BEFORE THE BOARD OF COUNTY COMMISSIONERS
MARTIN COUNTY, FLORIDA

ORDINANCE NUMBER 1107

AN ORDINANCE OF MARTIN COUNTY, FLORIDA, REGARDING COMPREHENSIVE PLAN AMENDMENTS CPA 19-3, UTILITIES EXTENSION, AND 19-14, CHAPTER 10, SANITARY SEWER SERVICES ELEMENT OF THE COMPREHENSIVE GROWTH MANAGEMENT PLAN, MARTIN COUNTY CODE; PROPOSING A COMBINED TEXT AMENDMENT TO CHAPTER 4, FUTURE LAND USE ELEMENT; CHAPTER 10, SANITARY SEWER SERVICES ELEMENT; AND CHAPTER 11, POTABLE WATER SERVICE ELEMENT/10 YEAR WATER SUPPLY FACILITIES WORK PLAN TO ALLOW FOR THE PROVISION OF WATER AND SEWER SERVICES TO A COUNTY OWNED PROPERTY OUTSIDE THE PRIMARY URBAN SERVICE DISTRICT; PROPOSING AMENDED POLICIES TO IMPROVE CONSISTENCY BETWEEN CHAPTER 10, SANITARY SEWER SERVICES ELEMENT AND CHAPTER 11, POTABLE WATER SERVICE ELEMENT/10 YEAR WATER SUPPLY FACILITIES WORK PLAN; AND PROPOSING OTHER MODIFICATIONS INCLUDING REMOVING REFERENCES TO INDIANTOWN; PROVIDING FOR CONFLICTING PROVISIONS, SEVERABILITY, AND APPLICABILITY; PROVIDING FOR FILING WITH THE DEPARTMENT OF STATE, CODIFICATION, AND AN EFFECTIVE DATE.

WHEREAS, Section 1.11, Comprehensive Growth Management Plan, and Section 163.3184, Florida Statutes, permit amendments to the Comprehensive Growth Management Plan and provide for amendment procedures; and

WHEREAS, on June 6, 2019, the Local Planning Agency considered the proposed Comprehensive Plan Amendment at a duly advertised public hearing; and

WHEREAS, on June 18, 2019, at a duly advertised public hearing, this Board considered the amendment and approved such amendment for transmittal to the Division of Community Planning and Development; and

WHEREAS, on August 27, 2019 at a duly advertised public hearing this Board considered and addressed the comments of the various reviewing agencies; and

WHEREAS, this Board has provided for full public participation in the comprehensive planning and amendment process and has considered and responded to public comments.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF MARTIN COUNTY, FLORIDA, THAT:

PART I. COMPREHENSIVE GROWTH MANAGEMENT PLAN AMENDMENT CPA 19-3, UTILITIES EXTENSION, AND CPA 19-14, SANITARY SEWER SERVICES ELEMENT

Comprehensive Growth Management Plan Amendments CPA 19-3, Utilities Extension, and CPA 19-14, Sanitary Sewer Services Element, are hereby adopted as follows: Text amendments to Chapter 10, Sanitary Sewer Services Element ("Exhibit A"); Chapter 11, Potable Water Services Element/10 Year Water Supply Facilities Work Plan ("Exhibit B"); and Chapter 4, Future Land Use Element ("Exhibit C"); attached hereto and incorporated by reference.

PART II. CONFLICTING PROVISIONS.

To the extent that this ordinance conflicts with special acts of the Florida Legislature applicable only to unincorporated areas of Martin County, County ordinances and County resolutions, and other parts of the Martin County Comprehensive Growth Management Plan, the more restrictive requirement shall govern.

PART III. SEVERABILITY.

If any portion of this ordinance is for any reason held or declared to be unconstitutional, inoperative or void by a court of competent jurisdiction, such holding shall not affect the remaining portions of this ordinance. If the ordinance or any provision thereof shall be held to be inapplicable to any person, property or circumstance by a court of competent jurisdiction, such holding shall not affect its applicability to any other person, property or circumstance.

PART IV. APPLICABILITY OF ORDINANCE.

This Ordinance shall be applicable throughout the unincorporated area of Martin County.

PART V. FILING WITH DEPARTMENT OF STATE.

The Clerk be and hereby is directed forthwith to scan this ordinance in accordance with Rule 1B-26.003, Florida Administrative Code, and file same with the Florida Department of State via electronic transmission.

PART VI. CODIFICATION.

Provisions of this ordinance shall be incorporated into the Martin County Comprehensive Growth Management Plan, except that Parts II through VII shall not be codified. The word "ordinance" may be changed to "article," "section," or other word, and the sections of this ordinance may be renumbered or re-lettered.

PART VII. EFFECTIVE DATE.

The effective date of this plan amendment, if the amendment is not timely challenged, shall be 31 days after the state land planning agency notifies the local government that the plan amendment package is complete. If timely challenged, this amendment shall become effective on the date the state land planning agency or the Administration Commission enters a final order determining this adopted amendment to be in compliance. No development orders, development permits, or land uses dependent on this amendment may be issued or commence before it has become effective. If a final order of noncompliance is issued by the Administration Commission, this amendment may nevertheless be made effective by adoption of a resolution affirming its effective status, a copy of which resolution shall be sent to the state land planning agency.

DULY PASSED AND ADOPTED THIS 27th DAY OF AUGUST, 2019.

ATTEST:

CAROLYN TIMMANN,
CLERK OF THE CIRCUIT COURT
AND COMPTROLLER

BOARD OF COUNTY COMMISSIONERS
MARTIN COUNTY, FLORIDA

BY: _____
EDWARD V. CIAMPI, Chairman

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY

BY: _____
SARAH W. WOODS,
COUNTY ATTORNEY

EXHIBIT A

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 10 SANITARY SEWER SERVICES ELEMENT

Chapter 10 SANITARY SEWER SERVICES ELEMENT

Adopted:	February 20, 1990	By Ordinance No. 373
Amended:	July 9, 1991	By Ordinance No. 400
Amended:	October 26, 1993	By Ordinance No. 430
Amended:	November 29, 1994	By Ordinance No. 450
Amended:	December 15, 1998	By Ordinance No. 537
Amended:	September 28, 1999	By Ordinance No. 555
Amended:	May 24, 2005	By Ordinance No. 668
Amended:	August 7, 2007	By Ordinance No. 765
Amended:	December 11, 2007	By Ordinance No. 778
Amended:	December 11, 2007	By Ordinance No. 781
Amended:	December 11, 2007	By Ordinance No. 782
Amended:	February 12, 2008	By Ordinance No. 787
Amended:	December 16, 2009	By Ordinance No. 840
Amended:	December 16, 2009	By Ordinance No. 851
Amended:	August 10, 2010	By Ordinance No. 870
Amended:	January 10, 2012	By Ordinance No. 907
Amended:	July 10, 2012	By Ordinance No. 913

EXHIBIT A

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 10 SANITARY SEWER SERVICES ELEMENT

Amended:	December 16, 2014	By Ordinance No. 965
Amended:	December 20, 2015	By Ordinance No. 984
Amended:	July 25, 2017	By Ordinance No. 1025
Amended:	August 22, 2017	By Ordinance No. 1032
Amended:	February 27, 2018	By Ordinance No. 1056

Section 10.1. Background Information

10.1.A. *Introduction.* In its 1982 Comprehensive Growth Management Plan (CGMP), Martin County set objectives for wastewater management. These included promoting centralized systems, initiating wastewater planning and including regulations in the Land Development Code and performance standards in the CGMP.

After adoption of the 1990 CGMP, the Board of County Commissioners (BCC) commissioned a series of planning documents, including the 1998 Wastewater Master Plan and the 2001 update. Those master plans recommended consolidating the County's wastewater system. Other recommendations included developing and/or expanding facilities in the Port Salerno/Tropical Farms and North County areas; eliminating package treatment plants and on-site sewage treatment and disposal systems (OSTDS) in areas with higher density; reusing sewage effluent for irrigation; and developing a biosolids disposal program. The 2001 Water and Wastewater Master Plan Update provided guidelines that allowed the Martin County Utilities and Solid Waste Department to meet the requirements of Florida Statutes.

The County acknowledges that proper planning for and investment in infrastructure constitutes a fundamental means of achieving the County's vision of environmental, economic, social and fiscal sustainability, and continued high quality of life set forth in the CGMP, especially the Future Land Use Element. Therefore, proper alignment and implementation of the Goals, Objectives and Policies of the CGMP are essential to achieve the these goals.

Full implementation and enforcement of the strategies and policies in this chapter are vitally important. The quality of life and the economy of Martin County rests on its waterways. The County's policy and investment has achieved significant success. In the period from 1982 through 2014, Martin

County has eliminated 70 package plants with a combined treatment capacity of 5.8 mgd, by providing regional sewer facilities.

The siting, design and permitting standards for OSTDS are within the jurisdiction of the Florida Department of Health and the State Department of Environmental Protection. Therefore, the County may not at this time have the full range of policy alternatives available to it to solve the environmental problems and fiscal challenges posed by failing OSTDS. There also remains some uncertainty as to the absolutely best approach to protect and restore water quality in every given situation. In some circumstances the best way forward is to eliminate OSTDS and provide regional facilities. In other circumstances, given proper standards and safeguards, additional development served by OSTDS may be appropriate. The County is cognizant that knowledge and best management practices regarding regional sewage systems and OSTDS will continue to develop and inform County policies and practices going forward.

Within the County's seven Community Redevelopment Areas (CRAs), there are areas that meet the criteria for high prioritization for capital investment for the extension of regional sewer facilities. The County Community Development Department and the County Utilities Department have prepared preliminary draft utility plans for each CRA. These preliminary draft plans identify needed gravity collection lines, force mains and lift stations needed to provide regional sewage facilities to the CRAs. Preliminary cost estimates have also been prepared.

10.1.B. *Purpose and intent.* This element serves as the basis for providing the sanitary sewer facilities and services necessary to manage the wastewater generated by Martin County's existing and future residents. It contains the goals, objectives and policies needed to implement these facilities and services.

Section 10.2. Existing Conditions

10.2.A. *Type of facilities.* Martin County residents are served by on-site sewage treatment and disposal systems (OSTDS), package sewage treatment plants and regional sewage systems. Each facility is described below.

On-site sewage treatment and disposal systems serve individual residences or small developments. Solid wastes settle in the tank and decompose; the remaining liquid is discharged to a drainfield and percolates into the soil. The natural process of filtration and microorganism activity in the soil completes the treatment process. On-site sewage treatment and disposal systems must be pumped out every 3-5 years to remove the accumulated solids, and the waste septage must be treated prior to final disposal.

Package sewage treatment plants are usually small, preconstructed units serving isolated developments. They can be designed to provide any level of service but usually provide no more than secondary treatment. Effluent is usually disposed through percolation ponds or drainfields.

Regional sewage systems are large systems serving densely populated regions, owned either by the public or by investors. Physical and biological methods are used to separate solid and organic matter from the wastewater. Depending on the facility's design and purpose, three levels of treatment are possible: primary, secondary and tertiary. Under FDEP requirements, all systems use secondary and/or tertiary treatment. Effluent to be reused for irrigation receives tertiary treatment

Six regional systems operate in Martin County. Designated regional sewage systems serving the County are Martin County North, Martin County South, South Martin Regional Utilities, Indiantown Utilities, the Loxahatchee River Environmental Control District (LRECD) and the City of Stuart (Table 10-1).

EXHIBIT A

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 10 SANITARY SEWER SERVICES ELEMENT

The goals, objectives and policies contained in this element require planning and operations consistent with the other Elements of this Plan. Wastewater Master Plans have been developed to guide the County's consolidation of sanitary sewer facilities and to address concerns about existing conditions and future needs. For example, the County developed and implemented an industrial waste effluent pretreatment program to ensure pretreatment of industrial waste streams prior to discharge to the public wastewater treatment facility. This program is necessary to ensure proper maintenance and operation of the facility and maintenance of effluent and biosolids standards. The County also conducted a pilot program to determine the economic feasibility and business and public response to conversion of dewatered biosolids for use as a soil amendment (fertilizer). This program considered the dual benefits of reduced landfill space and reduced need for synthetic fertilizers. Based on the findings of the pilot program, the County has issued a contract to build two regional biosolid facilities.

10.2.B. Both incorporated and unincorporated areas of Martin County rely on on-site sewage treatment and disposal systems where a regional sewage system is not available.

According to the General Soil Map of Martin County (Figure 10-1, on file with the Martin County Growth Management Department and on the County's website), the County has 15 "soil map units". Each unit represents a unique natural area, consisting of one or more major soil types and some minor soils. On-site sewage treatment and disposal system may pose health, safety and environmental problems if located in areas with unsuitable soils. The map is based on the Soil Survey of the Martin County Area, which has revealed that most of the County's soils have some limitations for on-site sewage treatment and disposal system absorption fields. These limitations include poor filtering, seepage, sandiness, slow rate of percolation, wetness, ponding and excess humus, as well as a shallow depth to bedrock or to a cemented pan. All of these characteristics affect absorption of effluent. The depth to bedrock/cemented pan affects installation of on-site sewage treatment and disposal systems. Therefore, use of on-site sewage treatment and disposal systems is regulated so these limitations can be overcome by testing and by designing, constructing and maintaining systems specifically geared to address the particular soil or situation. Higher densities should be avoided where more limited soils are present.

On-site sewage treatment and disposal systems must be located in accordance with setback requirements for potable water wells and surface water and wetlands. In addition, the Wellfield Protection Ordinance prohibits on-site sewage treatment and disposal systems within 200 feet of wells that supply public water.

The majority of on-site sewage treatment and disposal system approvals have been in rural areas, coastal communities and subdivisions grandfathered in under previous regulations. Since on-site sewage treatment and disposal systems discharge wastewater of a lower quality than water from a treatment plant, a high density of homes with on-site sewage treatment and disposal systems can threaten a wellfield or the water quality of surface water. Problems may also arise from improper installation or maintenance.

Regardless of the cause, on-site sewage treatment and disposal systems can fail and groundwater can be contaminated. Therefore, Martin County has established a policy requiring on-site sewage treatment and disposal system areas that experience problems to connect to regionalized sewer service.

In the County's Urban Service District, on-site sewage treatment and disposal systems will be prohibited where regional sewage systems are available. For existing residential uses utilizing on-site sewage treatment and disposal systems, a program to connect those areas with high densities, high water table, and poor soils—must be developed.

Restrictions on the use of on-site sewage treatment and disposal systems coupled with policies which limit the intensity of use and limit negative impacts remain an alternative to provide reasonable use of property in rural areas outside the Primary Urban Service District. On-site sewage treatment and disposal systems that are directly related to and supportive of agriculture, including agri-tourism or would

not jeopardize the integrity of the agricultural purpose of the district are allowed. All systems shall be consistent with the policies in Section 10.4

10.2.C. *Package plants.* New developments within the Primary Urban Service District are required to connect to a regional sewage system. Martin County's policies that discourage package plants and work to build an integrated, efficient and cost effective group of regional sewage systems have been effective. When the original comprehensive plan was adopted in 1982, there were over 100 package plants in Martin County. The County has eliminated seventy package plants in its service area since 1982.

All investor-owned systems are regulated by the Florida Public Service Commission and must adhere to the County level of service standard in Policy 10.1B.5.

10.2.D. *Regional sewage systems.* Due to the problems associated with package plants and on-site sewage treatment and disposal systems, Martin County has pursued a policy of consolidating wastewater systems by acquiring wastewater treatment facilities.

The Loxahatchee River Environmental Control District (LRECD) in Palm Beach County provides sewer service for a portion of Martin County south of Jonathan Dickinson State Park. LRECD has committed to expand its facilities in accordance with FDEP rules and regulations.

Interlocal agreements, through which one entity provides services, capacity or facilities to another, may be executed if they are in the best interest of the parties involved. The County currently provides sanitary sewer service to Sewall's Point and Ocean Breeze through interlocal agreements. On October 28, 2008, the County entered into a 20-year interlocal agreement with the City of Stuart in which the City will provide 1.1 MGD of sewer treatment capacity and the County will provide the same amount of potable water treatment to the City.

Figures 11-1 and 11-2 in Chapter 11 indicates the existing and potential service areas of each of the regional plants. Service areas in the southern portion of Martin County are not fully defined. Only regional sewage systems in this section shall be eligible for hook-ups for new development. This list shall not be changed without a plan amendment.

Table 10-1
Regional Sewage Systems in Martin County

Facility (Ownership)	Type of Treatment	Disposal Methods	Actual Flow (MGD)	Rated Capacity
North System (County)	Tertiary	Deep well Landscape irrigation	1.36	2.76
South System (County)	Tertiary	Landscape irrigation Deep well	2.90	5.9
City of Stuart Plant (City)	Tertiary	Deep well Landscape irrigation	1.56	4.0

South Martin Regional Utilities	Tertiary	Percolation ponds, landscape irrigation	0.8 AADF *	1.4 AADF *
Indiantown Utilities (Private)	Tertiary	Percolation ponds, reuse Agricultural irrigation	0.45	1.1
Loxahatcee River Environmental Control District (LRECD)	Tertiary	Landscape irrigation Deep well (back-up)	6.5	11.0

* The majority of systems are measured using the 3 month average daily flow; This system is measured using average annual daily flow.

Source: Regional utilities

10.2.E. *Issues in wastewater management.* The issues that emerge from current conditions in Martin County are:

1. Some of the remaining package systems are not properly financed or operated, resulting in unacceptable effluent quality.
2. High densities of on-site sewage treatment and disposal systems on small lots, on-site sewage treatment and disposal systems in unsuitable soils and poor construction or poor maintenance of on-site sewage treatment and disposal systems can lead to contamination of potable water wells, groundwater and surface waters.
3. Conservation of potable water has been enhanced through reuse of wastewater effluent.
4. Regional sewage systems will need further expansion to serve residents who currently are on failing on-site sewage treatment and disposal systems or package plant systems and to serve future residents.
5. Adoption of the CGMP in 1990 effectively ended the proliferation of new package plants.

10.2.F. *Level of service for effluent disposal.* Two waste streams are generated by wastewater treatment plants: effluent and biosolid streams. Before disposal, effluent streams must be disinfected in accordance with FDEP criteria. Disposal alternatives include discharge to land via percolation ponds or drainfields, reuse via spray irrigation or deep well injection. Before disposal, biosolids must undergo further biological treatment, called digestion, which reduces pathogens and volatile solids (odor-causing constituents). The biosolids are then disposed of as a liquid or further dewatered for disposal at a solid waste landfill or for application on agricultural land. Section 159.102 of the Martin County Code of Ordinances effectively eliminated land application in Martin County effective June 2001. FDEP has regulatory responsibility for ensuring adequate disposal capacity for the waste streams generated by wastewater plants. Martin County works with FDEP to document that sufficient effluent and biosolids disposal capacity exists before allowing additional connections to any sanitary sewer facility.

EXHIBIT A

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 10 SANITARY SEWER SERVICES ELEMENT

Section 10.3. Future needs

Wastewater Master Plans have been developed to guide the County's consolidation of sanitary sewer facilities and to address concerns about existing conditions and future needs (Table 10-2).

Service area population and flow projections have been developed to determine future demand.

The service areas for the North System and the South System are shown on Figure 11-1 in Chapter 11. The Tropical Farms Wastewater Treatment Plant needs one additional expansion to assure build-out capacity and appropriate disposal of effluent and biosolids. The Capital Improvement Plan gives further details of plant expansion.

Martin County is working with the FDEP to eliminate package plants and on-site sewage treatment and disposal systems not meeting the minimum criteria established by the Florida Department of Health, FDEP and other regulatory agencies. In extending sewer service, priority will be given to developed areas with groundwater or surface water contamination or pollution and to areas not served by regional sewage systems with lot sizes smaller than one-third acre. Priority will not be given to package plants in full compliance with all regulations or areas using on-site sewage treatment and disposal system that are in compliance with regulations and are not problematic. The County will continue programs for pretreatment of industrial waste streams, effluent reuse and biosolids disposal.

All of these activities are addressed in section 10.4, Goals, Objectives and Policies. This element and its implementation are designed to meet the County's long-term wastewater facility needs, preserve and protect the quality and quantity of Martin County's ground and surface water, and implement the CGMP.

Table 10-2
Required Future Capacity of Martin County Regional Sewage Systems
2015 and 2025

Facility	2015		2025	
Regional Facility	Projected population served	Required capacity (MGD)*	Projected population served	Required capacity (MGD)*
Martin County North	22,500 including Hutchinson Island	2.3	23,550	2.76
Martin County South	52,750	3.78 at 90% **	63,575	5.0 at 90% **
City of Stuart	18,213	3.0	20,098	3.0
South Martin Regional Utility	25,622	0.9 AADF	33,607	1.15 AADF

Indiantown	9,818	1.0	16,422	2.0
LRECD	5,660	0.61	6,050	0.65

* Based on 100 GPCD (gallons per capita demand)

** Required capacity equals estimated flow divided by 90% to account for permit requirements.

Note: Population estimates for the regional systems are based on the 2005 Martin County Utility Master Plan.

LRECD = Loxahatchee River Environmental Control District.

Section 10.4. Goals, Objectives and Policies

Goal 10.1. To provide regional sewage systems in a timely, cost-efficient manner to advance and protect public health, safety and welfare, and protect the environment while maximizing use of existing facilities and promoting compact urban development.

Objective 10.1A. To develop a program for correcting public and private wastewater deficiencies within 10 years.

