

RESOLUTION NO. 2017-10

A RESOLUTION OF THE TOWN OF ST. LUCIE VILLAGE BOARD OF ALDERMEN ADOPTING A WATER SUPPLY FACILITIES WORK PLAN FOR 2017 THROUGH 2027, WHICH WAS TRIGGERED BY THE UPDATED UPPER EAST COAST WATER SUPPLY PLAN; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Town of St. Lucie Village adopted Ordinance 2011-9, an ordinance adopting a Water Supply Facilities Work Plan for 2010 through 2020, in conjunction with updating its Growth Management Plan; and

WHEREAS, when the Upper East Coast Water Supply Plan was updated thereafter, the Town of St. Lucie Village adopted Ordinance 2013-1, adopting a Water Supply Facility Work Plan for 2013 through 2023, and

WHEREAS, South Florida Water Management District adopted a further updated Upper East Coast Water Supply Plan and advised that such adoption triggers the need for an update to the previously adopted Water Supply Facilities Work Plan; and

WHEREAS, the Town of St. Lucie Village has prepared such an update; and

WHEREAS, a copy reflecting redlined changes was transmitted to the South Florida Water Management District, pursuant to Resolution 2017-6, and the South Florida Water Management District has reviewed and approved the updated plan; and

WHEREAS, the Board of Aldermen of the Town of St. Lucie Village desires to adopt the updated Plan as submitted for review.

NOW, THEREFORE, the Board of Aldermen of the Town of St. Lucie Village, Florida hereby resolves as follows:

1. The Town of St. Lucie Village hereby approves the proposed updated Water Supply Facilities Work Plan for 2017 through 2027, a copy of which (with redlined changes accepted) is attached hereto as Exhibit "A".

2. This Resolution is effective upon passage.

PASSED AND APPROVED by the Board of Aldermen of the Town of St.
Lucie Village on this 19th day of December, 2017.

ATTEST:

TOWN OF ST. LUCIE VILLAGE
BOARD OF ALDERMEN
ST. LUCIE VILLAGE, FLORIDA

BY:

Diane C. Orme
Diane C. Orme, Clerk

BY:

William G. Thiess
William G. Thiess, Mayor

Approved as to form and legal sufficiency:

[Signature]
Town Attorney

I, DIANE C. ORME, Clerk of the TOWN OF ST. LUCIE VILLAGE,
FLORIDA, do hereby certify that this is a true and accurate copy of
Ordinance **2017-10** which was duly introduced, read and adopted at the
regular meeting of the Board of Aldermen of the TOWN OF ST. LUCIE
VILLAGE, FLORIDA, held this 19th day of December, 2017.

Diane C. Orme
DIANE C. ORME, CLERK

Town of St. Lucie Village, Florida

Water Supply Facilities Work Plan 2017-2027



**Prepared by:
Town of St. Lucie Village
July 2017**

Water Supply Facilities Work Plan

Introduction

The Town of St. Lucie Village Water Supply Facilities Work Plan (Work Plan) identifies the water supply sources and facilities needed to serve existing and new development within the Town. Chapter 163, Part II, Florida Statutes (F.S.), requires local governments to prepare and adopt Work Plans into their comprehensive plans within 18 months after the water management district approves a regional water supply plan or its update. The Upper East Coast Regional Water Supply Plan Amendment was approved by the South Florida Water Management District (SFWMD) on March 10, 2016. Therefore, the deadline for local governments within Upper East Coast planning area to update the current Work Plan is September 10, 2017.

Potable Water is Supplied by Domestic-Self Supplied Wells

The Work Plan will reference the initiatives already identified in the Town of St. Lucie Village Comprehensive Plan Update. According to state guidelines, the Work Plan and the comprehensive plan amendment must address the development of traditional and alternative water supplies, bulk sales agreements and conservation and reuse programs that are necessary to serve existing and new development for at least a 10-year planning period. The Town of St. Lucie Village Work Plan will have the planning time schedule of 2017-2027.

The Town's Work Plan is divided into the following sections:

- Introduction
- Statutory Basis
- Background Information
- Data and Analysis
- Conservation
- Regional Issues
- Reuse
- Capital Improvement Element
- Goals, Objectives, Policies

Statutory Basis

History

The Florida Legislature enacted bills in the 2002, 2004, and 2005 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, 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.

