

CHAPTER 6
SANITARY SEWER SUB-ELEMENT

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A. OVERVIEW

The following Future Land Use categories are considered to be urban and require the provision of sanitary sewer facilities and services consistent with the level of service standards set out in this Sub-element and in the Capital Improvements Element, unless specifically noted elsewhere in the Plan; Urban Low Intensity, Urban Medium Intensity, Urban High Intensity, Commercial, Industrial, Mixed Use, Activity Center, Planned Community, and Low Impact Urban. Each of these categories is described in the Future Land Use Element and geographically depicted by the Future Land Use Map. Additional requirements regarding sanitary sewer service are found in the Future Land Use (Chapter 1), Conservation (Chapter 12), Coastal Management (Chapter 11), and Capital Improvements (Chapter 15) Elements of the Comprehensive Plan.

Wastewater service within the unincorporated area represents the complete spectrum of facilities/systems, consisting of septic tanks, package plants, and area-wide systems. The majority of these package plants are privately-owned. The area-wide systems serving portions of the unincorporated region include both privately-held and publicly-owned facilities. The publicly-owned systems are either operated by municipalities or the County. In accordance with the provisions of the Comprehensive Plan, the County has, and continues to negotiate service area agreements with municipalities. Within these agreed upon areas, maps of which are included in the supporting documentation for this Sub-element, the appropriate utility will be the primary provider of central wastewater services.

The areas, to be accorded wastewater service by the County, are depicted by the maps found in the supporting documentation accompanying this Sub-element. The provision of wastewater service is intended to adequately accommodate the projected populations within these areas.

Additionally, the provision of reclaimed water to meet the demand for non-potable uses, chiefly landscape irrigation, is one of County's water supply strategies. This sub-element contains policies that will enhance and expand the County's reclaimed water usage with the purpose of reducing potable water demand. The specific actions to expand the County's reclaimed water facilities and supply are outlined in the Water Supply Facilities Work Plan that is incorporated into the Potable Water Sub-Element and also supported by policies in this Sub-Element. The facility improvements that implement the reuse strategy are included in the Five-Year Capital Improvements Program that the County prepares on an annual basis and incorporates into the amended Capital Improvements Element.

There are numerous privately owned "package plant" systems operating in the County sewer service areas. Several of the County sewer service areas lack regional facilities but contain smaller systems. The development of these small facilities into a regionally based system would greatly benefit the County in terms of economy and reliability of service.

This Sub-element, which is intended to comply with the requirements of Chapter 163, Florida Statute,

and Rule 9J-5, Florida Administrative Code, presents a plan addressing subjects as: the use of on-site systems the increase/expansion of County systems, and consolidation and regionalization of the wastewater collection, treatment and disposal systems under its control.

The adopted components of the Sanitary Sewer Sub-element include the Overview, the Goals, Objectives and Policies. The "support" components of this Sub-element have been printed separately.

B. GOALS, OBJECTIVES, AND POLICIES

GOAL:

6.1 Ensure that adequate and environmentally acceptable sanitary sewer systems are provided to areas appropriate for service within the unincorporated Volusia County.

OBJECTIVE:

6.1.1 Volusia County shall require that the following policies which establish minimum level of service standards are met when planning capital improvements and for reviewing applications for development approval.

POLICIES:

6.1.1.1 Volusia County adopts level of service standards providing for an annual average daily volume applicable for each of the unincorporated sewer service areas as depicted in the following table:

| Service Area | Sanitary Sewer Level of Service Standards | | |
|---------------|---|---------------------------------------|---------------------------------------|
| | Residential Connection (ERU/GPD*) | Non-Residential | |
| | | Office | Retail, Institutional & Industrial |
| Deltona North | 200 | 0.15 GPD per sq. ft. of Building Area | 0.10 GPD per sq. ft. of Building Area |
| Southwest | 200 | | |
| Northeast | 90 | | |
| Spruce Creek | 144 | | |
| Southeast | 175 | | |

*ERU – Equivalent Residential Unit/GPD - Gallons per Day

Within unincorporated areas encompassed by an adopted service area agreement with a municipality, the municipal level of service standards shall be applicable.

