VILLAGE OF ESTERO, FLORIDA

ORDINANCE NO. 2019 - 23

AN ORDINANCE OF THE VILLAGE COUNCIL OF THE VILLAGE OF ESTERO, FLORIDA, ADOPTING AN AMENDMENT TO THE VILLAGE OF ESTERO COMPREHENSIVE PLAN TO CHANGE THE TEXT TO REFERENCE THE VILLAGE'S 10-YEAR WATER SUPPLY FACILITIES WORK PLAN AS PROVIDED ON ATTACHMENT "A" AND MADE A PART HEREOF; ~~PROVIDING FOR TRANSMITTAL OF THE AMENDMENT TO THE STATE OF FLORIDA AND OTHER REVIEWING AGENCIES AS REQUIRED BY STATUTE;~~ PROVIDING FOR SEVERABILITY; PROVIDING FOR CONFLICTS; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Village Council, at a duly noticed public hearing held on June 13, 2018, adopted its Comprehensive Plan on second reading; and

WHEREAS, pursuant to Section 163.3177(5)(c)3., Florida Statutes, the Comprehensive Plan shall, within 18 months after the applicable water management district approval of its updated regional water supply plan, be amended to reference a 10-year water plan for water supply projects; and

WHEREAS, the Village engaged Johnson Engineering to prepare its work plan, entitled "The Village of Estero 10-Year Water Supply Facilities Work Plan" dated June, 2019 (Attachment "A"); and

WHEREAS, the Work Plan addresses water supply and conservation programs necessary to serve existing and new development in the Village for a minimum 10-year period; and

WHEREAS, the Village does not own or operate its own water supply facilities, but the two providers (Lee County Utilities and Bonita Springs Utilities) both have adequate capacity and allocation to serve Estero through the 10-year planning period; and

WHEREAS, the Village Planning and Zoning Board, at a duly noticed public hearing held on June 18, 2019 recommended that the Comprehensive Plan Amendment be adopted by

Words that have been added since the first reading are underlined in red. Words that have been deleted are ~~stricken through~~.

the Village Council on first reading for transmittal pursuant to Section 163.3184 of the Community Planning Act; and

WHEREAS, the Village Council, at a duly noticed meeting, held a first reading on this Ordinance on July 24, 2019, considered the recommendation of the Village Planning and Zoning Board and the comments of the public, and voted to transmit the Amendment to the State Land Planning Agency and other review agencies as provided in Section 163.3184, Florida Statutes; and

~~**WHEREAS,** the Village's adopted Comprehensive Plan is not yet effective, and once it is effective the Village intends that the adopted Amendment then shall become effective.~~

WHEREAS, the Department of Economic Opportunity and the South Florida Water Management District reviewed the Amendment and had no objections or comments in regard to the Amendment.

NOW, THEREFORE, be it ordained by the Village Council of the Village of Estero, Florida:

Section 1. Recitals.

The foregoing "Whereas" clauses are hereby ratified and incorporated as a part of this Ordinance.

Section 2. Adoption of the Comprehensive Plan Amendment ~~for Transmittal~~.

The Village Council adopts ~~on first reading~~ the Comprehensive Plan Amendment as proposed below, incorporated and made a part of this Ordinance. ~~for purposes of transmittal to the State Land Planning Agency and other commenting agencies as provided by Section 163.3184(4)(e), Florida Statutes.~~

> Policy INF- 1.3.2. The Village ~~shall has~~ developed a Water Supply Facilities Work Plan within 18 months after the South Florida Water Management District approves~~d~~ an update to the required water supply plan (titled the 2017 Lower *West Coast Water Supply Plan Update)*. The Village's Plan (*The Village of Estero 10-Year Water Supply Facilities Work Plan June 2019*) incorporated by reference herein, addresses issues that pertain to water supply for utilities and requirements needed to serve current and future development in the Village. The Work Plan indicates that the Village does not own or operate its own water supply facilities, and because the water suppliers (Lee County Utilities and Bonita Springs Utilities) have adequate capacity and allocation to serve Estero

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through the planning period, Estero does not need to undertake any capital improvement projects.

Section 3. Transmittal.

The Village Manager or his designee shall transmit the adopted Comprehensive Plan Amendment and other materials as required by statute to the State Land Planning Agency and other reviewing agencies as provided by Section 163.3184, Florida Statutes.

Section 4. Severability.

If any provision of this Ordinance or its application to any person or circumstance is held invalid, the invalidity does not affect other provisions or applications of this Ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this Ordinance are severable.

Section 5. Conflict.

All ordinances, resolutions, official determinations or parts thereof previously adopted or entered by the Village or any of its officials and in conflict with this Ordinance are hereby repealed to the extent inconsistent herewith.

Section 6. Effective Date.

This ordinance shall take effect upon adoption at second reading, except that the effective date of the Comprehensive Plan Amendment shall be thirty-one (31) days after the State Land Planning Agency notifies the Village that the plan amendment package is complete or, if timely challenged, thirty-one (31) days after the state Land Planning Agency, or the Administration Commission enters a final order determining the adopted Plan Amendment to be in compliance~~., and only after the Comprehensive Plan adopted June 13, 2018 becomes effective.~~

PASSED on first reading this 24th day of July, 2019.

PASSED AND ADOPTED BY THE VILLAGE COUNCIL of the Village of Estero, Florida this _____ day of _____, 2020~~2019~~.

Words that have been added since the first reading are underlined in red. Words that have been deleted are ~~stricken through~~.

Attest: **VILLAGE OF ESTERO, FLORIDA**

By: _____ By: _____
Kathy Hall, MMC, Village Clerk Bill Ribble, Mayor

Reviewed for legal sufficiency:

By: _____
Nancy Stroud, Esq., Village Land Use Attorney

Vote:	AYE	NAY
Mayor Ribble	____	____
Vice Mayor Errington	____	____
Councilmember Batos	____	____
Councilmember Boesch	____	____
Councilmember Levitan	____	____
Councilmember McLain	____	____
Councilmember Wilson	____	____

Attachment "A": The Village of Estero 10-Year Water Supply Facilities Work Plan

Words that have been added since the first reading are underlined in red. Words that have been deleted are ~~stricken through~~.

ATTACHMENT A

THE VILLAGE OF ESTERO
10-YEAR WATER SUPPLY FACILITIES
WORK PLAN

Prepared For:

THE VILLAGE OF ESTERO
9401 Corkscrew Palms Circle
Estero, FL 33928

Prepared By:

2122 Johnson Street
Fort Myers, Florida 33901
(239) 334-0046
E B 642

June 2019

EXECUTIVE SUMMARY

The purpose of the Village of Estero's 10-Year Water Supply Facilities Work Plan (Work Plan) is to identify and plan for the water supply sources 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 Work Plans into their comprehensive plans within 18 months after the pertinent water management district approves a regional water supply plan or its update for a region including the local government in question. The *Lower West Coast Water Supply Plan (LWCWSP) Update* was approved by the South Florida Water Management District (SFWMD) on December 20, 2017. The LWCWSP covers Lee and Collier Counties, as well as portions of Hendry, Glades and Charlotte Counties. The Village of Estero falls within the planning area for the LWCWSP.

The Work Plan considers a planning period through 2030, and uses population projections for the Village of Estero from Metro Forecasting Models, the same as used in the Comprehensive Plan. Lee County Utilities (LCU) and Bonita Springs Utilities (BSU) supply potable water to the Village of Estero. Johnson Engineering coordinated with LCU and BSU staff to determine approximate populations served by each utility and the associated raw and finished water demands for each through 2030. Based on the analyses in the Work Plan, both utilities should have adequate water treatment plant capacity and permitted allocations from the South Florida Water Management District (SFWMD) to serve the Village of Estero through 2030. Both utilities have several capital improvement projects planned over the next 5 years to support continuous water supply to their service areas at the per capita demands described in the Work Plan.

Because the Village of Estero does not own or operate its own water supply facilities, and because both BSU and LCU have adequate capacity and allocation to serve Estero through the planning period, Estero does not need to undertake any capital improvement projects or enter into agreements with the utility providers to ensure continued water supply at the current levels of service.

An assessment of existing Goals, Objectives, and Policies (GOPs) in the Village of Estero Comprehensive Plan was performed in preparation of the Work Plan to identify those that address water supply sources and facilities, as well as conservation and reuse programs.

Under current statutory requirements, the Village of Estero will be required to update the Work Plan within 18 months of approval of the next LWCWSP.

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LIST OF ABBREVIATIONS

ASR	Aquifer Storage and Recovery
BEBR	Bureau of Economic and Business Research
BSU	Bonita Springs Utilities, Inc.
CUP	Consumptive Use Permit
DEO	Department of Economic Opportunity
DSAP	Detail Specific Area Plan
EAR	Evaluation and Appraisal Report
ELU	Existing Legal User
ERC	Equivalent Residential Connection
FDEP	Florida Department of Environmental Protection
FDOH	Florida Department of Health
F.S.	Florida Statutes
GOPs	Goals, Objectives, and Policies
GPD	Gallons Per Day
IAS	Intermediate Aquifer System
LCU	Lee County Utilities
LOS	Level of Service
LOSA	Lake Okeechobee Service Area
LWCWSP	Lower West Coast Water Supply Plan
LPRO	Low Pressure Reverse Osmosis
MDL	Maximum Developable Limits
MFL	Minimum Flows and Levels
MG	Million Gallons
MGD	Million Gallons Per Day
ORC	Objections, Recommendations, and Comments
RO	Reverse Osmosis
SAS	Surficial Aquifer System
SFWMD	South Florida Water Management District
SSWA	South Shore Water Association
USACOE	United States Army Corps of Engineers
WSP	Water Supply Plan
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

1.0 INTRODUCTION

The purpose of the Village of Estero's 10-Year Water Supply Facilities Work Plan (Work Plan) is to identify and plan for the water supply sources 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 Work Plans into their comprehensive plans within 18 months after the pertinent water management district approves a regional water supply plan or its update for a region including the local government in question. The *Lower West Coast Water Supply Plan (LWCWSP) Update* was approved by the South Florida Water Management District (SFWMD) on December 20, 2017. The LWCWSP covers Lee and Collier Counties, as well as portions of Hendry, Glades and Charlotte Counties. The Village of Estero falls within the planning area for the LWCWSP. Therefore, the deadline for local governments within the Lower West Coast water supply planning area to amend their comprehensive plans to adopt a Work Plan is June 20, 2019.

Johnson Engineering, Inc. prepared this Work Plan based on information obtained from government entities and other parties. While Johnson Engineering has used reasonable care to avoid reliance upon faulty or incomplete information, Johnson Engineering is not able to verify the accuracy of all data and information provided by these governmental entities and other parties.