Requirements

The following highlights the statutory requirements:

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

- Ensure that its future land use plan is based upon availability of adequate water supplies and public facilities and services [s. 163.3177(6)(a), F.S., 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 the Department 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.
- 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 permit, to determine whether adequate water supplies will be available to serve the development by the anticipated issuance date of the certificate of occupancy [s.163.3180 (2)(a), F.S., effective July 1, 2005]. 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).
- Revise the Sanitary Sewer, Solid Waste, Drainage and Stormwater, Potable Water, and Natural Groundwater Aquifer Recharge Elements (Public Facilities Element), within 18 months after the water management district approves an updated regional water supply plan, to:
 - A. Identify and incorporate the alternative water supply project(s) selected by the local government from projects identified in the updated 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), F.S.];

- B. Identify the traditional and alternative water supply projects, bulk sales agreements, 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), F.S.];
 - C. 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 identified in the element as necessary to serve existing and new development. [s. 163.3177(6)(c), F.S.] .
- 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.
 - 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 appropriate regional water supply plan, the applicable District Water Management Plan, as well as applicable consumptive use permit(s). [s.163.3177 (6)(d), 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 (13), F.S.]

- 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 applicable regional water supply plans and regional water supply authorities' plans. [s. 163.3177(6)(h)1., F.S.]
- Address in the EAR the extent to which the local government has implemented 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, bulk sales agreements, and conservation and reuse programs are meeting local water use demands. [s.163.3191 (2)(1), F.S.]

Background Information

Overview

The Town of St. Lucie Village is a historic coastal village located along the Indian River Lagoon on the northeastern Atlantic coastline of St. Lucie County, Florida. The Town is surrounded by unincorporated St. Lucie County to the north and west, by the City of Ft. Pierce to the south, and by the Indian River Lagoon to the east. The boundaries of the town encompass an area of approximately 461 acres (St. Lucie County GIS Division, 2012).

The Town of St. Lucie Village was incorporated in 1961. The Town of St. Lucie Village is long and narrow in its orientation. The eastern portion of the Town is residential in use and located largely within the 100-year floodplain. Much of the area is developed around a large area of environmentally sensitive land, St. Lucie Village Heritage Park, which has been purchased and preserved through a Florida Communities Trust grant. The Town's orientation to the north and south is bisected by the Florida East Coast Railroad and Old Dixie Highway and bordered on the west by U.S. Highway 1. The Town is primarily residential with limited commercial uses which are located primarily adjacent to U.S. Highway 1.

The Town is substantially built-out. There have been only minor changes to the Town since the adoption of the Town's 1989 Comprehensive Plan in April 1990. These minor changes have included the designation of a new park, the platting of two new subdivisions near the northern edge of the Town along the FEC Railroad, and the annexation of 81 acres (referenced in the Comprehensive Plan Draft Update, 2009, Exhibit 1-13).

There are currently about 317 permanent and seasonally occupied dwellings and businesses in the Town and each has at least one well for potable and/or irrigation purposes. The SFWMD regulates some commercial wells, but wells for private residential use are exempt from SFWMD review. Both the Floridan and a surficial aquifer underlie the Town. All potable water wells in the Town draw water from the surficial aquifer, as the Floridan has high to moderate concentrations of dissolved salts. Recharge of the surficial aquifer is dependent mostly on rain water.

Of the Town's 590 residents, 586 obtain potable water from domestic self-supply systems (wells). These residents are responsible for ensuring that enough capacity is available to serve their existing and future needs by maintaining or replacing their wells.

