five sections:

1. Introduction
2. Background Information
3. Data and Analysis
4. Capital Improvements
5. Goals, Objectives, and Policies



1.1 Statutory History

The Florida Legislature enacted bills in the 2002, 2004, 2005, 2011, 2012, and 2016 sessions to address the state's water supply needs. These bills, in particular Senate Bills 360 and 444 (2005 legislative session), significantly changed Chapters 163 and 373, 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 and water supply planning.

1.2 Statutory Requirements

The Town of Jupiter has considered the following statutory requirements in updates to this 10-Year Water Supply Facilities Work Plan.

1. Coordinate appropriate aspects of the Comprehensive Plan with the 2018 LECWSP [163.3177(4) (a), F.S.].
2. Ensure the 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 analyses demonstrating that adequate water supplies and associated public facilities will be available to meet projected growth demands must accompany all proposed Future Land Use Plan and Plan amendments submitted for review.
3. In consultation with the water supplier, ensure that adequate water supplies and potable water facilities are available to serve new development no later than the issuance by the local government of a certificate of occupancy or its functional equivalent [s.163.3180 (2), F.S.].
4. Revision of the related comprehensive planning elements 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 2018 LECWSP, or alternative project(s) proposed by the local government under s. 373.709(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 2018 LECWSP [s. 163.3177(6)(c)3, F.S.]; and
 - c. Update the 10-Year Water Supply Facilities 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)3. and (5), F.S.].



5. Revise the Five-Year Schedule of Capital Improvements to include 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 2018 LECWSP, 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 demand for the established planning period, considering the applicable regional water supply plan [s.163.3167(9), 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 2018 LECWSP [s.163.3177 (6) (h) 1., F.S.].

While an Evaluation and Appraisal Report is not required, local governments are required to comprehensively evaluate, and as necessary, update the Comprehensive Plan to reflect changes in local conditions. The evaluation could address the extent to which the local government has implemented its 10-Year Water Supply Facilities Work Plan or the need to update the 10-Year Water Supply Facilities 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.].

2. Background Information

This section includes the following:

- An overview of the Town of Jupiter’s water service area; and
- A description of regional water supply planning issues that impact the Town of Jupiter, including Town policies related to those issues:
 - Loxahatchee River Watershed Restoration Project
 - Excess Surface Water for Aquifer Recharge
 - Expanded Use of Reclaimed Water
 - Floridan Aquifer Water Quality

1.3 Service Area

The Town of Jupiter service area encompasses a total area of 58 square miles, approximately one-tenth the total area of urban Palm Beach County. Retail customers include residential, commercial, and industrial properties within the Town of Jupiter, The



Town of Juno Beach, and unincorporated areas of Palm Beach and Martin Counties. The utility has no wholesale customers. **Figure 2-1** depicts the water service area.

Figure 2-1 also depicts the location of key Town assets including the following: 1) Water Treatment Plant (WTP); 2) Central Boulevard High Service Pump Station; 3) Juno Repump Station; 4) Riverbend Repump Station.

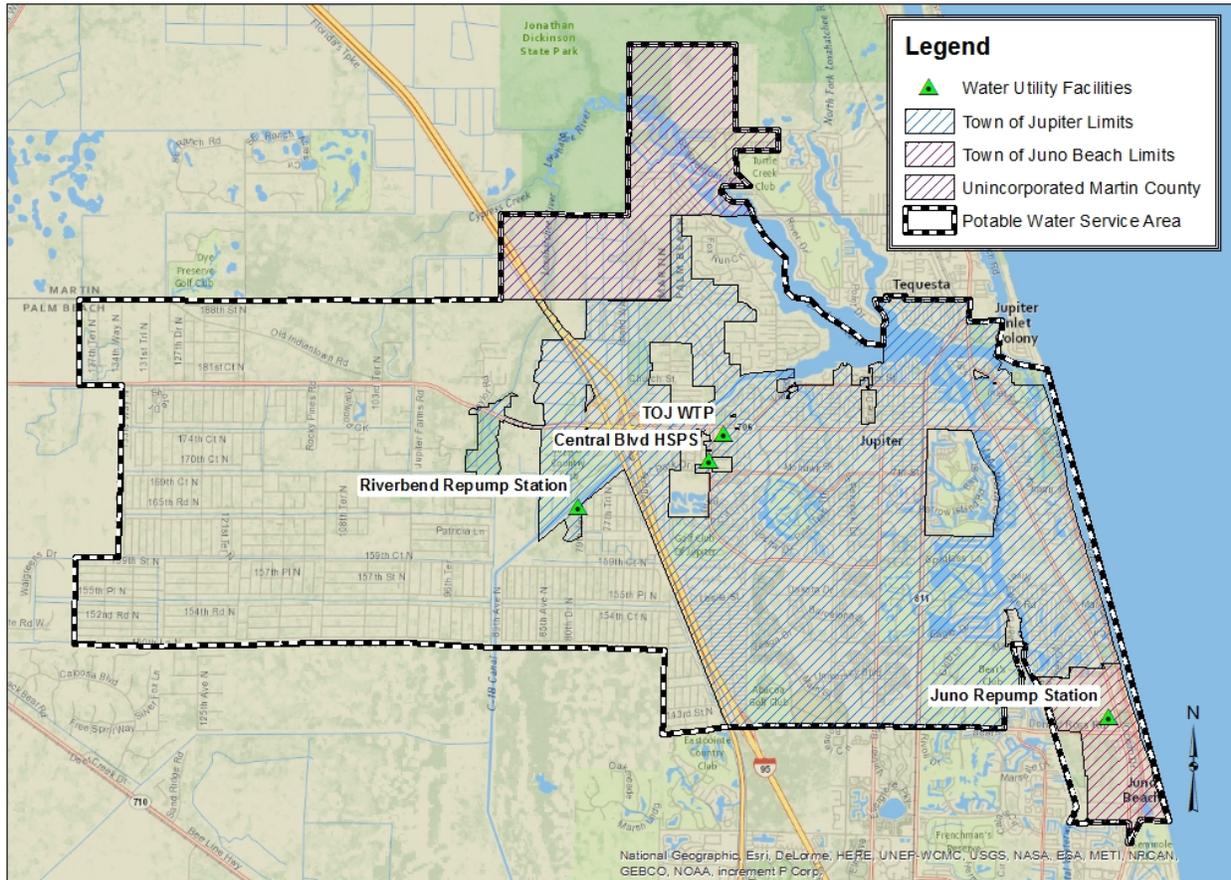


Figure 2-1: Town of Jupiter Water Service Area

1.4 Regional Water Supply Issues

Investigations and evaluations conducted at the national, regional, and local levels have reinforced the need to plan for the predicted impacts of more frequent and severe drought, increases in tidal and storm-related flooding, and ensuring that future planning efforts are flexible to adapt to changes to ensure a sustainable water supply infrastructure.