Policy 10.1A.1. The County shall regularly inspect and assess its wastewater collection facilities, including manholes, pipelines and service laterals. Based on the inspection findings, rehabilitation alternatives will be included in the subsequent revision to the Capital Improvement Plan and considered in the following annual budget. The County shall continue to allocate sufficient funds to ensure that maintenance and replacement needs are met in a timely manner.

Policy 10.1A.2. Deficiencies will be corrected according to the following priorities, in descending order:

(1) Deficiencies that are immediate threats to health and safety shall be corrected immediately.

(2) Deficiencies that, if not corrected, may affect health and safety within one year or before the health and safety of the public is affected;

(3) Deficiencies that are necessary to protect the environment and to meet all laws and regulations shall be corrected within two years, or as agreed upon by the FDEP or other regulatory agencies.

Policy 10.1A.3. Work programs and capital facility improvements to correct facility deficiencies shall be coordinated with the Capital Improvements Element.

Policy 10.1A.4. The County shall work with the Florida Department of Health and the FDEP to assure that all permitted wastewater package plants and on-site sewage treatment and disposal systems can be expected to function adequately and to be properly maintained.

Policy 10.1A.5. As part of the consolidation of wastewater treatment facilities, the County shall prioritize extension of service to existing residential areas with one or more of the following conditions:

(1) Package plant or on-site sewage treatment and disposal system failure;

(2) Ground or surface water contamination or pollution, including on-site sewage treatment and disposal systems at high densities in unsuitable soils;

(3) Lack of compliance with the recommended 500-foot setback from surface water;

(4) On-site sewage treatment and disposal systems at densities exceeding three units per acre or serving multifamily units on small lots.

Areas of high-intensity commercial and/or industrial use may receive priority based on proximity to an existing collection system, deficiency of the existing treatment facility serving the area and/or its impact on the surrounding environment, and funding availability.

Policy 10.1A.6. Extension of sanitary sewer lines and expansion of plant capacity shall be coordinated with the projected demand for service as established in the Future Land Use Maps (Chapter 4 of the CGMP). To assure consistency with the established land use pattern, sanitary sewer service will be extended consistent with the following determinations:

(1) Extension of service is proposed to an area delineated as a Primary Urban Service District. (The Primary Urban Service District is designated on Figure 4-2, Urban Service Boundaries in Chapter 4.)

Editor's note— Figure 4-2 is on file in the office of the Martin County Growth Management Department and on the County's website.

(2) The land use is defined in the Future Land Use Element (section 4.7A) as Commercial or Higher Intensity Institutional (Other), or Industrial use, or higher density residential development. For new residential development within the Primary Urban Service District, all single family subdivisions with lot sizes of less than one acre and all multi-family development shall be served by a regional sewer system;

(3) Engineering and fiscal assessment has been made of the optimum use of existing facilities and sanitary sewer systems; and

(4) The extension of sanitary sewer service and expansion of plant capacity do not hamper the provision of service to existing priorities in the urban service district or promote urban sprawl; provide for the efficient use of land; and maximize the use of existing facilities. This finding shall be made following a complete staff assessment.

Policy 10.1A.7. Sanitary sewer lines may be extended from the Primary Urban Service District to serve the following facilities, as described in the Jonathan Dickinson State Park Unit Management Plan:

River	Campground		(45	sites);
Boat		ramp		restroom;
Dump				station;
Picnic	area		restrooms	(3);
Concession				building;
Environmental	education	and	research	center;

Cabins (12);
Staff residences (3);
Boy Scout Camp facilities;
Girl Scout Camp facilities;
Pine Grove Campground;
Camp Pavilion;
Ranger Station; and
Administrative/Maintenance Complex.

Such extensions are intended to reduce or eliminate the impact on the Loxahatchee River of the public facilities located within the specific portions of Jonathan Dickinson State Park listed above and are considered to be waivers. These waivers shall not be used (1) to serve, encourage or justify other development outside the Primary Urban Service District or (2) to encourage, support or justify an increase in density in surrounding or nearby areas or any other amendment to the Comprehensive Growth Management Plan.

Policy 10.1A.8. Sanitary sewer lines may be extended from the Primary Urban Service District to serve the following previously approved projects provided that the project is proceeding in accordance with its timetable of development, is consistent with all conditions of approval, and is maintaining its schedule of construction or other activities established in the development order.

~~(1) Fort Dawson Parcel as described in Comprehensive Plan Amendment 07-10, Indiantown International.~~

(~~2~~ 1) Lots 67, 68, 75, 89, 90, 119 through 122 and lots 191 through 220 of Canopy Creek PUD (f/k/a Tuscawilla PUD as recorded in Plat Book 16, Pages 039-001 to 039-036, Public Records of Martin County, Florida).

(~~3~~ 2) Bridgewater Preserve as recorded in Plat Book 16, Pages 033-001 to 033-007, Public Records of Martin County, Florida. Any increase in residential density shall require approval by the Board of County Commissioners for a PUD Zoning Agreement and revised master/final site plan which is consistent with the Rural Density future land use designation and requires that the project connect to the existing potable water and sanitary sewer lines.

(4 3) Seven J's Industrial Subdivision, as recorded in Plat Book 15, Page 97 and/or any replat or redevelopment of the property contained within the plat recorded in Plat Book 15, Page 97.

(~~5~~ 4) The County landfill, parcel number 07-38-40-000-000-00020-7.

(~~6~~ 5) Martingale Commons PUD f/k/a Palm City 95 PUD.

(~~7~~ 6) Sheriff's Shooting Range, parcel number 07-38-40-000-000-00030-5.

(~~8~~ 7) Parcel number 28-40-42-000-000-00020-5, parcel number 28-40-42-000-000-00040-1, parcel number 28-42-000-000-00011-0, and parcel number 21-40-42-004-000-00005-0 on S.E. Island Way.

Policy 10.1A.9 Facilities at the Martin Correctional Institution may continue to receive sanitary sewer service from the City of Port St. Lucie in accordance with an interlocal agreement between Martin County, the City of Port St. Lucie and the Florida Department of Corrections. This is a specific exception and Port St. Lucie Utilities is not recognized as a regional utility for providing wastewater in Martin County.

EXHIBIT A

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 10 SANITARY SEWER SERVICES ELEMENT

Policy 10.1A.10. An exception to the prohibition of public facilities outside the Primary Urban Service District shall be provided for the 107-acre parcel of County owned land located on the north side of SW Citrus Boulevard, approximately 2,000 feet east of the Indiantown airport, parcel number 03-40-39-000-000-00011-0 and parcel number 34-39-39-000-000-00021-0.

Policy 10.1A.~~10.~~11 The County aims to fairly balance developers' ability to economically develop property with the public interest in providing regional wastewater service in the primary urban service district. Development proposals shall not be approved where adequate regional water and sewage facilities cannot be provided, unless the development can meet the requirements for an on-site sewage treatment and disposal system found in Policies 10.2A.7 and 10.2A.8.

Policy 10.1A.~~11.~~12 Package treatment plants shall be prohibited except within the Seven J's Industrial Area and Martingale Commons PUD, provided that the respective project is proceeding in accordance with its timetable of development and conditions of approval.

Policy 10.1A.~~12.~~13 In accordance with Policy 10.1A.8, if there is a gravity sewer line, force main or lift station in a public easement or right-of-way within 500 feet of Seven J's or Martingale Commons, the respective property will be required to connect to these facilities and the construction and/or utilization of package treatment plants or onsite treatment and disposal systems within these developments shall be prohibited. All properties deriving a special benefit from the connection shall pay for the expenses that are properly attributable to providing such connection under generally accepted accounting principles including, but not limited to, expenses related to the line extension, reimbursement to the County for any funds advanced, and all connection costs or other applicable capital facility charges. Such expenses shall be apportioned to and collected from such properties in a manner that fairly and reasonably apportions such expenses based upon an objectively determinable methodology in accordance with Section 71.103 of the Martin County Code, or other similar method of cost recovery permitted under Florida law. Until such time as facilities are available for connection, the use of on-site sewage treatment and disposal systems up to 2,000 gpd flows shall be allowed. Any existing uses on on-site sewage treatment and disposal systems must connect to the regional sewage system within 365 days of the date of receiving notice of the availability of the facilities.

Objective 10.1B. To plan for public facilities sufficient to meet future sanitary sewer needs based on adopted level-of-service standards and projected populations for the 5-year and 10-year planning periods.

Policy 10.1B.1. The Martin County Utilities and Solid Waste Department shall review and amend as necessary the Wastewater Master Plans as part of the annual adoption of the Capital Improvements Plan.

Policy 10.1B.2. The County shall maintain and improve an information system to assist in evaluating wastewater management, including wastewater quantity, quality and use. This system shall assist in resolving administrative, operational and maintenance issues related to the development of a comprehensive wastewater system, including system consolidation and possible regionalization of facilities. The information system shall include existing conditions of wastewater plants as reported by the FDEP. Maps of sewered areas will be updated quarterly.

Policy 10.1B.3. The County shall continue to acquire wastewater treatment facilities that meet the minimum standards established in the proposed County Wastewater Facility Ordinance, provided that:

EXHIBIT A

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 10 SANITARY SEWER SERVICES ELEMENT

(1) The County determines it is in the public interest to offer utility services to best manage wastewater resources;

(2) Ownership by the County will establish equal or greater long-range stability of the utility;

(3) The acquisition can be accomplished without a significant change in existing rate structures or will result in providing high-quality service more cost-effectively;

(4) There is a willing seller, or the County will exercise its right of eminent domain.

Policy 10.1B.4. The County shall manage the location, timing, scale and character of development options in areas not served by regional sewage system to ensure that (1) future development is provided with safe and sanitary means of wastewater disposal and (2) natural resources are not harmed by improper treatment and disposal of wastewater effluent. The CGMP and Land Development Regulations will be used to implement this policy.

Policy 10.1B.5. The level of service standards shall be incorporated into the Martin County Capital Improvements Element. The following level of service standard for residential and nonresidential use is hereby adopted for all sanitary sewer treatment facilities in Martin County and shall be used as the basis for determining the availability of capacity and the demand generated by a development:

Facility	Residential Level of Service	Year
Wastewater Treatment Systems	100 gallons per capita, per day	2015
	100 gallons per capita, per day	2025

Facility	Nonresidential Level of Service	Year
Wastewater Treatment Systems	0.1 gallons per sq. ft.	2015
	0.1 gallons per sq. ft.	2025

This level of service represents a County-wide average compiled from the best available data.

Policy 10.1B.6. To ensure available capacity of County-owned regional sewage systems, the County shall begin design of essential improvements when the system reaches 80 percent of total rated capacity. Construction will begin when the system reaches 90 percent of total rated

capacity. No additional reservations shall be made at 100 percent of rated capacity unless construction is underway. The County adopted the Adequate Public Facilities Ordinance to ensure that capacity is coordinated with approved developments.

Policy 10.1B.7. The County will monitor level of service standards for wastewater service and will report the results in the annual report on level of service for all County services.

Policy 10.1B.8. The Utilities and Solid Waste Department shall review all development proposals, plans and specifications to ensure that all sanitary sewer transmission systems meet County minimum standards, are consistent with the County's consolidation efforts and do not reduce levels of service.

Policy 10.1B.9. The County shall use treated wastewater effluent for irrigation purposes to the maximum extent practical.

Policy 10.1B.10. Martin County shall investigate Federal and State grants and other revenue sources to subsidize the cost of sanitary sewer services to existing areas that need such service.

Objective 10.1C. To adopt the following criteria for extending public facilities that maintain adopted level of service standards and promote compact urban development:

Policy 10.1C.1. The extension of sanitary sewer lines and expansion of treatment plant capacity shall be based on the projected demand for service as established in the Future Land Use Maps (Chapter 4). To assure consistency of efficient service provision with the established land use pattern, the following determinations must be made:

(1) The adopted level of service standards will be maintained and adequate capacity is available as determined by an analysis of the current and projected future population growth within the existing service area and the proposed area to be served;

(2) Extension of regional sewage systems shall be limited to those areas identified within the Future Land Use Element of this plan that are in the Primary Urban Service District, as shown on Figure 4-2, Urban Service Districts in the Future Land Use Element (Chapter 4) of the CGMP; to Jonathon Dickenson State Park as provided in Policy 10.1A.7 and projects that have vested under previous approvals, as provided in Policy 10.1A.8;

Editor's note— Figure 4-2 is on file in the office of the Martin County Growth Management Department and on the County's website.

(3) It would be practical, feasible and cost-efficient to provide the service in a long-term expansion program;

(4) Extension would be in the public interest; and

(5) Service shall not be extended to new development within the Secondary Urban Service District except to projects that have vested under previous approvals. ~~pursuant to a development order that may be issued by Martin County for a project on the Tesoro Groves parcels 05-40-39-000-000-00010-1 and 05-40-39-007-000-00020-2 as described in Official Record Book 02367 Pages 0313 through 0317~~.

EXHIBIT A

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 10 SANITARY SEWER SERVICES ELEMENT

Policy 10.1C.2. Public service areas shall be expanded based on their ability to serve new customers cost-effectively and without jeopardizing levels of service for present and future customers in existing service areas.

Policy 10.1C.3. To maintain the level-of-service standards specified in Policy 10.1B.5., the County shall ensure that adequate facility capacity exists or will be provided concurrent with development. Staff will analyze facility capacity based on adopted level of service standards and the projected need resulting from the development.

Policy 10.1C.4. In reviewing future development proposals and determining appropriate density allocations, the staff analysis will include evaluation of possible limitations in water supply and related problems of water quality, wastewater effluent and biosolids disposal. Development orders will not be approved where adequate water and sewer facilities cannot be provided.

Policy 10.1C.5.: All developments ~~approved in the County's~~ within established sewer service areas shall donate all needed sanitary sewer collection lines, lift stations, force mains and appurtenances along with suitable easements~~. In addition,all approved developments~~ and shall pay all applicable capital facility costs when services ~~is~~ are reserved by the County. This policy shall be implemented by~~:~~ ~~(1)~~ (a) ~~F~~formation of special assessment districts~~;~~, or ~~(2)~~ (b) execution of a standard developer's agreement~~.~~, or (c) execution of an interim agreement in accordance with the Land Development Regulations.

Policy 10.1C.6. When a property owner requests the County to provide wastewater service to a property and providing the service requires installation of a transmission line, the County will allow a portion of the capital facility charge as a credit towards construction of the line.

Policy 10.1C.7. To encourage developers to provide sewer capacity in excess of their project's needs, the County shall consider cost recovery agreements. The owner and the County shall apply credit towards the capital facility charges (CFC) in accordance with the CFC credit policy in effect at the time.

Policy 10.1C.8. Wastewater system improvements shall be located, designed and installed in a manner that is cost-effective, functional, responsive to the specific needs of existing and planned future land uses in the service area, and compatible with surrounding natural systems. Wastewater main extension shall be aligned and installed in a manner that prevents undue loss of established tree canopies or soil through induced erosion. Features of land altered by construction shall be returned as close as possible to the original condition. The timing and staging of construction shall be scheduled to minimize disruptive impacts, including those on residential quality and traffic flow.

Policy 10.1C.9. The County has defined detailed service area maps of government-owned or investor-owned sewerage systems that will be used to implement the Martin County Land Development Regulations as regional sewage systems. The five government owned regional sewage systems are Martin County North, Martin County South, South Martin Regional Utilities, the Loxahatchee River Environmental Control District, and the City of Stuart. The Indiantown Utility is the only investor-owned regional sewage system. Any changes in the list of eligible utilities and their service areas will be made by plan amendment. These map(s) shall be amended annually as necessary. The service area for private facilities shall be as certified and regulated by the Florida Public Service Commission. The service areas for governmentally-owned facilities shall be as determined by master plans or other appropriate documents authorized by the jurisdictional entity. Figure 11-1 in Chapter 11 shows the current regional utilities service areas in Martin County.

EXHIBIT A

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 10 SANITARY SEWER SERVICES ELEMENT

Objective 10.1D. To maintain a 10-year schedule of capital improvement needs for wastewater facilities, that is updated annually in conformance with the review process set forth in the Capital Improvements Element.

Policy 10.1D.1. Proposed capital improvement projects will be evaluated and ranked according to the following priorities, in descending order:

(1) Correction of deficiencies;

(2) Service to existing developments;

(3) Service to enclave and infill areas within the urban service area;

(4) Extension of service to new developments:

(a) Service to meet legal commitments and vested projects;

(b) Service to new developments.

Policy 10.1D.2. Ten-year wastewater facility work programs shall be evaluated annually to ensure that projects are prioritized based on current conditions and anticipated future resident demand, consistent with the Capital Improvements Element.

Policy 10.1D.3. The sanitary sewer system projects listed in the 10-year CIP will be prioritized in the wastewater facility program. This list may be evaluated annually and reprioritized as necessary.

Policy 10.1D.4. The 10-year wastewater facility work program shall be coordinated with other proposed work in public road rights-of-way to ensure consistency and cost-effectiveness of work in the County and in conjunction with State or municipal improvements.

Objective 10.1E. To continue coordinating with the FDEP to determine sanitary sewer facility deficiencies.

Policy 10.1E.1. No new package plants shall be allowed except for projects specified in Policy 10.1A.11 that are vested based on master plan approval consistent with the policies in effect at the time of approval. To maintain vested rights, projects must be proceeding in accordance with their timetables and the conditions of approval. No connections to existing package plants shall be allowed if enforcement action by FDEP would preclude such connections.

Policy 10.1E.2. Existing customers of package plants will be connected to regional systems when:

(1) The useful life of the package plant has been exhausted;

(2) It is cost-effective; or

(3) The package plant falls into noncompliance with FDEP regulations and is required to connect.

Policy 10.1E.3. When package plants are connected to regional systems, property owners benefiting from the connection shall pay all connection costs, including capital facility charges.

Goal 10.2. Martin County shall provide a safe, environmentally friendly alternative for wastewater treatment where regional sewage service is not available.

EXHIBIT A

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 10 SANITARY SEWER SERVICES ELEMENT

Objective 10.2A. Martin County shall require strict standards for on-site sewage treatment and disposal systems which protect the public health, the surficial aquifer, the St. Lucie Estuary, and wetlands and other surface waters.

Policy 10.2A.1. All new development within the primary urban service district requiring site planning or platting shall connect to a regional sewage system if a wastewater collection or transmission line with sufficient available capacity exists within one-quarter mile of the development as accessed via public easements or rights-of-way, and the regional sewage system has available capacity.

Policy 10.2A.2. Developments required to extend lines to connect to a regional sewage system shall do so in accordance with the requirements of that regional sewage system. For County-owned and/or operated systems, the routing and size of the wastewater collection and/or transmission main extension shall be in accordance with the County's master wastewater pipe network plan to be adopted by resolution. Where urban land use designations require future extension of wastewater collection and/or transmission mains, the mains shall be required to be extended the full length of the right-of-way or easement which is adjacent to the property.

Policy 10.2A.3. All single-family and duplex residential properties must connect to a regional sewage system within 365 days of the date of receiving notice that a gravity sewer collection main with sufficient available capacity is adjacent to the property within an easement or right-of-way, and the regional sewage system has available capacity.

Policy 10.2A.4. All multifamily and nonresidential properties must connect to a regional sewage system within 365 days of the date of receiving notice that a gravity sewer collection or a wastewater transmission (force) main with sufficient available capacity is adjacent to the property within an easement or right-of-way, and the regional sewage system has available capacity.

Policy 10.2A.5. When the Martin County Board of County Commissioners makes a determination, based upon facts and evidence that:

1. The sanitary sewer service being supplied to an area by an on-site sewage treatment and disposal system constitutes a health hazard or environmental harm; and
2. Connection to a regional sewage system is a reasonable means of avoiding such health or environmental hazard;

then the property owners shall be required to connect to a regional sewage system if a wastewater collection or transmission line with sufficient available capacity exists within one-quarter mile of the development as accessed via public easements or rights-of-way, and the regional sewage system has available capacity. All such connections shall be made in accordance with rules and regulations that provide for charges for these connections as determined by the Board of County Commissioners or the private regional sewage utility.

Policy 10.2A.6. Once a service connection is made to a regional sewage system, disconnection from that regional sewage system is prohibited.

Policy 10.2A.7. The use of on-site sewage treatment and disposal systems to provide sanitary sewer service shall be limited to the following:

1. Single-family dwellings on existing legally created residential lots of record as of April 1, 1982.

2. Duplex units on existing legally created residential lots of record as of April 1, 1982, provided that:
   a. The lot of record is serviced by a regional potable water system.
   b. The duplex is located in a subdivision which is zoned for duplex use and is designated for medium density or high density use on the future land use map of the Comprehensive Plan, and which was three-fourths developed in duplex use on April 1, 1982.
   c. A regional sewage system gravity sewer collection main is not available within 1,000 feet of the subject duplex lot.
   d. An agreement is executed with the County to connect to a regional sewage system within one year from the date that a gravity sewer collection main with sufficient available capacity is adjacent to the property within an easement or right-of-way, and the regional sewage system has available capacity.
3. Single-family lots created between April 1, 1982 and December 16, 2014 shall comply with the following:
   a. Each on-site sewage treatment and disposal system shall be located on a lot.
   b. Each lot shall have a usable minimum area of one-half acre per unit when the development is serviced by a private well.
   c. Each lot shall have a usable minimum area of one-third acre per unit when the development is serviced by a regional water supply system.
   d. The septic tank must be set back 75 feet from a drinking water well and 50 feet from irrigation well.
4. New subdivisions for single-family dwellings, on lots of a minimum one acre of usable upland area if a regional sewage system collection or transmission line with sufficient available capacity does not exist within one-quarter mile of the development as accessed via public easements or rights-of-way, and the regional sewage system does not have available capacity. For purposes of this section, the term "usable upland area" shall not include:
   a. Street rights-of-way.
   b. Drainage easements.
   c. Utility easements, except those allowing only overhead wires.
   d. Wetlands.
   e. Streams, lakes or similar bodies of water.
5. Any new residential or nonresidential use outside the primary urban service district on a lot of a minimum one acre of usable upland area per unit shall be in compliance with the following:
   a. For any use, the allowed potable water demand must match the allowed sewage flow. Allowed flows for potable water cannot exceed allowed flows for sanitary sewage and vice versa. The potable water demand shall be calculated in accordance with the Standards for On-Site Sewage Treatment and Disposal Systems, of the State of Florida Department of Health, Chapter 64E-6, Florida Administrative Code.