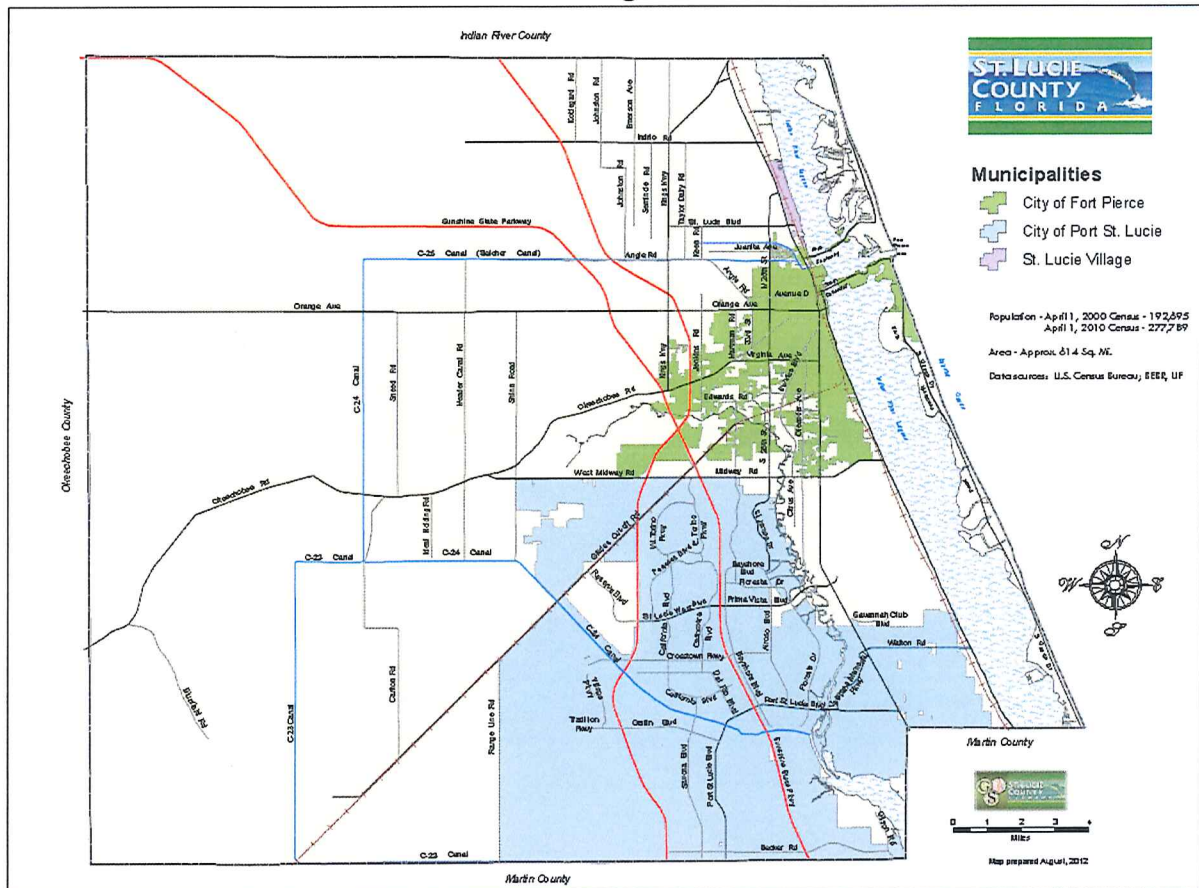
The nearest centralized potable water system is located in the City of Ft. Pierce and operated by the Fort Pierce Utilities Authority (FPUA), a public water supply utility. FPUA has future plans for a water main in the US 1 right-of-way west of the Town, but construction of this main is not in FPUA's 5-Year Capital Plan. Currently, FPUA provides potable water to four (4) residents (two households) at the extreme south end of the Town. Those four residents (two households) are ensured that enough capacity is available for existing and future needs by the FPUA.

Data and Analysis

Town's Location Map and Areas Served Map

The Town of St. Lucie Village location map is attached below as Map 1.11. Since the Town is 99 percent domestic self-supply wells the location map also reflects the service area of the domestic self-supplied wells.

Map 1.1 Location Map of the Town of St. Lucie Village



Population Information

The Town is substantially built-out. According to the U.S. Census, the total population was 584 in 1990 and 590 in 2010, an addition of only 6 residents, or a 1.0 percent increase (U.S. Census, 2010). Further, the U.S. Census (2010) projected a total 2012 population of 585, which represents a loss of 5 residents, a 1.0% decrease.