The Town of Jupiter, together with its municipal and regional partners, understands that it is imperative that local governments and water utilities begin to formalize the integration of water supply and climate change considerations as part of coordinated planning efforts and work to provide relevant updates to the 10-Year Water Supply



Facilities Work Plan and enhance Goals, Objectives and Policies (GOPs) of its comprehensive plan.

The Town is a leader in developing planning tools and identifying achievable and cost-effective goals that meet the needs of its community.

The 2018 LECWSP Update identified five key regional water supply issues that impact the municipalities within the SFWMD jurisdiction:

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 restricted allocation area (RRA) 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.

The following sections describe the Town's policies addressing these regional issues.

1.4.1 Loxahatchee River Watershed Restoration Project

Regional water managers have long recognized the importance of capturing excess surface water runoff and the use of such water for Surficial Aquifer recharge, for protecting natural systems, maintaining public water supplies and providing a barrier to salt water intrusion to the surficial aquifer. In fact, as part of the Loxahatchee River Watershed Restoration Project, (Northern Palm Beach County Plan) component of the Comprehensive Everglades Restoration Plan (CERP), the ultimate delivery of 25 cubic feet per second (cfs) from the regional system was planned to occur for this purpose. SFWMD had previously been in discussions with Jupiter to explore the diversion of excess surface water runoff from the C-18 Canal when discharges to tide through the S-46 structure are eminent and/or other system factors indicate it is prudent. The project is still in the preliminary planning phase with continuing evaluation of project alternatives, however, the current tentatively selected plan does not include the delivery of 25 cfs to the Town's surficial wellfields.

If the 25 cfs of recharge flow is ultimately implemented, these recharge flows would aid significantly in reducing natural area impacts due to the Town's groundwater withdrawals while also minimizing recurring impacts simply resulting from periodic drought. The primary benefit of the project would provide for sustainability of Jupiter's surficial aquifer resources which currently provide over 26 million gallons per day (MGD) of withdrawals for public utility use and over 14 MGD for privately permitted withdrawals within the Town's service area. Additional benefits would include protection of other



natural systems and wetlands, and stormwater runoff water quality improvement. A lack of recharge to surface waters may impact wetlands and potentially depress surface water levels jeopardizing the sustainability of the local surficial aquifer and potentially causing saltwater intrusion from the nearby Atlantic Ocean and Loxahatchee River, which the increased recharge provided by the project would help to alleviate. The increased diversion and attenuation of stormwater runoff provided by the project would also greatly reduce the amount of nutrients reaching the impaired waters in the Southwest Fork and main embayment of the Loxahatchee River.

1.4.2 Excess Surface Water for Aquifer Recharge

Since 1990, the Town has incrementally constructed a system of control structures, flow-ways and salinity barriers intended to increase surface water storage and surficial aquifer recharge utilizing freshwater that would otherwise be wasted to tide. The recharge system, when fully developed, is expected to offset some of the effects of urban groundwater withdrawals by replenishing the resource, thereby minimizing the risk of environmental harm, including wetland drawdowns and saltwater intrusion. The recharge system is seen as a prudent insurance policy for Jupiter's water supply given its susceptibility to impacts. The long-term sustainability of the region's water resources and freshwater environment will be greatly enhanced through operation of this system.

1.4.3 Expanded Use of Reclaimed Water

The Loxahatchee River District (LRD) has operated its water reuse program in 1983. This program provides reclaimed wastewater to residential communities, golf courses, public parks and recreational facilities with over 5 MGD of reuse water on average from 2015-2018. The yearly average steadily increased over the 4-year period and with plans to expand the reuse program within the next ten years, which number should continue to increase. The Town of Jupiter WTP has participated in this program for many years. The Town provides, on average, approximately 2 MGD of nanofiltration (NF) concentrate water to LRD for blending into the treated and disinfected wastewater, benefiting both entities. The Town plans to continue this partnership with LRD for the foreseeable future.

1.4.4 Floridan Aquifer Water Quality

Since the Floridan aquifer wellfield was initially constructed beginning in 1990, the utility has been monitoring water quality trends and adjusting production to minimize withdrawal impacts to the aquifer. It is expected that salinity of the Floridan aquifer raw water will continue to increase with use over time, however, it is believed that the rate of increase can be slowed down or controlled by managing use of the wells including pumping rates and rotation of wells in service. Since 2004 the Town has implemented, when possible, more equal pumping from each of the Floridan aquifer wells which has slowed the degradation in produced water quality.

The Town also recognizes the need for additional Floridan aquifer wells to reduce the rate of decline of water quality in the Towns wellfield and protect individual wells from over pumping. The Town's plans for development of new Floridan aquifer wells is further discussed in section 4.1.1 of this report. In addition to the preventative measures



discussed, the Town also has a reactive approach for making incremental modifications to the Reverse Osmosis (RO) plant equipment and process that will allow the facility to continue producing drinking water that meets design criteria if total dissolved solids (TDS) continue to increase as observed.

3. Data and Analysis

This section provides information related to the population forecast and water demand forecast within the Town of Jupiter's water service area. Three different water demand forecasts were analyzed for this report.

The planning horizon for the Water Supply Facilities Work Plan - 2019 Update spans 20 years, covering 2020 to 2040.

1.5 Population Information

This 10-Year Water Supply Facilities Work Plan - 2019 Update estimates the future water supply needs for the Town of Jupiter's water service area. The water demand forecast was developed based on current utility operations and the existing customer base, compared to population projections through 2040 available from the Palm Beach County Planning and Zoning Department (PBCPZD). The population forecast utilizing the PBCPZD population projections spans 15 years, covering 2020 to 2035, because PBCPZD population projections were only available to 2035 at the time of this writing. Therefore, the percentage of population growth projected for Palm Beach County from 2035 to 2040, by the University of Florida Bureau of Economic and Business Research (UFBEBR), was applied to the 2035 value projected using TAZ data to estimate 2040 population.

The population modeling used for the water demand forecast was performed by PBCPZD using the *Countywide Population Projections Through 2035 by TAZ (2014)*, to develop the projected populations based on the Office of Economic and Demographic Research (OEDR) and University of Florida's Bureau of Economic and Business Research (BEBR). Palm Beach County utilizes the OEDR/BEBR medium range projections for the County's Population Allocation Model. The population forecast was disaggregated into Palm Beach County's 2010 Traffic Analysis Zones (TAZ).

These OEDR/BEBR forecasts were assigned by the PBCPZD to 1,033 TAZs within 38 municipalities and unincorporated Palm Beach County. Annually BEBR issues population projections in five-year increments for every Florida County. Palm Beach County's 2014 Population Allocation Model incorporates:

- The 2010 Census populations and related information (Summary File 1, released in August 2011), such as persons per household, group quartered population, vacancy and seasonal rates by TAZs. Henceforth, the baseline for future population models will be 2010.
- The latest OEDR projections, released in March 2013. These projections are based on the 2010 Census released in late March 2011, and the 2012 OEDR population estimates released in the Fall of 2012.