According to state guidelines, the Work Plan and associated comprehensive plan amendments 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 Village's Work Plan is divided into five sections addressing the state guidelines, as well as sections for figures and appendices:

Section 1 – Introduction

Section 2 – Background Information

Section 3 – Data and Analysis

Section 4 – Capital Improvement Element

Section 5 – Goals, Objectives, Policies

Section 6 - Figures

Section 7 – Appendices

1.1 Statutory History

The Florida Legislature enacted bills in the 2002, 2004, 2005, 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 Chapter 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 the local land use planning and water supply planning.

1.2 Statutory Requirements

Per the enacted legislation, each local government must comply with the following requirements:

1.2.1 Coordinate appropriate aspects of its comprehensive plan with the appropriate water management district's regional water supply plan, [163.3177(4)(a), F.S.]

1.2.2 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)2.d, F.S., effective July 1, 2005]. 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 to DEO for review. The submitted package must also include an amendment to the Capital Improvements Element, if necessary, to demonstrate that adequate public facilities will be available to serve the proposed Future Land Use Map modification.

1.2.3 Ensure that adequate water supplies and facilities are available to serve new development no later than the date on which the local government anticipates issuing a certificate of occupancy and consult with the applicable water supplier prior to approving building permits, 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), F.S., effective June 2, 2011]. This "water supply concurrency" is now in effect, and local governments should be complying with the requirement for all new development proposals. In addition, local governments should update their comprehensive plans and land development regulations as soon as possible to address these statutory requirements. The latest point at which the comprehensive plan must be revised to reflect the concurrency requirements is at the time the local government adopts plan amendments to implement the recommendations of the Evaluation and Appraisal Report (EAR) or functional equivalent.

1.2.4 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:

1.2.4.1 Identify and incorporate the alternative water supply project(s) selected by the local government from projects

identified in the updated regional water supply plan, or the alternative project proposed by the local government under s. 373.0361(7), F.S. [s. 163.3177(6)(c)3, F.S.];

1.2.4.2 Identify the traditional and alternative water supply projects, and the conservation and reuse programs necessary to meet current and future water use demands within the local government's jurisdiction [s. 163.3177(6)(c)3, F.S.]; and

1.2.4.3 Include a water supply facilities work plan for at least a 10-year planning period for constructing the public, private, and regional water supply facilities, including development of alternative water supplies, identified in the element as necessary to serve existing and new development. [s. 163.3177(6)(c)3, F.S.]

1.2.5 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. Per s. 163.3177(3)(b), F.S., modifications to update the Five-Year Capital Improvement Schedule may be accomplished by ordinance and may not be deemed to be amendments to the local comprehensive plan.

1.2.6 To the extent necessary to maintain internal consistency after making changes described in Sections 1.2.1 through 1.2.5 above, revise the Conservation and Coastal Management Element based on projected water needs and sources for at least a 10-year planning period, considering the appropriate regional water supply plan, the applicable District Water Management Plan, as well as applicable consumptive use permit(s). [s.163.3177 (6)(d)3, F.S.]

If the established planning period of a comprehensive plan is greater than ten years, the plan must address the water supply sources

necessary to meet and achieve the existing and projected water use demand for established planning period, considering the appropriate regional water supply plan. [s.163.3167 (9), F.S.]

1.2.7 To the extent necessary to maintain internal consistency after making changes described in Sections 1.2.1 through 1.2.5 above, revise the Intergovernmental Coordination Element to ensure coordination of the comprehensive plan with applicable regional water supply plans and regional water supply authorities' plans, and with other units of local government providing services. [s.163.3177(6)(h)1., F.S.]

2.0 BACKGROUND INFORMATION

2.1 Overview

The Village of Estero was incorporated in 2014 with a total area of approximately 26.5 square miles. Estero is located within Lee County, east of Estero Bay and the Gulf of Mexico, north of the City of Bonita Springs, and west and south of unincorporated Lee County. The North Branch of the Estero River originates in Estero and runs through the northern and central part of the Village, converging with the South Branch of the Estero River. Halfway Creek originates in the southern part of Estero and runs through the southern and western portions of the Village. Corkscrew Road and Estero Parkway represent local east-west travel corridors, while US-41 and I-75 are regional north-south travel corridors across this part of the state.

The Village of Estero has a sizable seasonal population equaling approximately 49% of the permanent population based on 2018 population estimates. Approximately half of the population is aged 62 years or older, significantly higher than both Lee County as a whole (30%) and the State of Florida (22%).

The Village of Estero contracted with Metro Forecasting Models to develop population estimates for the Village's Comprehensive Plan in 2017. An explanation of the methodology used by Metro Forecasting Models (MFM) can be found in the Attachments to the Village of Estero Comprehensive Plan Data and Analysis adopted June 13, 2018. Based on the 2010 census, MFM estimates 30% of the total housing stock consists of seasonal housing units. For 2018, MFM estimates a permanent population of 34,631 for the Village of Estero, and a peak seasonal population of 51,738 (49.4% increase over permanent population). This swing in seasonal population remains constant through 2040 projections, when MFM predicts permanent and peak seasonal populations of 49,916 and 74,575, respectively (49.4% increase over permanent population).

Per the 2016 Existing Land Use data in the Comprehensive Plan Data and Analysis, the Village of Estero land use pattern is balanced with single family residential (17.3%), commercial (15.7%), recreation (12.5%), and natural conservation and buffer areas (24.1%) comprising the major land use types. Vacant land and water represent 10.7% and 8.5% of the existing land use area, respectively. Mobile homes, multi-family residential, industrial, mixed use, schools, semi-public and public buildings, and agriculture each represent less than 2% of the existing land use. The utility land use category represents 5.1%.

The Comprehensive Plan Data and Analysis identifies the largest developable vacant land by future land use categories as Village Neighborhood 1 (356 acres, 25.19% of total vacant), Village Center (300 acres, 21.23%), Transitional Mixed Use (228 acres, 16.14%), and Village Neighborhood 2 (121 acres, 8.56%). Wetlands represent the second largest category at 333 acres and 23.57% of total vacant, but this is a low density land use category at 1 dwelling unit per 20 acres and this category generally requires permitting and mitigation in order to develop. All other vacant land by future land use category is less than 100 acres and 5% of total vacant. Under currently allowed densities, vacant lands could accommodate up to 2,167 single family and 6,780 multi-family housing units, equivalent to roughly 20,030 additional persons based on the MFM household size ratios. The Village of Estero puts emphasis on open space, and recognizes the potential for transitional mixed use and infill along existing corridors through the future land use categories of Mixed Use and Village Center. The Village also discourages urban sprawl through the Future Land Use Element.

The Village of Estero falls within the public water supply service areas for Bonita Springs Utilities (southern portion of the Village) and Lee County Utilities (northern portion of the Village). The Village of Estero does not own or operate its own public water supply facilities.

3.0 DATA AND ANALYSIS

3.1 Population Information

The countywide population projections provided by Bureau of Economic Research (BEBR) do not provide the distribution of people residing in the municipalities and the unincorporated areas, nor do they account for seasonal populations. This distribution and seasonal information is important to consider when planning for water supplies, as it helps identify where growth is occurring and determine the peak demands on public facilities and services. The Village of Estero contracted with Metro Forecasting Models to develop population estimates for the Village's Comprehensive Plan in 2017. An explanation of the methodology used by Metro Forecasting Models (MFM) can be found in the Attachments to the Village of Estero Comprehensive Plan Data and Analysis approved on June 13, 2018. Based on the 2010 census, MFM estimates 30% of the total housing stock consists of seasonal housing units. For 2018, MFM estimates a permanent population of 34,631 for the Village of Estero, and a peak seasonal population of 51,738 (49.4% increase over permanent population). This swing in seasonal population remains constant through 2040 projections, when MFM predicts permanent and peak seasonal populations of 49,916 and 74,575, respectively (49.4% increase over permanent population). The Village of Estero has not annexed any new land area, nor does it anticipate to do so.

A significant amount of the Village of Estero's seasonal population is comprised of seasonal residents (i.e., "snowbirds"), whose seasonal period extends from approximately November through April. Historically Estero has had a larger seasonal vacancy/occupancy rate than Lee County as a whole. Vacancy rates are based on the number of vacant units for sale or rent, plus those occupied seasonally, divided by the total housing inventory. Both single and multi-family vacancy rates are estimated at 0.39 for 2018, though expected to decline to 0.275 and 0.227. respectively, by 2040. Seasonal

tourism associated with recreational activities, such as outdoor sports and shopping, also increases the seasonal population. Seasonal population may be accommodated in vacant housing units or in hotels.

Table 1 provides permanent populations projections for the Village of Estero through 2030, as well as an estimated seasonal population. The projections are based on information from MFM, as described above.

TABLE 1 - POPULATION PROJECTIONS

	2018	2020	2025	2030
Village of Estero[1]	34,631	38,410	44,684	48,125
Countywide Permanent Population[2]	698,468[4]	749,600	826,900	891,200
Estero Seasonal Population[1]	17,107	18,975	22,074	23,774
Countywide Seasonal Population[3]	143,060	153,533	169,365	182,535
Village of Estero Peak Population[1]	51,738	57,385	66,758	71,899
Countywide Peak Population	841,528	903,133	996,265	1,073,735

[1] From the Metro Forecasting Models projections used in The Village of Estero Comprehensive Plan

[2] BEBR mid-range population projection as reported in the 2018 Florida Population Studies Bulletin #180, Volume 51

[3] Based on 17% seasonal occupancy rate for Lee County 1990-2010 in the Village of Estero Comprehensive Plan, Future Land Use Element data and Analysis

[4] Estimate as of April 1, 2017, from 2018 Florida Population Studies Bulletin #180, Volume 51

The SFWMD LWCWSP (2017 Update) uses permanent county resident populations from the 2010 United States Census as the basis of population projections. 2010 county populations were then adjusted to 2014 populations using BEBR estimated annual growth rates from 2010 through 2014, and distributed to each utility service area considered in the LWCWSP. Information from metropolitan planning organizations (MPOs) within the Lower West Coast region were used to obtain year 2040 population projections by assigning 2040 BEBR population projections by traffic analysis zones (TAZs) to utility service areas.

The LWCWSP provides population projections for the Bonita Springs Utilities and Lee County Utilities service area, the two utilities that provide public water supply to the Village of Estero. Due to the lag time in document preparation between the SFWMD's LWCWSP and the Village's 10-Year Water Supply Facilities Work Plan, updated population projections by BEBR

have become available. Additionally, the Village of Estero, a unit not explicitly considered in the LWCWSP, uses population projections developed by MFM using an alternative methodology in order to be consistent with population projections provided in the Comprehensive Plan. Thus, slight differences may exist between the population projections used in this Work Plan and those of the SFWMD LWCWSP (2017 Update).