6. Nonresidential use of On-site Sewage Treatment and Disposal Systems. On-site sewage treatment and disposal systems can serve nonresidential uses when a regional sewage system is not available. In addition, the use must be determined by the Florida Department of Health not to constitute a high expected failure rate.

   An on-site sewage treatment and disposal system shall not be approved:

   a. Where an existing sanitary sewer (either government-owned or investor-owned) is available for connection, which means the system: (1) is not under an FDEP moratorium, (2) has adequate hydraulic capacity to accept the quantity of sewage to be generated by the proposed establishment, and (3) complies with the following conditions:

      (1) For estimated sewage flows of 600 or fewer gallons per day, there is a gravity sewer line in a public easement or right-of-way abutting or within 100 feet of the property, and gravity flow can be maintained from the building drain to the sewer line.

      (2) For estimated sewage flows of 601 to 1,200 gallons per day, there is a gravity sewer line, force main or lift station in a public easement or right-of-way within 100 feet of the property.

      (3) For estimated sewage flows of 1,200 to 2,000 gallons per day, there is a gravity sewer line, force main or lift station in a public easement or right-of-way within 500 feet of the property.

   b. For treatment and disposal of industrial, hazardous or toxic wastes;

   c. For onsite sewage treatment and disposal systems in excess of 2,000 gpd flows within the PUSD.

Policy 10.2A.8. The following standards shall apply to all on-site sewage treatment and disposal system installations:

1. No onsite sewage treatment and disposal system shall exceed a total site buildout flow of 2,000 gpd, except as described below and in Policy 4.13A.8(5). Total site buildout shall be as determined by the Florida Department of Health.
2. All on-site sewage treatment and disposal systems shall be designed, located and installed in accordance with the "Standards for On-Site Sewage Treatment and Disposal Systems," State of Florida Department of Health, Chapter 64E-6, Florida Administrative Code or as required by the goals, objectives and policies of this element, whichever is the more restrictive.
3. On-site sewage treatment and disposal systems (including the drainfield) shall not be located within ten feet of designated upland preserve areas.
4. The property owner shall be responsible for assuring adequate drainage so adjacent parcels will not be adversely affected.
5. When a parcel of land is located on or surrounding a water body or wetland, the on-site sewage treatment and disposal system shall be placed on the side of the parcel farthest from and at least 75 feet from the water body or wetland. This requirement shall be designated on the final plat of any approved subdivision located on or surrounding a water body or wetland. In the case of a lot of record created prior to April 1, 1982, the requirement set forth in this subsection shall be waived in cases of severe hardships. The Growth Management Department director may approve such a waiver in writing upon a

finding that requiring the 75-foot setback would prevent any reasonable use of the lot and upon an affirmative recommendation of the Florida Department of Health. A severe hardship does not exist if the building(s), driveways or other features on the property can be moved and still comply with all the current codes.

6. Each on-site sewage treatment and disposal system tank utilized must be equipped with an on-site sewage treatment and disposal system effluent filter. These filters must be maintained by the property owner and must remain in service for the life of the on-site sewage treatment and disposal system. A list of approved filters is available at the Florida Department of Health.

7. The installation of an on-site sewage treatment and disposal system shall not be permissible when the use is determined by the Florida Department of Health to constitute a high expected failure level.

8. On-site sewage treatment and disposal systems shall be set back a minimum of 15 feet from the design high-water line of a retention or detention area designed to contain standing or flowing water for less than 72 hours after a rainfall, or the design high-water level of normally dry drainage ditches or normally dry individual lot stormwater retention area.

9. For on-site sewage treatment and disposal systems outside the Primary Urban Service District the BCC may waive the 2,000 gpd limitation set forth in Policy 10.2A.8.1 above, to the extent necessary for nonresidential or agricultural uses permitted by the future land use designation and zoning district, but in no event shall the waiver allow total site buildout flows to exceed 5000 gpd.

   a. In order to obtain a waiver of Policy 10.2A.8.1. a person must submit an application in a form prescribed by the County Administrator. The application must contain a concise statement by the applicant detailing the circumstances that justify a waiver of the 2,000 gpd flow limitation The application must also contain written concurrence from the Florida Department of Health that the use to be served requires a system greater than 2,000 gpd total site buildout flow, but the system does not exceed 5,000 gpd total site buildout flow.

   b. The waiver shall not be granted unless the Board determines that:

      1. The proposed system meets all criteria required by the Florida Department of Health.

      2. The system has been located to protect wetlands, wellfields, water bodies, drainage facilities or other surface waters, to the maximum extent practicable. For on-site sewage treatment and disposal systems adjacent to wetlands, wellfields. water bodies, drainage facilities and other surface waters, a minimum setback of 200 feet has been provided.

      c. In granting the waiver, the Board may prescribe any appropriate maintenance conditions.

      d. In granting the waiver, the Board's decision shall be based upon the particular circumstances of the application and shall not constitute a precedent for other waiver applications.

Policy 10.2A.9. The following standards shall apply to all on-site sewage treatment and disposal systems that require repair or replacement:

1. Each existing on-site sewage treatment and disposal systems must be equipped with an on-site sewage treatment and disposal system effluent filter. These filters must be maintained by the property owner and must remain in service for the life of the on-site sewage treatment and disposal system. A list of approved filters is available at the Florida Department of Health.
2. If the existing on-site sewage treatment and disposal system is located within 75 feet of a water body or wetland, the effluent disposal portion of the system must be relocated to at least 75 feet from the water body or wetland. If potable water wells, property size, or other similar site restraints exist that prevent the relocation of the effluent disposal system to the proper setback, then the effluent disposal system must be moved as far as possible from the water body or wetland, as approved by the Florida Department of Health.

Goal 10.3. Martin County shall ensure that all County actions regarding water and wastewater policies, procedures and programs support, maintain and further a safe, healthy and ecologically balanced St. Lucie River Estuary and Indian River Lagoon, and Loxahatchee River watershed.

Objective 10.3.A. Martin County shall consider changes to Comprehensive Plan policies and the Land Development Regulations regarding OSTDS and regional sewage facilities to ensure that its policies and regulations are consistent with state-of-the-art knowledge and policies to achieve the County's goal of clean water and fiscal efficiency.

Policy 10.3A.1. Martin County shall monitor the research results produced by the Florida Department of Health's, on-going six-year, $5.1 million "Florida Onsite Sewage Nitrogen Reduction Strategies Study," the Department of Health's planned research into the effectiveness of effluent filters, the performance and management of advanced onsite systems, drip irrigation disposal of septic tank effluent, the life expectancy of onsite systems; as well as research being conducted by other public agencies and universities regarding contamination of water resources from OSTDS and methods to avoid it.

Policy 10.3A.2. Martin County shall complete its own $280,000 study in an attempt to document the extent to which OSTDS are contributing contamination to the County's surface water resources and modifies its policies and practices as a result of the research findings.

Policy 10.3A.3. The Martin County Utilities and Solid Waste Management Department, Growth Management Department and the Engineering Department shall synthesize contemporary research findings and periodically report such findings to the Board of County Commissioners for formulation, maintenance or modification of OSTDS and regional sewage service goals, objectives and policies to protect public health and the natural environment, and to advance the future land use goals of the Comprehensive Plan, to the greatest extent feasible.

Chapter 11 POTABLE WATER SERVICES ELEMENT/10 YEAR WATER SUPPLY FACILITIES WORK PLAN

Adopted:	February 20, 1990	By Ordinance No. 373
Amended:	July 9, 1991	By Ordinance No. 400
Amended:	October 27, 1992	By Ordinance No. 419
Amended:	October 26, 1993	By Ordinance No. 430
Amended:	November 29, 1994	By Ordinance No. 450
Amended:	December 15, 1998	By Ordinance No. 537
Amended:	September 28, 1999	By Ordinance No. 555
Amended:	May 24, 2005	By Ordinance No. 668
Amended:	December 11, 2007	By Ordinance No. 778
Amended:	December 11, 2007	By Ordinance No. 779
Amended:	December 11, 2007	By Ordinance No. 781
Amended:	December 11, 2007	By Ordinance No. 782
Amended:	February 12, 2008	By Ordinance No. 787
Amended:	December 16, 2009	By Ordinance No. 840
Amended:	December 16, 2009	By Ordinance No. 851
Amended:	August 10, 2010	By Ordinance No. 870
Amended:	January 10, 2012	By Ordinance No. 907

EXHIBIT B

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 11 POTABLE WATER SERVICES ELEMENT/10 YEAR WATER SUPPLY FACILITIES WORK PLAN

Amended:	July 10, 2012	By Ordinance No. 914
Amended:	December 16, 2014	By Ordinance No. 965
Amended:	December 20, 2015	By Ordinance No. 984
Amended:	July 25, 2017	By Ordinance No. 1025
Amended:	August 22, 2017	By Ordinance No. 1032
Amended:	February 27, 2018	By Ordinance No. 1057

Section 11.0. Introduction.

The purpose of the Martin County 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 its jurisdiction, 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 South Florida Water Management District (District) approves a regional water supply plan or its update. The 2016 Upper East Coast Regional Plan Update was approved by the District's Governing Board on March 10, 2016. Therefore, the deadline for local governments within the Upper East Coast Regional Water Supply Planning Region to amend their comprehensive plans to update the Work Plan is September 10, 2017. Residents of the Martin County obtain their water from five regional water suppliers including Martin County Consolidated System, Sailfish Point, City of Stuart, Indiantown Water Company, and South Martin Regional, which are responsible for ensuring enough capacity is available for existing and future customers. The Work Plan will reference the initiatives already identified to ensure adequate water supply for Martin County. According to state guidelines, the Work Plan and the comprehensive plan must address the development of traditional and alternative water supplies, service delivery and conservation and reuse programs necessary to serve existing and new development for at least a 10-year planning period. The Work Plan will have a planning time schedule consistent with the comprehensive plan and the Upper East Coast

EXHIBIT B

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 11 POTABLE WATER SERVICES ELEMENT/10 YEAR WATER SUPPLY FACILITIES WORK PLAN

Regional Water Supply Plan Update. The Work Plan is divided into five sections: Section 11.0 - Introduction Section 11.1 - Background Information Section 11.2 - Existing Conditions Section 11.3 - Data and Analysis Section 11.4 - Consolidated Water System Work Plan Projects/Capital Improvement Element/Schedule Section 11.5 - Goals, Objectives, and Policies

11.0A. *Statutory History.* The Florida Legislature enacted bills in the 2002, 2004, 2005, and 2011 sessions to address the state's water supply needs. These bills, in particular Senate Bills 360 and 444 (2005 legislative session), significantly changed Chapters 163 and 373, F.S. by strengthening the statutory links between the regional water supply plans prepared by the water management districts and the comprehensive plans prepared by local governments. In addition, these bills established the basis for improving coordination between local land use planning and water supply planning.

11.0B *Statutory Requirements.* Martin County has considered the following statutory provisions when updating the Water Supply Facilities Work Plan (Work Plan):

1. Coordinate appropriate aspects of its comprehensive plan with the Upper East Coast Regional Water Supply Plan [163.3177(4)(a), F.S.].

2. Ensure the future land use plan is based upon availability of adequate water supplies and public facilities and services [s.163,3177 (6) (a), F.S.]. Data and analysis demonstrating that adequate water supplies and associated public facilities will be available to meet projected growth demands must accompany all proposed Future Land Use Map amendments submitted for review.

3. Ensure that adequate water supplies and potable water facilities are available to serve new development no later than the issuance by the local government of a certificate of occupancy or its functional equivalent and consult with the applicable water supplier to determine whether adequate water supplies will be available to serve the development by the anticipated issuance date of the certificate of occupancy [s. 163.3180 (2), F.S.].

4. For local governments subject to a regional water supply plan, revise the General Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge Element (the "Infrastructure Element"), within 18 months after the water management district approves an updated regional water supply plan, to:

   a. Identify and incorporate the alternative water supply project(s) selected by the local government from projects identified in the Upper East Coast Regional Water Supply Plan, or alternative project(s) proposed by the local government under s. 373.709(8)(b), F.S. [s. 163.3177(6)(c), F.S.];

   b. Identify the traditional and alternative water supply projects and the conservation and reuse programs necessary to meet water needs identified in Upper East Coast Regional Water Supply Plan [s. 163.3177(6)(c)3, F.S.]; and

   c. Update the Work Plan for at least a 10-year planning period for constructing the public, private, and regional water supply facilities identified in the element as necessary to serve existing and new development [s. 163.3177(6)(c)3, F.S.].

5. Revise the Five-Year Schedule of Capital Improvements to include water supply, reuse, and conservation projects and programs to be implemented during the five-year period [s. 163.3177(3)(a)4, F.S.].

6. To the extent necessary to maintain internal consistency after making changes described in Paragraph 1 through 5 above, revise the Conservation Element to assess projected water needs and sources for at least a 10-year planning period, considering the Upper East Coast

Water Supply Plan, as well as applicable consumptive use permit(s) [s.163.3177 (6) (d), F.S.]. The plan must address the water supply sources necessary to meet and achieve the existing and projected water use demand for the established planning period, considering the applicable regional water supply plan [s.163.3167(9), F.S.].

7. To the extent necessary to maintain internal consistency after making changes described in Paragraphs 1 through 5 above, revise the Intergovernmental Coordination Element to ensure coordination of the comprehensive plan with the Upper East Coast Regional Water Supply Plan [s.163.3177 (6) (h) 1., F.S.].

8. While an Evaluation and Appraisal Report is not required, local governments are encouraged to comprehensively evaluate, and as necessary, update comprehensive plans to reflect changes in local conditions. The evaluation could address the extent to which the local government has implemented the need to update their Work Plan, including the development of alternative water supplies, and determine whether the identified alternative water supply projects, traditional water supply projects, and conservation and reuse programs are meeting local water use demands [s.163.3191 (3), F.S.].

Section 11.1. Background information.

11.1.A. *Overview.* The availability of potable water is one of the major determinants of growth in Martin County. Water must be provided in an economical and environmentally sensitive way that responds to the needs of residents. Water demand is a function of population distribution and density, so it must be carefully monitored and properly planned for. This requires the County to closely coordinate the pace of development with its ability to provide water to serve the anticipated population growth. The County recognizes that providing water for its growing population must not impede the quality or quantity of surface and groundwater supplies.

The 1982 Comprehensive Growth Management Plan (CGMP) included several objectives relating to water quality, use and supply development. Meeting those objectives included the following steps: updating the Water Master Plan, which is the framework for the County's provision of water services; incorporating water and sewer system design standards into the Land Development Regulations; establishing a public utilities department to expand review of water and wastewater system components; and passing the Potable Water Ordinance and the Wellfield Protection Ordinance.

The Water Master Plan was prepared in two phases. Phase I covered the Jensen Beach/Rio/Sewall's Point/Hutchinson Island area, served by the Martin County North System, and the Palm City area, served by Martin Downs Utilities. Phase II targeted the rest of the County, served by several large private utilities regulated by the Florida Public Service Commission. After development of Phase I but before Phase II, the South Florida Water Management District (SFWMD) prepared a water resource assessment study that provided additional data for County water planning activities. Phase II incorporated the Phase I document, and the consolidated Water Master Plan was adopted in October 1988.

The County's water system consisted of a combination of public and private systems, and the Water Master Plan recommended consolidation for better management of potable water supplies. Other recommendations included development of new wellfields and participation in the abandoned well plugging program of the SFWMD, as well as conservation efforts. These recommendations were considered throughout the planning process and used as guidelines to help meet the requirements of Florida Administrative Code rule 9J-5, which identified minimum criteria for local government comprehensive plans. The Potable Water Ordinance was adopted in 1995 and the Wellfield Protection Ordinances in 1993 and 1994. They were codified into the Land Development Regulations, and the system was then consolidated into the Martin County Consolidated Water System.

EXHIBIT B

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 11 POTABLE WATER SERVICES ELEMENT/10 YEAR WATER SUPPLY FACILITIES WORK PLAN

In 2001 the Martin County Utilities and Solid Waste Management Department updated the Water Master Plan to reflect the future water and wastewater needs of the entire service area. That update was the basis for a 10-year master plan that includes build-out scenarios of the current service area. It also identifies capital improvement projects that would meet the ultimate needs of the entire service area of the Martin County Consolidated Water System. The master plan, re-titled Martin County Utilities Master Plan, was again updated in 2007. The most recent master plan update efforts include Martin County Utilities Wastewater and Reclaimed Water Master Plan Update (2014) and Martin County Utilities Water Supply System Master Plan Update (2015).

Potable water is one component of the water supply system. The SFWMD Upper East Coast Water Supply Plan includes the following components of water supply in the region: public water supply, domestic self-supply, commercial/industrial self-supply, recreational self-supply, thermoelectric power generation self-supply and agricultural self-supply. This Chapter focuses on meeting the public water supply and domestic self-supply demand for Martin County.

11.1B *Relevant Regional Issues.* Overarching regional issues identified in the 2016 Upper East Coast Regional Water Supply Plan are:

i) Increased withdrawals from the SAS are limited due to potential impacts on wetlands as well as increased potential for saltwater intrusion.

ii) Additional surface water will not be allocated from the SFWMD C-23, C-24, and C-25 canals, or any connected canal systems that derive water supply from these District canals, over and beyond existing allocations.

iii) Extreme freshwater discharges are affecting the heath of the St. Lucie River and Estuary and southern Indian River Lagoon.

iv) Surface water users within the Lake Okeechobee Service Area (LOSA) have only a water supply level of certainty in a 1-in 6 year drought.

(ref. 2016 Upper East Coast Water Supply Plan Update, Planning Document, Chapter 1 p.9)

Martin County has wetland and groundwater protection policies in place and is committed to reduce reliance on the SAS and/or monitor and operationally manage any potential impacts to wetlands and chloride levels in accordance with the Upper East Coast Water Supply Plan and SFWMD Consumptive Use Permits.

Section 11.2. Existing Conditions

11.2.A. *Potable water supply and quality.* Two major aquifers serve Martin County: the Surficial Aquifer System (SAS) (nonartesian), 15 to 150 feet below the land surface, and the Floridan Aquifer System (FAS) (artesian), 600 to 1,500 feet below the land surface. Both aquifers yield water to wells in Martin County. Water from the FAS is used for irrigation and stock watering, and with advanced treatment, for potable water. Approximately half of the water used in Martin County is obtained from the SAS with projected increase in FAS use in the future.

Chemical analysis of water samples from Martin County indicate that water from the SAS is generally of good quality. It contains some iron (1 to 4 milligrams per liter). Water from the FAS is mineralized with chloride salt and requires advanced water treatment to be used as potable. Contamination of the surficial potable water supply can result from saltwater intrusion, leaky underground storage tanks, spills of hazardous or toxic substances, and free-flowing or leaking artesian wells that commingle Floridan water with surficial water. Saltwater intrusion has occurred in some coastal areas of Martin County. Further

discussion of water quality and groundwater contamination is detailed in Chapter 13, Drainage and Natural Groundwater Aquifer Recharge.

11.2.B. *Potable water facilities.* Martin County residents obtain potable water from a variety of water systems, both public and private (domestic self-supply). Each system operates with at least one production well. Several large capacity systems employ multiple wells. Presently five (5) of these systems are regional, designed to serve large areas and denser populations in Martin County, including Martin County Consolidated System, Sailfish Point, City of Stuart, Indiantown Water Company, and South Martin Regional. Martin Correctional Institution is currently served by the City of Port St. Lucie Utilities. The Village of Tequesta and Town of Jupiter are regional utility systems are part of the Lower East Coast Water Supply Planning Area and are not included in this water supply facilities work plan.

Given that Martin County's Water Supply System Master Plan Update and Wastewater and Reclaimed Water Master Plan Update recommend consolidation of the water systems network for more effective management of water supplies, County policy encourages the use of regional water service for new development.

Private wells are not permitted except for single-family units on lots of at least one-half acre, agricultural or testing uses, existing lots of record and churches, with the condition that the use be connected to a regional utility if the utility's water main abuts the property. Interim water systems (any water treatment/supply system approved for use until connection to a regional system is mandated) are allowed if the developer meets a series of conditions. However, within the Primary Urban Service District, any development within 150 feet of the lines of a regional system is required to connect to that system. Extension of water service to the Secondary Urban Service District is not allowed.

Consequently, Martin County's planning has focused on the regional systems that will serve much of the County's population in the future. Tables 11-1 through 11-5 show water usage for the five existing regional systems as described in the 2016 Upper East Coast Water Supply Plan.