- All land use densities changes approved or expired residential projects, annexations, and 2012 Municipal population estimates, adopted up to April 2013.

1.6 Service Area

The Town of Jupiter provides water to customers within the Town as well as the following jurisdictions:

- Town of Juno Beach
- Unincorporated Palm Beach County
- Unincorporated Martin County

The Town does not provide bulk water sales to jurisdictions via master meters.

Figure 3-1 depicts the water service area (inclusive of all retail customers). The Town of Jupiter's water service area encompasses a total area of 58 square miles, approximately one-tenth the total area of urban Palm Beach County. The Town's land use is composed of residential, commercial, and industrial uses.

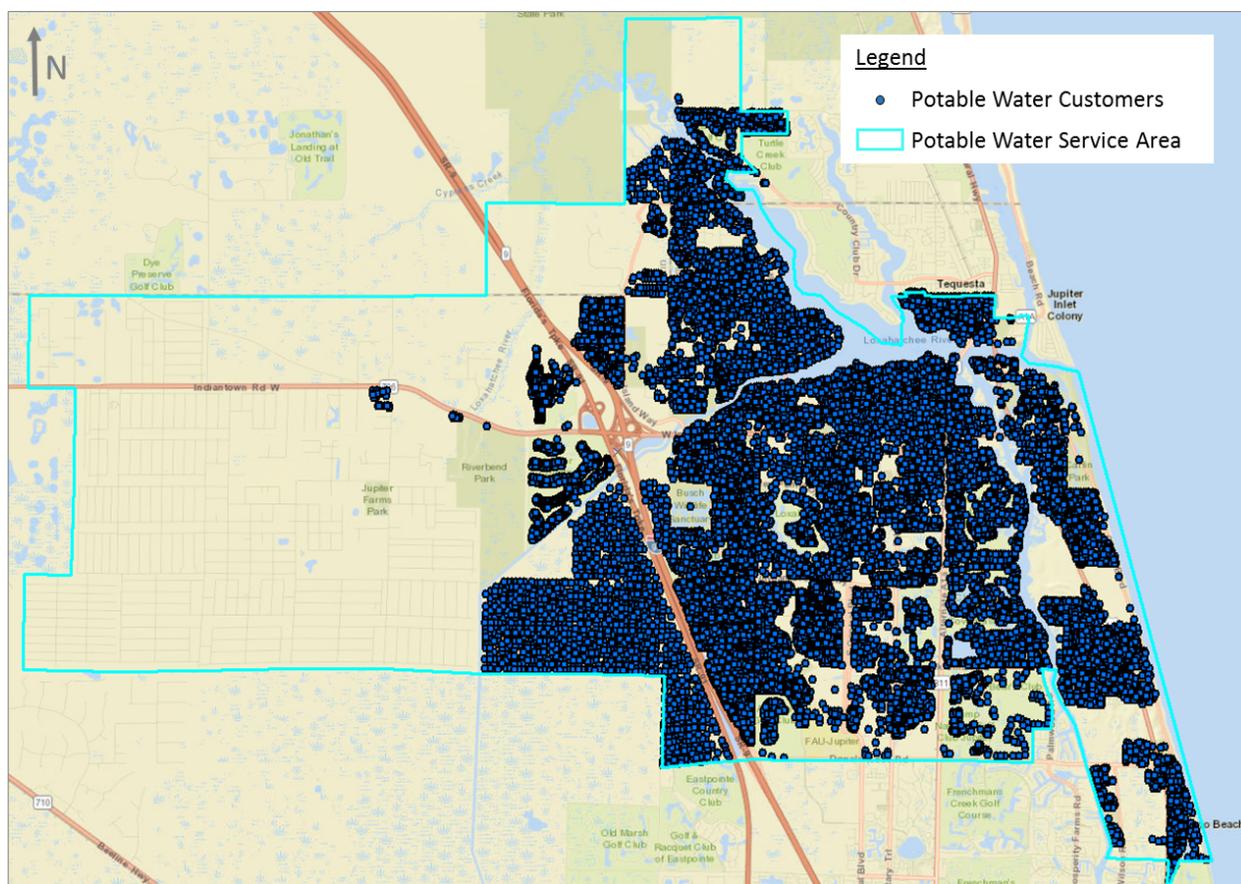


Figure 3-1: Town of Jupiter Water Customers
(as of July 2019, the Town's Water Utility served 30,234 accounts)

1.7 Potable Water Level of Service Standards

The Town of Jupiter has set level of service standards for its water system as summarized in **Table 3-1**.

Table 3-1: Town of Jupiter Water System Level of Service Standards

Component	Level of Service Standard / Goal
Raw Water Supply	26.2 MGD – Surficial Aquifer 23.5 MGD – Floridan Aquifer 49.7 MGD – Total
Treatment Capacity	30 Million Gallons per Day
Minimum system pressure during peak hour demand with largest pump out of service during non-fire flow conditions	Maintain a minimum of 45 psi in the distribution system
Minimum system pressure during peak hour demand with largest pump out of service during fire flow conditions	Maintain a minimum of 20 psi in the distribution system
Finished Water Pumped Per Capita – 2019 Comprehensive Plan Volume 1, Infrastructure Element	Policy 1.4.4 of the Comprehensive Plan Volume 1, Infrastructure Element indicates that the level of service for finished water pumped shall be 153 gallons per capita per day for residential customers and 100 gallons per 1,000 square feet for non-residential customers
Finished Water Storage	A minimum of 5.1 MG based on water demand in the past 12 months (FAC 62-555.320). Current storage capacity: 29.5 MG.
Maximum Distribution System Water Loss	10 Percent of Finished Water Pumped

Table 3-2 presents historical Annual Average Daily Flow (AADF) pumping data from the Town’s WTPs and wellfields along with the estimated populations from 2016 to 2018. The historical per capita water demand during this time frame is also presented.

**Table 3-2: Town of Jupiter Water Service Area
Historical AADF Finished and Raw Water Pumping Data**

Year	Water Service Area Population ¹	AADF Finished Water Pumped		AADF Raw Water Pumped	
		Pumping Rate Residential / Total (MGD) ²	Per Capita Residential / Total (Gallons per person per day)	Pumping Rate (MGD) ²	Per Capita (Gallons per person per day)
2016	75,536	10.9 / 15.8	143.8 / 208.5	19.6	259.5
2017	76,646	11.5 / 16.5	150.1 / 215.0	20.0	260.8
2018	77,755	10.8 / 15.7	139.0 / 202.3	19.1	245.1
2016 to 2018 Average:		11.1 / 16.0	144.3 / 208.6	19.9	255.1

Notes:

¹Water service area population forecast Palm Beach County Planning and Zoning Dept.