3.2 Maps of Current and Future Areas Served

The map depicting current boundaries of the Village of Estero and the Bonita Springs Utilities (BSU) and Lee County Utilities (LCU) service areas is Figure 1, which is provided in Section 6.0. LCU serves the portion of the Village of Estero north of Williams Road, and BSU serves the portion of the Village to the south of Williams Road. The Village of Estero falls wholly within either the BSU or LCU service area. There are no anticipated changes to the service area within the planning period.

3.3 Potable Water Level of Service Standard

Lee County Utilities has a level of service (LOS) of 250 gallons/day/equivalent residential connection (gpd/ERC). Facilities serving only multi-family or mobile homes have an LOS of 200 gpd/ERC. Facilities serving only recreational vehicles or travel trailer residential structures have an LOS of 100 gpd/ERC. BSU has a stated LOS of 235 gpd/ERC at a minimum pressure of 20 pounds per square inch (psi) at the meter anywhere within the system. The Village of Estero has adopted the LOS of either LCU or BSU for connections to their respective service areas.

3.4 Population and Potable Water Demand Projections by Each Local Government or Utility

Table 2 shows the population and potable water demand projections for the utilities serving areas within the Village of Estero. Locations of six (6) small public water systems, which provide water to small commercial

establishments, remote locations, and a motel, were obtained from the Florida Department of Health (last updated March 2018) for the Village of Estero, as shown on Figure 1 and on Table 3 below.

TABLE 2 - POPULATION & DEMANDS [VILLAGE OF ESTERO WATER SUPPLY FACILITIES WORK PLAN]

WATER SUPPLY UTILITY SERVICE WITHIN LOCAL GOVERNMENT'S JURISDICTION								
UTILITY SERVICE AREA	**POPULATION PROJECTIONS**				**WATER SUPPLY DEMAND (MGD)**			
YEAR ►	**2018**	**2020**	**2025**	**2030**	**2018**	**2020**	**2025**	**2030**
Lee County Utilities[1]	23,998	26,649	31,050	33,463	**2.40**	**2.66**	**3.10**	**3.35**
Bonita Springs Utilities[2]	10,341	11,469	13,342	14,369	**1.03**	**1.15**	**1.33**	**1.44**
Self-Served[3]	292	292	292	292	**0.044**	**0.044**	**0.044**	**0.044**
Village-wide Permanent Population[4]	34,631	38,410	44,684	48,125	**3.48**	**3.86**	**4.48**	**4.83**
Village-wide Seasonal Population[4]	17,107	18,975	22,074	23,774	**1.72**	**1.90**	**2.21**	**2.38**
Village-wide Peak Population[4]	51,738	57,385	66,758	71,899	**5.20**	**5.76**	**6.70**	**7.21**

[1] Total population (permanent plus seasonal) within Village of Estero not served by BSU or DSS
[2] Based on reported number of meter connections from BSU

[3] Includes small community system, assumed to remain constant

[4] From the Metro Forecasting Models projections used in The Village of Estero Comprehensive Plan

TABLE 3 – FDOH LIMITIED USE DRINKING WATER SYSTEMS WITHIN THE VILLAGE OF ESTERO

LIMITED USE DRINKING WATER SYSTEMS			
NAME	**PROGRAM**	**ENTITY ID**	**ADDRESS**
JRC Estero/Paw-Paradise	**LU Commercial**	**474630**	**20741 S Tamiami Trail**
Estero Groves Remote Line Switch	**Reg. LU Commercial**	**474724**	**20720 Highland Avenue**
College of Life Foundation	**Reg. LU Commercial**	**474441**	**8661 Corkscrew Road**
Cypress Park Motel	**LU Commercial**	**474268**	**21271 Cypress Park Circle**
Gess Family Partnership—Gulf Coast Driving…	**LU Commercial**	**474553**	**9000 Williams Road**
Shadow Wood Golf Clubhouse	**LU Commercial**	**474435**	**22801 Oak Wilde Boulevard**

3.5 Water Supply Provided by Local Government

Village of Estero—Lee County Utilities Service Area

Lee County Utilities operates five (5) interconnected water treatments plants (WTPs) countywide. The majority of the potable water demand within the Village of Estero LCU services area comes from the Pinewoods WTP and wellfield, located within the boundary of the Village, although the Corkscrew, Green Meadows, North Lee and Olga WTPs can also supply water to this area as needed. Figure 2 shows the water supply facilities for both LCU and BSU in and near the Village of Estero.

According to the SFWMD public water supply permit (No. 36-00122-W), raw water for the Pinewoods WTP is sourced from the Water Table aquifer, Sandstone aquifer, and Lower Hawthorn aquifer (an alternative water supply source) via 20 existing wells ranging from 8 to 16 inches in diameter, and seven (7) proposed wells ranging from 10 to 14 inches in diameter. The annual and maximum month allocations for the permit are 2,685.8 and 268.4 MG, respectively, then further limited by source. Treated water from the Pinewoods WTP is distributed to LCU's interconnected system. The Pinewoods Wellfield and WTP are located within the Village of Estero.

SFWMD permit 36-00152-W for the North Lee wellfield authorizes annual and maximum month allocations of 5,886 and 592.9 MG, respectively, via withdrawals from 20 existing wells open to the Lower Hawthorn aquifer and seven (7) additional proposed wells.

LCU's largest SFWMD permit for public water supply, 36-00003-W, includes the Green Meadows and Corkscrew wellfields, and Olga treatment facility, which is authorized for withdrawals from the C-43 (Caloosahatchee River). Permit 36-00003-W authorizes annual and maximum month allocations of 12,508 and 1,355 MG, respectively. In addition to surface water withdrawals from the C-43, LCU's Green Meadows and Corkscrew wellfields

withdraw groundwater from the Surficial, Sandstone and Upper Floridan aquifers from a combined total of 96 existing production wells. Forty four (44) proposed wells, open to the Surficial, Sandstone and Upper Floridan aquifers, remain on the permit, along with four proposed surface water pumps. Additionally, the permit includes aquifer storage and recovery (ASR) facilities at the Olga and Corkscrew WTPs.

According to the 2010 U.S. Census, the persons per household value for the area served by LCU ranges from 1.84 to 2.78. The total population in the Village of Estero served by LCU is estimated at 35,853 people in 2018. This population is assumed to grow at the same rate that the Village of Estero as a whole is projected to grow through the 10-year planning period (through 2030). The location of LCU service area within the Village of Estero is shown on Figure 1.

According to the SFWMD water use permit staff reports for 36-00003-W and 36-00122-W, the annual allocation is based on a raw water per capita rate of 118 gallons per day (gpd). Permit 36-00003-W includes losses to the ASR system at the Corkscrew wellfield in the maximum monthly allocation. Permit 36-00152-W assumes a raw water per capita rate of 140.24 gpd, and includes an allocation for backup supply if the Olga WTP (covered under permit 36-00003-W) in the amount of 1,616 million gallons per year and 152 million gallons per month.

The following table provides an analysis of the available water treatment plant (WTP) capacity and SFWMD permitted allocation. The analysis shows a WTP surplus to treat additional raw water and a surplus of SFWMD permitted raw water allocation through the 10-year planning period.

TABLE 4 – LEE COUNTY UTILITIES

WATER TREATMENT PLANTS	2018	2020	2025	2030
Total Population Served (LCU WUPs 36-00003-W, 36-00122-W, 36-00152-W)[1]	316,586	328,257	359,232	392,900
Population Served Village of Estero[2]	35,853	39,814	46,388	49,994
Finished Drinking Water Demand per Capita (GPD)[3]	100	100	100	100
Finished Water Avg. Daily Demand (MGD)	31.66	32.83	35.92	39.29
Estero Finished Water Avg. Daily Demand (MGD)	3.59	3.98	4.64	5.00
Available Facility Capacity (MGD)	50.9	50.9	50.9	50.9
Facility Capacity Surplus (Deficit)[4]	19.24	18.07	14.98	11.7
Raw Water SFWMD Allocation (MGD Annual Avg)	57.73	57.73	57.73	57.73
Raw Water Avg. Daily Demand (MGD)[5]	39.26	40.7	44.55	48.72
Estero Raw Water Avg. Daily Demand (MGD)	4.45	4.94	5.75	6.20
Raw Water Permitted Surplus (Deficit)[6]	18.47	17.03	13.18	9.01

GPD = Gallons per Day

[1] Based on population projections provided in SFWMD staff reports for permits 36-00003-W, 36-00122-W, 36-00152-W, includes Village of Estero

[2] Total population (permanent plus seasonal) within Village of Estero not served by BSU or DSS.

[3] Average of calculated finished per capita water demands from 36-00003-W, 36-00122-W and 36-00152-W staff reports

[4] Calculated by subtracting Finished Water Avg. Daily Demand from Available Facility Capacity

[5] Weighted avg. of raw per capita water demands from 36-00003-W, 36-00122-W and 36-00152-W staff reports (124 gpd), includes Village of Estero

[6] Calculated by subtracting Raw Water Avg. Daily Demand from Raw Water SFWMD Allocation

For the period from 2020 to 2030, the projected population within the Village of Estero served by LCU represents between 12.1 and 12.7% of the projected population served by the utility. Population projections provided in LCU water use permits, as shown in Table 2, are approximately 26-27% higher than population projections for the utility included in the LWCWSP. The analysis should be considered conservative within the context of the LWCWSP.

Based on the population projections and demand estimates, Lee County Utilities should have adequate plant capacity and permitted raw water allocation through 2030.

Lee County Utilities System PWS Summary Table	
SFWMD Permit #s	36-00003-W, 36-00122-W, 36-00152-W
Permit Expiration Date	6/15/2031, 12/1/2034 & 8/20/2032, respectively
Raw Water Source(s)	Water Table, Surficial, Sandstone, Mid-Hawthorn, Lower Hawthorn & Upper Floridan aquifers; SFWMD Canal C-43
Annual Allocations (MG)	12,508; 2,685.76 & 5,886, respectively
Maximum Monthly Allocations (MG)	1,355; 268.43 & 592.9, respectively
Treatment Type	Reverse osmosis, nanofiltration, lime softening
Treatment Efficiency	80 (RO)-95% (lime softening)
Treatment Capacity (MGD)	50.90 combined
Storage Volume (MG)	32.5 in tanks; 3.2 ASR at Corkscrew
Interconnect or Bulk Sales Agreement	Interconnects with Cities of Fort Myers (5) and Cape Coral (2), Bonita Springs Utilities (1); provides water to Town of Fort Myers Beach

3.6 Water Supply Provided by Other Entities

Village of Estero—Bonita Springs Utilities Service Area

Bonita Springs Utilities (BSU) operates reverse osmosis and lime softening water treatments plants to supply its service area. The BSU WTP on East Terry Street near I-75 supplies potable water to the portion of the Village of Estero south of Williams Road. Figure 2 shows the water supply facilities for both LCU and BSU in and near the Village of Estero.