11.2.C. *Public water supply (PWS) and domestic self-supply (DSS) water use in Martin County (average rainfall conditions).* In 2013 the regional water systems operating in Martin County had a raw water demand of 20.61 million gallons per day (MGD). Domestic self-supply systems had a raw water demand of 1.10 MGD. Martin County's 2013 public water supply demand historical total was 21.71 MGD for all public water and domestic self-supplied demands under average conditions. It is projected that Martin County's total average raw water supply demand, for regional facilities (24.27 MGD) and domestic self-supply (0.58 MGD), will be 24.85 MGD in 2030. [ref. SFWMD 2016 Upper East Coast Water Supply Plan Update Appendices, Table A-4].

All public water systems are regulated by the FDEP and are required to meet drinking water standards stipulated in Florida Administrative Code Chapter 62-550. The standards cover a wide range of contaminants, including metals, nitrate, organic compounds and bacteria. If surficial aquifer raw water meets all the standards, usually disinfection is the only treatment required. This is true for most of the County's smaller community systems. In Martin County, surficial aquifer raw water normally meets all standards except for iron. Ion exchange, softening and aeration are the most common methods for iron control. Losses in water volume through treatment of the surficial aquifer are relatively low. Reverse osmosis membranes, however, are used to treat the brackish waters of the Floridan aquifer. Consequently treatment losses increase to approximately 20 percent. Treatment technologies and efficiencies define the difference between raw water withdrawn from the aquifer and finished water distributed to users as discussed in this Chapter.

All domestic self-supply water systems draw from the surficial aquifer, and each has at least one well. Regional systems draw from either the surficial aquifer (City of Stuart and Indiantown), the Floridan aquifer (Sailfish Point) or from both the surficial and Floridan aquifers (Martin County Consolidated System and South Martin Regional).

EXHIBIT B

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 11 POTABLE WATER SERVICES ELEMENT/10 YEAR WATER SUPPLY FACILITIES WORK PLAN

To assure the safety of Martin County's public wellfields, the County has adopted Wellfield Protection Regulations that apply to all public water supply wellfields. The Regulations prohibit any activities involving hazardous waste and any effluent discharge within 500 feet of a well. Septic tanks and stormwater retention ponds are prohibited within 200 feet of a public well. The Regulations reflect actual drawdown zones and refined enforcement strategies.

11.2.D. *Issues in potable water management.* Water issues emerging from current conditions in Martin County are as follows (not in priority order):

(1) The number and proximity of community wells, non-community systems and unregulated agricultural wells results in unmanaged withdrawal of water from the surficial aquifer.

(2) Unmanaged withdrawals can lower the water table and harm the environment, and they may cause isolated saltwater intrusion.

(3) Poorly maintained and operated systems diminish water quality. The cost of upgrading facilities may lead to abandonment of some systems.

(4) Contamination of groundwater results from saltwater intrusion, leaking Floridan wells, leaking underground storage tanks, agricultural pollution and contaminated industrial wells and septic tanks.

(5) Increasing demand for water requires conservation by all users.

(6) Increasing demand for water requires increased use of reclaimed water for irrigation through permitted use of all reclaimed water and regional reclaimed system interconnection. A reclaimed water interlocal agreement was executed between Martin County and the City of Stuart in October 2011, providing the County with 0.375 MGD of additional reclaimed water.

(7) The surficial aquifer has withdrawal limitations.

(8) Wellfields in drawdown zones could be contaminated from unregulated disposal or spills of hazardous or toxic materials.

The County expanded the wellfield protection program in 1993 to include the following:

(1) Determination and mapping of the projected cones of depression and zones of influence for (a) existing and future wellfields of all public potable water supply wells meeting the definitions set forth in the Wellfield Protection Regulations, and (b) existing and future wells operated outside the service areas for regional utilities as described in the Wellfield Protection Regulations;

(2) Regulation of the use, handling, production or storage of regulated materials (e.g., hazardous and toxic materials) within the projected cones of depression of the wellfield;

(3) Determination and prohibition, if necessary, of inappropriate land uses within the zones of influence;

(4) Structural containment standards for regulated materials (e.g., hazardous and toxic materials);

(5) Requirements for installation of monitoring wells;

(6) Procedures for permitting, monitoring, emergency reporting, cleanup, personnel training and material inventory;

(7) Establishment of financial responsibility for noncompliance with the conditions of the permit and/or for cleanup of regulated material spills;

(8) Procedures that set forth specific conditions to be incorporated in development orders;

(9) Development of a database to monitor existing and future land uses in drawdown zones; and

(10) Determination of specific enforcement strategies for various areas within drawdown zones.

The Wellfield Protection Regulations protect all public wells currently in use from potential adverse impacts by regulating all new development in unincorporated areas. The Regulations have been revised to protect existing and future wellfields of all public potable water supply wells meeting the definitions set forth in the Regulations by regulating all development within the Wellfield Protection Zones in Martin County.

Section 11.3. Future Needs Data and Analysis

11.3.A. *Water Supply Population Estimates 2013 to 2040.* The SFWMD has developed population estimates for Martin County regional utilities (Table 11.01). These estimates were based on work completed to establish SFWMD 2010 populations, the 2014 Land Use Update (data from 2012), current (2013) and future (2040) utilities service area maps (Figures 1 and 2), and growth plans for local governments as well as PWS utilities. Population projections for 2014 were developed from planned growth areas identified in the 2040 service area maps. Five-year incremental projections for each utility were based on a linear interpolation of the change in population from the 2010 census and 2013 estimates through 2040 (BEBR 2014) using adjusted medium BEBR populations. It was assumed that all populations outside of PWS service areas had self-supplied potable water. (ref. 2016 Upper East Coast Water Supply Plan Appendices: Appendix A, p. 4)

Table 11.01
Martin County PWS and DSS Water Supply Population Projections 2013 to 2040

	2010	2013	2015	2020	2025	2030	2035	2040
Indiantown Company	6,374	6,507	6,595	6,944	7,257	7,545	7,780	8,181
Jupiter, Town of	2,155	2,161	2,165	2,175	2,185	2,195	2,205	2,215
Martin County Consolidated System	86,535	88,887	90,802	97,339	102,661	106,925	110,074	112,572
Sailfish Point	1,002	1,002	1,002	1,002	1,002	1,002	1,002	1,002
South Martin Regional Utility	19,877	23,629	24,064	25,151	26,238	27,326	28,413	29,500
Stuart, City of	15,603	16,841	17,149	17,919	18,689	19,460	20,230	21,000
Tequesta, Village of	4,011	4,095	4,150	4,370	4,567	4,748	4,896	5,030
PWS Total	135,557	143,122	145,927	154,900	162,599	169,201	174,600	179,500

EXHIBIT B

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 11 POTABLE WATER SERVICES ELEMENT/10 YEAR WATER SUPPLY FACILITIES WORK PLAN

DSS Total	10,761	7,588	5,473	4,500	4,000	4,000	4,000	4,000
Martin Total	146,318	150,710	151,400	159,400	166,599	173,201	178,600	183,500

(Ref. 2016 Upper East Coast Water Supply Plan, Appendix A, p.4, Table A-1)

EXHIBIT B

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 11 POTABLE WATER SERVICES ELEMENT/10 YEAR WATER SUPPLY FACILITIES WORK PLAN

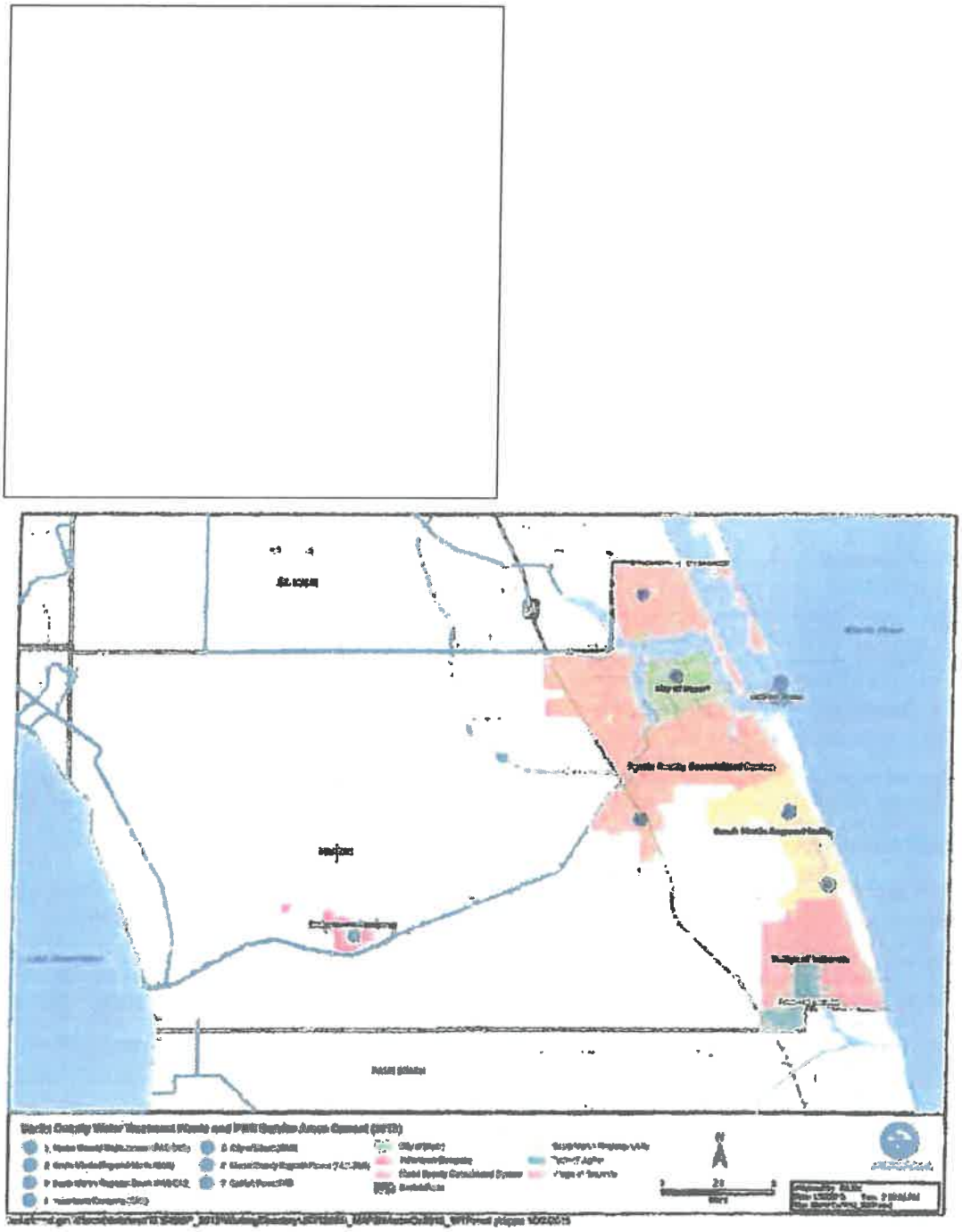

Figure 1: 2013 Potable Water Treatment Facilities in Martin County (UECWSP Appendix E, Figure E-1, p. 104)

EXHIBIT B

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 11 POTABLE WATER SERVICES ELEMENT/10 YEAR WATER SUPPLY FACILITIES WORK PLAN

Figure 2: 2040 Utility Service Areas in Martin County (UECWSP Appendix E, Figure E-2, p. 104)

11.3.B. Public water supply and domestic self-supply projected demand. Martin County's PWS finished water demand from regional systems and the estimated demand for DSS systems for 2013 and 2030 under average conditions is shown in Table 11.02. Demand for domestic self-supply systems is projected to fall as more households connect to regional systems.

Table 11-02
Regional Systems Finished Public Water Demand in Martin County

Year	2013	2030
Public Water Supply Finished Water Demand (MGD)	17.73	20.85
Domestic Self-Supply Water Demand (MGD)	1.10	0.58
Total PWS and DSS Finished Water Demand (MGD)	18.83	21.43

(ref. SFWMD 2016 Upper East Coast Water Supply Plan Update Appendices Table A-6).

However, the increase in demand indicated in the projections does not increase the demand on the surficial aquifer. By connecting domestic self-supply systems to regional utilities and implementing alternative water supply projects, much of the demand is shifted from the surficial aquifer to the Floridan aquifer. Reclaimed water projects (also considered alternative water supply projects) contribute to the recharge needed for the surficial aquifer.

Conservation efforts are needed to effectively manage Martin County water resources. With prudent management, the County has sufficient water to meet its future needs. The County has implemented a variety of efforts to avoid depleting the resource. These include a wellfield protection program, water conservation program, water shortage requirements and a rate structure that encourages conservation.

Tables 11-1 through 11-5 summarize the projected demands for each public water supply system in Martin County. This information corresponds to the 2016 Upper East Coast Water Supply Plan Update. Note that Martin Correctional Institution was connected to the City of Port St. Lucie Utilities in 2010. The estimated population of the Towns of Ocean Breeze and Sewell's Point, located in unincorporated Martin County, are served by the Martin County Consolidated System.

Table 11-1
Indiantown Company

The Indiantown Company service area Includes the unincorporated Indiantown properties in the Primary Urban Service District and the Indiantown Golf and Country Club. Potable water supplies are 100 percent from the SAS, and are projected to remain the same in the future. The utility is reusing 100% (0.57 MGD) of its wastewater.

Description	2013 (Existing)	2020 (Projected)	2030 (Projected)

EXHIBIT B

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 11 POTABLE WATER SERVICES ELEMENT/10 YEAR WATER SUPPLY FACILITIES WORK PLAN

Population†	6,507	6,944	7,545
Average 2010-2013 Per Capita (gallons per day (GPD) finished water)	79	79	79
Potable Water Demand (dally average annual finished water, MGD)	0.51	0.55	0.60
Potable Water Source	Permit No. 43-00041-W (expires 2029)		
Surficial Aquifer System (SAS)	1.18		
Florida Aquifer System (FAS)	0.00		
Total Allocation	1.18		
Permitted Capacity by Source	FDEP Potable Water Treatment Capacity (MGD) (PWS ID# 4430667)		
Facility & Projects Capacity—SAS, MGD++	1.3	1.3	1.3
Facility & Projects Capacity—FAS, MGD++	0.0	0.0	0.0
Total Capacity	1.30	1.30	1.3
Non-Potable Water Facility & Projects Capacity-Reclaimed water++, MGD	0.75	0.75	0.75

† Population data are from the SFWMD's 2016 Upper East Coast Water Supply Plan Update Proposed Population Projections.

++ Facility Production Capacity: FDEP Facility design capacity plus water supply projects design capacities.

Table 11-2
Martin County Consolidated Water System
(North and Tropical Farms water treatment plants)

EXHIBIT B

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 11 POTABLE WATER SERVICES ELEMENT/10 YEAR WATER SUPPLY FACILITIES WORK PLAN

The service area for the Martin County Consolidated Water System consists of the unincorporated areas of Jensen Beach, Palm City, South Hutchinson Island, Tropical Farms, and Port Salerno; portions of the incorporated City of Stuart; and Ocean Breeze Park and Sewall's Point. Based on plant capacity, water supplies consist of 28 percent traditional groundwater (surficial aquifer) and 72 percent brackish groundwater (Floridan aquifer). Future water supplies are projected to maintain about 30 percent traditional and 70 percent alternative water supplies.

Description	2013 (Existing)	2020 (Projected)	2030 (Projected)
Population†	88,887	97,339	106,925
Per Capita (gallons per day (GPD) finished water [1]	108	108	108
Potable Water Demand (daily average annual finished water, MGD)	9.60	10.5	11.5
Potable Water Source	Permit No. 43-00102-W (expires 2035)		
Surficial Aquifer System (SAS), MGD	6.68		
Florida Aquifer System (FAS), MGD	15.09		
Total Allocation	21.77		
Permitted Capacity by Source	FDEP Potable Water Treatment Capacity (MGD) (PWS ID# 4431891)		
Facility & Projects Capacity—SAS, MGD++	5.3	5.3	7.05
Facility & Projects Capacity—FAS, MGD++	13.50	13.50	15.70
Total Capacity	18.8	18.8	22.75
Non-Potable Water Facility & Projects Capacity—Reclaimed water++, MGD	8.66	8.66	8.66

† Population data are from the SFWMD's 2016 Upper East Coast Water Supply Plan Update Planning Document p. 129-133.

1 Ref. Martin County Water & Wastewater Plant Flows and Treatment Capacity Report, February 2017

++ Facility Production Capacity: FDEP Facility design capacity plus water supply projects design capacities. Ref. Martin County Utilities Water Supply System Master Plan Update (2015) and Martin County Utilities Wastewater and Reclaimed Water Master Plan (2014)

Table 11-3
Sailfish Point

Sailfish Point serves potable water to only the Sailfish Point development on Hutchinson Island. Water supplies consist of 100 percent brackish (FAS) groundwater and are projected to remain the same in the future. The utility is reusing 100% (0.08 MGD) of its wastewater.

Description	2013 (Existing)	2020 (Projected)	2030 (Projected)
Population†	1,002	1,002	1,002
Average 2010-2013 Per Capita (gallons per day (GPD) finished water)	150	150	150
Potable Water Demand (daily average annual finished water, MGD)	0.15	0.15	0.15
Potable Water Source	Permit No. 43-00146-W (expires 2022)		
Surficial Aquifer System (SAS)	0.00		
Florida Aquifer System (FAS)	0.22		
Total Allocation	0.22		
Permitted Capacity by Source	FDEP Potable Water Treatment Capacity (MGD) (PWS ID# 4434000)		
Facility & Projects Capacity—SAS, MGD++	0.0	0.0	0.0

Facility & Projects Capacity—FAS, MGD++	0.22	0.22	0.22
Total Capacity	0.22	0.22	0.22
Non-Potable Water Facility & Projects Capacity—Reclaimed water++, MGD	0.25	0.25	0.25

† Population data are from the SFWMD's 2016 Upper East Coast Water Supply Plan Update.

++ Facility Production Capacity: FDEP Facility design capacity plus water supply projects design capacities.

Table 11-4
South Martin Regional Utility

South Martin Regional Utility (SMRU) serves the Town of Jupiter Island, Hobe Sound vicinity and portions of unincorporated southeast Martin County. Water supplies consist of 75 percent traditional SAS groundwater and 25 percent brackish FAS groundwater. Future water supplies are projected to be about 59 percent traditional and 41 percent FAS in the future, SMRU reuses 100 percent (0.80 MGD) of its wastewater.

Description	2013 (Existing)	2020 (Projected)	2030 (Projected)
Population†	23,629	25,151	27,326
Average 2010-2013 Per Capita (gallons per day (GPD) finished water)	150	150	150
Potable Water Demand (daily average annual finished water, MGD)	3.54	3.77	4.10
Potable Water Source	Permit No. 43-00066-W (expires 2032)		
Surficial Aquifer System (SAS)	4.83		
Florida Aquifer System (FAS)	4.76		

Total Allocation	8.64*		
Permitted Capacity by Source	FDEP Potable Water Treatment Capacity (MGD) (PWS ID# 4430624)		
Facility & Projects Capacity—SAS, MGD++	6.14	6.14	6.14
Facility & Projects Capacity—FAS, MGD++	2.0	2.0	4.2
Total Capacity	8.14	8.14	10.34
Non-Potable Water Facility & Projects Capacity—Reclaimed water++, MGD	1.40	1.40	2.40

† Population data are from the SFWMD's 2016 Upper East Coast Water Supply Plan Update.

++ Facility Production Capacity: FDEP Facility design capacity plus water supply projects design capacities.

+ See permit for allocation calculation.

Table 11-5
City of Stuart Utilities

City of Stuart Utilities serves incorporated City of Stuart and portions of unincorporated Martin County. Potable water supplies are 92 percent from the SAS and 8 percent from the FAS: they are projected to be 88 percent SAS and 12 percent FAS in the future. This utility reuses 13 percent (0.21 MGD) of its wastewater.

Description	2013 (Existing)	2020 (Projected)	2030 (Projected)
Population†	16,841	17,919	19,460
Average 2010-2013 Per Capita (gallons per day (GPD) finished water)	196	196	196
Potable Water Demand (daily average annual	3.30	3.51	3.81

finished water, MGD)			
Potable Water Source	Permit No. 43-00053-W (expires 2029)		
Surficial Aquifer System (SAS)	3.67		
Florida Aquifer System (FAS)	0.00		
Total Allocation	3.67		
Permitted Capacity by Source	FDEP Potable Water Treatment Capacity (MGD) (PWS ID# 4430259)		
Facility & Projects Capacity—SAS, MGD++	6.0	6.0	6.0
Facility & Projects Capacity—FAS, MGD++	0.50	0.50	0.80
Total Capacity	6.50	6.50	6.80
Non-Potable Water Facility & Projects Capacity—Reclaimed water++, MGD	4.00	4.00	4.00

† Population data are from the SFWMD's 2016 Upper East Coast Water Supply Plan Update.

++ Facility Production Capacity: FDEP Facility design capacity plus water supply projects design capacities.

Section 11.4. Consolidated Water System

11.4.A. *Overview.* The Martin County Consolidated Water System consists of two water treatment facilities with an interconnected distribution system which operate under SFWMD Permit No. W-00102-W and FDEP Permit Nos. 00081025-079-WC (North WTP) and 0143244-003-WC (Tropical Farms WTP). It provides potable drinking water to customers in the Martin County Consolidated Water System service area, which serves designated areas in Palm City, Port Salerno, Tropical Farms, Jensen Beach, Hutchinson island and the City of Stuart. Table 11-6 details the existing and future capacities, treatment methods and water sources for the water treatment facilities.

