# SANITARY SEWER, SOLID WASTE, DRAINAGE, POTABLE WATER AND AQUIFER RECHARGE ELEMENT

# GOAL 4

The City of Green Cove Springs shall provide sanitary sewer, solid waste, drainage and potable water facilities and services to meet the needs of existing and future populations.

## **Objective 4.1**

The City shall assure implementation of the Concurrency Management System, which will include procedures to ensure that when a development permit is issued, adequate facility capacity is available or will be available when needed to serve the development. All system improvements for replacement, expansion, or increase in capacity of facilities shall comply with the adopted level of service standards for the facilities.

# Policies

**4.1.1** The City shall use the following-level of service standards as the basis for determining the availability of facility capacity and the demand generated by developmentestablished in the Capital Improvements Element, policy 8.3.1.

Facilities	Level of Service Standards
Sanitary Sewer	120 gallons per capita per day;
Solid Waste	8.0 pounds per capita per day;
Potable Water	-150 gallons per person per day
Drainage	
	10

Minor Internal Facilities 10-year return period storm;

24-hour duration;

Storage basins 25-year return period storm

for peak flow attenuation; 24-hour duration;

Major Drainage Facilities 100-year return period storm;

24-hour duration;

Water Quality Treatment of stormwater

41

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runoff shall be required for all development, redevelopment and, when expansion occurs, in existing developed areas. The stormwater treatment system or systems can be project specific, serve sub-areas within the City or be a system to serve the entire-City. Regardless of the area served and in accordance with Chapter-17-25, F.A.C., the stormwater treatment systems must provide alevel of treatment for the runoff from the first one (1) inch ofrainfall for projects in drainage basins of 100 acres or more, or asan option for projects with drainage basins less than 100 acres, thefirst one-half (1/2) inch of runoff in order to meet receiving waterquality standards of Chapter 17-302, Section 17-302.500, F.A.C.

Stormwater discharge facilities shall be designed so as to not lower receiving water quality or degrade the receiving water body below the minimum conditions necessary to assure the suitability of water for the designated use of its classification as established in Chapter-17-302, F.A.C. It is intended that all standards in these eitations are to apply to all development and redevelopment and that anyexemptions or exceptions in these eitations, including project sizethresholds, are not applicable. Infill residential development within improved residential areas or subdivisions existing prior to theadoption of this comprehensive plan, must ensure that its postdevelopment stormwater runoff will not contribute pollutants which will cause the runoff from the entire improved area or sub- division to degrade receiving water bodies and their water quality as statedabove.

Water Quantity Post-development runoff from

the site shall not exceed

peak pre-development runoff rates.

- **4.1.2** In order to ensure that these level of service standards are maintained, methodologies for determining capacity and demand shall incorporate appropriate peak demand coefficients for each facility and for each type of development proposed.
- **4.1.3** All improvements for replacement, expansion, or increase in capacity shall be compatible with the adopted level of service standards for facilities.

4.1.4 The City shall review facility demands and capacity information when building permits

are issued.

- **4.1.5** To ensure that adequate facility capacity is available at the time a development permit is issued or when needed to serve a development, the City shall annually review procedures in accordance with Objective 4.7 and its implementing policies.
- **4.1.6** Prior to approval of a building permit or its functional equivalent, the City shall consult with its water suppliers to determine whether adequate water supplies are available to serve the new development no later than the anticipated date of issuance of a certificate of occupancy or its functional equivalent. The City shall ensure with its water suppliers that adequate water supply and potable water facilities shall be in place and available to serve the new development no later than the issuance of a certificate of occupancy or its functional equivalent.

#### **Objective 4.2**

The City shall continue to provide safe and adequate sanitary sewer service to all existing and future developments located within the City limits. Existing Sanitary Sewer deficiencies shall be scheduled for correction in the Capital Improvements Element.

#### Policies

- **42.1** All future development shall continue to be required to connect to the City's Sanitary Sewer Collection system.
- 42242.1 The City shall continue to ensure proper maintenance of its sanitary sewer facilities and ensure wastewater effluent meets all state and federal requirements.
- 422 All sanitary sewer improvements and replacements shall be corrected in accordance with the priorities set forth in the Capital Improvements Element.
- **423** Sanitary sewer improvements as identified by the 2015 Sanitary Sewer Master Plan creating a regional Waste Water Treatment Plan at the Harbor Road shall be prioritized.

#### **Objective 4.3**

The City shall provide efficient and economical solid waste service in a manner which protects public health, safety and welfare. ecordinate with the county in the collection, transfer, and disposal of solid waste and in the development of resource recovery programs.

# Policies

- **4.3.1** The City shall coordinate with the County in a solid waste reduction program, which will reduce the amount of solid waste the City disposes to landfills.
- **4.3.2** The City shall encourage all commercial and industrial establishments to participate in the recycling program. The City will encourage industrial developments to recycle or reuse other wastes not included in the recycling program.
- **4.3.3** All solid waste improvements and replacements shall be <u>corrected provided</u> in accordance with the priorities set forth in the Capital Improvements Element.

#### **Objective 4.4**

Stormwater management facilities shall be designed in accordance with St Johns Water Management District (SJRWMD) and Florida department Department of Environmental Protection (FDEP) criteria that reduces flooding, promotes aquifer recharge, minimizes degradation of water quality in surface and ground waters and protects the functions of wetlands. Adequate stormwatermanagement will be provided to afford reasonable protection from flooding and to preventdegradation of quality. Existing Drainage deficiencies shall be scheduled for correction in the-Capital Improvements Element.