According to the SFWMD public water supply permit (No. 36-00008-W), raw water is sourced from the Lower Tamiami aquifer via 20 existing wells ranging from 8 to 12 inches in diameter. The annual and maximum month allocations for the permit are 2,094 and 222.343 MG, respectively. Groundwater is treated using lime softening. SFWMD permit 36-04062-W for the reverse osmosis WTP authorizes annual and maximum month allocations of 4,769 and 16 MG, respectively, via withdrawals from 11 existing wells and five (5) proposed wells open to the Floridan Aquifer System.

According to the 2010 U.S. Census, the persons per household value for the area served by BSU ranges from 1.84 to 2.23. The total population in the Village of Estero served by BSU is estimated at 15,449 people in 2018 based on the number and type of meters reported by BSU. This population is assumed to grow at the same rate that the Village of Estero as a whole is projected to grow through the 10-year planning period (through 2030).

According to the LWCWSP, the per capita finished water rate is 151 gallons per day (gpd) based on historical use from 2010 to 2014. Data obtained from BSU for the period from 2014 to 2018 indicate finished water usage is less than 100 gpdpc, based on a population per ERC of 2.22 persons. Based on a system efficiency of 100% for the portion of water supplied by the Lower Tamiami aquifer, per correspondence with BSU, and an efficiency of 80% for the Floridan Aquifer System, the weighted average per capita raw water rate is approximately 114 gpd for 2018. There is a rising trend, so a raw water per capita rate of 120 gpdpc is used in Table 5.

The following table provides an analysis of the available water treatment plant (WTP) capacity and SFWMD permitted allocation. The analysis shows a WTP surplus to treat additional raw water and a surplus of SFWMD permitted raw water allocation through the 10-year planning period.

TABLE 5 – BONITA SPRINGS UTILITIES

WATER TREATMENT PLANTS	2018	2020	2025	2030
Population Served (BSU WUPs 36-00008-W, 36-04062-W[1]	58,497	61,482	68,789	76,095
Total population Served Village of Estero[2]	15,449	17,134	19,933	21,468
Finished Drinking Water Demand per Capita (GPD)[3]	100	100	100	100
Finished Water Avg. Daily Demand (MGD)	5.85	6.15	6.88	7.61
Estero Finished Water Avg. Daily Demand (MGD)	1.54	1.71	1.99	2.15
Available Facility Capacity (MGD)	15.5	17.6	17.6	17.6
Facility Capacity Surplus (Deficit)[4]	9.65	11.45	10.72	9.99
Raw Water SFWMD Allocation (MGD Annual Avg)	18.8	18.8	18.8	18.8
Raw Water Avg. Daily Demand (MGD)[5]	7.02	7.38	8.25	9.13
Estero Raw Water Avg. Daily Demand (MGD)	1.85	2.06	2.39	2.58
Raw Water Permitted Surplus (Deficit)[6]	11.78	11.42	10.55	9.67

MGD = Million Gallons per Day

[1] Based on population projections provided in SFWMD LWCWSP, linear interpolation for 2018 and 2025 projections. Includes Village of Estero

[2] Based on reported number of meter connections from BSU.

[3] From BSU for period from 2014-2018

[4] Calculated by subtracting Finished Water Avg. Daily Demand from Available Facility Capacity

[5] Based on weighted avg. of raw per capita water demands from 2014-2018 (120 gpd)

[6] Calculated by subtracting Raw Water Avg. Daily Demand from Raw Water SFWMD Allocation

For the period from 2020 to 2030, the projected population within the Village of Estero served by BSU represents between 27.8 and 28.2% of the projected population served by the utility. Based on the population projections and demand estimates, Bonita Springs Utilities should have adequate plant capacity and permitted raw water allocation through 2030, based on a WTP expansion to 17.5 MGD after 2018. In addition, BSU will renew both of its consumptive use permits during the planning period. Permit renewals are anticipated to request additional allocation to meet demand projections through a 20-year renewed permit duration.

Bonita Springs Utilities System PWS Summary Table	
SFWMD Permit #s	36-00008-W, 36-04062-W
Permit Expiration Date	8/9/2027, & 11/15/2021, respectively
Raw Water Source(s)	Lower Tamiami & Floridan Aquifer System
Annual Allocations (MG)	2,094 & 4,769, respectively
Maximum Monthly Allocations (MG)	222.34 & 486.4, respectively
Treatment Type	Reverse osmosis, lime softening
Treatment Efficiency	75 (RO)-90% (lime softening)
Treatment Capacity (MGD)	15.5, expansion to 17.60
Storage Volume (MG)	13
Interconnect or Bulk Sales Agreement	Interconnects with Lee County and Collier County

Small Public Water Systems

A small number (n=6) of small public water systems are located within the Village of Estero and provide water to small commercial establishments, remote locations, and a motel. These Limited Use Commercial systems are small and serve transient populations, as regulated by the Department of Health. A list of these small public water systems was obtained from the Florida Department of Health (last updated March 2018). Locations of small public water systems are shown as points on Figure 1 and listed in Table 3.

Self Supply

A small number of individual water users within the Village of Estero have permitted wells for domestic self-supply, as reported in the Lee County Well Construction Database. These facilities may include those serving small public water systems. For the purposes of this Work Plan, self supply and small public water systems are grouped together within the self supply category, given the small number of each.

3.7 Future Water Supply Demands

Future growth is anticipated to be driven by the Hertz Global Headquarters located in Estero, along with three regional commercial centers and the

growth of Florida Gulf Coast University (campus located outside of Estero to the northeast). These factors have been accounted for in the population projections provided in Section 3.4.

3.8 Potential Future Water Suppliers

No potential future water suppliers within the Village of Estero are anticipated during the planning period.

3.9 Agricultural and Landscape/Golf Water Supply Demands

The SFWMD LWCWSP predicts agricultural demands will decrease slightly in Lee County, while landscape irrigation will increase county-wide. Golf course irrigation is projected to remain constant. Several properties within the Village of Estero have water use permits through the SFWMD for landscape irrigation, including multiple planned communities with and without golf courses, mixed use and commercial properties, schools, and parks. Only two active agricultural/nursery water use permits (one expired) fall within the Village of Estero due to the small percentage of land use in that category.

Consistent with trends for Lee County as a whole, landscape irrigation will likely increase over the planning period, proportional to the anticipated growth, and rely on irrigation wells and onsite lake withdrawals for supply. Growth will likely occur as in-fill of existing developments and conversion of currently vacant lands. Many existing residential/golf course communities occupy former agricultural lands, and landscape/recreation irrigation demands have replaced former agricultural irrigation demands in these locations.

3.10 Commercial/Industrial Water and Power Generation Supply Demands

According to the SFWMD LWCWSP (2017 Update), Lee County will have an increase of 0.98 MGD between 2014 and 2030 for commercial and industrial self-supply demand. Traditional groundwater sources are expected to meet demands, provided the CUP permitting conditions are met.

Alternative sources will be evaluated as part of the CUP permitting process. Some industrial applications require potable-grade water. Potable water to serve these users is included in this Work Plan. If not on-line or available, potable water will be self-supplied. Only two small industrial water use permits exist within the Village of Estero.

3.11 Conservation

The following conservation measures have been incorporated by the Comprehensive Plan for the Village of Estero, in addition to complying with elements of the water conservation plans developed by both LCU and BSU for their respective service areas. The Village of Estero presently operates under a version of the Lee County Land Development Code dated April 20, 1994 and amended through 2014 (transitional land development code for Village of Estero).

Florida Friendly Landscaping

The Village will promote Florida Friendly and xeriscape landscaping techniques in the Land Development Code and provide education on water conservation through creative landscaping and promote the conservation and use of native plant species through xeriscape landscaping on Village projects.

Water Conservation Rate Schedule

Both LCU and BSU have tiered rate structures to promote water conservation.

Irrigation Restrictions

Lee County has adopted an ordinance restricting landscape irrigation to two days per week year-round, with alternating days for even and odd addresses between 5:00 p.m. to midnight, and midnight to 9:00 a.m. The Village of Estero complies with this ordinance, and educates residents on the ordinance via its web site.

Rain Sensors and Conservation of Irrigation Water

The Florida Building Code and transitional Land Development Code for Estero require the installation of rain sensors for automatic irrigation systems. Irrigation systems should conserve water and be designed to eliminate application of water to impervious areas.

Ultra Low Volume Plumbing Fixtures

Both LCU and BSU require installation of ultra low volume (ULV) plumbing fixtures in all new construction. Maximum flow volumes are:

Toilets: 1.6 gal/flush at 80 psi

Showerheads: 2.5 gpm at 80 psi

Faucets: 2.2 gpm at 60 psi

Water Loss Accounting

Both BSU and LCU estimate water losses due to hydrant flushing, line breaks and dead-end main flushing; tests and calibrate meters annually; and conduct annual leak detection surveys.

Public Information

LCU, BSU and the Village of Estero provide websites that include information on water supply and water shortage declarations, and a contact number for residents to report leaks, in addition to resources for water conservation published by the SFWMD.

3.12 Reuse

Both LCU and BSU provide reuse water to customers. All public access reuse water generated by BSU is sold to Resource Conservation Systems, which supplies irrigation water to communities located within the Village of Estero,

such as The Brooks, and Bonita Springs. LCU also provides reuse water to communities within the Village of Estero and elsewhere within its service area. LCU continues to identify projects to maximize its reclaimed water usage, including an ongoing reuse water ASR project receiving cooperative funding from the SFWMD.

4.0 REGIONAL ISSUES

The LWCWSP identifies regional water supply issues which may impact the Village of Estero's water supply planning, including seasonal availability of surface water supplies and associated establishment of minimum flows and levels (MFLs) and recovery strategies, peak freshwater discharges to the Caloosahatchee Estuary, and increased withdrawals from the Surficial and Intermediate aquifer systems. The LWCWSP also discusses limited freshwater availability in the Surficial Aquifer System (SAS) and Intermediate Aquifer System (IAS), and MFLs and maximum developable limits (MDLs) to address management of those resources. A discussion of regional issues, as they pertain to the Village of Estero, is provided below, organized by WSP.

