

INFRASTRUCTURE

**City of St. Augustine Comprehensive Plan
EAR-Based Amendments**

INFRASTRUCTURE ELEMENT

SANITARY SEWER SUB-ELEMENT

SS Goal

Wastewater facilities shall continue to be provided in an efficient manner supporting the intended development of the City depicted by the Future Land Use Map.

SS Objective 1.1

The City shall construct, operate and maintain the municipal wastewater facilities to protect the water quality function of natural drainage features. The measurable target for this objective is the effluent water quality discharged from the wastewater treatment plants as measured by the Department of Environmental Protection (DEP).

SS Policy 1.1.1

All future point source discharges into the Intracoastal Waterway shall be prohibited. The City continues to support the reuse of treated wastewater.

SS Policy 1.1.2

The City will operate and maintain the municipal wastewater facilities in accordance with the Department of Environmental Protection (DEP) and the Environmental Protection Agency (EPA) permit conditions. This includes periodic monitoring of effluent water quality required by the DEP and EPA permits.

SS Objective 1. 2

The City shall maintain effluent disposal, sludge disposal, pump station or force main facilities,. The City shall also correct any subsequently identified deficiencies. The measurable target for this objective is providing wastewater facilities at the adopted level of service standard.

SS Policy 1.2.1

The City establishes the following priorities for replacement and providing for future sanitary sewer needs:

- | | |
|--------------|---|
| 1st priority | projects which serve to protect public health and safety; |
| 2nd priority | projects which provide safe and functional wastewater services to serve existing residential areas; and |
| 3rd priority | projects which provide wastewater services to serve new development. |

SS Objective 1. 3

The City shall act to discourage the proliferation of urban sprawl and maximize the use of the existing wastewater facilities. The measurable target for this objective is the area served by the City wastewater system.

SS Objective 1. 4

The City shall provide wastewater facilities at the adopted level of service standard within the service area for both existing and future development. The measurable target for this objective is the provision of wastewater facilities at the adopted level of service standard: a minimum of 220 gallons capacity per dwelling unit.

SS Policy 1.4.1

Consistent with public health and safety, sanitary sewer facilities shall be in place and available to serve new development no later than the issuance by the local government of a certificate of occupancy or its functional equivalent.

SS Policy 1.4.2

The City shall maintain the adopted level of service standards for the service areas for sanitary sewer.

SS Policy 1.4.3

The City will provide a sewer system level of service consisting of a minimum of 220 gallons per day per dwelling unit.

SS Policy 1.4.4

The City will continue to operate and maintain the municipal wastewater system based on the existing master planning process established by City staff and under the aegis of the Director of Public Works. The master planning process addresses: maintenance of the existing wastewater facilities; maintenance of the wastewater data base; prioritized rehabilitation projects; and periodic updates of the master plan.

POTABLE WATER SUB-ELEMENT

PW Goal

Water facilities shall continue to be provided in an efficient manner supporting the intended development of the City depicted by the Future Land Use Map.

PW Objective 1. 1

The City shall continue to maintain these existing facilities. The measurable target for this objective is providing potable water facilities at the adopted level of service standard.

PW Policy 1.3.3

The City continues to support reuse of treated waste water to preserve potable water supplies.

PW Policy 1.3.4

The City shall continue to use effluent for irrigation and process water at the Wastewater Treatment Plant to conserve potable water.

PW Policy 1.3.5

The City shall implement water conservation measures referenced in the water conservation plan approved as part of the city's Consumptive Use Permit and other additional water conservation measures, including, but not limited to:

- Requirement for low-flow plumbing fixtures
- Customer notifications for increases of 10% or greater in water use from previous meter reading
- Citizen awareness and education programs
- Requirements for multi-family submeters
- Promoting the use of Florida-friendly landscaping (University of Florida, Institute of Food and Agricultural Science's *A Guide to Florida-Friendly Landscaping*)
- Promoting participation in the Florida WaterStarSM program
- Implementation of the landscape irrigation provisions in Rule 40C-2.042(2), Florida Administrative Code.

PW Objective 1. 4

The City shall act to discourage the proliferation of urban sprawl and maximize the use of the existing potable water facilities. The measurable target for this objective is the area served by the City potable water system.

PW Policy 1.4.1

The City shall continue to enforce the City Code which requires development inside the City limits to connect to the City's potable water system if a City water line exists within the boundaries of the development.

PW Objective 1. 5

The City shall provide water service at the adopted level of service standard within the service area for both existing and future development. The measurable target for this objective is the provision of potable water facilities at the adopted level of service standard.

PW Policy 1.5.1

The City shall maintain the adopted level of service standards for the service districts for potable water.

PW Policy 1.5.2

The City will provide a water system level of service consisting of a minimum of 220 gallons per day per dwelling unit at a minimum pressure of 20 psi. Consistent with public health and safety, potable water facilities shall be in place and available to serve new development no later than the issuance by the local government of a certificate of occupancy or its functional equivalent.