# Policies

**441** The City's land development regulations shall require review of all proposed development to ensure adequate retention/detention of stormwater runoff to maintain surface water quality, to encourage percolation, and reduce impacts to drainage canals, surface water, and groundwater. The City shall require proof of obtaining the appropriate drainage and stormwater permits and approvals from the (FDEP), SJRWMD and Army Corps of Engineers, prior to issuing development permits. No development shall be allowed to degrade surface water quality below the standards set forth in Chapter 40C-42, F.A.C. and Chapter 17-25, F.A.C. Chapter 62-330, FAC.

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Formatted: List Paragraph, Left, Indent: Left: 1.24", Right: 0.94", Space Before: 0.05 pt, Line spacing: Multiple 1.01 li, Tab stops: 1.24", Left EAR BASED AMENDMENTS – ADOPTED 08/02/2011 442441Manmade drainage systems including swales and ditches shall be routinely maintained to prevent the interruption of stormwater flows.

- 443<u>442</u> The City shall implement recommendations of its Stormwater Master Drainage Plan to ensure adequate drainage is provided for existing and future development.
- 444 In accordance with <u>Chapter 62-330, FAC, Chapter 40 4, F.S.</u>, new development and redevelopment's drainage facilities must be constructed so as to prevent peak <u>flows</u> <u>discharge rates</u> after development from exceeding the peak <u>flow discharge</u> prior to development.
- 445<u>443</u>All drainage improvements and replacements shall be corrected in accordance with the priorities set forth in the Capital Improvements Element.
- 446<u>444</u> The City shall review and approve all drainage plans for project that are exempted from the stormwater permit requirements of the DEP, SJRWMD and Army Corps of Engineers to assure compliance with the all City regulations and requirements.

## **Objective 4.5**

The City shall maintain land development regulations which provide for the conservation and protection of its potable water resources. Existing potable water deficiencies shall be scheduled for correction in the Capital Improvements Element.

#### Policies

- **4.5.1** The City shall require low-use showers and toilets for all construction within the City and areas outside the City which use city water.
- **4.5.2** The City shall, in its landscaping ordinance, <u>encourage require</u> low water use features and vegetation and water conserving irrigation practices.
- **4.5.3** The City shall continue to participate with the SJRWMD in their water conservation efforts. The City shall maintain in the Land Development Regulations that contain the features of the SJRWMD Model Water Conservation Ordinance for Landscape and Irrigation for the development of conservation and preservation policies for the use and re-use of water resources.
- **4.5.4** The City shall incorporate the alternative water supply projects from the 2017 SJRWMD Water Supply Plan into the Capital Improvements Element.
- **4.5.34.5.5** The City shall continue to be a member of the North Florida Water Supply Partnership promoting and developing strategies regarding water conservation.
- **4.5.4** The City shall implement the improvements identified in the 2016 Reclaimed Water System Master Plan. eontinue to determine the potential for water reuse and coordinate the results with the SJRWMD and DEP.

**4.5.54.5.6** No development, except for structures required for water supply, shall be located within 50 feet of existing and future public potable water wellfields. Within 500' feet of the wellheads, the following uses shall be prohibited: Landfills, facilities for bulk storage, handling or processing of materials on the Florida Substance list; acid manufacture; cement, lime manufacturing; distillation of bones; manufacture of

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2012, does this need to be updated?	

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explosives; fat, tallow, or lard rendering; garbage or dead animal reduction; activities that require the storage of use or transportation of restricted substances, agricultural chemicals, hazardous toxic waste, medical waste, and petroleum products; mines; feedlots or other commercial animal facilities; automobile wrecking or junkyards; excavation of waterways or drainage facilities which intersect the water table and, paper and pulp manufacturing. No septic tanks or new sewage treatment plants shall be allowed within 500' feet of the wellheads. Only those uses identified in the "Wellfield Protection Plan for the City of Green Cove Springs" shall be located within 500 feet of the public potable water well.

# 4.5.64.5.7 The City shall implement the improvements identified in the 2018 Water Master

<u>Plan.</u> All potable water improvements and replacements shall be corrected in accordance with the priorities set forth in the Capital Improvements Element.

#### Objective 4.6

Future development shall be required to connect with central sewer and water systems and provide drainage facilities which maximize the use of existing facilities and discourage urban sprawl.

# Policies

- **4.6.1** The City shall annually monitor the condition of level of service standards for solid waste, potable water, sanitary sewer, and drainage facilities. The Planning and Zoning Department shall be assigned the task of reviewing all development orders to determine their current and future impacts on the capacities of existing public facilities.
- **4.6.2** No permit shall be issued for new development which will result in an increase in demand on deficient capacities or if adequate facility capacities for solid waste, potable water, sanitary sewer and drainage facilities is not available prior to or concurrent with the development's impact.
- **4.6.3** The City shall continue to maintain existing public facilities in such a manner so as to encourage in fill development on vacant parcels of land that are within a close proximity to existing public facilities.
- 4.6.44.6.3 Extension of public utilities outside of the City limits shall be in the areas designated in the Green Cove Springs Water and Sewer Service Area in the Interlocal Agreement with Clay County Utility Authority (CCUA).

### **Objective 4.7**

The City shall protect the functions of natural drainage features and floodplains by implementing land use controls which limit the density of development in floodplain areas.

# Policies

**4.7.1** The City shall enforce land development regulations which limit the density of dwelling units within FEMA designated 100-year floodplains such that existing flood storage is maintained and allowable densities do not create potential flood hazards, or degrade the natural functions of the floodplain and does not alter the capacity of the floodplain.

#### **Objective 4.8**

To conserve and protect the natural functions of groundwater resources, the City shall coordinate with the SJRWMD to identify all natural groundwater recharge areas

## Policies

**4.8.1** Green Cove Springs shall seek assistance from the SJRWMD and coordinate with Clay County to protect identified natural groundwater recharge areas in the City limits.

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