Element IV - INFRASTRUCTURE ELEMENT Goals, Objectives, and Policies City of Stuart, Florida Effective April 2002

GOAL STATEMENT A

The provision of needed public facilities in a timely manner which protects investments in existing facilities, maximizes the use of existing facilities and promotes compact urban development.

Objective A1. - Facility deficiencies.

Continuation of an active program that provides for the correction of existing public facility deficiencies within established facility service areas of the Capital Improvement Element.

*Policy A1.1.* Priority shall be given to work programs for correction of the deficiencies in and necessary improvements to the following facilities:

a. New raw water wells S-1 and S-2;
b. Water distribution system;
c. Drainage system.

*Policy A1.2.* Work programs and capital facility improvements to correct existing facility deficiencies shall be coordinated with and supportive of each other.

SANITARY SEWER

*Policy A1.3.* Through an aggressive multi-year capital investment program, the City has nearly eliminated storm water infiltration and inflow (I/I) into its waste water treatment system.

The City shall continue to monitor its infiltration and inflow (I/I) program and make improvements as resources permit.

*Policy A1.4.* The City shall continue to monitor the wastewater collection system inspection and condition assessment in order to document and evaluate the condition of each component, including manholes, pipelines and service laterals. Upon completion of the inspection program, rehabilitation alternatives shall be evaluated and priorities established.

HAZARDOUS WASTE

*Policy A1.5.* The City shall continue to support and participate with Martin County in monitoring hazardous waste from both large quantity and small quantity generators. The hazardous waste management program has been developed that included the following components:

a. Continue to monitor and update the number of businesses handling, storing and/or generating hazardous materials and the type and quantity of waste and materials generated within the City;
b. Continue periodic inspections of the facilities of waste generators and handlers to ensure that proper procedures are being followed;
c. Continue implementing procedures for emergency response and cleanup in the event of a hazardous waste spill, including provisions that can be attached as conditions to site plan approvals, when appropriate;
d. The City shall continue to cooperate with County, State and local agencies who are working for the establishment of public education programs on the proper handling and disposal of hazardous waste and materials; and
e. The City will continue to coordinate with Martin County to implement the small quantity generator program which will: a) establish a point of origin collection system for small gravity generators and b) construction and operation of a collection/transfer facility.

DRAINAGE

*Policy A1.6.* The City shall continue implementation of Land Development Code to ensure that stormwater treatment is consistent with South Florida Water Management District (SFWMD) permitting requirements.

POTABLE WATER

*Policy A1.7.* The City shall continue to coordinate with Martin County as a participant in the County's wellfield protection program. The City shall continue to regulate land use activities within the wellfield protection areas. This program contains the following:

a. Determination of appropriate and inappropriate land uses within the zones of influence;
b. Structural containment standards for regulated materials (e.g., hazardous and toxic materials);

c. Requirements for installation of monitoring wells;

d. Procedures for emergency reporting, cleanup, personnel training and material inventory; and

e. Establishment of financial responsibility.

*Policy A1.8.* The City shall provide for ongoing implementation of a preventive and corrective maintenance program for the water distribution system. This program shall include the following:

a. Maintain and update inventory of existing facilities;

b. An inspection program; and

c. Maintain and update inventory of field equipment and stock.

(Ord. No. 2205-2010, § 1(Exh. I), 9-27-2010; Ord. No. 2274-2014, § 1, 3-10-2014)

Objective A2. - Capital improvement priorities.

The City will maintain a five-year schedule of capital improvement needs for public facilities to be updated annually in conformance with the review process set forth in the Capital Improvement Element of this Plan.

*Policy A2.1.* Proposed capital improvement projects will be evaluated and ranked in order of the following priority level guidelines:

a. The protection of public health, safety and welfare to fulfill the City's legal commitment to provide facilities and services, or to maximize the use of existing facilities;

b. Serving annexed enclaves and infill areas within the City's identified service area that will allow for efficient provision of necessary urban services.

*Policy A2.2.* The City shall encourage the installment of gravity lines and lift stations to serve neighborhood[s] currently on septic tanks.

*Policy A2.3.* The City shall continue to implements its sewer connection ordinance.

(Ord. No. 2205-2010, § 1(Exh. I), 9-27-2010)

Objective A3. - Future public facility needs objective and policies.

To plan for and provide sufficient public facilities and services at an established level of service necessary to meet future public needs of the Capital Improvement Element.

*Policy A3.1.* The City, through the Public Works Department, shall continue to update and implement the recommendations of the December, 2009 Boyle Engineering Water and Wastewater Needs Assessment Report.

*Policy A3.2.* The Five-Year Public Facility work programs and the Ten-Year Water Supply Facilities Work Plan, consistent with the Capital Improvements Element of this Plan, shall be evaluated on an annual basis in order to ensure that necessary projects are prioritized based upon current conditions and future resident demand. Based upon the annual evaluation, amend the Comprehensive Plan as necessary, including updating level of service standards.