4.1. Lower West Coast Water Supply Plan

Lake Okeechobee Service Area (LOSA) MFLs, Recovery Strategy and Restricted Allocation

Due to the implementation of the United States Army Corps of Engineers (USACOE) Lake Okeechobee federal recovery strategy, the SFWMD developed a MFL recovery strategy in 2008 to address predicted exceedances of the MFL. As part of the recovery strategy, restricted allocations in the LOSA were implemented in response to the predicted MFL exceedances and decline in the level of certainty for existing legal users (ELUs) of the resource. The restricted allocations limit new withdrawals from Lake Okeechobee.

Of the main water suppliers for the Village of Estero, only LCU withdraws surface water from the C-43, part of LOSA, at its Olga facility, as authorized under SFWMD permit #36-00003-W. LCU's C-43 allocation constitutes 7.6% of its total permitted withdrawals, which were evaluated as part of the last permit renewal approved in 2011. The last permit renewal included discussion on the MFL and Water Availability Rule, which states that the permitted allocation is calculated as the base condition water use. Additionally, LCU has implemented an ASR program to increase storage capacity at Olga in order to mitigate impacts to operations due to seasonal variations in flow and salinity. The permit received a 20-year duration.

Neither LCU nor the Village of Estero proposes any increases in withdrawals from the LOSA system to meet projected water demands.

Limited Fresh Groundwater Resources in the SAS and IAS

According to the LWCWSP, there is limited availability of fresh groundwater in the Lower Tamiami (SAS), Sandstone (IAS) and Mid-Hawthorn (IAS) aquifers due to concerns over impacts to wetlands and ELUs, and saline water intrusion. MFLs and MDLs have been established for these aquifers since 2001. Parts of Lee, Collier and Hendry Counties are most affected by the MFLs and MDLs. The SFWMD will review requests for additional withdrawals from these sources on a case-by-case basis during the permitting process. Water suppliers to the Village of Estero, both LCU and BSU, do source water from the Sandstone and Lower Tamiami aquifers, respectively, within the reduced threshold areas. To meet increased water demands, both water suppliers have expanded into the Upper Floridan aquifer, not considered a fresh groundwater source, while limiting withdrawals from the freshwater aquifers discussed above to historically permitted quantities.

The Village of Estero has several policies to limit consumption from freshwater aquifers, both through discouraging overuse of potable water and limiting quantities of freshwater used for irrigation within the Village of Estero. Such policies include:

INF-1.2.3: The Village shall base all future development and use of groundwater resources on determinations of the safe yield of the aquifer system(s) in order not to impair the native groundwater quality or create other environmental damage. Criteria for safe-yield determinations will be determined by the SFWMD, the agency charged with permitting these activities.

INF-1.2.5: Coordinate with Lee County and utility providers to identify water needs consistent with projections of human population and the needs of natural systems in order to determine the future demands for groundwater.

INF-1.2.6: Continue to encourage the developer driven expansion of infrastructure to provide reuse water service when sufficient supply is available.

INF-1.2.7: When and where available, reuse water should be the first option for meeting irrigation needs of a development. Where reuse water is not available, surface water or low quality groundwater should be used for irrigation. All other potential water sources must be eliminated prior to selecting potable water as the sole source for meeting the irrigation needs of a development.

CCM-1.10.1: Work with Lee County and utility providers to identify water needs consistent with projections of human population and the needs of natural systems in order to determine the future demands for groundwater. The Village will support appropriate measures to ensure water supplies of sufficient quantity and quality to meet the present and projected demands of all consumers and the environment, based on the capacity of the natural systems.

CCM-1.10.2: Comply with the Mandatory Year Round Landscape Irrigation Conservation Measures as detailed in the Florida Administrative Code and cooperate with emergency water conservation measures of the South Florida Water Management District.

CCM-1.10.4: Promote Florida Friendly landscaping techniques in the Land Development Code and provide education on water conservation through creative landscaping, and promote the conservation and use of native plant species through Florida-friendly landscaping techniques on Village projects.

Caloosahatchee River (C-43) MFL and Estuary Impacts

The Caloosahatchee River has had an MFL established at the S-79 structure in Lee County since 2001. On multiple occasions, the MFL has not been met. Additionally, peak freshwater discharges from Lake Okeechobee during the wet season affect the health of the estuary, as do inadequate flows during the dry season. Additional storage capacity is needed to address water availability issues. As discussed previously, only LCU withdraws a small portion of its overall allocation from the Caloosahatchee River (C-43), which is established per historical base condition water use, with no proposed increases from this source. The Village of Estero has policies intended to reduce the potential for damaging wet season flows to the estuary through attenuation of runoff and improved water quality. Such policies include:

ICE-1.4.3: Participate with other appropriate governments to prepare and implement water management plans, including the Estero Bay Agency on Bay Management, Charlotte Harbor National Estuary Program, the Charlotte Harbor Management Plan, DEP aquatic preserve management plans, water supply plans, and other water resource management plans.

CCM-1.3.11: The Village shall develop a stormwater master plan to readdress recurring flood issues which takes into account an anticipated increase in flooding from rainfall and storm surge.

CCM-1.9: WATER QUALITY. The Village shall coordinate with County, state and federal agencies to manage the quality of the Village's surface waters with priority on the Estero Bay ecosystem so as to maintain or improve water quality and wildlife health and diversity; to reduce or maintain current pollution loading and system imbalances in order to conserve estuarine productivity; and to provide the best use of estuarine areas.

CEI-1.2.7 & INF-1.1.1: The following surface water management standards are adopted as minimum acceptable levels of service:

A. The existing surface water management system in the Village will be sufficient to prevent the flooding of designated evacuation routes (U.S. 41, Corkscrew Road, Three Oaks Parkway, Interstate 75, and Ben Hill Griffin Parkway) from the 25-year, 3-day storm event (rainfall) for more than 24 hours.

B. Regulation of Private and Public Development
All new private and public developments shall be constructed with floor slabs at a minimum of one (1) foot above the 100-year, 3-day storm event flood plain level and shall be safe from flooding from a 100-year, 3-day storm event (rainfall). In such new public and private developments, roads and parking lot travel ways shall be constructed at a minimum of the 25-year, 3-day storm event flood plain level.

Surface water management systems in new private and public developments (excluding widening of existing roads) must be designed to SFWMD standards (to detain or retain excess stormwater to match the predevelopment discharge rate for the 25-year, 3-day storm event [rainfall]).

Stormwater discharges from development must meet relevant water quality and surface water management standards as set forth in state rules including but not limited to requirements listed in Numeric Nutrient Criteria and Total Maximum Daily Loads and Basin Management Action Plans.

New developments must be designed to avoid increased flooding of surrounding areas. Development must be designed to minimize increases of discharge to public water management infrastructure (or to evapotranspiration) that exceed historic rates, to approximate the natural surface water systems in terms of rate, hydroperiod, basin and quality, and to eliminate the disruption of wetlands and flowways, whose preservation is deemed in the public interest.

The Village land development regulations shall provide a process to determine how this policy shall apply to the remainder of partially developed permitted projects or subdivisions on a case by case basis.

C. Design trunk conveyance crossings of arterial roads to be free of flooding from 25- year, 3-day storm events at a minimum.

D. Other standards may be added by amendment to this comprehensive plan for development impacting water bodies that have water quality impairments identified by Florida Department of Environmental Protection, including but not limited to the following water bodies: 3258C4 - Mullock Creek (Marine Segment); 3258C – Mullock Creek; 3258D1 - Estero River (Marine Segment); 3258D2 - Estero River; 3258H2 - Spring Creek (Marine Segment).

INF-1.1.2: Prepare a Stormwater Master Plan that is geographically based on watersheds using best available data related to rainfall, soils, topography, drainage patterns and water quality.

The Stormwater Master Plan will evaluate future conditions (including build-out within the watershed) and long-duration storms, identify existing wetlands and natural areas, and promote the protection of natural channels and conveyances. The Stormwater Master Plan will also provide recommendations on mitigation activities for the enhancement of existing stormwater management facilities and/or natural conveyances and recommend other programmatic and regulatory action items to be implemented within the land development code with the intent to reduce increased flooding from future conditions within the watershed and enhance water quality.

INF-1.1.4: The Village shall endeavor to protect, secure and restore, where feasible, natural flowway systems including, without limitation, the Main, South and North Branches of the Estero River and the Halfway Creek flowway, through regulations or incentives to assure their continued environmental function.

INF-1.1.7: Provide sufficient performance and/or design standards for development protective of the function of natural drainage systems, including the following provisions to be addressed in the land development code:

A. Provide sufficient performance and design standards to require post-development runoff to approximate the total characteristics of the natural flow prior to development.

B. Floodplains must be managed to minimize the potential loss of life and damage to property by flooding.

C. Floodways should be kept as unobstructed as possible.

D. Natural flow patterns will be restored by public investment where such action is of significant public or environmental benefit, and feasible.

E. To maintain flowways, the Village may coordinate with landowners at the time of new development or redevelopment to establish flowage easements while allowing concentration or clustering of development on the remainder of the property.

F. The Village will maintain regulations which provide for the management and protection of floodplains, consistent with state and federal regulations.

G. Through the land development code, the Village will require developments to have and maintain an adequate surface water management system that is consistent with the criteria adopted per recommendations of the Stormwater Master Plan, provide for acceptable programs for operation and maintenance, and post-development runoff conditions which reflect the natural surface water flow in terms of rate, direction, quality, hydroperiod, and drainage basin.

H. Channelization of natural streams and rivers is prohibited; channelization of other natural watercourses is discouraged.

I. Through the Land Development Code, the Village will adopt appropriate regulations to protect the natural functions of riparian systems from incompatible development practices along their banks.

5.0 CAPITAL IMPROVEMENTS

5.1 Work Plan Projects

The Village of Estero has no planned capital improvement projects relating to water supply because it does not own or operate its own water supply facilities. Both LCU and BSU, the potable water suppliers to the Village of Estero, do have planned capital improvement projects over the period from 2019 through 2030.

5.2 Capital Improvements Element/Schedule

The following Table 6 is a Five-Year Schedule of Capital Improvements for water supply projects proposed by LCU and BSU in the next five years. These projects will be funded as shown below.