PW Policy 1.5.3

Prior to approval of a building permit or its functional equivalent, the local government shall consult with the applicable water supplier to determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of issuance by the local government of a certificate of occupancy or its functional equivalent.

SOLID WASTE SUB-ELEMENT

SW Goal

Solid waste services and facilities shall continue to be provided in an efficient manner supporting the intended development of the City depicted by the Future Land Use Map.

SW Objective 1.1

The City shall continue to provide solid waste service and facilities for existing and future needs of the City. The measurable target for this objective is the provision of solid waste facilities at the adopted level of service standard:- the level of service standard is four (4.0) pounds per person per day.

SW Policy 1.1.1

The City establishes as its solid waste level of service the ability to dispose of 6.75 pounds of solid waste per day per capita.

SW Policy 1.1.2

The solid waste level of service shall mirror the County's to dispose of four (4.0) pounds of solid waste per day per capita.

SW Policy 1.1.3

Consistent with public health and safety, solid waste facilities shall be in place and available to serve new development no later than the issuance by the local government of a certificate of occupancy or its functional equivalent.

SW Policy 1.1.4

The City shall provide collection services at a frequency and level of convenience to protect the health and safety of the community.

SW Objective 1.2

The City shall have a recycling program, and will strive to recycle thirty percent (30%) of the volume of solid waste collected. The measurable target for this objective is the percentage of solid waste collected that is recycled.

SW Policy A41.2.1

The City shall continue to provide recycling for residential and nonresidential solid waste customers.

STORMWATER MANAGEMENT SUB-ELEMENT

SWM Goal

Stormwater management shall be provided which supports the intended development depicted by the Future Land Use Map, and which protects the function of natural drainage features.

SWM Objective 1.1

Stormwater management facilities shall be provided to control discharges necessitated by rainfall events to support continued protection of water quality, water quantity, and enhancement to the natural to the natural environment for both existing and future development at the adopted level of service. The measurable target for this objective is the provision of stormwater management facilities at the adopted level of service standard. These systems may incorporate methods to collect, convey, store, absorb, inhibit, treat, use or reuse water to prevent or reduce flooding, environmental degradation and pollution, or otherwise affect the quality and quantity of discharges.

SWM Policy 1.1.1

- The City shall develop and adopt a Citywide Master Stormwater Plan including a detailed review of current practices in Stormwater Management, develop strategies for compliance with regulatory requirements and complete an update to the May 1995 Stormwater Facilities Master Plan. The City shall implement the recommendations of the Citywide Master Stormwater Plan by continuing to fund and establish priorities as the studies for each watershed or sub-basin are completed.

SWM Policy 1.1.2

The City shall implement the Citywide Master Stormwater Plan, and shall take action to address deficiencies for the affected areas, by identifying appropriate implementation mechanisms and possible revenue sources. The City shall continue to update its inventory of all private and public drainage facilities, easements and right-of-ways.

SWM Policy 1.1.3

In the same way that the City's development regulations implement the Future Land Use Plan, the Citywide Master Stormwater Plan shall implement the goals, objectives and policies of the Stormwater Management Sub-Element. The City establishes the following priorities for Stormwater Management System improvements:

1. projects which serve to protect essential services;
2. projects which serve to protect residential areas, with an emphasis on residences in the historic district;

3. projects which serve to protect private developments established prior to 1985; and
4. projects which serve to protect against repetitive flooding.

SWM Policy 1.1.4

The City shall coordinate with the Florida Department of Environmental Protection (FDEP), the St. Johns River Water Management District (SJRWMD) and St. Johns County in the identification of all drainage basins in the City to assure uniformity of basin designation.

SWM Policy 1.1.5

There shall be no reduction in the flood storage capacity or the natural functions and values of the floodplain in the City in areas designated as regulatory floodways as updated by FEMA Flood Insurance studies. Encroachments shall be prohibited within designated regulatory floodways including but not limited to fill, new construction and development improvements that would result in any increase in flood levels.

SWM Policy 1.1.6

The City shall regulate development within flood prone areas to minimize flood storage capacity reduction, so that the post-development conditions do not exceed pre-development conditions and ensure that there will not be any adverse impacts either upstream or downstream which will afford protection of life and property within flood prone areas and/or floodplains.

SWM Policy 1.1.7

The City shall coordinate with the Florida Department of Environmental Protection (FDEP) and the St. Johns River Water Management District (SJRWMD) to utilize water quality data and other appropriate biological indicators to design Stormwater Management Systems that facilitate the maintenance and/or improvement of the existing water quality.

SWM Policy 1.1.8

The City shall work with the Florida Department of Environmental Protection (FDEP), the St. Johns River Water Management District (SJRWMD) and the U.S. Environmental Protection Agency (EPA) to educate and distribute information on the surface water resources in the City.