² Data provided by Town of Jupiter Utilities Department

The above data represent the overall water consumption rate within the Town’s water service area including: 1) residential; 2) commercial; 3) industrial. These data indicate the following:

- 2016 to 2018 average raw water per capita demand: 255 gallons per person per day
- 2016 to 2018 average finished water per capita demand: 150 gallons per person per day residential demand and 209 gallons per person per day total demand

The above 3-year per capita averages for raw water and finished water demand are used to assess future forecasts based upon the water service area population forecast.

1.8 Population and Potable Water Demand Projections

Table 3-3 presents the population forecast for the Town of Jupiter’s water service area from 2020 through the year 2035 performed by the PBCPZD, and to 2040 based on UFBEBR projections. The population forecast for 2015 is also included.

Table 3-3: Town of Jupiter Water Service Area – PBCBZD Population Projections

Location	2015	2020	2025	2030	2035	2040
Jupiter	57,622	62,910	64,194	65,688	67,345	69,567
Juno Beach	3,359	3,465	3,536	3,653	3,788	3,913
Unincorporated Palm Beach County	11,302	11,374	11,811	12,218	12,607	13,023
Unincorporated Martin County	2,144	2,224	2,307	2,394	2,484	2,566
Total	74,427	79,974	81,848	83,953	86,224	89,090

Table 3-4 presents the water demand forecast for the Town of Jupiter’s water service area from 2020 through the year 2040. Water demand estimates for 2016-2018 are also included (based upon respective population forecasts for those years). Forecasts are presented for the raw water and finished water demands on an AADF basis. Additionally, the maximum day water demand is provided based upon the historical maximum day to annual average day ratio of 1.4 (based upon water pumping data from 2009 to 2014). The data in the table below assumes that the Town’s average gross per capita water demand from 2016 to 2018 remains stable through 2040.

Table 3-4: Town of Jupiter Water Service Area – Water Demand Forecast - PBCBZD

Year	Population	Raw Water Per Capita (gpcd) ¹	Finished Water Per Capita (gpcd) ¹	Raw Water Demand AADF (MGD)	AADF Finished Water Demand (MGD)	Max Day Finished Water Demand (MGD)
2016	75,536	259	208	19.6	15.8	22.1
2017	76,646	261	215	20.0	16.5	23.1
2018	77,755	245	202	19.1	15.7	22.0
2020	79,974	255	209	20.4	16.7	23.4
2025	81,848	255	209	20.9	17.1	23.9
2030	83,953	255	209	21.4	17.5	24.6
2035	86,224	255	209	22.0	18.0	25.2
2040	89,090	255	209	22.7	18.6	26.0

Note:

¹ Year 2020 - 2040 raw and finished water per capita demands are based on an average of the per capita from the years 2016 through 2018.

The maximum day finished water demand is presented in the above table since it is critical to assess the timing for expanding treatment capacity to meet future demand.

Tables 3-4 illustrates that the annual average day raw water demand does not exceed the annual average day combined raw water allocation of 29.84 MGD through the year 2040. It also illustrates that the Town’s design treatment capacity of 30.0 MGD is sufficient through the year 2040 to meet the maximum day demand with all treatment units in service.

Jupiter Farms is the area west of the Florida’s Turnpike/Interstate 95 corridor and represents by far the largest portion of the Town of Jupiter service area to which potable water service has yet to be extended. As referenced in *Countywide Population Projections Through 2035 by TAZ (2014)*, the currently unserved area within Jupiter Farms had a population of approximately 11,190 persons in 2010, or about 14% of the entire Service Area. If potable water service were to be extended to this area, it is expected that demand for water would not likely include an irrigation component, as households have existing private water systems. Hence, per capita water demand



would likely be reduced by approximately 25%. If the entire Jupiter Farms area were to connect to the Town's water distribution network by 2030, raw water demand would be expected to increase to 23.5 MGD, finished water to 19.3 MGD, and Max Day Finished water demand to 27.0 MGD. As is the case without having extended service to Jupiter Farms, both raw water and Max Day demands remain below both water treatment rated capacity and Water Use Permit thresholds.

1.9 Water Supply from Local Governments

This section briefly describes the water supply, treatment, storage and distribution infrastructure that is owned and operated by the Town of Jupiter. Additionally, LRD's reuse water program is briefly described as it relates to water supply planning.

- Water Use Permit (WUP) Information and Number
- Raw Water Allocation Information
- Existing Water Facilities
 - Water Treatment Plant;
 - Wellfields;
 - Saltwater Intrusion Monitoring Program;
 - Distribution System Water Storage Facilities;
 - Surficial Aquifer Recharge Project; and
 - Finished Water Distribution System.
- Interlocal Agreements and Bulk Sales
- Distribution System Interconnects
- Treatment Losses
- Distribution System Losses
- Outstanding Compliance Issues
- Required Upgrades or Expansion
- Deep Injection Wells and Reuse

1.9.1 Water Use Permit

Both surficial and Floridan aquifer water sources are permitted by the South Florida Water Management under Consumptive Use Permit No. 50-00010-W. The permit was issued November 11, 2004 with an expiration date of November 11, 2024. The WUP was most recently modified on March 26, 2019 and has a new expiration date of September 30, 2030.

1.9.2 Raw Water Allocation

The permit allows withdrawal from the surficial and Floridan aquifers within the limitations presented in **Table 3-5**.

Table 3-5: Current Aquifer Withdrawal Limits (million gallons)

Category	Floridan Aquifer (million gallons)	Surficial Aquifer (million gallons)
Annual Allocation	4,275	6,862
Maximum Month Allocation	555	617

The total annual allocation from both sources combined cannot exceed 8,909 MG. The maximum monthly allocation from both sources combined cannot exceed 925 MG.

1.9.3 Town of Jupiter Water Treatment Plant

The Town’s existing water treatment facility consists of three separate processes; RO, ion exchange and NF. Each of the processes is permitted by the Florida Department of Environmental Protection (FDEP) and have rated treatment capacities as shown in **Table 3-6**.

Table 3-6: Existing Rated Plant Capacities

Facility	FDEP Permitted Treatment Capacity (MGD)
Reverse Osmosis	13.7
Ion Exchange	1.8
Nanofiltration	14.5
Total	30.0

The RO plant is capable of producing 13.7 MGD of finished water. The Utility has a permitted (by SFWMD) daily withdrawal allocation from the Floridan aquifer of 17.90 MGD (max month basis), which allows the RO plant the ability to produce 13.7 MGD of finished water at the 75% recovery rate of the process.

In 1999, a 1.8 MGD ion exchange treatment plant was constructed. The ion exchange plant utilizes surficial aquifer water to produce water of increased alkalinity and low color which when blended with the RO permeate waters improves the chemical and aesthetic characteristics of the total blended finish water.