*Policy A3.3.* Expansion of service areas shall be based on ability to serve new customers in a cost effective manner without jeopardizing levels of service for present and future customers within existing service areas.

(Ord. No. 2166-08, § 1, 1-12-2009)

Objective A4. - Solid waste.

The City shall commit to ongoing monitoring and reduction of solid waste collection through its Residential Single Stream Recycling Program and a voluntary Commercial Recycling Program.

*Policy A4.1.* The City shall continue to coordinate and cooperate with Martin County in updating and implementing the County-wide Solid Waste Master Plan. To this end, the City puts special emphasis on the following:

a. Continue implementation of Residential Single Stream Recycling Program and a voluntary Commercial Recycling Program;
b. Continue implementation of a hazardous waste management program;
c. Continue active participation by the City Director of Public Works on the Martin County Board of County Commissioners Solid Waste Advisory Committee; and
d. Continue support of reusable landfill materials for mulching, composting and other environmental uses.

(Ord. No. 2205-2010, § 1(Exh. I), 9-27-2010)

Objective A4D. - Drainage.

The City shall encourage Low Impact Development (LID) practices in development projects to reduce, treat, infiltrate, and manage runoff flows caused by storms, urban runoff, and impervious surfaces.

*Policy A4.1.* Post development runoff volumes shall not exceed pre-development runoff volumes for a storm event of three-day duration and 25-year return frequency for parcels greater than one acre. The same criteria shall apply for a storm event of three-day duration and ten-year return frequency for parcels less than one acre.

*Policy A4.2.* The City shall, through the Public Works Department, coordinate all drainage design, construction and maintenance activities that occur within the City limits or affect the City in any way. This will require active and regular communication with and monitoring of Martin County, the South Florida Water Management District and the Florida Department of Transportation.

*Policy A4.3.* The City shall continue to adhere to its Master Stormwater Drainage Plan and it will continue to address water quality and quantity and an ongoing funding source.

(Ord. No. 2205-2010, § 1(Exh. I), 9-27-2010)

Objective A5. - Potable water and sanitary sewer.

Land use types, densities and intensities shall be designated within the FLUE to promote development in Stuart to efficiently utilize the available surplus capacity of water and sewer facilities. The City of Stuart Ten-Year Water Supply Facilities Work Plan is hereby incorporated into the Comprehensive Plan and used as the basis to determine future water supply needs for the City and the Stuart water service area. The City shall maximize the use of existing facilities and discourage urban sprawl.

*Policy A5.1.* Improvements and new construction additions to the City potable water distribution system shall consider fire flow and protection requirements within the City limits.

*Policy A5.2.* The City has executed an Interlocal Agreement For The Sale And Purchase Of Supplemental Water and Wastewater Capacity With Martin County which shall be used as the basis to define potable water supply responsibilities in the City and City service area. This policy recognizes that for emergency purposes City water lines are currently interconnected with adjacent County water lines.

*Policy A5.3.* The City shall continue the Wellfield Operating Program with the intent of preventing contamination of the potable water source by saltwater intrusion, chemical contamination from industrial activities, or migration of the leachate of the closed City landfill.

*Policy A5.4.* Projected potable water demands through the year 2028 will be met by implementing the 20-year Interlocal Agreement For The Sale And Purchase Of Supplemental Water And Wastewater Capacity with Martin County, executed on November 14, 2008, which provides the City with potable water from an alternative water supply.

*Policy A5.5.* Coordinate with the South Florida Water Management District and Martin County to update the City's Ten-Year Water Supply Facilities Work Plan within 18 months of each successive update of the Upper East Coast Water Supply Plan.

*Policy A5.6.* At the time of each required Evaluation and Appraisal Report (EAR), the City shall assess progress toward implementing the directives of the City's Ten-Year Water Supply Facilities Work Plan and the Upper East Coast Water Supply Plan.

*Policy A5.7.* The City shall continue implementation and conduct a periodic review of the City's Sewer Master Plan.

(Ord. No. 2166-08, § 1, 1-12-2009; Ord. No. 2205-2010, § 1(Exh. I), 9-27-2010)

Objective A6. - Planning for public facilities objective and policies.

Upon adoption of this Plan, to establish criteria for the extension of necessary public facilities which maintain adopted level of service standards and discourage urban sprawl.

*Policy A6.1.* Extension of service to any area is contingent upon approval of the Department of Public Works and the City Commission indicating that:

a. Surplus utilities capacity is available as determined by the Department of Public Works;
b. It would be practical and feasible to provide the service in a long-term

expansion program;

c. Extension would be in the best interests of the City.

*Policy A6.2.* A determination by the City of whether adequate potable water supplies are available to serve a new development shall be made prior to issuing a building permit.