SWM Policy 1.1.9

The City shall maintain compliance with the National Pollution Discharge Elimination System (NPDES) permit and the requirements of the Federal Clean Water Act amendments. The City will continue with planning activities and implementation of the Stormwater Management Program.

SWM Policy 1.1.10

The minimum Level of Service Standard (LOS) for the Municipal Stormwater Management System is based on the 10-year, 1-hour storm event, which equals 3.1-inches of rainfall for the duration of the event.

SWM Policy 1.1.11

The City shall continue to operate and maintain the Municipal Stormwater Management System.

SWM Objective 1.2

The City shall continue to update their Development Criteria which shall require the implementation of Stormwater Management procedures that ensure water quality and quantity is improved and that adequate facility capacity is available to serve future developments.

SWM Policy 1.2.1

New development shall be required to construct adequate Stormwater Management facilities according to State, Regional and City standards.

SWM Policy 1.2.2

The City shall continue to manage and regulate development within the 100-year floodplain through enforcement of the City floodplain management regulations.

SWM Policy 1.2.3

Consistent with public health and safety, stormwater management facilities shall be in place and available to serve new development no later than the issuance of a certificate of occupancy or its functional equivalent.

SWM Policy 1.2.4

The City shall require that the Stormwater Management facilities meet or exceed the adopted Level of Service Standards (LOS), and that capacity is available concurrent with the impacts of the development.

SWM Policy 1.2.5

As the Citywide Master Stormwater Plan completes planning, design and environmental analyses for the watersheds and sub-basins studied, findings shall be presented to the City Commission for review and recommendation concerning consistency with or needed amendment of, the Stormwater Management Sub-Element of, the Plan.

SWM Policy 1.2.6

The City shall encourage the incorporation of natural features into the construction of new Stormwater Management facilities which provide vegetation and buffers which promote wildlife habitat.

SWM Policy 1.2.7

Water quality standards for stormwater discharges shall comply with state water quality standards set forth in chapters 62-3, 62-4, 62-302 and 62-550, Florida Administrative Code (F.A.C.). Surface and ground water discharges from Stormwater Management Systems cannot cause or

contribute to a violation of state water quality standards. These standards shall apply to all new development and redevelopment regardless of project size.

Objective 1.3

The City shall adopt regulations to require routine maintenance of privately controlled drainage facilities in a manner consistent with maintenance criteria established for publicly maintained facilities.

SWM Policy 1.3.1

Routine maintenance schedule shall include, but shall not be limited to the following:

1. mowing the retention and detention areas and their respective drainage swales;
2. limitation of trash or debris;
3. cleaning out ditches, swales, pipes and structures;
4. sedimentation and erosion prevention through re-grading or vegetating; and
5. dredging of ponds.

AQUIFER RECHARGE SUB-ELEMENT

AR Goal

To protect the function of natural groundwater aquifer recharge areas.

AR Objective 1.41

The City shall protect the function of Florida Aquifer recharge areas inside the City limits identified by the St. Johns River Water Management District. The measurable targets for this objective are: [1] land uses on property inside the City which are in the surficial Aquifer recharge area; and [2] land uses on property in St. Johns County which are in the surficial Aquifer recharge area.

AR Policy 1.1.1

The City shall prohibit uses which could adversely impact the function of the wellfields within the county, to the extent lawful, such as hazardous wastes, underground petroleum tanks, etc. -

AR Policy 1.1.2

Within 600 feet of any future potable water well field located inside the City limits, the City shall prohibit all activities and uses which could adversely impact the function of the surficial Aquifer recharge area and well head protection area. The City shall work with St. Johns County to prohibit activities or uses that could adversely impact surficial Aquifer recharge areas and well head protection areas for well fields located outside of the City limits.

AR Policy 1.1.3

The City shall continue to maintain staff level contact with St. Johns County to encourage the restriction of land uses which could adversely impact the function of the surficial Aquifer recharge area around the City's well field.

AR Policy 1.1.4

The City shall comply with all applicable federal and state regulations related to well head protection areas.

AR Policy 1.1.5

The City shall maintain the existing 1,500 feet permanent protective easement around its potable water well field which is located outside of the City limits in St. Johns County. This easement prohibits: water supply wells larger than 4 inches in diameter; surface mining of shell, phosphate, sand or other minerals; septic tanks within 500 feet of any City owned or operated water well; and any development which requires more than 10% of the develop area to be covered by an impervious surface.

The City shall also maintain the existing 200 feet permanent protective easement around each well site in the City's potable water well field which is located outside of the City limits in St. Johns County. These easements prohibit: water supply wells larger than 2 inches in diameter; surface mining of shell, phosphate, sand or other minerals; septic tanks; and any development which requires more than 10% of the developed area to be covered by an impervious surface.

The City shall consider, when feasible, regulations to new development to provide reuse irrigation water lines when reclaim water is available from St. Johns County Utilities through Interlocal agreement.