In 2010, the Town commissioned a 14.5 MGD NF plant. The plant utilizes raw water from the surficial aquifer, which is the same source used by the ion exchange plant.

The Utility has a permitted (by SFWMD) daily withdrawal allocation from the surficial aquifer of 19.90 MGD (max month basis), which allows the ion exchange plant to operate in conjunction with the NF plant. The NF plant produces 14.5 MGD of product at an 85% process recovery rate.

1.9.4 Town of Jupiter Wellfields

The Town utilizes two distinct water supply sources to meet the needs of its water treatment facilities. Raw water from the surficial aquifer (fresh) is used to supply the NF



and ion exchange treatment plants, while raw water from the Floridan aquifer (brackish) is used to supply the RO plant.

While each source has a permitted maximum withdrawal rate (annual and max month), the total allowable withdrawal rate is less than the sum of the two sources. The Town's general approach to operating the utility is to depend more heavily on the brackish water source (and the RO Plant) during dry periods. This operating approach aids in reducing the impacts on the surficial aquifer, which is typically strained during dry times. During wet periods, the Town relies more heavily on the surficial aquifer (NF) due to its lower operating costs as compared to RO. The Town's water use permit was recently renewed and does not expire until September 30, 2030. Permitted resources and facilities provide the capacity and operational flexibility needed by the system to serve demands through service area build out.

The Town of Jupiter's surficial aquifer wellfield currently includes 45 production wells that have a combined raw water producing capacity of approximately 15,120 gallons per minute (gpm) or 21.8 MGD. The wells are located throughout the largely residential western areas of the Town; located as far north as Rialto on Island Way and as far south as the Abacoa Golf Course on Heights Blvd.

As of 2019, ages of the Town's surficial aquifer wells vary from 5 to 45 years. Older wells are found closer to the WTP, the oldest were reportedly installed in 1974. The newest wells, drilled in 2014, are located north of Indiantown Road along the Island Way corridor. These two wells are not currently in service as they are awaiting raw watermain and final wellhead construction. The Town's surficial aquifer production wells typically produce between 125 and 800 gpm (0.2 and 1.2 MGD) with the older wells producing at the lower end of the scale and the newer wells producing more.

The Town of Jupiter's Upper Floridan aquifer wellfield includes 11 in service production wells that have a combined raw water producing capacity of approximately 10,190 gpm or 14.7 MGD. Individually these wells produce between 500 and 1,440 gpm. The wells are completed within the Upper Floridan aquifer at depths between 1,017 feet and 1,825 feet (only one well, RO-6 was drilled this deep, the rest are less than 1,660 feet deep). The wells are located at the Central Blvd Ground Storage Tank and High Service Pumping Facility (RO-2 and RO-3); along the South Indian River Water Control District outfall canal (RO-7 and RO-10), and within the SFWMD C-18 canal Right of Way (RO-6, RO-8, RO-9, RO-11, and RO-12). Originally constructed in 1990, well RO-4, located at the WTP site, was prone to sand and silt production and has remained unused. In 2016 RO-4 was redeveloped and reevaluated for use by the RO plant as a water supply source. Results of the evaluation indicated that well RO-4 is now suitable for use as an in-service Floridan aquifer production well. RO-4 is expected to be put into service in August 2019.

As of 2019, ages of the Upper Floridan aquifer wells are between 15 and 31 years old. The wells are constructed with either fiberglass reinforced polyester (FRP) casing or polyvinyl chloride (PVC) casing. The nature of the brackish water produced by the wells dictates use of this type of casing because the water is corrosive.

On March 26, 2019, modifications to the Town's SFWMD Consumptive Use Permit 50-00010-W were approved, that authorized the relocation of three proposed surficial



aquifer wells, replacement of seven existing surficial aquifer wells with five new surficial aquifer wells, and the addition of four proposed Floridan aquifer wells.

1.9.5 Saltwater Intrusion Monitoring Program

The Town of Jupiter operates a saltwater intrusion monitoring program in accordance with the limiting conditions of its SFWMD Water Use Permit. Its goal is to locate and monitor the saltwater interface in and around the Town's wellfields. The purpose of the program is to provide an early warning monitoring system to assist wellfield managers in tracking the location and to manage withdrawals to limit the inland movement of the salt front. The Town currently has 29 saltwater monitor wells.

1.9.6 Distribution System Water Storage Facilities

The Town water storage facilities consist of seven ground storage tanks located at the WTP, adjacent Central Boulevard Repumping Station, Riverbend Repumping Station, and Juno Beach Repumping Station.

The WTP has two ground storage tanks with a combined capacity of 4.5 million gallons on-site. The Central Boulevard Repumping Station has three ground storage tanks with a combined capacity of 21.0 million gallons.

The two remote storage and repump facilities sites are the Juno Beach Repump Station and the Riverbend Repump Station. The Juno Beach Repump Station has a ground storage tank with a capacity of 1.0 million gallons. The Riverbend Repump Station has a ground storage tank with a capacity of 3.0 million gallons.

1.9.7 Surficial Aquifer Recharge Project

Since 1990, the Town has incrementally constructed a system of control structures, flow-ways and salinity barriers intend to increase surface water storage and surficial aquifer recharge utilizing freshwater that would otherwise be wasted to tide. Surplus runoff is captured and channeled into existing surface water storage areas in an effort to maintain these systems at their designed control elevations. Currently, the Town is permitted to withdraw approximately 12 cfs from the C-18 Canal to supply to the surficial aquifer recharge system. These recharge flows aid in reducing natural area impacts due to the Town's groundwater withdrawals while providing protection to natural systems and wetlands.

1.9.8 Finished Water Distribution System

The Town of Jupiter's water distribution system consists of over 467 miles of 2 to 30-inch diameter water mains that convey the finished water from the treatment facilities to the individual customers. In general, the larger diameter transmission mains radiate from the water treatment facility and decrease in size as they extend throughout the service area. The majority of the Town's customers are to the east, north and south of the WTP.

1.9.9 Interlocal Agreements and Bulk Sales

The Town of Jupiter currently has the following key interlocal agreements in place:

- The Town of Jupiter has an emergency water interconnect agreement with both the Village of Tequesta and Seacoast Utility Authority. The agreement allows for the sharing of water supplies in times of emergency through designated piped and metered connections within the water distribution system.
- The Town also has an agreement with LRD that provides for collaborative approaches to regional water supply issues. Under this agreement, the Town supplies, on average, over 2 MGD of NF water treatment by-product water to LRD for use to augment its reuse water supply.
- The Town has an agreement with the SFWMD for the development of the Town’s Floridan aquifer wellfield. The agreement is for the easements and the District’s support of the Town’s development of its Floridan aquifer Wellfield within the C-18 Canal right-of-way.
- There is also an agreement for the operation of the Town’s surplus runoff surficial aquifer recharge system between LRD, the South Indian River Water Control District, Northern Palm Beach County Improvement District, North Palm Beach Heights Water Control District, and multiple homeowner associations.