- 6.1.1.2 Provide the major wastewater facilities collecting wastewater from a new development in accordance with the adopted Capital Improvements Program and Budget as amended on an annual basis.
- 6.1.1.3 Volusia County shall continue to require "advanced secondary treatment" of wastewater (including high-level chlorination and sand filtration) at all County owned wastewater treatment plants with capacities of 0.1 MGD or more.
- 6.1.1.4 Volusia County shall require that all new development which is located within an area encompassed by an adopted municipal sewer service agreement, shall comply with the Sanitary Sewer Sub-element and the level of service standards adopted by said municipality.
- 6.1.1.5 Central sewer is not required for non-urban areas, except as required by the Florida Administrative Code, Chapter 64E-6. Lines should only be extended if the absence of such facilities would result in a threat to the public health or safety or a designated rural area is inside an approved sewer service area with an agreement that describes the method and timing of when these services would be provided, or the Comprehensive Plan is amended to change rural areas to urban areas.
- 6.1.1.6 Central sewer systems may be installed in Rural Communities, Rural Villages, and Rural Recreational areas that are established in the Comprehensive Plan provided that said systems are designed to serve only the development within the geographic area encompassed by the Rural Community or Recreational area.
- 6.1.1.7 Volusia County may negotiate agreements with developers for the County to provide wastewater facilities in accordance with the Master Plan for the affected County sewer service area and the County's design and construction standards.
- 6.1.1.8 Except as may otherwise be permitted by this Sub-element, the extension of wastewater lines and the establishment of central wastewater systems outside of sewer service areas (County, municipal, or other as established by an adopted service area agreement) shall be prohibited unless such extension or facility construction will mitigate existing or potential problems of public health, safety, or welfare or other exceptions under the guidelines delineated in the Future Land Use Element.
- 6.1.1.9 Except as may otherwise be permitted by this Sub-element, Volusia County shall require the installation of a central sewer collection and transmission system. The County may require the installation of a wastewater treatment plant, in accordance with County land development regulations where connection to an existing central sanitary sewer system is not available and connection to a central sanitary sewer system when said system is available within in areas designated for urban uses by the Future Land Use Map.
- 6.1.1.10 Prior to 2009, Volusia County shall adopt an Industrial Wastewater Pretreatment Ordinance which will require industrial and commercial land uses which generate wastewater substantially different (in waste strength and chemical constituents) from

residential wastewater to pre-treat the effluent prior to its discharge to a County-owned treatment facility.

- 6.1.1.11 Volusia County shall regularly inspect all County-owned and private wastewater treatment facilities to ensure proper operation and maintenance. All County-owned wastewater treatment plants shall be operated and maintained in a manner which complies with the applicable State regulation(s).
- 6.1.1.12 County sewer service areas may include undeveloped land inside existing unincorporated urban areas where the developer agrees to provide necessary urban services. In this instance, the necessary facilities and services are to be guaranteed in an enforceable development agreement. An enforceable development agreement may include, but is not limited to, development agreements pursuant to County land development/utility regulations, or an agreement or development order issued pursuant to Chapter 380, (F.S.).
- 6.1.1.13 Septic tanks are only allowed under any one of the following applicable circumstances provided that the septic tank has been approved by the Florida Department of Health:
- a. the lot is not designated for urban land uses by the Future Land Map, or
 - b. the lot is one acre or larger in size and is designated as either Low Impact Urban or Urban Low Intensity by the Future Land Use Map and the lot is within a single family subdivision (new or previously approved under Volusia County Ordinance 72-2 or 88-3, as amended), or
 - c. the septic tank is installed in conjunction with the construction of a single family residence upon an existing single family lot or a new subdivision of six (6) lots or less in size (exempt or approved under Volusia County Ordinance 72-2 or 88-3, as amended) which is designated for urban land uses by the Future Land Use Map and which the lots are less than one (1) acre in size provided that:
 - i) central service is currently not available to the lot. Connection to central sewer service is required when said service becomes available, and
 - ii) the lot is not located within a Special Assessment District which has been established for the purpose of installing a wastewater system.or
 - d. the septic tank is installed in conjunction with non-residential construction on an existing lot (exempt or approved under Volusia County Ordinance 72-2 or 88-3, as amended), which is designated for urban land uses by the Future Land Use Map provided that central wastewater service is not currently available and that the estimated wastewater flow from said non-residential use is less than five thousand (5,000) gallons per day. Connection to a central system of sanitary sewer service is required when said system is available.