Due to modest growth patterns in the Town in the past, projections of 590 for 2017 and 608 for 2027 were used. The 2027 population growth projection of 608 indicates an 18 person increase over the actual 2010 Census population of 590 (a 3.1 increase in population). The Town's population increased modestly between 1990 and 2000 with the addition of 20 residents (a 3.4% increase in population). The Town's share of the St. Lucie County growth between 1990 and 2000 was only 0.047 percent.

The potential expansion of the Town's current boundaries through annexations is the only factor which might result in significant population increase during the planning period. This could only occur if the Town's Board of Aldermen reconsiders their passive position regarding annexation.

There is no central sanitary sewer serving the Town. Residents and businesses rely exclusively on septic systems. Development is constrained by the lack of central sanitary sewer service. Many lots fall below the regulatory threshold of 0.5 acres for on-site septic service as stipulated by s. 381.0065(4)(a), F.S., for lots platted after 1971. Additionally, most of the area east of the FEC Railroad falls within the Coastal High Hazard Area (CHHA) where flooding can occur during Category 1 or higher storms. Opportunities for development in the Town are primarily located in the area between Old Dixie Highway and U.S. Highway 1. Although approximately 24% of the Town's land is vacant there are obstacles to development for portions of the land such as being located in the CHHA, wetlands, and lack of a centralized water and sewer system.

Over the last fifteen years the Town has remained a low density, single-family area and the Town has changed very little. The Town's population was forecast in the 1989 Plan to reach 745 by 2000; however, the 2010 Census indicates only 590 residents. Parcels were annexed, yet little development has occurred. Residential development west of Old Dixie Highway has increased somewhat, as has commercial use along U.S. Highway 1. Two new subdivisions along the eastern edge of the FEC Railroad in the northern part of the Town have been platted, although, to date only one residence has been built. The acquisition of the lands that make up the Town's Heritage Park through a Florida Communities Trust grant is a significant change that was not anticipated in 1989.

Since the Town's Comprehensive Plan was adopted in 1990, the character of the Town itself has not changed as much as neighboring Fort Pierce, the rest of St. Lucie County or the State of Florida as a whole. As a result, residents view contextual changes in their community related to outside growth as a greater concern than internal changes.

In 2006, an evaluation of existing gross acreage by land uses revealed that 236 acres or 51.2% of the total gross acreage in the Town was dedicated to residential use. The remaining gross acreages are allocated to non-residential uses such as commercial (30.3%); light industrial (0.4%); institutional (0.7%) recreation and open space (16.7%);