The Town of Jupiter has no bulk water customers. Currently, the Town does not have any plans for revisions to existing agreements or additional future agreements.

1.9.10 Distribution System Interconnects

The Town of Jupiter maintains distribution system interconnects with two other utilities, Seacoast Utilities, adjacent to the south service area boundary, and the Village of Tequesta, adjacent to the north boundary.

1.9.11 Treatment Losses

Treatment losses, for the purpose of this report, is defined as the difference between raw water pumped and finished water pumped. The terminology “treatment loss” may be misleading since a portion of the water is not actually “lost”. Rather the “lost” water is repurposed for reuse water blending or other beneficial use. Hence, “treatment efficiency” may be a more accurate term. However, since the 10-Year water supply plan template issued by the SFWMD used the terminology “treatment loss”, this report uses the same terminology as the SFWMD template.

Treatment losses vary with the efficiency of the treatment technology utilized. The treatment loss for the Town’s WTP, which uses a combination of NF and RO technologies, is roughly 16 to 20 percent of the raw water pumped. The recent historical overall treatment loss in the system is summarized in **Table 3-7**.

Table 3-7: Historical Overall Treatment Loss

Water Use Category	Annual Total Production (mg)		
	2016	2017	2018
Raw Water	7,154	7,295	6,956
Finished Water Pumped from WTP	5,788	5,859	5,814

Treatment Loss	1,366	1,436	1,142
Loss as % of Raw Water Pumped ¹	19.1%	19.7%	16.4%

Note:

¹Loss as a percentage of raw water pumped does not account for reuse of average 2 MGD of NF Concentrate, which is typically not considered a water loss.

1.9.12 Distribution System Losses

Distribution system losses are presented in **Table 3-8**. The percent distribution system loss refers to the percent of finished water pumped. The distribution system losses have averaged 9.0 percent over the timeframe from 2016 through 2018.

Table 3-8: Historical Distribution System Losses

Water Use Category	Annual Total Production (mg)		
	2016	2017	2018
Raw Water	7,154	7,295	6,956
Finished Water Pumped from WTPs	5,788	5,859	5,814
Billed Authorized Consumption	5,085	5,280	5,067
Unmetered Authorized Consumption	149	146	170
Total Authorized Consumption	5,234	5,426	5,237
Distribution System Loss	554	433	577
% Distribution System Loss	9.6%	7.4%	9.9%

1.9.13 Outstanding Compliance Issues

There are no outstanding compliance issues related to the Town of Jupiter’s water facilities.

1.9.14 Required Upgrades or Expansions

The Town of Jupiter utility system provides heightened emphasis on long-range capital and financial planning in its operation. The following section contains a summary of projected capital requirements for the Town’s WTP, wellfields, and transmission system necessary for continued long-term efficient production of drinking water.

The Town has a three-phase plant modification plan to allow the RO plant equipment and processes to continue producing drinking water that meets design criteria and water supply needs as TDS increases in the Floridan aquifer raw water supply. The proposed modifications in each phase is based on projected future TDS increases. The final phase of the plan will allow the plant to continue operation with TDS concentrations up to 11,500 parts per million (ppm) TDS projected to occur in 2028.

Phase 1 is intended to accommodate raw water TDS concentrations from 4,700 to 7,300 ppm. Phase 1 consists of the addition of Stage 2 feed pressure booster pumps or



the replacement of existing interstage energy recovery devices to boost pressure from Stage 1 concentrate to Stage 2 feedwater.

Phase 2 is intended to accommodate raw water TDS concentrations from 7,300 to 8,500 ppm. This phase includes the replacement of membranes in all nine RO trains with high rejection, low energy membranes, reducing individual train recovery from 75% to 70% but allowing for an increase in TDS in the raw water.

Phase 3 is intended to accommodate raw water TDS concentration from 8,500 to 11,500 ppm. This phase consists of the construction of a raw water booster pump station on the WTP site and the addition of a second pass RO treatment system for portions of the Stage 2 permeate on each of the nine trains.

The Town has additional plans to improve its RO plant by upgrading the Concentrate Treatment Facility. By making modifications to the existing degasifiers at the facility, the efficiency and flexibility of the Concentrate Treatment Facility can be improved. There are also plans to add an additional degasifier for treatment of RO permeate if it is found to be necessary based on the performance of the existing degasifiers.

To improve the Town's wellfields, there are plans to install four additional Floridan aquifer wells to reduce the stress on the existing wellfield by lowering the individual pumping rates and spreading the pumping over a larger wellfield area. In addition, it is the Town's goal to target non-Town owned surficial aquifer withdrawal facilities for connection to the Town's regional water supply system or LRD's reuse system to eliminate major withdrawals from the surficial aquifer that increases the risk of salt water interface migration into the Town's wellfields.

Currently, the Town is only able to monitor flows and pressures of the water distribution system at the WTP and high service pumping facilities. The Town plans to add the capability to more closely supervise the distribution system by adding eleven remote flow monitoring stations at several major aerial and subaqueous crossings. In addition, the Town plans to add fifteen pressure sensing stations throughout the service area.

1.9.15 Deep Well Injection Wells and Reuse

Town of Jupiter WTP NF concentrate disposal is accomplished in conjunction with LRD. LRD is a regional wastewater treatment facility that lies less than one half mile from the Jupiter WTP. NF concentrate disposal is accomplished via either of two methods. Primarily, NF concentrate is mixed with disinfected reclaimed water within storage ponds on the LRD WWTP site, then pumped to LRD customers via a reclaimed water distribution network. During periods of low irrigation demand, combined WWTP reclaimed water and WTP concentrate is pumped down LRD's deep injection well. LRD has plans to expand its reuse program in order to minimize the amount of high-quality reuse water that is disposed of through the deep injection well.

1.10 Water Supply Provided by Others

This Town of Jupiter does not currently receive water supplied by others. This section is not applicable to the Town of Jupiter.

1.11 Conservation

The Town of Jupiter has been promoting water conservation for more than 30 years. Conservation is a proven strategy for delaying implementation of expensive alternative water supply technologies. The Town intends to continue to strive for further reduction in the future. The following subsections summarize the Town of Jupiter's ongoing conservation initiatives.

Water conservation has been addressed through a series of ordinances within the Town's municipal code and Comprehensive Plan.

1.11.1 Conservation Rate Structure

The Town has implemented a progressive conservation rate structure that provides for step-wise increases in rates as water usage increases. For example, water rates for residential customers increases from \$1.31 per thousand gallons per month for consumption under 6,000 gallons, to \$4.14 per thousand gallons per month when consumption increases to over 30,000 gallons per month.