Table 11-6
Martin County Consolidated Water System Facilities

EXHIBIT B

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 11 POTABLE WATER SERVICES ELEMENT/10 YEAR WATER SUPPLY FACILITIES WORK PLAN

Facilities (Existing)	Source	Permitted Plant Capacity (MGD)	Treatment Method	Well Source
North water treatment plant (WTP)	Traditional supply	3.3	Lime softening	SAS
	Alternative supply	5.5	Reverse osmosis	FAS
Tropical Farms WTP	Traditional supply	2.0	Membrane softening/iron treatment	SAS
	Alternative supply	8.0	Reverse osmosis	FAS
Total		18.8		

Proposed Facilities (2020)	Source	Permitted Plant Capacity (MGD)	Treatment Method	Well Source
North WTP	Traditional supply	3.3	Lime softening	SAS
	Alternative supply	5.5	Reverse osmosis	FAS
Tropical Farms WTP	Traditional supply	2.0	Membrane softening/iron treatment	SAS
	Alternative supply	8.0	Reverse osmosis	FAS
Total		18.8		

[1] A fifth FAS well is planned for construction in FY20 to reduce demand on existing wells - no increase in plant capacity.

Proposed Facilities (2030)	Source	Permitted Plant Capacity (MGD)	Treatment Method	Well Source
North WTP	Traditional supply	3.3	Lime softening	SAS
	Alternative supply	5.5	Reverse osmosis	FAS
Tropical Farms WTP	Traditional supply	3.75	Membrane softening/iron treatment	SAS
	Alternative supply	8.0	Reverse osmosis	FAS
Total		20.55		

Source: Martin County Utilities Water Supply System Master Plan Update, October 2015 (Figure 3-1) and the FY2017 Martin County Utilities Capital Improvement Plan.

The North WTP provides two types of treatment. The lime softening facility treats the raw water from 12 SAS wells and the reverse osmosis (RO) facility treats water from four FAS wells. The Floridan aquifer contains certain dissolved minerals including chloride that requires reverse osmosis membrane treatment. Following treatment this water is blended with treated surficial aquifer water prior to distribution. The blend provides a stable, non-corrosive potable water that meets all applicable water quality criteria while reducing operational treatment cost and avoiding additional chemical costs. Based on raw water treatment methods, the system wide treatment efficiency is assumed at 86% and includes 8% system wide distribution losses [Water Use Permit No. 43-00102-W. Exhibit No. 5B Martin County Utilities Consolidated System Future Raw Water Use].

The Tropical Farms WTP includes an iron treatment facility and nanofiltration (NF) facility. The iron treatment facility removes iron from raw water pumped from 10 SAS wells for blending with the NF and RO permeate water. The RO facility draws water from 5 FAS wells. One of the fundamental goals of the Consolidate System is to provide similar water quality to all customers through the utilization of similar treatment techniques. In general, this includes a combination of FAS water, membrane softening and raw water blend at each location. [Martin County Utilities Water Supply System Master Plan Update, October 2015].

The existing plant finished water storage facilities at the North WTP include one 5 MG and one 3 MG ground storage tanks that provide a total of 8 MG in storage. At the Tropical WTP, there are two 0.5 MG

and one 5 MG storage tank that supply a total of 4.2 MG of finished water storage capacity based on minimum high service pump shutoff level. Only the storage volume above this level or 4.2 MG is included in the finished water capacity for these plants. There is one repump and storage facility not associated with the WTPs that provides system storage and high-service pumping capacity to the consolidated system. The Golden Gate Repump and Storage Facility includes of a 2 MG ground storage tank. [Martin County Utilities Water Supply System Master Plan Update. October 2015].

Martin County Utilities water system is interconnected with South Martin Regional Utilities, City of Stuart, Fort Pierce Utility Authority, Port St. Lucie and the City of Stuart water systems for emergency water supply as reflected in interlocal agreements with each utility. The County also has two additional interlocal agreements with the City of Stuart to 1) supply up to 1 MGD of finished water by 2027 and 2) to receive up to 0.375 MGD of reclaimed water.

The Consolidated Water System is included in a SFWMD designated water resource caution area as described in the Upper East Coast Water Supply Plan. Future water supplies are projected to be 30 percent traditional (surficial aquifer) and 70 percent alternative (Floridan aquifer) to reduce stress on the SAS. Operational improvements and management in addition to proposed water supply projects are adequate to serve projected demands. Martin County has made marked strides in responding to regional strategies outlined in the Upper East Coast Water Supply Plan, including implementation/adoption of a 10-year Capital Improvements Program (CIP) consistent with Upper East Coast Water Supply Plan; substantial increased use of the Floridan aquifer; continued reduced dependence on the surficial aquifer; and a wellfield protection program. In addition, the County has an approved consolidated water conservation plan for the South and North systems in its SFWMD Permit No. 43-00102-W that meets all the required elements of the SFWMD Applicants Handbook Standard Conservation Plan as follows:

i. Water Conservation public education program that consists of:
    1) Public service announcements:
    2) Presentations to schools and community organizations;
    3) Tours of water and wastewater facilities:
    4) Public water conservation exhibits; and
    5) Detailed information available on website;

ii. Outdoor Water Use Conservation program that consists of;
    1) Permanent irrigation ordinance that restricts landscape irrigation between 9:00 A.M. and 5:00 P.M.;
    2) Martin County Ordinance No. 494, Land Development Regulations, which requires the use of Florida-Friendly landscaping principles;
    3) Martin County Ordinance which requires ultra-low plumbing fixtures on all new construction;
    4) Martin County Ordinance 494, Land Development Regulations, which requires any person who purchases and installs an automatic lawn sprinkler to install, operate, and maintain a rain sensor device or automatic switch which will override the irrigation with the occurrence of adequate rainfall; and
    5) Outdoor Water Conservation Public Education- Martin County Utilities participates in the annual Stuart WaterFest which focuses on public education and water conservation;

iii. Rate Structure: A rate structure designed to promote the efficient use of water by charging a 25 percent surcharge for usage in excess of 10,000 gallons per month per residential unit and a 50 percent surcharge for usage in excess of 15,000 gallons per month per residential unit.

iv. Water Loss Reduction Program: Although water losses have not historically exceeded 10 percent, Martin County Consolidated has implemented a leak detection system and implements several water loss methods;

v. Indoor Water Conservation Program: Martin County Consolidated provides tips to reducing indoor water use by providing tips on their website and brochures on how to conserve water which lowers the cost of customer's water bill.

11.4.B *Proposed modifications to the Consolidated Water System* . To satisfy total projected water supply needs and provide effective wellfield operation, three new Floridan aquifer wells and two additional reverse osmosis treatment trains are proposed for the service area. Two wells will be located at the Tropical Farms WTP (Water Treatment Facility), and one well at the North WTP.

Martin Downs:

The County decommissioned the Martin Downs facility in 2008. It retains A SFWMD consumptive use permit is retained at this location to provide public water supply and to supplement the reuse water supply for irrigation. Water from the Martin Downs SAS wells will be piped to the Tropical Farms WTP via a raw water main planned for construction in 2018.

Vista Salerno:

Vista Salerno has been decommissioned. The County has withdrawn its consumptive use permit and abandoned SAS wells at this location.

Tropical Farms:

Tropical Farms is served by 10 SAS wells and five FAS wells which provide water to two on-site treatment plants. The reverse osmosis membrane treatment facility is rated for 8 MGD maximum daily flow (MDF) and the existing nanofiltration membrane softening plant is rated for 2 MGD (MDF), providing a combined treatment capacity of 10 MGD. Treated SAS water is blended with RO water to add needed alkalinity and hardness stability. Changes in Tropical Farms SAS water supply well production and reduced water use allocation necessitate transfer of approximately 2 MGD of raw water from the Martin Downs SAS wellfield to the Tropical Farms WTP. A transmission line is planned for construction in 2018. A sixth FAS well is planned for construction in 2021 to reduce aquifer stress by reducing individual well withdrawal (no plant capacity increase). It is estimated that a plant capacity increase from 10 MGD to 11.75 MGD will be triggered by system demands in 2026 equivalent to the construction of two iron treatment filters. Tropical Farms WTP supplies water to Martin Downs and Port Salerno.

North System:

The North System consists of a 3.3 MGD lime softening WTP and a 5.5 MGD reverse osmosis WTP. The lime softening plant is presently served by 12 surficial wells. The North System reverse osmosis WTP, expanded to 5.5 MGD in 2004, is served by four Floridan aquifer wells and three reverse osmosis membrane trains. A fifth FAS well is planned for construction in 2020 to reduce stress on the aquifer by reducing pump demands (no plant capacity increase).

11.4.C. *Water supply facilities work plan.* The CIP details the acquisitions and construction projects planned for a 10-year period for all County departments.

Martin County contracted with consultants to estimate the amount and type of water, wastewater and reclaimed water facilities needed to meet the needs of the service area. The recommendations in the

resulting reports, Martin County Utilities Wastewater and Reclaimed Water Master Plan Update (2014) and Martin County Utilities Water Supply System Master Plan Update (2015), are incorporated in the CIP and are updated annually. Summary tables listing the capital improvements are incorporated into the Capital Improvements Element (Chapter 14) of the CGMP through annual amendments. The future land use and zoning maps were also analyzed to determine demand for facilities for the 10-year period and the ultimate demand for water service. The service area is a subarea of the larger Primary Urban Service District, not served by the other regional utilities listed in Tables 11-1 through 11-5.

Table 11-7
Demand Projections, Water Supply Facilities Plan

Fiscal Year	Projected Population	Average Annual Daily Flow (MGD)	Maximum Daily Flow (MGD)*
2013	88,887	9.07	11.23
2020	97,339	10.03	14.04
2030	106,925	11.01	15.41

Source: [1] Chapter 11 Potable Water Services Element/10 Year Water Supply Facilities Work Plan Table 11-2, Martin County Consolidated System, Martin County Utilities Water Supply System Master Plan Update (2015).

* Table 1-9 Existing Potable Water Demand, Table 1-10 Peak Factors - Water Distribution System, Table 2-12 Total MCU Projected Potable Water Demands at Build-Out

2 The estimated maximum daily flow is the average daily flow multiplied by a recommended peaking factor of 1.4. The actual peaking factor for 2013 was 1.24. This calculation is used in determining the necessary size of water treatment facilities.

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

Martin County supports water reuse initiatives under consideration by both the SFWMD and other local governments in the region and the implementation of new regulations or programs designed to increase the volume of reclaimed water used and public acceptance of reclaimed water. Martin County's water conservation program encourages both conservation of water and use of alternative water supplies, such as reclaimed water for irrigation. There are no local financial responsibilities detailed in the CIE or CIS.

11.4.E. *Capital Improvements Program for Water Supply.* Martin County and the SFWMD have identified alternative water supply projects in the 2016 Upper East Coast Water Supply Plan Update for the Martin County's Consolidated System (Table 11-8). Each year Martin County selects alternative water supply projects from the Upper East Coast Water Supply Plan and Incorporates them into the Capital Improvements Element and subsequently the CIP.

Table 11-11
Alternative Water Supply Projects 2013-2030

Project Number and Description	Water Source	Raw Water Required (MGD)	Design Capacity (MGD)	Year Completed	In UECWSP
CIP #3305 Raw Water Main & Pump Martin Downs Wellfield to Tropical Farms WTP	Surficial	2.0	2.0	2018	No
CIP # 3017, North WTP, Well NRO-5	Floridan		2.0	2020	Yes
CIP # 3000, Tropical Farms WTP, Well TFRO-6	Floridan		2.0	2021	Yes
CIP # 3000, Tropical Farms WTP, Well TFRO-7	Floridan		2.0	2025	Yes

Sources: *Martin County Utilities and Solid Waste Department CIP FY2017*

Section 11.5. Goals, Objectives and Policies

Implementation of this Chapter is designed to address Martin County's long-term potable water needs while preserving the quality and quantity of groundwater supplies.

Goal 11.1. To provide for needed potable water supply facilities in a timely, cost-efficient manner that protects public health, safety and welfare; maximizes the use of existing facilities; and promotes compact urban development.

Objective 11.1A. To correct public and private facility deficiencies in a timely manner in priority order (as specified in Policy 11.1A.2).

Policy 11.1A.1. The County shall continue to undertake a preventive and corrective maintenance program for all County-owned water systems. It shall include the following activities, performed annually, and preparation of an annual report covering the activities performed:

(1) Inventory of facilities;

(2) Facility inspection program;

(3) Inventory of field equipment and stock;

(4) Regular, programmed preventive maintenance of all facilities.

Policy 11.1A.2. The priority for correcting deficiencies and maintaining County facilities shall be as follows, in descending order:

(1) Deficiencies that are immediate threats to health and safety shall be corrected directly.

(2) Deficiencies that may affect health and safety will be corrected within one year or before the health and safety of the public are affected.

(3) Deficiencies that must be corrected to meet applicable laws and regulations shall be corrected within two years, or as agreed upon by the FDEP and/or other regulatory agencies.

(4) Other corrective repairs will be undertaken as time and resources allow.

Policy 11.1A.3. Capital facility improvements needed to correct deficiencies identified during engineering inspections will receive priority funding and will be included in the next revision of the 10-year CIP.

Policy 11.1A.4. Martin County shall continue to review proposed well construction and locations, assure compliance with the Wellfield Protection Program and maintain and update regulated areas on the Wellfield Protection Maps.

Policy 11.1A.5. Martin County shall work with the County Health Department and FDEP to assure that all permitted potable water systems can be expected to continue to provide safe drinking water. The Wellfield Protection and Potable Water Land Development Regulations and any other related regulations shall be coordinated to give residents the best possible assurance that permitted water systems will continue to serve them.

Policy 11.1A.6. Martin County will review the Potable Water Regulations to determine their effectiveness in promoting consolidation of services and preventing proliferation of small systems. The potential of requiring hookup to regional systems will be investigated.

Objective 11.1B. To plan for sufficient public facilities to meet future water needs based on adopted level of service standards and projected population for the 5-year and 10-year planning periods and build-out of service areas.

Policy 11.1B.1. The Martin County Board of County Commissioners shall review and amend (as necessary) the approved Martin County Utilities Water, Wastewater and Reclaimed Water Master Plan. Following adoption by the Board of County Commissioners, it will be used as input for the Martin County 10-year water supply plan.

Policy 11.1B.2. Martin County shall maintain and improve an information system to assist in evaluating water management, including water quantity, quality and use. This system shall be used in resolving administrative, operational and maintenance issues related to the development of a comprehensive water system, including system consolidation and possible regionalization of facilities. The information system shall include existing conditions of potable water plants as reported by the FDEP.

Policy 11.1B.3. Martin County shall continue to acquire water treatment facilities that meet the minimum standards established in the Water System Regulations, provided that:

(1) The County determines that acquisition of such facilities is in the public interest;

(2) Ownership by the County will establish equal or greater long-range stability of the utility;

(3) The acquisition can be made without a significant change in existing rate structures or in a more cost-effective manner;

(4) There is a willing seller, or the County will exercise its right of eminent domain.

Policy 11.1B.4. The County shall evaluate the feasibility of providing incentives to users of private water treatment facilities or individual water wells to connect to regional public water facilities when they become available.

Policy 11.1B.5. Based on the SFWMD water assessment study, Martin County will continue to identify alternative water sources, which will be considered when the 10-year CIP is adopted.

Policy 11.1B.6. The level of service standards shall be incorporated into the Capital Improvements Element The levels of service and minimum water delivery rate standards shall be used as the basis for determining the availability of facility capacity and the demand generated by a development. The current residential level of service standard for water treatment systems is 108 gallons per capita. [Ref. Martin County Water & Wastewater Plant flows and Treatment Capacity Report, February 2017]. The nonresidential level-of-service standards for water treatment systems are as defined in F.A.C. 64E-6.008 Standards for Onsite Sewer and Disposal Systems.

(1) Fire hydrants: The minimum water delivery rate for any single fire hydrant shall be 500 gallons per minute, and the minimum pressure in any point within a water distribution system shall be 20 pounds per square inch (psi). Assuming a maximum day demand and commercial fire flow demands, the goal is 60 psi at all times.

Policy 11.1B.7. The timing of impacts of development shall be in accordance with Policy 14.1C.4 in the Capital Improvements Element.

Policy 11.1B.8. To ensure capacity of the regional water system, Martin County shall begin to design essential improvements when the system reaches 80 percent of total rated capacity. Construction will begin when the system reaches 90 percent of total rated capacity. No additional reservations shall be made at 100 percent of rated capacity unless construction of improvements is underway.

Policy 11.1B.9. The County will monitor level of service standards for potable water service by reviewing the previous 12 monthly operating reports submitted to the FDEP. The results will be reported in the annual report on level of service for all County services. Available capacity for new connections will be based on existing capacity, less current flows, less equivalent residential connections reserved.

Policy 11.1B.10. The Martin County Utilities and Solid Waste Department shall review all development proposals, plans and specifications to ensure that water transmission systems meet minimum standards, are consistent with the County's consolidation efforts and do not reduce levels of service below acceptable levels.

Objective 11.1C. To establish criteria for extending public facilities that maintain adopted level of service standards and discourage urban sprawl.

Policy 11.1C.1. The extension of potable water lines and expansion of treatment plant capacity will be based on the projected demand for service as established in the Future Land Use Maps (Chapter 4 of the CGMP). To assure consistency of efficient service provision with the established land use pattern, the following determinations must be made:

(1) The adopted level of service standards will be maintained and adequate capacity is available based on an analysis of the current and future population growth within the existing service area and the proposed areas to be served;

(2) Extension of public potable water facilities shall be limited to areas identified in the Future Land Use Element as an established urban service district including the exceptions identified in Chapter 4, Policy 4.7A.3 of the CGMP;

(3) It would be practical, feasible and cost-efficient to provide the service in a long-term expansion program;

(4) Extension of public potable water facilities would be in the public interest.

(5) Priority shall be given to projects located within the Primary Urban Service District for provision of water service.

Policy 11.1C.2. Expansion of public service areas shall be based on ability to serve new customers cost-effectively without jeopardizing levels of service for present and future customers in existing service areas.

Policy 11.1C.3. The County shall ensure that adequate capacity exists or will be provided concurrently with development to maintain adopted level of service standards. Development review staff will analyze facility capacity based on adopted levels of service and projected need resulting from the development.

Policy 11.1C.4. As part of the staff analysis, additional considerations will be evaluated in reviewing future development proposals. These considerations may include possible limitations in water supply, water quality problems and appropriate density allocations.

Policy 11.1C.5.: All development within established potable water service areas shall donate all needed water distribution lines and appurtenances along with suitable easements, and shall pay all applicable capital facility costs when services are ~~provided~~ reserved by the County. This policy shall be implemented by (a) formation of special assessment districts, or (b) execution of a standard developer's agreement, or (c) execution of an interim agreement in accordance with the Land Development Regulations.

Policy 11.1C.6.: If a transmission line must be installed to provide service to a property as requested by the owner, the County will allow a portion of the capital facility charge as a credit towards construction of the transmission line.

Policy 11.1C.7. To encourage developers to provide potable water capacity beyond their project's needs, the County shall consider cost recovery agreements. These shall be considered if the facility's construction cost exceeds the proportion of the capital facility charge to be credited to the developer. Credit shall be applied in accordance with the credit policy in effect at that time.

Policy 11.1C.8. All public and private water system improvements shall be located, designed and installed in a manner that is cost-effective, functional, responsive to fire protection needs of existing and planned future development, and compatible with surrounding natural systems. Water main extensions shall be aligned and installed in a manner that prevents undue loss of

established tree canopies or soil through induced erosion. Land features altered by construction shall be returned to their original condition as close as is reasonably possible. The timing and staging of the work will aim to minimize disruptive impacts, including impacts on residential quality of life and traffic flow.

Policy 11.1C.9. Martin County has developed detailed service area maps of regional utilities that will be used to implement the Land Development Regulations. The map(s) shall be amended as needed. The service area for private facilities shall be certified and regulated by the Florida Public Service Commission. The service areas for government-owned facilities shall be as determined by master plans or other appropriate documents authorized by the entity. Figure 11-1 shows the current regional utilities service areas in Martin County. Figure 11-2 shows the potential regional utilities service areas in Martin County.

Editor's note— Figure 11-1 is on file in the office of the Martin County Growth Management Department.

Editor's note— Figure 11-2 is on file in the office of the Martin County Growth Management Department.

Policy 11.1C.10. Potable water lines may be extended from the Primary Urban Service District to serve the following facilities, as described in the Jonathan Dickinson State Park Unit Management Plan:

River Campground restroom and 45 sites;
Boat ramp restroom;
Dump station;
Picnic area restrooms (3);
Concession building;
Environmental education and research center;
Cabins (12);
Staff residences (3);
Boy Scout Camp facilities;
Girl Scout Camp facilities;
Pine Grove Campground;
Camp Pavilion;
Ranger Station; and
Administrative/Maintenance Complex.

Such extensions are intended to reduce or eliminate the impact public facilities located in the specific portions of Jonathan Dickinson State Park listed above, have on the Loxahatchee River, and are considered to be waivers. These waivers shall not be used to serve, encourage or justify other development activity outside the Primary Urban Service District and shall not be used to encourage, support or justify an increase in density in surrounding or nearby areas, or any other amendment to the Comprehensive Growth Management Plan.