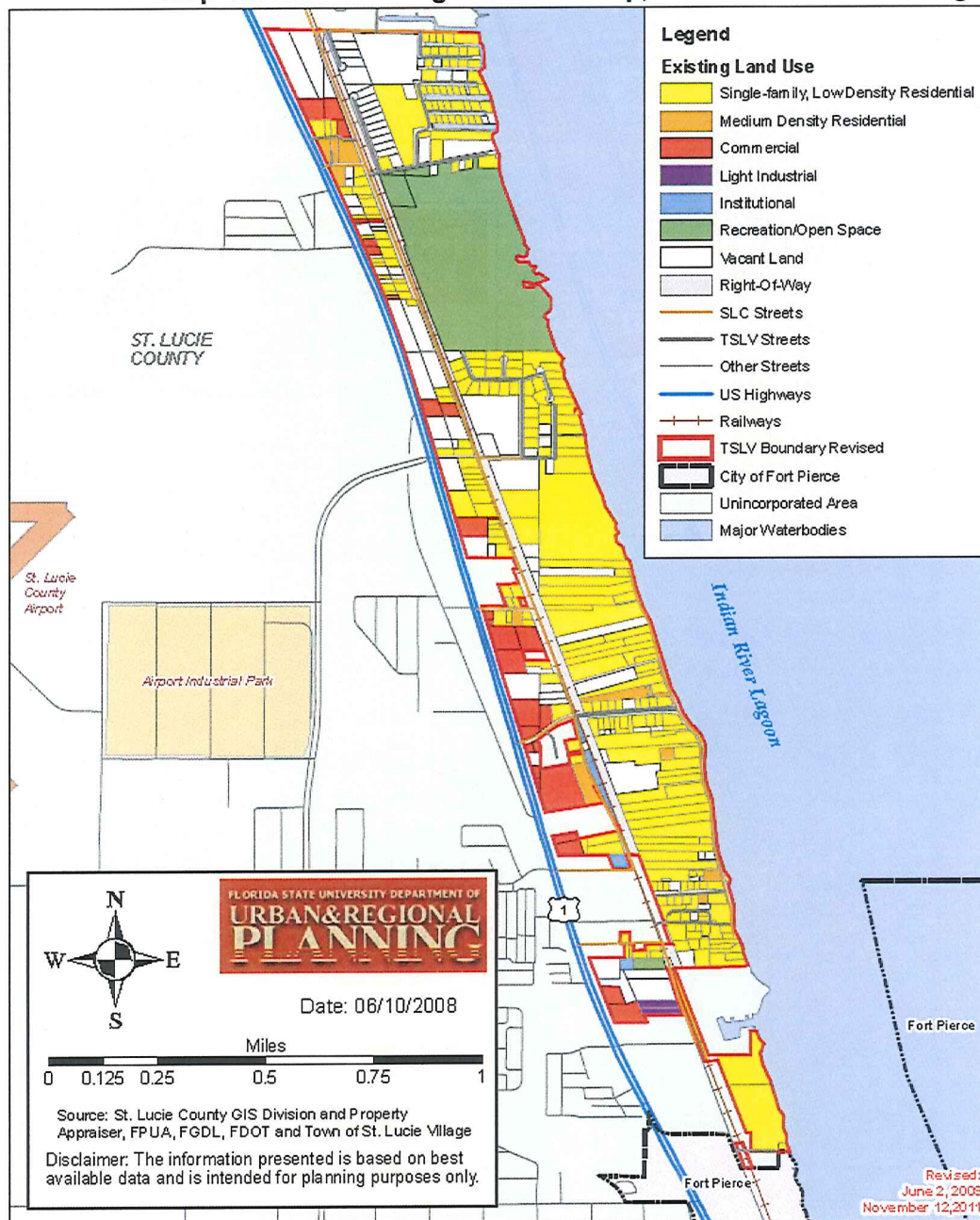
right-of-way (0.7%); and vacant undeveloped lands (23.7%). The Town does not anticipate substantial increases in land area in the near future, unless there is policy decision from the Town to reconsider their passive position on annexation. In the meantime, the residential and non-residential growth rate is anticipated to be minimal for the next 10 to 20 years. Included below are Table 1; "Analysis of Existing Land Uses", 2006 and Map 1.2, "2006 Existing Land Use Map, Town of St. Lucie Village", both from the Town of St. Lucie Village Comprehensive Plan adopted December 20, 2011.

Table 1 Analysis of Existing Land Uses, 2006

Existing Land Use	Existing Use (Acres)	Percent Total
Single-family, Low Density Residential	227.9	49.4%
Medium Density Residential	8.1	1.8%
Commercial	30.3	6.6%
Light Industrial	2.0	0.4%
Institutional	3.4	0.7%
Recreation / Open Space	76.9	16.7%
Right-of-way	3.0	0.7%
Vacant	109.5	23.7%
Total Land Area	461.1	100.00%

Sources: St. Lucie County Property Appraiser and GIS data, October 2006

Map 1.2 2006 Existing Land Use Map, Town of St. Lucie Village



The existing lands uses are served by domestic self-supply wells and individual septic tank systems.

In 2007, the Town's Building Department records indicated that only 1 (one) permit was issued for new residential construction and one (1) permit for new commercial construction. In 2011, no permits were issued for any new development.

Water Supply Provided by Individual Self-Supplied Wells
Potable Water Level of Service Standard

There are currently about 317 permanent and seasonally occupied dwellings and businesses in the Town (US Census 2010) and each has at least one well. Potable water is obtained by each through individual on-site wells. The SFWMD regulates some commercial wells, but wells for private residential use are exempt from SFWMD review. Both the Floridan and a surficial aquifer underlie the Town. All potable water wells in the Town draw water from the surficial aquifer, as the Floridan has high to moderate concentrations of dissolved salts. Recharge of the surficial aquifer is dependent mostly on rain water. There have been no documented problems of salt water intrusion or well contamination in the Town though several residents have stated that intrusion is beginning to occur in their wells.