Further, the Town provides for additional curbs on water use during periods of water shortage through Section 20-159 of the Town Code. It provides for the imposition of a surcharge of up to 100 percent on customer accounts whose water use exceeds the average of the preceding four months by an amount fixed by Council resolution.

1.11.2 Water Shortage Restrictions

Section 20-149 through 20-164 of the Municipal Code provides for the imposition of water restrictions under an array of circumstances, including drought, requests by the SFWMD deterioration of aquifer, saltwater intrusion, and water availability. Restricted water uses are established and provisions for enforcement are addressed. The Town has been successful in enforcing the various implemented restrictions and requirements.

1.11.3 Landscape Irrigation Restrictions

The Town of Jupiter has implemented progressive landscape irrigation restrictions under Section 20-156 and 20-344 of the Town Code that meet the requirements of the SFWMD. These restrictions can apply to all individuals who use Town of Jupiter water, as well as water from private wells, lakes, canals, or other sources. Violators are subject to fines and imprisonment. There have been no issues successfully implementing irrigation restrictions and requirements.

1.11.4 Meter Replacement Program

The Town has implemented an ongoing meter replacement program that is funded annually through 2041 through its renewal and replacement budget. With newer and more accurate water meters, the Town can monitor water consumption more effectively.

1.11.5 Plumbing Code

An essential part of the Town of Jupiter's conservation program is the implementation of high efficiency plumbing requirements. Section 20-158 establishes the requirements



for water saving devices such that flows are limited to 3.0 gpm for fixtures generally and 3.5 gallons per flush for toilets.

1.11.6 Public Outreach

The Town has always prided itself in being a very environmentally conscious community that embraces water conservation which is encouraged through the Town's public outreach efforts. On an annual basis, the utility works with local schools and Jupiter area students to promote resource protection and conservation through a water conservation poster contest. The program has been a tremendous success in increasing awareness of natural resource issues and advocating for conservation efforts to the many local students who participate.

1.12 Reuse

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

1.12.1 Local Government Specific Actions, Programs, Regulations, or Opportunities

This section describes the Town of Jupiter's ongoing participation in the reuse program operated by LRD within the Town's service area.

LRD, founded in 1971, began its reuse program, also known as irrigation quality (IQ) Water, in 1983. Today, this respected wastewater recycling program serves residential communities, golf courses, public parks and recreational facilities such as Roger Dean Stadium, with nearly 5.0 MGD of reuse water on average. On a typical day, LRD blends approximately 2 MGD of NF concentrate from the Town's WTP with treated and disinfected wastewater from its own facility. LRD operates an extensive network of reuse lines throughout the Jupiter and Tequesta communities with almost 184,000 feet or 35 miles of 2 inch to 36 inch force mains. Because IQ Water must meet strict health standards, using it to water lawns and landscaping provides for a safe, economical and environmentally beneficial use of this resource.

Thoroughly treated and disinfected according to exacting regulations, IQ Water must meet the requirements of the FDEP and the Public Health Department. LRD's IQ Water system is monitored 24 hours a day by trained operators and tested at an on-site, state-certified laboratory, as well as other independent research laboratories. The LRD IQ Water program has garnered numerous awards from state and national environmental managers for its safety and innovation.

Over the next 10 years, LRD intends to expand its reuse program. The District intends to reach a larger customer base by installing additional infrastructure and by

evaluating options to supplement the reclaimed water produced. LRD also plans to evaluate alternative beneficial uses for the IQ water during wet periods when demand is not as great. LRD also plans to develop additional IQ water storage facilities. The goal of these improvements is to minimize the amount of IQ water disposed of through LRD's deep injection well by increasing the amount of reuse water able to be used and stored.

1.12.2 Local Financial Responsibilities

The Town of Jupiter does not have any financial responsibilities relative to reuse. Hence, this section is not applicable to the Town of Jupiter.

1.13 Sector Plans

This section is not applicable to the Town of Jupiter.

4. Capital Improvements

This section provides a brief description of the Town of Jupiter Capital Improvements Program (it is noted that the terminology "Community Investment Plan" is utilized by the Town of Jupiter) for Water Supply.

1.14 Work Plan Projects

This section identifies projects required to augment and/or diversify water supply to meet demand in the Town of Jupiter's water service area.

1.14.1 Water Supply / Treatment Projects Needed from 2019 to 2030

Based upon the raw water demand forecast, further development of traditional water supply, alternative water supply, and reuse projects are not required to meet the demand within the Town of Jupiter's water service area over the period from 2019 to 2030. However, the Town has planned for various upgrades and maintenance projects for its water supply and water treatment assets.

The Town has multiple ongoing renewal and replacement programs that are funded through the 2019 to 2030 period. Programs include Large Meter Replacement, Asset Maintenance, Pump Replacement, RO and NF Membrane Replacement, Generator Replacement, Production Well Replacement, and Storage Reservoir Replacement. These ongoing maintenance and replacement project ensure that the Town's drinking water assets remain reliable and maximizes their useful life.

The Town has several projects planned for its wellfields for the 2019 to 2030 period. As part of the Town's Production Well Replacement Project, six surficial aquifer wells are planned to be replaced by 2023. These wells have exceeded their useful life and are no longer responding to rehabilitation efforts. Also, by 2022, the Town plans to install three new Floridan aquifer wells approximately 1,500 feet deep in order to reduce stress on the existing wells and slow the rate of raw water degradation experienced in the Floridan aquifer production zone. An additional Floridan aquifer well is planned to be



constructed in 2028. Considering the existing Floridan aquifer well RO-4 is planned to be put back into service in August 2019, this would bring the total number of Floridan aquifer wells up to 12.

Jupiter is addressing many of its needed plant upgrades in 2019. The Concentrate Treatment Facility degasifiers will be modified to allow for additional efficiency and flexibility of the overall facility. In addition, the Town will investigate and address the issue causing reduced capacity of the NF concentrate conveyance piping to LRD in order to maximize the flow able to be delivered for use in LRD's reuse program.

Several of the WTP facilities require renewal and replacement projects that fall outside the scope the Town's standard programs. The two Mobile Bed Absorbers (MBA) used for RO permeate odor control has surpassed their 20-year useful life. The MBAs are planned to be rehabilitated and upgraded by 2023 to extend the useful life of the existing units as well as improving the odor control treatment, operation, and maintenance of the facility. In 2020, the NF pretreatment filter media will reach its recommended 10-year useful life and is planned to be replaced to avoid the possibility of causing future problems in the NF process.

In order to address the degradation of the Floridan aquifer source water, the Town has planned for several improvements to its RO plant. Planned to be completed in 2022, the first phase of these improvements is the replacement of existing energy recovery devices or interstage booster pumps and replacement of RO membranes on all nine RO trains. Phase 2 is also planned to be completed in 2022 and consists of the completion of replacement of membranes in all nine RO trains with high rejection, low energy membranes as part of the Town's RO and NF Membrane Replacement Program. The final phase is planned for 2028 and will involve the construction of a raw water booster pump station at the WTP site and the addition of a second pass RO treatment system on each of the nine trains.