Policy 11.1C.11. Potable water lines may be extended from the Primary Urban Service District to serve:

~~(1) Fort Dawson Parcel as described in Comprehensive Plan Amendment 07-10, Indiantown International.~~

(~~2~~ 1) Lots 67, 68, 75, 89, 90, 119 through 122 and lots 191 through 220 of Canopy Creek PUD (f/k/a Tuscawilla PUD as recorded in Plat Book 16, Pages 039-001 to 039-036, Public Records of Martin County, Florida).

(~~3~~ 2) Bridgewater Preserve as recorded in Plat Book 16, Pages 033-001 to 033-007, Public Records of Martin County, Florida. Any increase in residential density shall require approval by the Board of County Commissioners for a PUD Zoning Agreement and revised master/final site plan which is consistent with the Rural Density future land use designation and requires that the project connect to the existing potable water and sanitary sewer lines.

~~(4) A project approved pursuant to a development order that may be issued by Martin County on the Tesoro Groves parcels 05-40-39-000-000-00010-1 and 05-40-39-007-000-00020-2as described in Official Record Book 02367 Page 0313 through 0317.~~

(~~5~~ 3) Seven J's Industrial Subdivision, as recorded in Plat Book 15, Page 97 and/or any replat or redevelopment of the property contained within the plat recorded in Plat Book 15, Page 97.

(~~6~~ 4) The County landfill, parcel number 07-38-40-000-000-00020-7.

(~~7~~ 5) Martingale Commons PUD f/k/a Palm City 95 PUD.

(~~8~~ 6) Sheriff's Shooting Range, parcel number 07-38-40-000-000-00030-5.

(~~9~~ 7) Parcel number 28-40-42-000-000-00020-5, parcel number 28-40-42-000-000-00040-1, parcel number 28-42-000-000-00011-0, and parcel number 21-40-42-004-000-00005-0 on S.E. Island Way.

(8) The 107-acre parcel of County owned land located on the north side of SW Citrus Boulevard, approximately 2,000 feet east of the Indiantown airport, parcel number 03-40-39-000-000-00011-0 and parcel number 34-39-39-000-000-00021-0.

Policy 11.1C.11.1. Facilities at the Martin Correctional Institution may receive potable water service from the City of Port St. Lucie in accordance with an interlocal agreement between Martin County, the City of Port St. Lucie and the Florida Department of Corrections.

Objective 11.1D. To maintain a 10-year schedule of capital improvements for public facilities, to be updated annually in conformance with the review process set forth in the Capital Improvements Element.

Measure: Completion of each year's capital improvements projects for potable water facilities.

Policy 11.1D.1. Proposed public potable water capital improvement projects will be evaluated and ranked according to the following priorities, listed in descending order:

(1) Protection of public health, safety and welfare, including of areas with contaminated wellfields or groundwater;

(2) Fulfillment of the County's legal commitment to provide facilities and services or to maximize the use of existing facilities;

(3) Provision of service to areas of high-density land use or high-intensity use; and

(4) Provision of service to enclaves and infill areas within the County's identified urban service areas or that will allow for efficient provision of necessary urban services.

Policy 11.1D.2. The 10-year Water Supply Facilities Work Plan, consistent with the Capital Improvements Element, shall be evaluated annually to ensure that necessary projects are prioritized based on current conditions and future demand.

Policy 11.1D.3. The water system projects listed in the Capital Improvements Element and the CIP will have assigned priorities in the 10-year Water Supply Facilities Work Plan. This listing may be evaluated and reprioritized annually.

Policy 11.1D.4. The 10-year Water Supply Facilities Work Plan shall be coordinated, as appropriate, with proposed State, County or municipal projects in public road rights-of-way to ensure consistency and cost-effectiveness of County efforts.

Objective 11.1E. To continue programs for conserving and protecting potable water resources in Martin County.

Measure: The reduction of the per capita water consumption rate from 120 gallons per day (1992 adoption of Martin County Comprehensive Plan) to 100 gallons per day by 2025.

Policy 11.1E.1. The County Commission and the Utilities and Solid Waste Management Department will continue to operate the water conservation program, which includes the following components:

(1) Compliance with and monitoring of native vegetation requirements, encouragement for use of xeriscape techniques and continued preservation of native vegetation, wherever practical and possible;

(2) Provision for using treated wastewater for irrigation to avoid the use of potable water;

(3) An education program to inform the public about water conservation techniques and devices; includes informing public about Mandatory Year-Round Landscape Irrigation Conservation Measures as detailed in 40E-24, F.A.C.

(4) Continuation of the leak detection and meter testing and repair program to minimize losses of water in the distribution system;

(5) Continuation of the SFWMD emergency water shortage rules during a declared drought or water emergency;

(6) Continued research and active enforcement of water-saving device requirements;

(7) Approval of dual conveyance systems with separate pipes for water and wastewater reuse to enable use of lower quality water for nonpotable uses.

Policy 11.1E.2. The County shall encourage reuse and reclamation of water for irrigation, landscape, agriculture, and industry as an alternative to the use of potable water supplies. A reclaimed water interconnect has been established for delivery of 0.375 MGD from the City of Stuart to Martin County. The County shall work with the Town of Jupiter Island to Interconnect the reclaimed water system to fully utilize the available water supply.

Policy 11.1E.3. The County shall continue to enforce a Water Conservation Regulation, which shall include time restraints for irrigation.

Policy 11.1E.4. The County will continue to cooperate with the SFWMD to investigate, evaluate and formulate techniques to develop new sources of groundwater and conserve existing supplies. Possible techniques are deep aquifer storage and recovery and reverse osmosis.

Policy 11.1E.5. New potable water wells and wellfields shall be located in areas where quantities of regulated materials do not exceed proposed criteria in the wellfield protection program.

Policy 11.1E.6. The County shall continue a wellfield protection program that prevents contamination of potable water sources by saltwater intrusion or chemical contamination and prevents adverse impacts to water levels and vegetation in adjacent wetlands.

Policy 11.1E.7. The County shall coordinate with municipalities and adjacent counties to project future well and wellfield needs. This effort should include determining needs for and locations of additional wellfields, including an assessment of the feasibility of joint development and operations between the County, the City of Stuart and the Town of Jupiter Island.

Objective 11.1F. To continue coordinating with the FDEP to determine deficiencies in potable water facilities.

Policy 11.1F.1. No new package plants shall be allowed except for those projects specified in Policy 10.1A.11. No connections to existing package plants shall be allowed if enforcement action by FDEP would preclude such connections.

Policy 11.1F.2. Existing customers of package plants will be connected to regional systems when:

(1) The useful life of the package plant has been exhausted; or

(2) Doing so is cost-effective; or

(3) A package plant falls into noncompliance with FDEP regulations and is required to connect by consent order.

Policy 11.1F.3. When package plants are connected to regional systems not purchased by the County, property owners receiving the benefit of connection shall pay all applicable connection costs, including capital facility charges.

Policy 11.1F.4. In accordance with Policy 11.1C.11 of the CGMP, if water lines become available in a public easement or right-of-way within 500 feet of Seven J's or Martingale Commons, the respective property will be required to connect to these lines within 365 days of notice of the availability of the lines. All properties deriving a special benefit from the connection shall pay for the expenses that are properly attributable to providing such connection under generally accepted accounting principles including, but not limited to expenses related to the line extension, reimbursement to the County for any funds advanced and all connection costs or

other applicable capital facility charges. Such expenses shall be apportioned to and collected from such properties in a manner that fairly and reasonably apportions such expenses based upon an objectively determinable methodology in accordance with Section 71.103 of the Martin County Code, or other similar method of cost recovery permitted under Florida law.

Goal 11.2. To coordinate growth management policies and water resource management. Martin County will coordinate and cooperate with the SFWMD and other local, regional, State and Federal agencies to ensure effective linkages between growth management and water resource management.

Objective 11.2A. To maintain a 10-year Water Supply Facilities Work Plan to link growth management with the SFWMD's Upper East Coast Water Supply Plan. The Work Plan projects will be described in the CIP and updated annually.

Policy 11.2A.1. The County shall consider the most current version of the Upper East Coast Water Supply Plan in the annual updates of the CIP.

Policy 11.2A.2. The 10-Year Water Supply Facilities Work Plan should meet current and projected potable water needs based on the availability and appropriate use of regional water resources and the combined use of alternative water supplies. The Work Plan shall incorporate alternative water supply projects from the SFWMD's Upper East Coast Water Supply Plan. The Work Plan shall be consistent with the County's Water Use Permit renewals.

Policy 11.2A.3 . The County shall work with each regional utility to define the ultimate boundaries of that entity's potable water and wastewater service areas and to coordinate development of consistent master plans and work plans when applicable. Every regional provider's master plan and/or work plan is encouraged to consider the Upper East Coast Water Supply Plan. This task shall be completed after the regional providers have adopted their respective work plans, if applicable.

Policy 11.2A.4 . Martin County shall coordinate with SFWMD, suppliers of potable water, and municipalities within Martin County on issues of potable water supply. The County shall make available information regarding changes in land use, population and demand projections, Level of Service, and other information relevant to the provision of potable water.

Objective 11.2B. To foster compatibility between the built and natural systems.

Policy 11.2B.1. The County shall coordinate with the SFWMD and other entities involved in the Upper East Coast Water Supply Plan to evaluate the long-term needs of the natural and built environments. The aim of this collaboration is to restrict activities that result in degradation or overuse of potable water resources and to assure adequate water supply for the competing needs of native ecosystems, agriculture and domestic and industrial users.

Policy 11.2B.2. The County shall coordinate with the SFWMD to ensure consistent planning throughout Martin County.

Policy 11.2B.3. The County shall support efforts to integrate land use and water resource planning to ensure the availability of water for regional water management purposes.

EXHIBIT C

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 4 FUTURE LAND USE ELEMENT

Chapter 4 FUTURE LAND USE ELEMENT

Adopted:	February 20, 1990	By Ordinance No. 373
Amended:	July 9, 1991	By Ordinance No. 400
Amended:	October 22, 1991	By Ordinance No. 403
Amended:	October 27, 1992	By Ordinance No. 419
Amended:	March 2, 1993	By Ordinance No. 423
Amended:	October 26, 1993	By Ordinance No. 430
Amended:	September 13, 1994	By Ordinance No. 448
Amended:	November 29, 1994	By Ordinance No. 450
Amended:	December 15, 1998	By Ordinance No. 537
Amended:	September 28, 1999	By Ordinance No. 555
Amended:	September 25, 2001	By Ordinance No. 598
Amended:	December 11, 2001	By Ordinance No. 606
Amended:	May 27, 2003	By Ordinance No. 630
Amended:	December 16, 2003	By Ordinance No. 638
Amended:	October 5, 2004	By Ordinance No. 654
Amended:	December 7, 2004	By Ordinance No. 658
Amended:	May 24, 2005	By Ordinance No. 668

EXHIBIT C

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 4 FUTURE LAND USE ELEMENT

Amended:	September 6, 2005	By Ordinance No. 675
Amended:	December 6, 2005	By Ordinance No. 687
Amended:	August 7, 2007	By Ordinance No. 758
Amended:	August 7, 2007	By Ordinance No. 765
Amended:	December 11, 2007	By Ordinance No. 776
Amended:	December 11, 2007	By Ordinance No. 777
Amended:	December 11, 2007	By Ordinance No. 781
Amended:	December 11, 2007	By Ordinance No. 782
Amended:	February 12, 2008	By Ordinance No. 787
Amended:	April 29, 2008	By Ordinance No. 795
Amended:	April 29, 2008	By Ordinance No. 796
Amended:	August 5, 2008	By Ordinance No. 803
Amended:	May 19, 2009	By Ordinance No. 822
Amended:	December 16, 2009	By Ordinance No. 840
Amended:	December 16, 2009	By Ordinance No. 845
Amended:	March 16, 2010	By Ordinance No. 857
Amended:	August 10, 2010	By Ordinance No. 870
Amended:	August 10, 2010	By Ordinance No. 877

EXHIBIT C

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 4 FUTURE LAND USE ELEMENT

Amended:	August 10, 2010	By Ordinance No. 879
Amended:	August 10, 2010	By Ordinance No. 880
Amended:	August 10, 2010	By Ordinance No. 882
Amended:	December 14, 2010	By Ordinance No. 888
Amended:	January 10, 2012	By Ordinance No. 907
Amended:	July 10, 2012	By Ordinance No. 913
Amended:	November 13, 2012	By Ordinance No. 921
Amended:	December 16, 2014	By Ordinance No. 965
Amended:	December 20, 2015	By Ordinance No. 984
Amended:	August 13, 2013	By Ordinance No. 938
Amended:	December 10, 2013	By Ordinance No. 946
Amended:	July 8, 2014	By Ordinance No. 957
Amended:	May 24, 2016	By Ordinance No. 997
Amended:	July 25, 2017	By Ordinance No. 1025
Amended:	August 22, 2017	By Ordinance No. 1032
Amended:	February 27, 2018	By Ordinance No. 1050
Amended:	August 21, 2018	By Ordinance No. 1080

EXHIBIT C

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 4 FUTURE LAND USE ELEMENT

Acronyms used in this chapter:

CGMP	Comprehensive Growth Management Plan
COR	Commercial Office/Residential
CR	County Road
CRA	Community Redevelopment Area
F.A.C.	Florida Administrative Code
FAR	Floor Area Ratio
FLUM	Future Land Use Map
F.S.	Florida Statutes
GC	General Commercial
GIS	Geographic Information System
LC	Limited Commercial
LOS	Level of Service
MUO	Mixed Use Overlay
NWI	National Wetlands Inventory
PUD	Planned Unit Development
SR	State Road
USD	Urban Service District

EXHIBIT C

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 4 FUTURE LAND USE ELEMENT

Section 4.1. Background

4.1.A. *Land use profile.* Martin County possesses a unique and valuable mix of physical and manmade resources centered around the Atlantic Ocean, St. Lucie Inlet, estuaries of the St. Lucie River, Indian River, Loxahatchee River, Lake Okeechobee and the urban and rural land areas linking these features. Martin County's total land area consists of approximately 344,316 acres or 538 square miles.

4.1.B. *Existing land use assessment.* Table 4-1 lists the existing land uses and the acreage of those land uses for unincorporated Martin County. The existing land uses are categorized by Department of Revenue Codes (DOR) and are assigned by the Martin County Property Appraiser to each property based upon the actual use of the land. The data listed in Table 4-1 can be seen graphically in Figure 4-1, 2010 Existing Land Use Map, identified and adopted as part of this Plan.

Editor's note— Figure 4-1 is on file in the office of the Martin County Growth Management Department.

Table 4-1

Existing Use	Acres
No category assigned	25.05
0000 Vacant Residential	5491.57
0100 Single-Family	20256.89

0110 Single-Family Transitional	57.23
0200 Mobile Home	649.33
0300 Multifamily ≥10 units	220.38
0400 Res Mobile Home Condo	16.11
0400 Residential SFD Condo	.28
0004 Vacant Condo	.06
0400 Residential Condo	.40
0482 Condo Recreation Area	7.54
0500 Cooperative	185.33
0600 Retirement Home Not Elig 196.192	.56
0700 Misc Residential Imp	364.93
0800 Duplex	198.31
0803 Triplex Income Producing	35.33
0804 Quadriplex Income Producing	31.92
0812 Multifamily Apts < 10	52.19
1000 Vacant Commercial	707.83
1001 Commerc. Transition Prop	2.14
1100 Stores 1-Story	174.30

1200 Mixed Use/Store/Office	69.49
1204 Mixed Use Condo	.61
1300 Department Store	39.58
1400 Supermarkets	1.99
1500 Regional Shopping Center	53.76
1600 Community Shopping Center	355.68
1700 Office Bldg Non-prof 1-Story	59.36
1800 Office Bldg Non-prof Multi-Story	19.18
1900 Prof Serv/Medical Offices	46.15
2000 Marina/Air/Bus Terminals	156.16
2100 Restaurant/Cafeterias	47.12
2200 Drive-in Restaurants	12.59
2300 Financial institution	42.32
2500 Repair Service Shops	18.31
2600 Service Station	42.06
2700 Auto Sales/Repair	68.88
2800 Mobile Home Parks, Parking Lots	430.06
3000 Florist Greenhouses	.79

3300 Nightclub Bars Lounges	1.01
3400 Bowling Alley/Skating Rink	27.77
3500 Tourist Attrn/Perm Exhib	30.53
3800 Golf Course/Driving Range	5267.57
3900 Hotels/Motels	43.44
4000 Vacant Industrial	829.60
4100 Light Equipment Mfg	135.87
4200 Heavy Equipment Mfg	6.24
4300 Lumber Yards, Sawmills	48.52
4500 Cannery Fruit/Veg/Brewers	82.84
4700 Minrl Process Cement Phosp	358.82
4800 Warehouse Distribution Term	400.55
4804 Warehouse Condo	7.22
4900 Open Storage Junk Yard	73.08
5000 Improved Ag Stables	3294.06
5200 Cropland Soil Cpcty CLII	16971.63
5300 Cropland Soil Cpcty CLIII	27192.41
5700 Timber Site Index 4	2649.53

6300 GrazLD Soil Cpcty CL III	92839.24
6400 GrazLD Soil Cpcty CL IV	27384.24
6500 GrazLD Soil Cpcty CL V	1682.34
6600 Orchard Groves Cltrus, Etc.	6791.33
6700 Poultry, Bees, Trop Fish, Etc.	838.70
6900 Ornamentals Misc Agric	4798.14
7000 Vacant Institutional	84.73
7100 Churches	671.51
7200 Private Schools/Colleges	248.12
7300 Privately Owned Hospitals	20.96
7400 Homes for the Aged	75.94
7500 Orphan/Nonprofit/Charity	713.63
7600 Mort/Cemeteries/Cremat	100.41
7700 Clubs, Lodges, Union Halls	31.65
7800 Sanit/Convalescent Home	27.10
8300 Public County Schools	617.01
8500 Hospitals	20.06
8600 Cnty other than prev cvrd	7145.44

EXHIBIT C

COMPREHENSIVE GROWTH MANAGEMENT PLAN

Chapter 4 FUTURE LAND USE ELEMENT

8700 St other than prev cvrd	64650.94
8700 St other than prev cvrd	121280.29*
8800 Fed other than Prev cvrd	2249.18
8900 Muni other than prev cvrd	289.02
9100 UtilityGasElectricTelep	11804.11
9109 HmOwn NoVal Utility Res	24.73
9149 HmOwn NoVal Utility Condo	6.21
9400 Right-of-Way Streets/Roads	850.72
9409 HmOwn NoVal ROW, Res	2326.31
9449 HmOwn NoVal ROW, Condo	1178.81
9499 ComAssn NoVal ROW, Comm	14.76
9500 RiversLakesSubmergedLands	525.80
9509 HmOwn NoVal RvrsLakes Res	2680.52
9549 HmOwn NoVal RvrsLakes Condo	26.86
9599 ComAssnNoValRivrLakesCom	117.62
9600 SewageDisposalSolidWaste	2.98
9700 Outdoor Rec Park Lands	461.54
9709 HmAssn NoVal RecArea, Res	3176.14

9749 HmOwn NoVal RecArea, Condo	198.43
9800 Central Assess Railroads	1078.76
9900 Vacant Acreage	16610.26
9901 Improved AC No Classed Ag	1236.24

*Acreage with parcel for Lake Okeechobee

Table 4-2 lists the future land use designations by acreage for Martin County based on data in the Geographical Information System (GIS). Although the GIS renders a better approximation of land use allocation, it is an approximation, not an exact, survey-grade calculation.

The land use inventory assessment reveals that major urban development continues in the coastal area between the Sunshine State Parkway (Turnpike) and the Atlantic Ocean. The most intense urbanization fans out from Stuart, the urban core of Martin County. West of the Turnpike the County has remained largely agricultural, with older, rural residential developments and mobile home developments supplemented by subdivisions of 20-acre lots. A western urban core occurs in the Indiantown area along the State Road 710 corridor.

Table 4-2
Existing Land Uses at Time of Evaluation and Appraisal Report 2009 and 2017

Future Land Use	Total Acreage		Developed Acreage		Wetland Acreage*		Undeveloped Acreage	
	2009	2017	2009	2017	2009	2017	2009	2017
Agricultural	191,473	189,060	127,207	172,745	39,031	39,011	25,235	16,316
AgRanchette	29,970	28,752	20,932	25,672	5,884	5,468.08	3,154	3,080
AgTEC	NA	1,735	NA	1,735	NA	5	NA	0.00

Rural Heritage	382	380	308	336	15	13	59	43
Rural Density Residential (0.5 upa)‡	13,568	9,932	7,210	8,378	2,855	1,893	3,503	1,553
Estate Density Residential (1 upa) ‡	1,961	1,957	1,780	1,885	181	181	0	72
Estate Density Residential (2 upa) ‡	13,111	12,148	10,758	11,325	1,678	1,411	675	823
Low Density Residential (5 upa) ‡	14,353	13,846	11,776	12,732	1,321	1,218	1,256	1,114
Medium Density Residential (8 upa) ‡	2,516	2,502	2,210	2,023	134	132	172	479
High Density Residential (10 upa) ‡	573	591	554	529	4	5	15	62
Mobile Home Density Residential (8 upa) ‡	1,330	1,302	1,189	1,208	85	85	56	93
Commercial General	1,692	1,633	1,291	1,351	99	94	302	282
Commercial Limited	355	337	273	252	7	7	75	85
Commercial Office Residential	643	680	427	469	23	27	193	212
Commercial Waterfront	460	530	388	396	34	33	38	134
Industrial	4,877	4,982	2,389	4,166	751	751	1,737	815

Power Generation	11,510	11,510	10,056	11,502	1,449	1,499	5	5
General Institutional	3,309	3,312	3,001	3,204	208	210	100	108
Recreation	1,532	6,459	795	6,456	282	1,542	455	2
Public Conservation	44,161	45,582	NA	45,574	11,593	12,098	32,568	7.35
Incorporated	6,105	6,212	NA	NA	NA	NA	NA	NA
Blank	143	3,581			NA		NA	
Water	292	238			NA		NA	
Totals	344,316	347,258	202,544	311,936	65,634	65,682	69,598	25,287

* Wetland acreage is based on four data sets in the Composite Wetlands Map: (1) Hydric+NWI; (2) Satellite+hydric; (3) Sat.+NWI; (4) Sat.+hydric+NWI.