TABLE 6 – 5-YEAR CAPITAL IMPROVEMENT PROJECTS **Estimated Costs in Millions of Dollars**

Description	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	Water Source	Funding Provider	C&O Time-frame
LEE COUNTY UTILITIES								
N-S 30" WM SR-80 to AHR					$4	Multiple	CIP	2022-2028
US 41 WM Improvements Alico-N. Airport Rd.	$1.9					Multiple	CIP	2018-2019
Water System Improvements	$0.7	$0.7	$0.7	$0.7	$0.7	Multiple	CIP	2018-2028
NLC WTP Expansion to 15 MGD	$3.20		$5.70			UFA	W. Con. Fee	2018-2021
NLC WTP Expansion to 15 MGD			27.60			UFA	CIP	2018-2021
NLC Wellfield Expansion to 15 MGD	$3.40		$1.00			UFA	W. Con. Fee	2018-2021
NLC Wellfield Expansion to 15 MGD		$5.30	$4.30			UFA	CIP	2018-2021
RSW Transmission Line Ben Hill to Treeline	$2.40	$12.10				Multiple	W. Con. Fee	2018-2020
Carriage Village WM Replacement			$1.23			Multiple	CIP	2020-2021
Corkscrew Production Well Panel Replacement		$2.40				SAS/IAS		2019-2020
Del Prado WM Replacement		$0.35	$2.10			Multiple		2019-2021
Fiddlesticks WM Replacement	$5.60					Multiple		2017-2019
Green Meadows 2nd DIW					$1.00	UFA	CIP	2022-2025
N. Tamiami 24" WM Pondella-Cleveland			$1.25	$6.24		Multiple	W. Con. Fee	2020-2022
New Post Rd WM Imprvmt.	$2.08					Multiple	W&S R&R	2016-2019
Principia WM Improvements	$0.19	$0.94				Multiple	W&S R&R	2018-2020
Reuse System & Site Imprvmt.		$2.01	$1.38	1.38	$1.38	Reuse	CIP	2019-2023
San Carlos WM Replacement Linda Loma to Kelly				$0.27	$1.53	Multiple	W&S R&R	2021-2023
SFM Transmission Line Imprv.	$0.39	$2.80				Multiple	CIP	2018-2020
Summerlin Rd. Water System Improvements			$0.75	$2.60	$2.90	Multiple	W. Con. Fee	2020-2025
WTP Improvements	$0.28	$0.36	$0.43	$0.59	$0.19	Multiple	CIP	2018-2030
Work Dr. Industrial Park WM Improvements	$1.94					Multiple	W&S R&R	2017-2019
WWE Water Transmission Line Improvements			$0.20	$1.48		Multiple	W. Con. Fee	2020-2022
Total Estimated Cost	$22.08	$26.96	$46.64	$13.26	$11.70			

(From published Lee County Capital Improvement Program Detailed Report FY 18/19-FY 22/23)

Description	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	Water Source	Funding Provider	C&O Time-frame
BONITA SPRINGS UTILITIES								
Deep Injection Well Interconnection		$0.30	$4.00	$0.70		Multiple	Reserve	2020-2022
Developer Upgrades-Water					$0.73	Multiple	Developer	2023
EWRF Upgrades	$0.82	$0.65	$1.00	$0.50	$1.50	Reuse	R&R Funds	2019-2023
Well Rehab	$0.07	$0.39	$0.07		$0.88	Multiple	R&R Funds	2019-2023
RO Plant Ph 2 & 3	$3.16	$14.52	$12.76	$12.47		UFA	Water ANC Fees	2019-2022
WM R/R	$1.82	$1.50	$1.50	$1.50	$1.50	Multiple	R&R Funds	2019-2023
WTP Upgrades	$1.12	$0.45	$0.21	$0.21	$0.10	LTA	Water ANC Fees	2019-2023
Misc. Service Extension Projects-Water	$0.25	$0.25	$0.25	$0.25	$0.25	Multiple	R&R Funds	2019-2023
Total Estimated Cost	$7.24	$18.06	$19.79	$15.63	$4.96			

(From BSU Capital Improvement Plan, 2019-2023)

6.0 GOALS, OBJECTIVES AND POLICIES

An assessment of existing Goals, Objectives, and Policies (GOPs) in the Village of Estero Comprehensive Plan was performed in preparation of this Work Plan to determine those that address water supply sources and facilities, as well as conservation and reuse programs. Until approval of the Village of Estero Comprehensive Plan is complete, Estero continues to operate under its Transitional Comprehensive Plan based on a 2014 version of the Lee Plan, as amended through October 2014. References to GOPs in both plans have been provided below for comparison. Goal are indicated in **bold**, Objectives in *italic*, and Policies in plain type.

Infrastructure Element

Transitional Comprehensive Plan Based on Lee Plan 2014 Codification	Estero Comprehensive Plan
Goal 63: Groundwater. To protect the County's groundwater supplies from those activities having the potential for depleting or degrading those supplies.	*INF-1.2: Groundwater Recharge. Protect groundwater supplies from those activities having the potential for depleting or degrading those supplies.*
Lee Plan Objective 63.1: WELLFIELD PROTECTION. The county will maintain a wellfield protection ordinance to provide regulations protecting the quality of water flowing into potable water wellfields. (Amended by Ordinance No. 94-30, 00-22)	INF-1.2.1: The Village shall implement Lee County's wellfield protection ordinance through the land development code to protect the quality of water flowing into potable water wellfields.
Lee Plan Policy 63.1.2: The staff hydrogeologist will review and comment on all development applications near public utility potable water wellfields, with particular attention to proposed land uses within a 10-year travel time from the wellheads. (Amended by Ordinance No. 00-22)	INF-1.2.2: The Village shall coordinate with the Lee County staff hydrogeologist for review and comment on all development applications near public utility potable water wellfields, with particular attention to proposed land uses within a 10-year travel time from the wellheads.
Lee Plan Objective 63.2: POTABLE GROUNDWATER. Base all future development and use of groundwater resources on determinations of the safe yield of the aquifer system(s) in order not to impair the native groundwater quality or create other environmental damage. Criteria	INF-1.2.3: The Village shall base all future development and use of groundwater resources on determinations of the safe yield of the aquifer system(s) in order not to impair the native groundwater quality or create other environmental damage. Criteria for safe-yield determinations will be determined by the

for safe-yield determinations will be determined by the SFWMD, the agency charged with permitting these activities. *(Amended by Ordinance No. 94-30, 00-22)*	SFWMD, the agency charged with permitting these activities.
Lee Plan Policy 63.2.1: For maximum protection of groundwater resources, identify future wellfields and/or relocation site(s) for existing wellfields well in advance of need. Coordinate with SFWMD, other water suppliers, and DEP to avoid duplication and to assist in data collection and interchange. (Amended by Ordinance No. 94-30)	INF-1.2.4: For maximum protection of groundwater resources, coordinate with applicable utility providers to identify future wellfields and/or relocation site(s) for existing wellfields well in advance of need. Coordinate with SFWMD, water suppliers, and Florida Department of Environmental Protection to avoid duplication and to assist in data collection.
Lee Plan Policy 63.2.3: Identify water needs consistent with projections of human population and the needs of natural systems in order to determine the future demands for groundwater. (Amended by Ordinance No. 94-30)	INF-1.2.5: Coordinate with Lee County and utility providers to identify water needs consistent with projections of human population and the needs of natural systems in order to determine the future demands for groundwater.
Lee Plan Policy 57.1.5 (as amended by Lee County Ordinance 17-19): Continue to encourage the developer driven expansion of infrastructure to provide reuse water service when sufficient supply is available.	INF-1.2.6: Continue to encourage the developer driven expansion of infrastructure to provide reuse water service when sufficient supply is available.
Lee Plan Policy 61.1.6 (as amended by Lee County Ordinance 17-19): When and where available, reuse water should be the first option for meeting irrigation needs of a development. Where reuse water is not available, surface water or low quality groundwater should be utilized for irrigation. All other potential water sources must be eliminated prior to selecting potable water as the sole source for meeting the irrigation needs of a development. New developments will coordinate with county staff regarding the source of irrigation water.	INF-1.2.7: When and where available, reuse water should be the first option for meeting irrigation needs of a development. Where reuse water is not available, surface water or low quality groundwater should be used for irrigation. All other potential water sources must be eliminated prior to selecting potable water as the sole source for meeting the irrigation needs of a development.
Lee Plan Objective 151.5: COORDINATION OF WATER SUPPLY PLANS AND THE LEE PLAN. Coordinate between Lee County and the South Florida Water Management District to ensure that the Lee Plan remains consistent with the District's regional water supply plans. *(Added by Ordinance No. 09-13)*	*INF-1.3: Coordinate with the South Florida Water Management District to ensure that the Village Comprehensive Plan remains consistent with the District's regional water supply plans.*
Lee Plan Policy 53.2.1: County development regulations will be amended to specify that	INF-1.3.1: No building permit will be issued unless potable water supply will be available

no building permit under the Land Development Code will be issued in a franchised or certificated water service area, or within Lee County Utilities' future service area, unless potable water supply will be available to meet current and projected growth demands, or surety is given that it will be available prior to occupancy. This policy does not exempt development of any size from meeting the levels of service required for concurrency under Policies 53.1.2 and 95.1.3. (Added by Ordinance No. 09-13	to meet current and projected growth demands, or surety is given that it will be available prior to occupancy.
Lee Plan Policy 151.5.1: The county will continue to evaluate the latest water supply plans issued by the South Florida Water Management District to ensure consistency in the Lee Plan and the County's Water Supply Facilities Work Plan. The county will update the Water Supply Facilities Work Plan within 18 months after the South Florida Water Management District approves an update to the regional water supply plan. (Added by Ordinance No. 09-13)	INF-1.3.2: The Village shall develop a Water Supply Facilities Work Plan within 18 months after the South Florida Water Management District approves an update to the regional water supply plan.
	INF-1.3.3: The Village shall continue to evaluate the latest water supply plans issued by the South Florida Water Management District to ensure consistency in the Village Comprehensive Plan and the Village's Water Supply Facilities Work Plan.
Lee Plan Policy 151.5.2: The county will coordinate with other government agencies and private suppliers of potable water during the water supply planning process to include the review of land use changes, addressing population projections, and acceptable level of service standards. (Added by Ordinance No. 09-13)	INF-1.3.4: The Village shall coordinate with other government agencies and private suppliers of potable water during the water supply planning process to include the review of land use changes, addressing population projections, and acceptable level of service standards.
Lee Plan Objective 53.1: The County will ensure the provision of acceptable levels of potable water service throughout the future urban areas of the unincorporated county, either directly by Lee County Utilities, or indirectly through franchised utility companies. (Amended by Ordinance No. 94-30, 00-22, 03-04)	*INF-1.5: POTABLE WATER. The Village of Estero shall coordinate with utility providers to ensure the provision of acceptable levels of potable water service.*
Lee Plan Policy 95.1.3(1) (as amended by Lee County Ordinance 17-19): Potable Water Facilities: Minimum Acceptable Level of Service: Within certificated, franchised, or designated service areas only: supply and treatment capacity of 250 gallons per day per	INF-1.5.1: The minimum acceptable level of service standard for potable water connections to Lee County Utilities will be: An available supply and treatment capacity of 250 gallons per day per equivalent residential connection (ERC), except that facilities serving only multi-family or mobile