A majority vote of residents responding to an official survey would be necessary for central water and/or sewer services to be requested from FPUA. At this time, only 2 of the 317 houses are served by central water and none are served by central sewer. Should the residents vote and elect to receive central water and sewer services, a special taxing district would need to be established for the Town residents to pay an assessment on their tax bill for the extension of centralized water and/or sewer.

Water Supply Provided by FPUA to Two Households (4 residents)

FPUA currently serves only 2 households (4 residents) within the Town with central water. FPUA has established a water use level of service of 300 gallons per day (GPD) per typical dwelling unit. A typical dwelling unit serves 2.5 persons, therefore, the adopted level of service is 120 GPD/person. Presently, FPUA serves 4 residents for a total demand of 480 GPD.

The following Table 2 outlines population and demand by private self-serve wells and FPUA for the planning period;

Table 2 Population and Potable Water Demand Projections – Town of St. Lucie Village

	2010 Population (U.S. Census)	2027 Population Projection	2017 Demand Projection (MGD)	2027 Demand Projection (MGD)
Self Served Potable Wells	586	603	.07032	.07236
FPUA Customers	4	5	.00048	.00060
Totals	590	608	.07080	.07296

Sources: U.S. Census (2010) and FPUA

Conservation

Conservation efforts are needed to effectively manage the Town's water resources. The Town presently has incorporated water conservation best management practices in the adopted Land Development Regulations. These measures include the requirement to use xeric landscaping and ultra low volume toilets for all new and replacement fixtures.

The Town will continue to actively support SFWMD in the implementation of new regulations or programs that are designed to conserve water during the dry season. The Town will adhere to the adopted SFWMD year round water conservation measures which include limited irrigation watering schedules and the use of moisture sensing devices.

Further, the Town presently has a policy to promote water conservation education via a joint program with FPUA. The Town presently receives electric service from FPUA. Water conservation educational inserts will be included in the billing statements periodically which will reach every Town resident.

The Town shall cooperate with the South Florida Water Management District in implementing the Upper East Coast Water Supply Plan, including the development and implementation of water conservation programs.

Regional Issues

As the state agency responsible for water supply in the Upper East Coast Regional planning area, the SFWMD plays a major role in resource protection, through criteria used for Consumptive Use Permitting.

Reuse

State law supports reuse efforts. The reuse effort in the state is primarily led by utilities, local governments, the water management districts and state agencies. The intent of their efforts is to implement water reuse programs that increase the volume of reclaimed water used and promote public acceptance of reclaimed water. Florida Statutes (Sections 403.064(1) and 373.250(1) F.S. promote water reuse as a formal state objective. "These sections conclude that water reuse programs designed and operated in compliance with Florida's rules governing reuse are deemed protective of public health and environmental quality." Section 403.064(1), F.S., concludes, "reuse is a critical component of meeting the state's existing and future water supply needs while sustaining natural systems."

The Town of St. Lucie Village supports water reuse initiatives by Florida Department of Environmental Protection (FDEP) and South Florida Water Management District (SFWMD).

The Town will support the SFWMD water reuse projects, and implementation of new regulations or programs designed to increase the volume of recycled or reclaimed water used and public acceptance of these water uses. The widespread use of septic tanks and drainfields within St. Lucie Village provides some beneficial reuse by recharging the surficial aquifer.

Capital Improvements

As noted in this document, the Town does not provide water service to the residents. All but four residents (two households) use domestic self-supplied wells for potable water and irrigation water. No capital improvement projects have been identified.

Concurrency

The Town presently requires documentation that potable water is available prior to issuance of the Building Permit. This documentation is normally a well construction permit from the St. Lucie County Health Department and/or a Consumptive Use Permit from SFWMD, as applicable. For any proposed potable water connections to FPUA, the Town would require a water availability letter from FPUA. In any event, no Building Permits will be issued without the appropriate documentation of water availability.