*Policy A6.3.* The following level-of-service standard is hereby adopted and shall be used as the basis for determining the availability of facility capacity and the demand generated by new development:

| Facility Standard | Level of Service |
|---|---|
| Sanitary sewer facilities | 80 gallons per capita per day (residential)<br>1,100 gallons per acre per day (nonresidential)<br>115 gallons per capita per day (total wastewater flow rate) |
| Solid waste facilities | 3.5 pounds per capita per day (residential)<br>0.007 pounds per square foot per day (nonresidential) |
| Drainage facilities | Retention of half of the runoff of a 25-year/3-day-duration storm event for parcels greater than 1 acre, and retention of half of the runoff of a 10-year/3-day storm event for parcels less than 1 acre |
| Finished Potable water | 250 gallons per day per equivalent residential connection |

| | The following equivalents shall be used for the purposes of determining the impacts of Proposed Future Land Use Plan amendments, based upon Table of Land Use Densities and Intensities (Future Land Use Element, Policy A7.2) |
|---|---|
| Low Density Residential | 250 gallons per day per unit |
| Multiple-Family Residential | 200 gallons per day per unit |
| Retail Commercial | 100 gallons per day per 1,000 square feet |
| Office Commercial | 150 gallons per day per 1,000 square feet |
| Industrial | 30 gallons per day per 1,000 square feet |
| Institutional | 100 gallons per day per 1,000 square feet |

*Policy A6.4.* The City shall monitor and report raw water and finished water usage on an annual basis to determine the effectiveness of its water conservation programs. Based upon the results of the annual summary, the City shall modify, as necessary, its water supply (ten-year water supply planning) per capita consumption rates used in the Ten-Year Water Supply Facilities Plan.

(Ord. No. 2166-08, § 1, 1-12-2009; Ord. No. 2205-2010, § 1(Exh. I), 9-27-2010)

Objective A7. - [Use of existing facilities and prevention of urban sprawl.]

The City shall maximize the use of existing facilities and discourage urban sprawl. The Future Land Use Element will continue to provide for mixed use opportunities through implementation of the Stuart Urban Code.

*Policy 7.1.* Through the City's Future Land Use Map and land use policies, the City will encourage mixed-use development, infill development and redevelopment which will maximize the use of existing facilities and discourage urban sprawl.

(Ord. No. 2205-2010, § 1(Exh. I), 9-27-2010)

Objective A8. - Conservation of potable water resources.

The City shall maximize the use of existing facilities and discourage urban sprawl. The City shall maintain or reduce per capita use of potable water.

*Policy A8.1.* The City shall continue to implement its water conservation program by:

a. Enforce existing landscaping provisions which require the preservation and/or use of desirable species of native and drought-tolerant vegetation as a portion of all new development landscape plans;
b. Using treated wastewater on public and private lands, where feasible, and the use of potable water for irrigation purposes;
c. Sponsoring ongoing education programs to inform the public of various water conservation techniques and devices;
d. Employing its existing leak detection and meter testing and repair program to minimize losses of water in the distribution system;
e. Limit landscape irrigation to two-days per week.
f. Implementing South Florida Water Management District's (SFWMD) emergency water shortage rules during a declared drought or water emergency;
g. Requiring that development must connect to central potable water facilities as it becomes available; and
h. Enforcing its Land Development and Florida Building Code standards requiring low volume plumbing fixtures for new construction.

*Policy A8.2.* The Future Land Use Map and land use policies will continue to provide for

mixed-use opportunities.

(Ord. No. 2205-2010, § 1(Exh. I), 9-27-2010; Ord. No. 2274-2014, § 1, 3-10-14)

Objective A9. - Protection of natural groundwater recharge areas and drainage features.

The City shall continue to protect, and where possible enhance the functions of natural recharge areas and drainage features to ensure an adequate supply of recharge waters to the surficial aquifer.

*Policy A9.1.* The City shall include in its annual update of the City's Five-Year Capital Improvements Project list the first five years of the 10-year Water Supply Facilities Work Plan to ensure consistency between the Infrastructure Element and the Capital Improvements Element. Annual updates of the Capital Improvement Projects list will continue to include projects listed in the Work Plan beyond the five year time frame.

*Policy A9.2.* City Land Development Regulations shall continue to reflect the increased retention/detention capability of drainage basins in order to reduce stormwater outfall runoff to the St. Lucie River.

*Policy A9.3.* During redevelopment activities the City shall, where feasible, require retrofitting of the existing stormwater outfall system to provide for greater retention/detention capability.

*Policy A9.4.* New potable water wells and wellfields shall be located in areas where no regulated materials (e.g., hazardous and toxic materials) will be used, handled, stored, or produced within the projected cones of depression of such wells or wellfields. At the time future wellfield locations are identified, establishment of incompatible land uses within the cones of depression of such wells shall be prohibited.

*Policy A9.5.* The City shall continue to actively enforce the Planned Unit Development (PUD) open space requirement of 30 percent of gross site area for RPUDs and 25 percent for CPUDs. This open space area will preferably preserve existing native vegetation and will consist of pervious surfaces.

*Policy A9.6.* The City will cooperate with and assist the County and the South Florida Water Management District in developing a program to map prime natural groundwater aquifer recharge areas.

(Ord. No. 2205-2010, § 1(Exh. I), 9-27-2010)

**Cross reference—** Conservation element, Element V.