Equivalent Residential Connection (ERC), except that facilities serving only multi-family or mobile home residential structures must have a capacity of 200 gallons per day, and facilities serving only recreational vehicle or travel trailer residential structures must have a capacity of 100 gallons per day. Where a private water utility has provided an alternate standard for application within its certificated or franchised area, and that standard has been adopted into this comprehensive plan, that will be the standard to be used for concurrency management in the respective certificated or franchised area.	home residential structures must have a capacity of 200 gallons per day and facilities serving only recreational vehicle or travel trailer residential structures must have a capacity of 100 gallons per day.
City of Bonita Springs Comprehensive Plan (Capital Improvements Element) Policy 1.1.3.a: Potable Water Facilities: Within certified, franchised or designated service areas an available supply, treatment and delivery of 235 gallons per day per equivalent residential connection (ERC) and delivery of potable water at a minimum pressure of 20 pounds per square inch (psi) at the meter anywhere in the system. (Cross Reference: Infrastructure Element Policy 1.1.1)	INF-1.5.2: The minimum acceptable level of service standard for potable water connections to Bonita Springs Utilities will be: An available supply and treatment capacity of 235 gallons per day per equivalent residential connection (ERC) and delivery of potable water at a minimum pressure of 20 pounds per square inch (psi) at the meter anywhere in the system.
Lee Plan Policy 53.1.4 (as amended by Lee County Ordinance 17-19): Utilities are encouraged to construct and install sufficient treatment facilities and distribution systems to meet or exceed the minimum acceptable service standards and with the capacity to deliver water at a pressure of 40 pounds per square inch (wp PSI static) at the meter anywhere on the individual system (excluding fire flow conditions). All utilities will be required to advise the county of system expansions or modifications.	INF-1.5.3: Utility providers are encouraged to construct and install sufficient treatment facilities and distribution systems that will meet or exceed the minimum acceptable service standards and with the capacity to deliver water at a pressure of 40 pounds per square inch (wp PSI static) at the meter anywhere on the individual system (excluding fire flow conditions). All utility providers must advise planning and engineering staff of the Village regarding system expansions or modifications and must regularly provide summaries to the Village on compliance with water treatment and quality standards.
Lee Plan Policy 53.1.5: No county development order under the Land Development Code for a residential development more intense than 2.5 dwelling units per gross acre, for a commercial	INF-1.–5.4: No development order for new development will be issued unless potable water service, at the minimum acceptable level of service, is available at the property line, or surety is given that it will be installed

development of more than 30,000 square feet of gross floor area, or for any industrial plant of more than 30,000 square feet of gross floor area, will be issued in any franchised or certificated water service area, or within Lee County Utilities' future service area, unless potable water service, at the minimum acceptable level of service, is available at the property line, or surety is given that it will be installed prior to occupancy. This policy will in no way exempt any development of any size from meeting the levels of service required for concurrency under Policies 53.1.2 and 95.1.3. (Amended by Ordinance No. 00-22, 09-13).	prior to occupancy.
Lee Plan Policy 53.1.8: The costs of new or augmented potable water infrastructure that is developed by Lee County will be borne by those who benefit from the improved supply. (Amended by Ordinance No. 94-30, 00-22)	INF-1.–5.6: The costs of new or augmented potable water infrastructure that is developed by a utility provider will be borne by those who benefit from the improved supply.
Lee Plan Policy 53.1.9: New development will pay through appropriate financial mechanisms its fair share of the costs of providing standard potable water for that development. (Amended by Ordinance No. 00-22)	INF-1.—5.7: New development will pay through appropriate financial mechanisms its fair share of the costs of providing standard potable water for that development.

Conservation and Coastal Management Element

Transitional Comprehensive Plan Based on Lee Plan 2014 Codification	Estero Comprehensive Plan
Lee Plan Policy 63.2.3: Identify water needs consistent with projections of human population and the needs of natural systems in order to determine the future demands for groundwater. (Amended by Ordinance No. 94-30)	CCM-1.10.1: Work with Lee County and utility providers to identify water needs consistent with projections of human population and the needs of natural systems in order to determine the future demands for groundwater. The Village will support appropriate measures to ensure water supplies of sufficient quantity and quality to meet the present and projected demands of all consumers and the environment, based on the capacity of the natural systems.
Lee Plan Objective 117.1: WATER SUPPLIES. Insure water supplies of sufficient quantity and quality to meet the present and projected demands of all consumers and the environment, based on the capacity of the natural systems.	
Lee Plan Policy 117.1.7: The county will cooperate fully with emergency water conservation measures of the South Florida Water Management District. (Amended by Ordinance No. 00-22)	CCM-1.10.2: Comply with the Mandatory Year Round Landscape Irrigation Conservation Measures as detailed in the Florida Administrative Code and cooperate with emergency water conservation measures of the South Florida Water Management District.
Lee Plan Policy 55.1.3 (as amended by Lee County Ordinance 16-01): Lee County will actively implement the Water Supply Facilities Work Plan as adopted by the Board of County Commissioners. Lee County will utilize the document as the County's guide to water supply facility planning with a planning horizon through the year 2030. A copy of the adopted Water Supply Facilities Work Plan will be maintained and kept on file by Lee County Utilities.	CCM-1.10.3: Develop and implement a Water Supply Facilities Work Plan, as required by the State of Florida. The Village shall use the document as the Village's guide to water supply facility planning with a minimum planning horizon as specified by the State of Florida. A copy of the adopted Water Supply Facilities Work Plan will be maintained and kept on file by the Village.
Lee Plan Objective 117.2: XERISCAPE LANDSCAPE. The county will continue to promote xeriscape landscaping techniques. (Amended by Ordinance No. 94-30, 00-22)	CCM-1.10.4: Promote Florida Friendly landscaping techniques in the Land Development Code and provide education on water conservation through creative landscaping, and promote the conservation and use of native plant species through Florida-friendly landscaping techniques on Village projects.
Lee Plan Policy 117.2.1: The county will continue to encourage xeriscape landscaping techniques for new development in the Land Development Code. (Amended by Ordinance No. 94-30, 00-22)	
Lee Plan Policy 117.2.2: The county will provide education on water conservation through creative landscaping, and promote	

the conservation and use of native plant species through xeriscape landscaping techniques. (Amended by Ordinance No. 94-30, 00-22)	
Lee Plan Objective 63.1: WELLFIELD PROTECTION. The county will maintain a wellfield protection ordinance to provide regulations protecting the quality of water flowing into potable water wellfields. *(Amended by Ordinance No. 94-30, 00-22)*	CCM-1.10.6: Support and comply with Lee County's wellfield protection ordinance protecting the quality of water flowing into potable water wellfields.

Intergovernmental Coordination Element

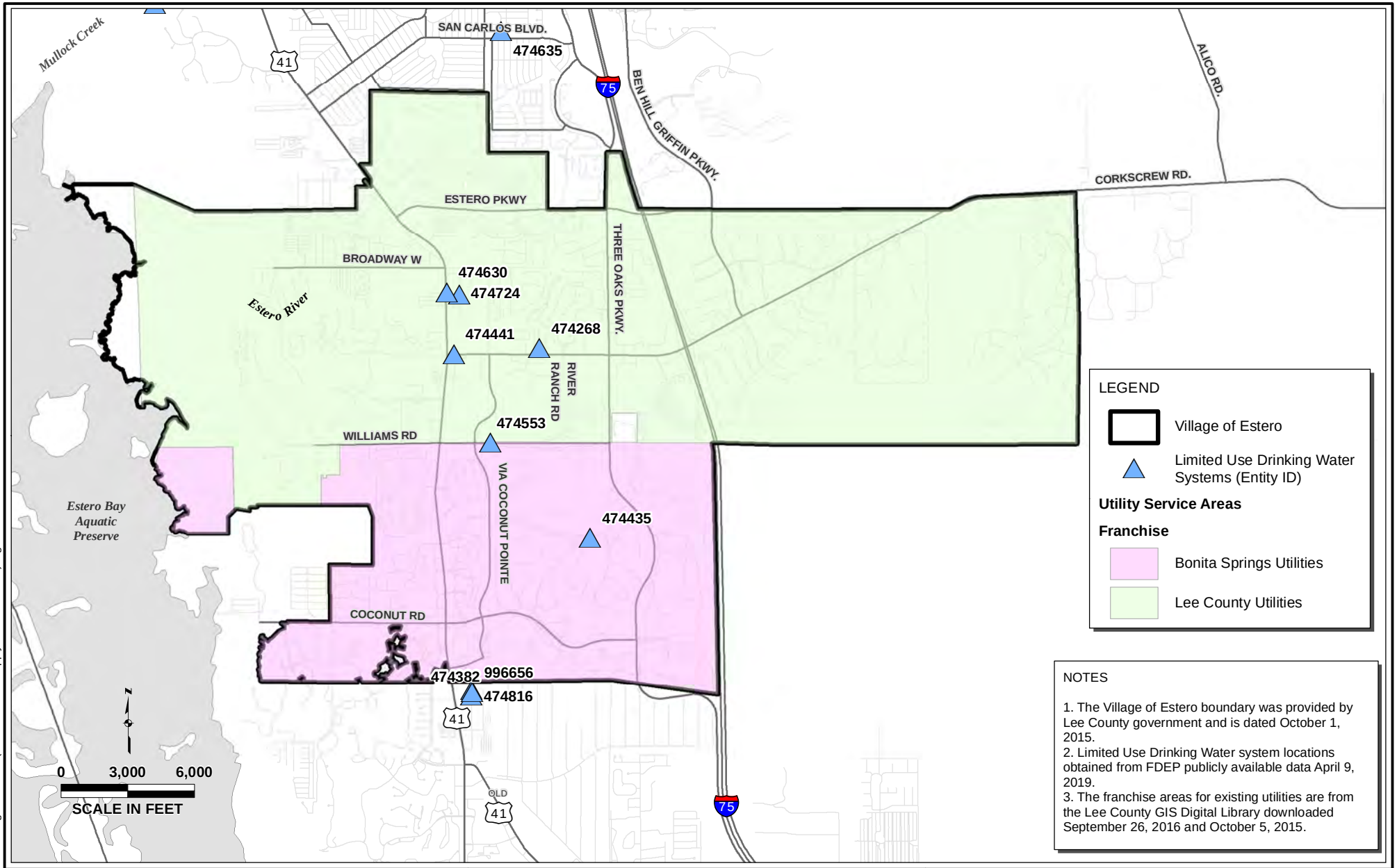
Transitional Comprehensive Plan Based on Lee Plan 2014 Codification	Estero Comprehensive Plan
Adapted from Lee Plan Objective 151.5: COORDINATION OF WATER SUPPLY PLANS AND THE LEE PLAN. Coordinate between Lee County and the South Florida Water Management District to ensure that the Lee Plan remains consistent with the District's regional water supply plans. (Added by Ordinance No. 09-13)	*ICE-1.3: WATER SUPPLY PLAN COORDINATION. The Village shall coordinate with the South Florida Water Management District to ensure that the Village Comprehensive Plan remains consistent with the District's latest regional water supply plan.*
Lee Plan Policy 151.5.1: The county will continue to evaluate the latest water supply plans issued by the South Florida Water Management District to ensure consistency in the Lee Plan and the County's Water Supply Facilities Work Plan. The county will update the Water Supply Facilities Work Plan within 18 months after the South Florida Water Management District approves an update to the regional water supply plan. (Added by Ordinance No. 09-13)	ICE-1.3.1: Continue to evaluate the latest water supply plans issued by the South Florida Water Management District to ensure consistency in the Village Comprehensive Plan and the Village's Water Supply Facilities Work Plan.
Lee Plan Policy 151.5.2: The county will coordinate with other government agencies and private suppliers of potable water during the water supply planning process to include the review of land use changes, addressing population projections, and acceptable level of service standards. (Added by Ordinance No. 09-13)	ICE-1.3.2: Coordinate with other government agencies and private suppliers of potable water during the water supply planning process to include the review of land use changes, addressing population projections, and acceptable level of service standards.
Lee Plan Objective 112.2: The county will continue to participate with other governments to prepare and implement water management plans, including the Estero Bay Agency on Bay Management, Charlotte Harbor National Estuary Program, the Charlotte Harbor Management Plan, the Water Management District Surface Water Improvement and Management (SWIM) plans, DEP aquatic preserve management plans, water supply plans, and other water resource management plans. (Amended by Ordinance No. 94-30, 98-09, 00-22)	ICE-1.4.3: Participate with other appropriate governments to prepare and implement water management plans, including the Estero Bay Agency on Bay Management, Charlotte Harbor National Estuary Program, the Charlotte Harbor Management Plan, DEP aquatic preserve management plans, water supply plans, and other water resource management plans.