‡ upa = units per acre

NA = not applicable

Source: GIS/SDE database linked with Property Appraiser's database.

Methodology of Table 4-2:

In 2009 and in 2017 the acreage of wetlands was determined using the County's Composite Wetlands Map. This map, adopted as Figure 9-1 of the Comprehensive Growth Management Plan (CGMP) is made up of 1981 hydric soils data, 1985 National Wetlands Inventory data and satellite classification data (Thematic Mapper and SPOT data) from multiple years. Areas indicated as wetlands by any two of the three sources were assumed to be wetlands. This has been the practice for numerous County studies between 2001 and 2017. Editor's note— Figure 9-1 is on file in the office of the Martin County Growth Management Department.

The 2009 data was generated by joining the GIS Future Land Use database with the 2009 Property Appraiser's database. Likewise, in 2017 the GIS Future Land

Use database was joined to the 2017 Property Appraiser's database. Each of these is a separate snapshot in time because each data base changes with time. As ownership changes and use of the land change, the Property Appraiser changes the Department of Revenue (DOR) codes on properties. Selected DOR codes identified by DOR as "vacant" are calculated for each future land use designation. The following vacant DOR codes were queried; 100, 107, 670, 700, 800, 990, 991, and 992. The Property Appraiser's Department of Revenue codes were created for taxation purposes, not for land use planning. For example, a parcel that may appear vacant to a passerby may have, for taxation purposes, Department of Revenue code 364. That code means that cattle graze on the property.

For the purpose of land area estimation, unincorporated Martin County, the undeveloped acreage identifies the amount of land area that could potentially be developed within a land use designation. Additionally, the County uses land development and environmental protection regulations to ensure that development is consistent with the CGMP.

Editor's note— Figure 9-1 is on file in the office of the Martin County Growth Management Department.

For the purpose of land area estimation, unincorporated Martin County land is either developed acreage (DVA), wetland acreage (WA) or undeveloped acreage (UDVA), adding up to total acreage (TA). Thus, TA = DVA + WA + UDVA. Conversely, UDVA = TA - DVA - WA. The undeveloped acreage identifies the amount of land area that could potentially be developed within a land use designation. Additionally, the County uses land development and environmental protection regulations to ensure that development is consistent with the CGMP.

Section 4.2. Analysis of Land Use Features

4.2.A. *Land use issues.* Martin County has experienced steady population growth over the years. All available evidence supports the premise that this population expansion will continue into the foreseeable future. Such growth will increase the pressure for urbanization, at the possible expense of agriculture uses and the natural environment. Therefore, it is important for the Board of County Commissioners and the citizens of the County to address growth and its associated impacts as a primary concern.

Many considerations need to be weighed in developing a growth management strategy. For example, a balance should be struck between the needs of the population and those of the natural systems in order to maintain the integrity of both. Specific land use issues that must remain in the forefront of growth management planning include the planned use of coastal areas and vacant lands, preservation of natural resources,

provision of public services and utilities, and maintenance of agriculture as a strong economic force. These issues are discussed below and detailed in relevant chapters.

(1) *Coastal area land uses.* The coastal area shall be synonymous with the Coastal High Hazard Area as defined in Chapter 2 and identified in Figure 8-5, Coastal Area Land Use, in the Coastal Management Element (Chapter 8).

Editor's note— Figure 8-5 is on file in the office of the Martin County Growth Management Department.

Figure 8-1 identifies public access points (i.e., boat ramps and public parks) and land zoned for waterfront commercial uses. Areas are identified for existing and future water-related land uses (i.e., restaurants, hotels/motels, boat yards and marinas). Additionally, urban uses are mapped as a general category to reflect the character and intensity of developed areas in the coastal zone. The relatively less extensive areas of underdeveloped or vacant land in the coastal zone are identified.

Figure 8-1 illustrates the concentration of water-dependent and water-related uses in such areas as the Manatee Pocket, Jensen Beach/Indian River Drive, SR 707/Rio, Indiantown and beginning along Hobe Sound adjacent to U.S. Highway 1 in the south County. While extensive areas of public holdings are evident, much of the coastal zone remains in private ownership. Planning for these private land uses has been a primary concern for Martin County. While significant public access points are located along the beaches and estuary rivers, a balance has been sought to control the often competing and incompatible areas of waterfront residential use with the water-dependent/related commercial and industrial uses. Therefore, the Future Land Use Map (FLUM) has been closely monitored to provide opportunities for both activities while recognizing the capacity limitation in Martin County's coastal zone.

Editor's note— Figure 8-1 is on file in the office of the Martin County Growth Management Department.

Rapid consumption of this land for residential acreage has left limited opportunities to introduce new waterfront commercial activities, except in redevelopment scenarios. Residential uses have always been an option in the Marine Waterfront Commercial future land use designation in Goal 4.13. Martin County added a no-net-loss policy to prevent the conversion of existing Marine Service Areas to permanent residential uses; conversion of a Marine Service Area requires the creation of a new Marine Service Area to ensure no net loss.

All new or reuse proposals to incorporate such development must assure that any potential negative impacts to established residential areas are minimized.

Properly located and adequately planned mixed-use developments are encouraged to provide public access to the water, provide for diversity and protect stable residential neighborhoods, which are to be enhanced and benefited by the nonresidential uses being proposed as neighboring land uses. Although this type of mix can be found in some planned unit developments (PUDs), more emphasis needs to be given to carefully selected commercial enterprises that protect existing neighborhoods. This approach will provide the immediate benefit of increased tax dollars and will also add to the tourist industry and the County's long-term economic base. Opportunities to introduce a more balanced use of the coastal areas can be found in the vacant parcels remaining. Redevelopment areas include the Jensen Beach/Indian River Drive Area, Rio, ~~Indiantown,~~ Port Salerno, which is the location of the Manatee Pocket, Hobe Sound and Jupiter Sound.

In general, uses in the coastal area should be balanced among those that help conserve environmental resources, provide recreational opportunities, support tourism and redevelopment, and enhance the local economy. As such, residential uses should be considered for integration with mixed use redevelopment projects. Nonresidential uses should be required to be consistent with policies established in the Coastal Management Element, should comply with the policies for location in Goal 4.13., and should generally be required to make any of the following uses compatible with existing residential neighborhoods:

(a) Boating and marine-related businesses;

(b) Businesses that provide the public an opportunity to enjoy water views, such as restaurants, and also enhance the local tourist industry;

(c) Businesses or groups of businesses that allow pedestrian activities in a waterfront environment, such as shopping and eating and drinking establishments;

(d) Recreational uses, particularly fishing, boating, swimming and related uses, and unique uses such as outdoor concert facilities.

(2) *Recreational land uses.* An important factor for determining appropriate recreational facilities for an area is the age structure of the population. Table 4-3 shows that the 65 and older age cohort will remain the largest component of the population in Martin County. The more active lifestyle of retirees and younger population groups require the County and other providers of recreation services to anticipate and plan for community parks that provide for a full range of facilities and opportunities. Martin County parks must continue to be planned

to accommodate the diverse needs of the County's population groups, which are more specifically identified in the Recreation Element (Chapter 7) and the Parks and Recreation Master Plan.

Table 4-3
Population Projections by Age for Martin County, 2020-2045

	Estimate	Projections					
Age	2016	2020	2025	2030	2035	2040	2045
Total	150,870	157,481	164,293	169,749	174,300	178,077	181,321
0—4	5,861	6,204	6,691	6,923	7,060	6,976	7,040
5—17	18,577	18,356	18,356	18,855	19,749	20,436	20,626
18—24	10,053	9,942	9,856	9,818	9,437	9,955	10,579
25—54	47,679	47,575	48,302	50,435	53,087	54,091	55,006
55—64	24,395	26,579	25,014	20,964	18,645	19,827	22,063
65—79	30,675	34,096	39,074	43,039	43,604	39,538	34,912
80+	13,630	14,711	17,000	19,715	22,718	27,254	31,068

Source: Bureau of Economic and Business Research, Florida Population Studies, Bulletin 178, June 2017.

(3) *Land uses to enhance the economic base.* Table 4-4 compares employment distribution by major industry groupings for the State and Martin and Palm Beach Counties. Palm Beach County is used for comparison since it is immediately to the south.

Table 4-4 shows that certain industries employ greater proportions of the labor force in Martin County relative to the State. These are agriculture, forestry, fishing and hunting; construction; and arts, entertainment and recreation. Martin County has lower representation than the State in transportation, information/communications and wholesale trade.

In 2000, the largest employment categories in the County were retail trade, health care and social assistance, and construction. Retail trade is dominant due to the high number of seasonal residents, particularly senior citizens and tourists. The spending by seasonal residents and tourists on goods and services brings money into the local economy and thus contributes to the economic base.

Table 4-4
Employment Comparison by Industry:
Percentage of Employment by Major Industry Groups for the State, Palm Beach County and Martin County 2017

Employment by Industry	Florida (percent)	Palm Beach County (percent)	Martin County (percent)
Natural Resource and Mining	0.9	1.3	0.9
Construction	5.7	5.7	7.8
Manufacturing	4.3	3.2	4.9
Trade, Transportation and Utilities	20.6	19	20.6
Information	1.6	1.7	1.1
Financial Activities	6.5	6.6	4.1
Professional and Business Services	15.5	17.4	12.4
Education and Health Services	14.8	16.2	20.1

Leisure and Hospitality	14.1	14.5	15.1
Other Services	3.3	4.3	4.0
Government	12.6	10.2	9.0

Office of Economic and Demographic Research July 2017

(4) *Land use coordination with abutting jurisdictions.* The County has identified mechanisms and programs to enhance coordination with adjoining local jurisdictions and municipalities. The Intergovernmental Coordination Element (Chapter 3) provides the specific means to assure maintenance of land use compatibility. This coordination includes County review and comment on proposed annexations, land use, zoning and site plan approval procedures and applications.

(5) *Vacant land use suitability.* The County requires urban development to locate in the urban service districts. Vacant land in these districts should be used for in-fill development to minimize leapfrog development. In-fill development within the urban service districts provides for cost-effective use of existing and planned infrastructure improvements.

Figure 4-2
Urban Service District Boundaries Map

As of December 6, 2005 the black and white drawing (8.5 x 11 inch) of the Urban Services District map was replaced with a map produced in the Geographic Information System at the same scale as the FLUM series.

Editor's note— Figure 4-2 is on file in the office of the Martin County Growth Management Department.

(6) *Natural resources and vacant land potentials.*

(a) *Soils and natural resources.* In western Martin County, the greatest amount of vacant land is in the Port Mayaca area near Lake Okeechobee. Most of the soils range from the Pineda-Riviera-Boca series to the Okeelanta variant mucks along Lake Okeechobee. As such, this area is mostly suitable for agriculture. Vacant acreage in the Indiantown area (associated with soils of the low ridges and knolls) is suitable for urban

development and lies in the urban service districts. (Refer to the Soil Survey of Martin County, Florida Area, Figure 4-3, which is incorporated into the CGMP by reference.)

Editor's note— Figure 4-3 is on file in the office of the Martin County Growth Management Department.

The south County area is dominated by Salerno-Jonathan-Hobe soils and soils of the flatwoods west of the Coastal Ridge and east of the Turnpike. Except for isolated intrusions of the estuarine system, from the Loxahatchee River on the south and the St. Lucie River on the north, this area is suitable for urban development. However, much of the area is removed from the urban core, so essential services would be provided from the south. Urban development is encouraged in the urban services area (Figure 4-2) along major arterial roadways.

The Coastal Ridge, also in the south County planning area, is characterized by Paola-St. Lucie sandy soils with Palm Beach-Canaveral soils to the east. The complex slopes of the Coastal Ridge, while developable, are fragile. They must be maintained wherever possible for conservation or recreation. In addition, the uplands of the Coastal Ridge and adjacent coastline along the Indian River from the south County line to the St. Lucie Inlet have been designated an aquatic preserve and manatee sanctuary by the Florida Department of Environmental Protection. This designation may limit development of boat docking facilities and precludes certain waterfront commercial activities in any of the vacant lands in this area. More intensive development opportunities for the Port Salerno/SR 76 Corridor Area exist in the area north of Cove Road and the Hobe Sound area just west of U.S. 1, as natural extensions of urbanization to the north and east.

With the exception of Hutchinson Island, the remaining planning areas surrounding the urban core of Stuart are both subject to development pressure and most readily available for planned expansion of urban services and facilities. This is where in-fill should be encouraged. The County has made progress in minimizing densities on Hutchinson Island and in many of the designated coastal areas discussed above. The Bessie series of soils that characterize the tidal swamps are located along the St. Lucie Canal and Okeechobee Waterway from the south fork of the St. Lucie River to State Road 76 (Kanner Highway). Some residential development has already occurred in this area. However, future development should be low intensity and regulated to assure preservation of environmentally sensitive natural communities.

(b) *Natural resource limitations on the uses of land by general category.* Although the soil survey for Martin County is one reference for site-specific natural resource information and is relied on for wetland/upland soil and vegetative analyses and topographic features, the County has devised an identification tool to provide more comprehensive data on soils and wetlands. Martin County uses the Composite Wetland Map (Figure 9-1, in the Conservation and Open Space Element, Chapter 9) to identify the approximate location of potential wetlands. The map consolidates many data sources into one useful tool. It consists of 1981 hydric soils data, 1985 National Wetlands Inventory data, satellite classification data (Thermatic Mapper and SPOT data) and Martin County environmental field data. Additional data sources will be considered as they become available.

Editor's note— Figure 9-1 is on file in the office of the Martin County Growth Management Department.

In conjunction with Martin County's continuing analysis of the location of future land uses, strict development regulations have been put into effect. As a result, the FLUM designations restrict the type and intensity of uses that can be supported. As an overall environmental constraint, all development must preserve wetlands and native uplands on-site in grouped, clustered orientation with relationship to off-site regional natural resources, in accordance with the policies in the Conservation and Open Space Element (Chapter 9) and the Coastal Management Element. In addition, septic tanks for nonresidential and residential uses are subject to the restrictions in the Sanitary Sewer Services Element (Chapter 10). Natural resource constraints by general land use categories are summarized as follows:

1) Single-family residential developments must have natural area preserves (wetlands and native upland areas) set aside for common open space, controlled by a central homeowners association. The common open space generally assures that the net density of the entire tract is lower than the density allowed by the FLUM. Where this land use type depends on septic tanks, development on suitable soils is required. Lower density and/or clustered residential developments are generally better suited to environmentally sensitive areas because they can preserve large, contiguous natural areas and reduce impervious surfaces.

2) Multifamily residential projects can cluster the density and recoup some of the density lost to open space by transfer of development potential to more suitable upland portions. The common open

space, in natural resource preserve areas, is similarly preserved and maintained in its natural state.

3) Commercial office and residential land uses are similar to multifamily areas. Natural preserve areas are incorporated in the development plan and maintained continuously. This category of uses should not generally be located in areas of extensive environmental sensitivity due primarily to significant lot sizes and the potential for runoff. However, compared to other commercial and industrial uses, commercial office and residential uses typically have less impact on the environment.

4) Limited and general commercial areas are restricted both in the intensity of site use (due to natural area preserve requirements) and in the type of use. Fuel service and other uses that could adversely affect the groundwater table are controlled by the Wellfield Protection Regulations. This category of uses should not generally be located in areas of extensive environmental sensitivity due primarily to significant lot sizes and the potential for runoff. Overall, general commercial uses have a greater impact on environmental resources than limited commercial uses.

5) Waterfront commercial uses are constrained by the limited access to the water. While the Coastal Management Element encourages this activity on sites that are not environmentally sensitive, all waterfront property, particularly multislip commercial docks, is controlled by the Boat Facilities Siting Plan and the Manatee Protection Plan (referenced in the Coastal Management Element).

6) Industrial uses are located most suitably in urban areas with access to transportation and proximity to markets/employees. Wetland and upland preservation areas are assured of continued viability by control of drainage outfall and other potentially noxious activities. Industrial runoff and waste products are regulated by the Wellfield Protection Regulations. Industrial uses generally have the greatest potential for environmental damage and should not be located in areas of extensive environmental sensitivity due primarily to significant lot sizes and the potential for runoff.

7) Agricultural uses must preserve wetland areas on-site. The wetland policies found in the Conservation and Open Space Element must be followed to ensure protection and preservation of on-site wetlands. Agricultural use of the land also must preserve native upland areas on-site or pay a fee-in-lieu-of that contributes to native upland preservation in another location. Agricultural uses are

required to preserve 25 percent of endangered, threatened or rare upland native habitat and 10 percent of common upland native habitat. Many low-intensity agricultural uses such as range (pasture) land can be compatible with environmentally significant resource areas.

8) Institutional development, whether for community-related services or for park and recreation development, is expected to preserve environmentally sensitive areas on-site. Intensive uses such as civic buildings can have negative environmental impacts and should not generally be located in significant natural resource areas.

9) Public utilities and major power generation facilities are intensive users of land. Although the majority of the acreage reserved for Florida Power & Light's use ~~in Indiantown~~ involves the reservoir for cooling water, such areas as the Barley Barber Swamp and the preserve area north of the existing power plant must be maintained in their natural state.

10) Private conservation areas should be set aside for permanent open space/natural preserves.

(c) *Preservation areas and vacant land.* Residential use of land near or on the coast, other water bodies or wetlands can threaten preservation of the very attributes that make the area attractive for growth. Such development should be planned to minimize that threat by assuring that environmentally sensitive and threatened habitats are preserved.

Certain areas in Martin County are recognized by federal, state and local programs as environmentally sensitive. Some of these are identified as lands to be protected by the Indian River Lagoon (South) Restoration Plan, Save Our Rivers, Florida Forever and other restoration programs recognized by Martin County. To implement the objectives of Policy 9.1K.1. and Section 13.2.E. and to encourage implementation of recognized land protection programs, Martin County has adopted policies under Objective 4.5F encouraging agricultural preservation, conservation of public open space and restoration of natural areas. These areas provide special public benefits, including recreational opportunities, life support services, tourism, commercial and sport fishing, scenic values, water purification, water recharge and storage, and sensitive habitats critical to the survival of endangered wildlife and plants.

Urban development in or adjacent to environmentally sensitive areas can significantly reduce their environmental values.

(d) *Agricultural use and vacant land.* Agriculture is one of the County's major exporting industries. It is concentrated at locations where soils, climatic conditions and other market and industry factors are especially suitable for crops such as citrus, vegetables and sugar cane.

As population growth continues and available land suitable for urbanization along the Coastal Ridge declines, development pressure will heighten on significant interior agricultural areas. This pressure can come in the form of higher land values for urban use, resulting in speculation and conversion to urban development. The loss of agricultural lands through urban encroachment adversely affects this export industry, as well as the entire service industry, which employs pickers, processors, refiners, shippers and similar workers. Agricultural land is not viewed by Martin County as vacant land use. Agricultural activities are vital to the continued diversity and health of the community. Lands used for agricultural purposes are to be protected for future benefits and community identity.

(e) *Natural vegetation and vacant land.* Vegetation has many uses for people. Besides providing habitat and food for wildlife, it produces oxygen, removes carbon dioxide, absorbs nutrients in waste, purifies the air and reduces soil erosion. A visible part of the only subtropical area in the continental United States, natural vegetation in Martin County is a strong attraction for many tourists and for permanent residents.

Urban development frequently removes or alters much of the County's natural vegetation. In many cases this is unnecessary and could be avoided. Many species, such as mangroves in coastal areas, are essential to the integrity and maintenance of the lands they occupy. Studies have shown enhanced value of residential property where native vegetation is preserved. The natural communities and their value for the planned future of Martin County are detailed in the Conservation and Open Space Element.

(7) *Public services supporting development.* The cost of energy is increasing as the supply diminishes. This cost is affecting the County's public service operations and maintenance requirements. Operation, maintenance and capital improvement needs to support development are becoming more costly.

Urban development located outside existing urban service areas to take advantage of low land costs results in higher future costs. This leapfrog development requires extension of public services past undeveloped land, which can be very costly in both dollars and energy. Isolated single-use developments, such as large single-family subdivisions removed from commercial or industrial centers, force residents into needlessly long trips for shopping, public schools and services. The County is encouraging the

development of multiple-use projects that consolidate urban activities so they can be served in a planned expansion of urban services within the boundaries set forth in Figure 4-2.

Transportation access is a key factor affecting the location and magnitude of growth. As coastal land diminishes and growth continues, development pressures will lead to demands for access to the County's westerly areas. However, the County shall only entertain suburban and urban uses and densities (i.e., commercial, industrial and residential densities in excess of two units per acre) for lands located in the Primary Urban Service District, as amended periodically (see Figure 4-2).