1.14.2 Water Supply / Treatment Projects Needed from 2030 to 2040

Based upon the raw water demand forecast, further development of traditional water supply, alternative water supply, and reuse projects are not required to meet the demand within the Town of Jupiter's water service area over the period from 2030 to 2040, however, the Town has planned for several projects and programs to take place in this timeframe to maintain its water assets.

Several of the renewal and replacement programs will continue into this timeframe, including the Large Meter Replacement, Asset Maintenance, Pump Replacement, RO and NF Membrane Replacement, Generator Replacement, Production Well Replacement, and Storage Reservoir Replacement Programs. Two new programs will begin in this timeframe. The WTP Replacement Program and Recharge System Replacement Program will begin in 2030 and 2038 respectively. In addition, the NF bulk sulfuric acid tanks are planned to be replaced in 2038.

1.14.3 Transmission System Projects Needed from 2019 to 2040

No new potable water transmission network projects are planned through 2040, however, the Town has planned for many projects to improve its existing transmission system.

There are currently 32 projects planned to improve or replace existing piping and valves throughout the Town’s distribution system. In addition to these projects there are two projects planned to make various improvements the Central Boulevard High Service Pump Station. Also, planned to take place in 2021, the Distribution System Flow and Pressure Monitoring project will add remote monitoring units throughout the service area in order to better monitor flows and pressures of the water distribution system.

1.14.4 Projects Needed to Supply Water Outside of the Town’s Water Service Area

The Town of Jupiter has no plans to supply water outside of its existing water service area over the next 10 years. Hence, this section is not applicable to the Town of Jupiter.

1.15 Capital Improvements Element/Schedule

Table 4-1, on the following page, presents the Five-Year (Fiscal Year 2020 – 2024) Schedule of Capital Improvements for traditional water supply, treatment, storage, and distribution system infrastructure. Additionally, alternative water supply projects (if any) that have been identified to start within the next five years are included.

Costs include engineering services along with construction costs. Additionally, the Five-Year Schedule of Capital Improvements includes costs for development of engineering studies where appropriate.

The projects presented herein are based upon the Town of Jupiter’s Long-Term Capital Improvement Plan for Fiscal Year 2020 – 2024.

Table 4-1: Town of Jupiter Water System - Five-Year (FY 2020-2024) Community Investment Plan

Project Number and Title	Funding Source	FY 2020-2024 CIP Total	Unfunded Needs
W0329 Large Meter Replacements	R&R	\$414,367	-
W1219 Customer Information & Utility Billing System (V4 Upgrade)	R&R	\$125,000	-
W1290 Utilities Water Asset Maintenance Program	R&R	\$6,869,806	-
W1291 Professional Services	CF	\$50,000	-
W1503 Mobile Bed Absorber Rehab for RO Permeate Oder Control	R&R	\$2,725,516	-
W1508 Membrane Replacements for the Nanofiltration Plant and RO Trains A-D and I	RROth	\$874,890	-
W1817 Production Well Replacement Program – Surficial Aquifer Wells No. 12-18	R&R	\$5,015,014	-
W20XX Construction of Floridan Aquifer Wells RO-15, RO-16, and RO-17 and Raw Watermains	R&R	\$10,648,000	-
W20XX WTP Replacement Program – Nano Pretreatment Sand Filter Media Replacement	R&R	\$316,693	-

Project Number and Title	Funding Source	FY 2020-2024 CIP Total	Unfunded Needs
W20XX Riverbend Country Club Watermain Improvements	R&R	\$200,000	-
W20XX RO Plant Modifications to Address Raw Water Degradation – Increase Interstage Boost	R&R	\$1,639,091	-
W20XX Pine Gardens North Infrastructure Improvements	R&R/CDBG	\$2,041,199	-
W21XX Distribution System Flow and Pressure Monitoring	OS	\$752,600	-
W21XX Fisherman’s Landing Watermain Replacement	R&R	\$994,881	-
W21XX Brentwood North Distribution System Improvements	R&R	\$94,637	-
W21XX Jupiter Lakes and Wood Duck Service Valve Replacement	R&R	\$358,440	-
W22XX Indiantown Road Water Transmission Fitting Replacement	R&R	\$196,267	-
W22XX Loxahatchee River Road Area Distribution System Improvements Phase II	R&R	\$636,540	-
W23XX Eganfuskee/Carl St/Clark Ln Area Distribution Improvements	R&R	\$399,775	-
W24XX Water Treatment Plant Hardened Training Facility and Server Room	R&R	\$652,795	-
W0002 New Meters	OS	\$319,688	-
W0002 Meter Replacement Program	R&R	\$2,184,840	-
Total		\$39,447,965	-

Notes:

R&R – Water Renewal and Replacement Funds

RROth – Water Renewal and Replacement Sub-fund – Membrane, Ion, and Storm

CF – Water Plant Capacity Charges

OS – Water Off-site Transmission Fees

CDBG – Intergovernmental Palm Beach County Community Development Block Grant Funds

5. Goals, Objectives and Policies

The Town of Jupiter Comprehensive Plan addresses the needs and aspirations of the community. This has tremendous implications regarding the importance of community input in the development and implementation of the Comprehensive Plan.

The Comprehensive Plan also plays a significant role within Florida’s growth management system. The Comprehensive Plan is required to be consistent with the State Comprehensive Plan (Chapter 187, Florida Statutes), and to be consistent with the Regional and County Comprehensive Plans. In short, the Comprehensive Plan



provides a critical link between the Town of Jupiter, State of Florida, Regional, and Palm Beach County plans. The Comprehensive Plan focuses on those issues facing the Town of Jupiter over a twenty-year time horizon. The Comprehensive Plan establishes long-term direction of goals as well as short-term objectives and policies to guide implementation efforts.

The Comprehensive Plan Goals, Objectives and Policies have been reviewed for consistency with the 10-Year Water Supply Facilities Work Plan – 2019. Overall, no conflicts were found between the Comprehensive Plan and this 10-Year Water Supply Facilities Work Plan. Therefore, this 10-Year Water Supply Facilities Work Plan will be adopted by reference in the Town of Jupiter’s Comprehensive Plans, along with the Town’s recent Water Master Plan. To accomplish this, the Goals Objectives and Policies listed below will be updated as necessary for coordination with this 10-Year Water Supply Facilities Work Plan – 2019:

1. Revision of Policies adopting the Work Plan by reference to implement the 10-Year Water Supply Facilities Work Plan – 2019.
2. Revision of Policies incorporating the Town’s Water Master Plan to implement the 2017 Water Master Plan Update.