Capital Improvements Element

Transitional Comprehensive Plan Based on Lee Plan 2014 Codification	Estero Comprehensive Plan
Lee Plan Policy 95.1.3: MINIMUM ACCEPTABLE LEVEL-OF-SERVICE STANDARDS. Level of-service (LOS) standards will be the basis for planning the provision of required public facilities within Lee County. Some of these standards will be the basis for determining the adequacy of public facilities for the purposes of permitting new development. The "Minimum Acceptable Level of Service" will be the basis for facility design, for setting impact fees, and (where applicable) for the operation of the Concurrency Management System (CMS). *[policy continues with a second paragraph]*	*CIE-1.2: Level of service (LOS) standards will be the basis for planning the provision of required public facilities within the Village. Some of these standards will be the basis for determining the adequacy of public facilities for the purposes of permitting new development. The level of service standards will be the basis for facility design, for setting impact fees, and (where applicable) for concurrency management.*
Lee Plan Policy 95.1.3(1) (as amended by Lee County Ordinance 17-19): Potable Water Facilities: Minimum Acceptable Level of Service: Within certificated, franchised, or designated service areas only: supply and treatment capacity of 250 gallons per day per Equivalent Residential Connection (ERC), except that facilities serving only multi-family or mobile home residential structures must have a capacity of 200 gallons per day, and facilities serving only recreational vehicle or travel trailer residential structures must have a capacity of 100 gallons per day. Where a private water utility has provided an alternate standard for application within its certificated or franchised area, and that standard has been adopted into this comprehensive plan, that will be the standard to be used for concurrency management in the respective certificated or franchised area.	CIE-1.2.3: The minimum acceptable level of service standard for potable water connections to Lee County Utilities will be: An available supply and treatment capacity of 250 gallons per day per equivalent residential connection (ERC), except that facilities serving only multi-family or mobile home residential structures must have a capacity of 200 gallons per day and facilities serving only recreational vehicle or travel trailer residential structures must have a capacity of 100 gallons per day.
City of Bonita Springs Comprehensive Plan (Capital Improvements Element) Policy 1.1.3.a: Potable Water Facilities: Within certified, franchised or designated service areas an available supply, treatment and delivery of 235 gallons per day per	CIE-1.2.4: The minimum acceptable level of service standard for potable water connections to Bonita Springs Utilities will be: An available supply and treatment capacity of 235 gallons per day per equivalent

equivalent residential connection (ERC) and delivery of potable water at a minimum pressure of 20 pounds per square inch (psi) at the meter anywhere in the system. (Cross Reference: Infrastructure Element Policy 1.1.1)	residential connection (ERC) and delivery of potable water at a minimum pressure of 20 pounds per square inch (psi) at the meter anywhere in the system.
Lee Plan Objective 2.2 (as amended by Lee County Ordinance 17-19): DEVELOPMENT TIMING. Direct new growth to those portions of the future urban areas where adequate public facilities exist or are assured and where compact and contiguous development patterns can be created. Development orders and permits (as defined in F.S. 163.3164(7)) will be granted only when consistent with the provisions of Sections 163.3202(2)(g) and 163.3180, F.S. and the concurrency requirements in the Land Development Code. (Ordinance No. 94-30, 00-22, 17-19)	CIE-1.3.7: Development orders and permits will not be issued unless the required public facilities and services (transportation, schools, water, sewer, drainage, and solid waste) necessary to support such development at the adopted LOS standards are available concurrent with the associated impacts.

7.0 FIGURES



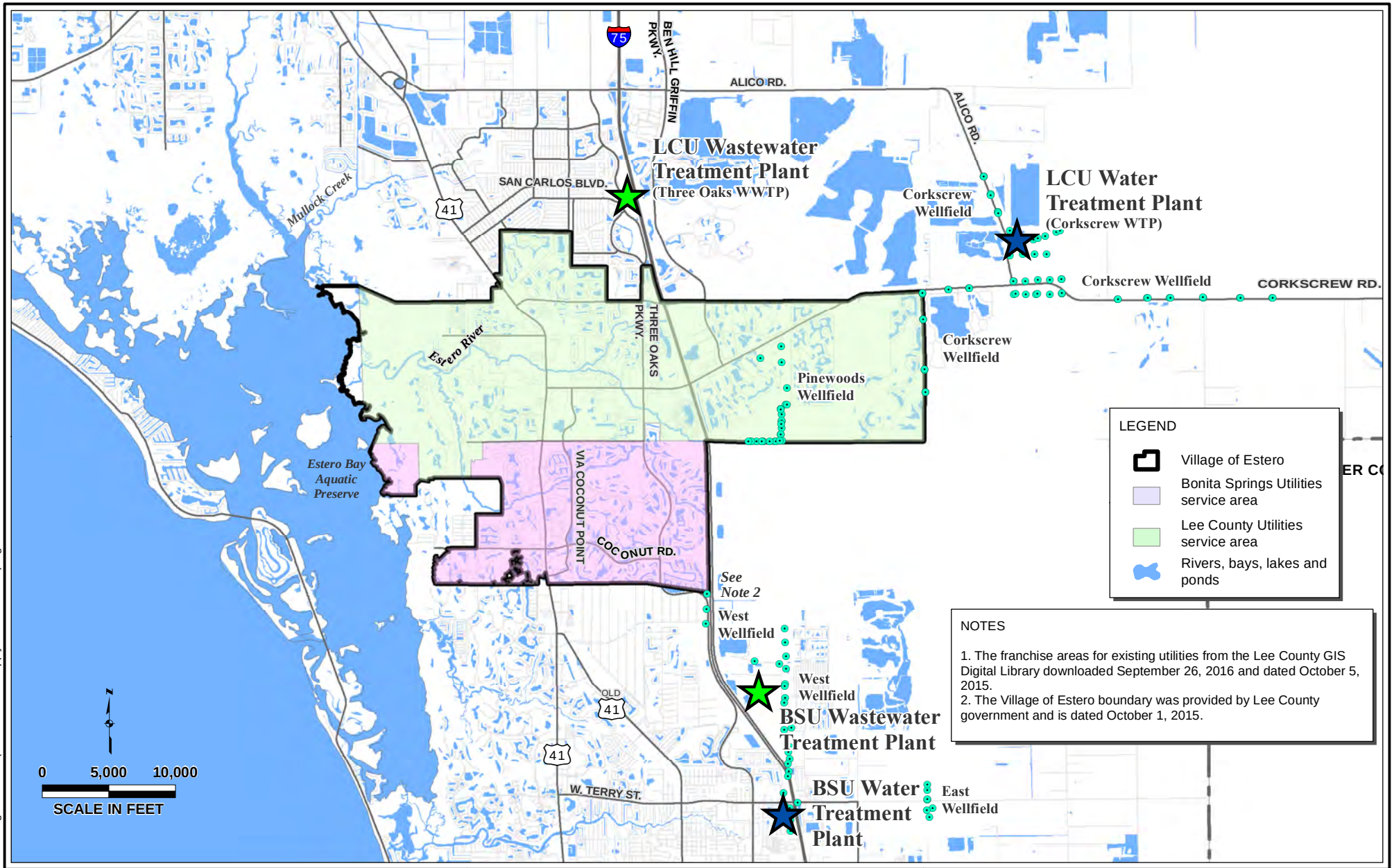
L:\20180000\20181321-005 - Village of Estero (10-Year Water Supply Fac Work Plan)\Figure1.mxd

Village of Estero
10-Year Water Supply
Facilities Work Plan

JOHNSON ENGINEERING, INC.
2122 JOHNSON STREET
P.O. BOX 1550
FORT MYERS, FLORIDA 33902-1550
PHONE (239) 334-0046
FAX (239) 334-3661
E.B. #642 & L.B. #642

Figure 1: Utility Service Areas

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
April 2019	20181321-005	--	As Shown	Figure 1



L:\20180000\20181321-005 - Village of Estero (10-Year Water Supply Fac Work Plan)\Figure2.mxd

Village of Estero 10-Year Water Supply Facilities Work Plan

JOHNSON ENGINEERING, INC.
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Figure 2: Public Water Supply Facilities

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
April 2019	20181321-005	--	As Shown	Figure 2