The long-term quality and livability of a residential neighborhood depends considerably on access to public services and facilities. These include potable water and regional sewer systems, adequate roads and drainage, street and sidewalk maintenance, recreational facilities, trash collection, fire and police protection, and schools. The FLUM and the provision of urban services, illustrated on Figure 4-2, are coordinated by Martin County. In an effort to assure that natural resources are maintained, natural systems are not degraded and the fiscal health of the County is maintained by a planned, timed and cost-effective capital improvement program, the County has staged needed infrastructure maintenance and improvements at realistic and achievable levels of service in the Capital Improvements Element (Chapter 14).

(a) *Urban Service Districts.* Population data (estimates and projections), projected demand for housing units, and the supply of vacant residential land shall be calculated for the Primary and Secondary Urban Service Districts. The tabular presentation shall compare the projected demand with the supply.

(b) *Schools.* In 2008 the Board of County Commissioners coordinated with the Martin County School Board to create the Public Schools Facilities Element (Chapter 17). The element creates concurrency standards preventing residential development from exceeding the capacity of public schools.

In compliance with Florida Statutes (F.S.) section 163.31777, Martin County entered into an interlocal agreement with the Martin County School Board and the City of Stuart to coordinate the planning and implementation of public schools with the timing and location of residential development. Suitable public school sites shall be determined by applying the Florida Department of Education siting criteria and site assessment by Martin County based on school-age population projections provided by the Martin County School Board. Site location shall be consistent with Policy 4.7A.

Editor's note— Figure 4-2 is on file in the office of the Martin County Growth Management Department.

(8) *Population and projected residential demand for units.*

(a) Population projections for demand of future residential housing units. The base data for population estimates and projections comes from the U.S. Decennial Census. In between decennial Census years, the University of Florida's Bureau of Economic and Business Research (BEBR) provides annual updates to the estimates and projections to the Office of Economic and Demographic Research (EDR). In the years in between the decennial Census, the permanent population estimates and projections provided by EDR shall be used in the annual update to the Population Technical Bulletin to project permanent and seasonal population for the planning horizon of the Plan.

Subtracting permanent population for the four Martin County municipalities from permanent population countywide provides the permanent population for the Martin County unincorporated area. Permanent population is defined as those residents who spend more than six months of the year in Martin County.

Persons per household (unincorporated Martin County) is the number of permanent residents living in residential housing units (classified by the Census as population in occupied housing) divided by the number of occupied housing units (provided by the US Census or American Community Survey in a given year) to arrive at the persons per household for unincorporated Martin County. Example using 2010 Census data: 124,120 persons / 54,709 units = 2.27 persons per unit.

Every ten years the Census provides detailed data on the number of housing units. American Community Survey Data shall be used as source data between Decennial Census years.

"Occupied housing units" are the number of residential housing units occupied by permanent residents who live in residential units rather than in prison or group homes.

All other housing units are classified by the census as "vacant housing."

The vacant housing is broken into a number of categories. "Vacant seasonal housing units" represent housing units that are occupied less than six months of the year by seasonal residents.

Occupied housing plus vacant seasonal housing equals the number of housing units actually in use.

The projected, permanent population (housing) divided by the permanent population (housing), provides the percentage increase in population. Multiply this percentage times the number of housing units actually in use by permanent and seasonal residents to determine the housing need in the future period. This provides the simplest and most accurate estimate for future housing needs. American Community Survey Data shall be used as source data between Decennial Census years.

(b) *Population projections for LOS determination.* Chapter 14, the Capital Improvements Element, outlines the data sources for determining the Level of Service (LOS) for various County facilities. The LOS for sewer, potable water, roads, and other facilities are calculated based on specific information related to those services, while the LOS measures for corrections, libraries collections, prisons and sidewalk/bikepaths are based on the weighted average population. The peak population for this purpose refers to the entire population in the peak season and includes permanent and seasonal residents in residential housing, as well as people in group homes, prisons and tourist facilities. The weighted average population as outlined in Chapter 1, Section 1.7.E. assumes that five months of the year are peak population months and weighs the permanent and peak populations accordingly to produce the weighted average population for both countywide population and for the population of the unincorporated area.

(9) *Residential capacity determination.* The challenge in providing for residential capacity is to provide adequate vacant land concentrated within the urban service districts to meet the needs of the projected population. The urban service districts are a key strategy for assuring that growth occurs where public facilities can be provided in an efficient cost-effective manner. Outside the urban service districts residential development is limited to twenty acre minimum lot sizes in the Agricultural Land Use and five acre lot sizes in the Agriculture Ranchette Land Use. A modest amount of growth happens outside the boundaries of the urban service districts and should be accounted for when projecting the increase in population that must be served within the urban service districts. When the undeveloped residential acreage within either the Primary Urban Service District or the Secondary Urban Service District no longer provides for projected population growth for the fifteen year planning period, planning for expansion of residential capacity shall commence. When the undeveloped acreage within either the Primary Urban Service District or the Secondary Urban Service District provides for no more than 10 years of projected population growth, the County is required to expand capacity.

The 15 year planning period for residential capacity shall begin with the 2010 Census and shall be updated to a new 15 year planning period every 5 years.

Residential supply calculations. Residential capacity represents the supply for residential development within the two urban service districts to meet the projected population demand for residential units in the 15 year planning period. The calculation of residential supply within the urban service districts shall include:

1. Vacant property that allows residential use according to the Future Land Use Map. The maximum allowable density shall be used in calculating the number of available units on vacant acreage. For the purpose of this calculation, the maximum allowable density for wetlands shall be one-half the density of a given future land use designation.
2. Subdivided single family and duplex lots. The following lot types shall be included in the residential capacity calculation:
   (a) Vacant single family or duplex lots of record as of 1982 developed prior to the County's tracking of development approvals.
   (b) Vacant single family or duplex lots of record platted after 1982.
3. Potential for residential development in Mixed Use Overlays.
4. Excess vacant housing not in use by permanent or seasonal residents. Excess vacant housing is a vacancy rate higher than 3% of the housing in actual use.
5. ~~The eastern Urban Service District and the Indiantown Urban Service District shall considered separately.~~

In a normal housing market there will always be a percentage of vacant housing. Calculations of "excess vacancy" are based on the assumption that 3% of the total unincorporated housing units will normally be vacant. When the vacant housing number exceeds 3% of the total number of housing units in actual use, the excess shall be included in the calculation of available residential capacity.

Residential capacity shall be re-calculated every five years to ensure that adequate capacity continues to exist for no less than ten years.

A small portion of the housing needs for the County's projected growth is regularly met by large lots outside the two urban service districts. An appropriate percentage of future growth will be assigned to the area outside the urban service districts based on the average number of certificates of occupancy for the preceding five years. The number of Certificates of Occupancy outside the urban service districts shall be divided by total

Certificates of Occupancy for the unincorporated area to determine the appropriate percentage.

(10) *Active residential development tracking system.* In addition to insuring adequate residential capacity, it is critically important to maintain a strategy for tracking the timing and location of active residential developments. Unlimited development approvals lead to an unlimited commitment to provide public facilities and to higher taxes and higher rates for public services. In order to have a feasible concurrency management system, it is necessary to know when and where approved and vested developments are going to happen. In order to have a cost effective concurrency management system and Capital Improvement Plan, it is necessary to limit approvals to the number of units actually needed for expected population growth. Committing to and building facilities for projects that don't happen is expensive and inefficient.

In order to limit active residential developments to units needed for population growth and to provide the necessary services in a cost effective manner, Martin County will implement and maintain a residential development tracking system.

The system will keep current information on all residential development approvals and will limit the location and timing of active residential developments in order to provide timely, cost-effective public facilities concurrent with development and consistent with a feasible Capital Improvement Plan.

The regulatory system to synchronize development with public facilities will include all active residential projects whose timetables for development include residential construction within the first five year period of the 15 year planning period. The same 15 year planning period used for residential capacity planning shall be used. The 15 year planning period for residential capacity began with the 2010 Census and shall be updated to a new 15 year planning period every 5 years.

Active residential development projects are those projects with final plan or final plat approval, where building permits can be pulled without further site plan review. Lots of record prior to 1982 and residential developments which are 90% complete will be deleted from the active development list. The amount of active residential development approved in the five year period of the 15 year planning period shall be limited to 125% of the demand for housing units projected for that period.

In the fourth year of the five year planning period, Martin County shall begin preparing the update to the residential capacity analysis described in Policy 4.1D.7. Need calculations must be available for the following five year period before a given five year period expires.

While the current pattern of the Future Land Use Map will remain as it is, the active residential development test will be used in conjunction with location and land suitability requirements in the review and approval of future project requests. These requirements shall include, at a minimum, location within the Primary or Secondary Urban Service District; protection of natural resources; adequate provision of facilities and services at the adopted level of service, and meeting all land suitability standards specified in the Future Land Use Element.

In the event a proposed site plan, within the primary or secondary urban service districts, does not pass the active residential development test, all review of the project will cease until the applicant reduces the number of units in the proposed site plan to comply with the active residential development test. When the 125% threshold has been reached and one or more proposed site plans cannot receive a reservation of capacity and be added to the active residential development tracking system the applicants shall have three options:

1. Request, in writing all application materials and application fees be returned, or
2. Continue review and receive tentative approval without a reservation of capacity.
3. Reschedule units to a later period.

If site plans in the active residential development system are breached, fail to maintain development timetables or if new population projections result in additional capacity demands then site plans or portions of site plans with tentative approval will be added to the active list. Site plans with the earliest tentative approval date shall be added first. If the number of residential units in a tentative site plan exceeds the available capacity for the five year period, only the number of units necessary to arrive at the 125% threshold may be added to the active list.

At no time will the active residential development pool for the five year period be allowed to exceed 125% of the five year housing need. All new residential developments, including projects which already have the approved land use designations, will be tested against the 125% five year capacity measure. If the 125% capacity measure has been reached, no new projects shall be permitted within the five year time period.

Platted or vested residential lots outside the Primary and Secondary Urban Service Districts shall not be included in the active residential list.

The housing recession and changes in state law that automatically extended development timetables have created a challenge for the timely planning of public facilities.

(11) *Future Land Use Map.* Martin County has provided a reasonable mix of opportunities for single-family, multiple-family and mobile home residential units to meet the demands of the various demographic groups and family characteristics. The FLUM identified in Section 4.3 and adopted with this Plan reflect Martin County's policy on the use of all lands under the County's jurisdiction. The policies of the Future Land Use Element will ensure fulfillment of the County's residential needs without creating urban sprawl.

Population estimates and projections for unincorporated Martin County shall be published to the Martin County web site and shall be updated annually.

Residential capacity for unincorporated Martin County shall be published to the Martin County web site and shall be updated every five years. Residential capacity shall be presented in tabular form for the Primary and the Secondary Urban Service Districts and shall include: Data identified in Policy 4.1D.2, Policy 4.1D.3, Policy 4.1D.4 and Policy 4.1D.5., CGMP.

The residential capacity shall be presented in tabular form with the projected population increases to demonstrate both the 10 year capacity and the 15 year capacity for both the Urban Service Districts (Primary and Secondary).

(12) *Future nonresidential requirements.*

(a) *Industrial land.* The supply of industrial land was estimated by Martin County staff, who evaluated current comprehensive land use plan designations for industrial land. That assessment indicated the presence of 5,933 acres of land that is already developed or may be developed for industrial use. The 5,933 acres includes 900 acres of the AG TEC future land use designation.

(b) *Commercial land.* Land associated with retail trade, services and office-related activities including government are collectively called commercial land. Lands with a Commercial Office/Residential, Limited Commercial, General Commercial and Marine Waterfront Commercial future land use designations are considered Commercial land. The future land use designations listed total 3,211 acres of land that is already developed or may be developed for commercial purposes.

(c) *Public utility needs.* The creation of a Public Utility land use category ensures fulfillment of the unique needs of electrical generation. The 11,510 acres in this category are designated for the public power plant operated by Florida Power and Light. The site includes the existing power plant and cooling pond, as well as the acreage set aside for the proposed plants and storage areas needed for them.

(d) *Institutional needs.* Martin County has approximately 49,000 acres designated as institutional use on the FLUM. This category accommodates three types of uses: public facilities (either publicly or privately operated), recreational facilities and conservation areas. Each use is specifically identified in the FLUM Series. Additional acreage is projected for, public facilities, dredge spoil management sites and additional recreation and conservation areas. Expansion plans for these uses are specified in greater detail in the following elements: Recreation, Conservation and Open Space, Solid and Hazardous Waste and Capital Improvements. The need for additional dredge spoil management sites is addressed in three documents: (1) Long-Range Dredged Material Management Plan for the Intracoastal Waterway in Martin County, Florida, Final Report, September 1993; (2) Long Range Dredged Material Plan for the Okeechobee Waterway-Crossroads to St. Lucie Lock, Martin County, Florida, July 1998; and (3) Long Range Dredged Material Management Plan for the Okeechobee Waterway-St. Lucie Lock to Palm Beach/Hendry County Line, August 2007. These are hereby incorporated by reference into the CGMP. Other long-term needs for dredge spoil management sites identified by the Florida Inland Navigation District will be incorporated by reference in the Plan, consistent with policies in the Intergovernmental Coordination Element.

Section 4.3. Future Land Use Map (Year 2025) and Map Series

As of December 7, 2004 the format for the adopted FLUM changed from 24 × 36 inch mylar sheets to the Martin County GIS.

The Year 2025 Future Land Use Map and the related map series, identified and adopted as part of this Plan, reflects Martin County policy for managing development and resource options. It is based on goals, objectives and policies stipulated throughout the CGMP together with analysis of population, housing and land resources; natural resources, including wetlands, floodplain areas, water recharge areas, fish and wildlife, and agricultural lands; capital improvement needs; and fiscal efficiency in the delivery of public facilities and services.

The densities denoted on the FLUM reflect the maximum gross residential density permitted on the land. The maximum density is not guaranteed by right.

Zoning and site plan review procedures found in the LDRs are consistent with this Plan. The LDRs to ensure that specific density and intensity assigned to new development is (1) compatible and consistent with established development and (2) provides equitable use of the land in conformance with the Capital Improvements Element (Chapter 14) and natural resource restrictions contained in the Coastal Management and Conservation Elements.

The land use pattern and capacities indicated on the Year 2025 FLUM and related map series are consistent with the Capital Improvements Element and adopted population projections. The land use pattern and capacities, along with estimated population growth, form the basis of the 10-year capital improvement plan shown in the Capital Improvements Element. The policies for allocating land use development are listed under Goal 4.13.

Section 4.4. Goals, Objectives and Policies

Goal 4.1. To manage growth and development in a way that is fiscally efficient, consistent with the capabilities of the natural and manmade systems, and maintains quality-of-life standards acceptable to Martin County's citizens.

Objective 4.1A. To continue to update and revise the Land Development Regulations as needed to implement all provisions of the adopted CGMP.

Policy 4.1A.1. Conformity of Land Development Regulations. The County's Land Development Regulations shall conform to all guidelines and standards contained in this Plan and shall:

(1) Regulate the use of land and water consistent with this element and the FLUM, while ensuring land use compatibility and providing open space;

(2) Regulate the subdivision of land;

(3) Protect environmentally sensitive lands and incorporate minimum landscape standards;

(4) Regulate areas subject to seasonal and periodic flooding and provide for drainage and stormwater management;

(5) Regulate signage;

(6) Ensure safe and convenient on-site traffic flow and parking needs;

(7) Protect potable water wellfields and aquifer recharge areas;

(8) Protect endangered and threatened species and species of special concern and their habitats as defined in the Florida Fish and Wildlife Conservation Commission's official list or as determined as regionally significant by the Treasure Coast Regional Planning Council;

(9) Ensure that any development orders and permits issued do not result in a level of service (LOS) below the base level of service standards adopted in the Capital Improvements Element;

(10) Include provisions for the transfer of development rights to:

(a) Protect environmentally sensitive areas and/or historic resources; and

(b) Specify those receiving zones in the Primary Urban Service District that can accept additional density and where in-fill development allows for new development and redevelopment of previously underused portions of the Primary Urban Service District.

Policy 4.1A.2. Supremacy of CGMP. Where conflict arises between the adopted Land Development Regulations and this Plan, the goals, objectives and policies of this Plan shall control all land use and development decisions.

Objective 4.1B. To maintain a concurrency management system to assure that no development orders or permits will be issued that result in a reduction of the adopted LOS standards at the time the impact of development occurs.

Policy 4.1B.1. Satisfaction of concurrency requirement. The concurrency requirement shall be satisfied and approval of a development permit may be granted if all LOS standards specified in the Chapter 14, Capital Improvements Element are met.

Policy 4.1B.2. Analysis of availability of public facilties. All requests for amendments to the FLUMs shall include a general analysis of (1) the availability and adequacy of public facilities and (2) the level of services required for public facilities in the proposed land uses. This analysis shall address, at a minimum, the availability of category A and category C service facilities as defined in the Capital Improvements Element. No amendment shall be approved unless present or planned public facilities and services will be capable of meeting the adopted LOS standards of this Plan for the proposed land uses. The Capital Improvements Element or other relevant plan provisions and the FLUMs may be amended concurrently to satisfy this criterion. The intent of this provision is to ensure that the elements of the CGMP remain internally consistent.

Compliance with this provision is in addition to, not in lieu of, compliance with the provisions of Martin County's Concurrency Management System. When a map amendment is granted under this provision, it does not confer any vested rights and will not stop the County from denying subsequent requests for development orders based on the application of a concurrency review at the time such orders are sought.

Martin County may adopt sub-area development restrictions for a particular site where public facilities and services, such as arterial and collector roads, regional water supply, regional wastewater treatment/disposal, surface water management, solid waste collection/disposal, parks and recreational facilities, and schools, are constrained and incapable of meeting the needs of the site if developed to the fullest capacity allowed under Goal 4.13 of this Growth Management Plan. The master or final site plan for a site that is subject to such sub-area development restrictions shall specify the maximum amount and type

of development allowed. Sub-area development restrictions apply to the following sites:

(1) The tract of real property described in the Warranty Deed recorded at OR Book 2157, Page 2403, of the Public Records of Martin County, which is limited to 365,904 square feet of nonresidential use, consistent with the assigned future land use designation, and on which residential uses shall not be allowed.

(2) The development of the tract of real property described in the Warranty Deed recorded in OR Book 2239, Page 2498, Public Records of Martin County, Florida, shall be restricted and managed as follows:

(a) Uses on the subject property shall be limited to nonresidential uses. Residential uses shall not be permitted.

(b) Uses on the property shall be consistent with the future land use designations for the property and the applicable land use policies of the Martin County Comprehensive Growth Management Plan (CGMP).

(c) The maximum intensities of uses on the subject property contained within a building or buildings shall not exceed 1,600,000 square feet.

(d) All future applications for development approval shall be processed as a Planned Unit Development (PUD).

(e) The maximum intensities of all uses contained within a building or buildings shall not exceed 500,000 square feet on the subject property (of which up to 25,000 square feet may be in marina uses) prior to December 1, 2015.

(3) This sub-area policy applies only to lands within the boundaries of Florida state parks within Martin County, Florida. Recreation facilities allowed in the state parks shall be limited to those supporting resource-based outdoor recreation activities specifically identified in the park's approved management plan which has been developed according to F.S. sections 253.034 and 259.032, and F.A.C. 18-2 including, but not limited to, hiking, biking and equestrian trails, swimming areas, interpretive visitor centers, resource-based camping accommodations for use by tents, pop-up campers and other recreational vehicles, and cabins. All uses within the state parks must conform to the park's management plan. Activities which are normally allowed in this land use category but are prohibited under this sub-area policy include fairgrounds, commercial marinas, ball fields, dredge spoil facilities and other user-based (active) recreation facilities.

Policy 4.1B.3. Internal consistency of elements. Maintaining internal consistency among all elements of the Plan shall be a prime consideration in

evaluating all requests for amendments to any element of the Plan. Among other considerations, the FLUM shall not be amended to provide for additional urban expansion unless the CGMP includes traffic circulation, mass transit, water, sewer, solid waste, drainage and park and recreation facilities necessary to serve the area, and the associated funding sources.

Objective 4.1C. To continue to inform the public about the development review process through the County website pages, which shall be updated routinely as revisions and changes occur.

Policy 4.1C.1. Minimum requirement for website pages. At a minimum the website pages should include:

(1) The procedures and costs involved in requests for CGMP amendments, rezonings, development plan reviews and building permits;

(2) Identification of the roles and responsibilities of each implementing agency involved in the development review process and the location of their offices for public contact;

(3) Identification of the roles and responsibilities of the Board of County Commissioners, Local Planning Agency, and Board of Zoning Adjustment with regard to the development review process;

(4) The Comprehensive Growth Management Plan, Land Development Regulations and Codes of Ordinances;

(5) The Future Land Use Map series, the Zoning Atlas and Figure 4-2 (Urban Service District Boundaries);

Editor's note— Figure 4-2 is on file in the office of the Martin County Growth Management Department.

(6) A basic description of concurrency management for each of the Category A and C public services.

Objective 4.1D. Martin County shall continue to collect and monitor development and population data to ensure sufficient land to address projected population needs while controlling urban sprawl and maintaining a cost effective capital improvements program.

Policy 4.1D.1. Tracking of approved site plans. Martin County shall track all approved residential site plans, including vested unbuilt development and approved mixed-use site plans. The status of approved final site plans shall be updated as units are completed, timetable extensions are approved or development orders are breached.