- 6.1.1.14 Volusia County shall require all sewage treatment and disposal systems including septic tanks to be located and constructed in a manner consistent with all applicable local, State, and Federal regulations, including the applicable Goals, Objectives, Policies, and level of service standards contained in this Comprehensive Plan.
- 6.1.1.15 An existing septic tank system may be upgraded, provided that a central sanitary sewer system is not available. However, connection to a central sanitary sewer system is required where said system is available in lieu of upgrading an existing septic tank system.
- 6.1.1.16 The establishment of central wastewater service outside of sewer service areas is prohibited except for Rural Communities, Rural Villages, and Rural Recreational areas as provided for by this Sub-element or where the Florida Department of Environmental Protection, the County Development Review Committee or other appropriate agency, has determined that such a facility is necessary to correct existing or potential problems of public health, safety, or welfare.
- 6.1.1.17 Within the County sewer service areas, package treatment plants may be permitted as an interim measure provided that said plants are constructed and designed to County standards including provisions to allow the interim system to be connected to a central wastewater system when said connection is available pursuant to Policy 6.1.2.5. Interim package treatment plants serving residential developments shall be dedicated to the County. When the interim facility is located within an area encompassed by an adopted sewer service area agreement, the package plant may be dedicated to the entity responsible for providing sewer service to the region.
- 6.1.1.18 Existing privately-owned package treatment plants that are not located in County sewer service areas, Rural Communities, Rural Villages, Rural Recreational Areas, or a region encompassed by an adopted sewer service area agreement may expand only so long as said expansion is for the purpose of correcting existing conditions which have been determined to be a hazard to the public health, safety, or welfare. Expansion of said system will require that the facility comply with the appropriate level of service standards and other County rules and regulations, as applicable.
- 6.1.1.19 The location and siting of new package treatment plants shall be prohibited in areas where the disposal of effluent will result in the lowering of the ambient quality, where such information is available, of surface water or groundwater unless such discharge can be shown to be of overriding public interest.
- 6.1.1.20 The County shall not approve the use of interim treatment facilities within the boundaries of an adopted sewer service area agreement unless the facilities are approved by both the County and the appropriate entity responsible for providing the service. As a result of this policy, the interlocal agreements shall also require that the County and the municipality develop a set of criteria to address the following items for interim treatment facilities: system design operation, construction standards, future dedication/acquisition and payment of capital charges.

OBJECTIVE:

- 6.1.2 Throughout the planning period, Volusia County shall maximize the use of existing facilities within sewer service areas, so as to discourage urban sprawl.

POLICIES:

- 6.1.2.1 Volusia County shall replace and/or consolidate, when it is determined to be feasible, smaller package plants owned by the County with "advanced secondary" sewage treatment plants or enlarge existing plants.
- 6.1.2.2 The "infilling" of urban areas shall be directed to locations where an existing wastewater collection network is available and where treatment capacity is adequate to service the intended development or to those areas where funds have been committed for the provision of adequate capacity, unless otherwise vested under the County's Concurrency Management Ordinance, Vested Rights Ordinance, or Land Development Regulations as may be determined by the County Council.
- 6.1.2.3 Volusia County shall continue to maintain programs and schedules that are intended to promote facility longevity and optimum operating levels.
- 6.1.2.4 Where feasible, Volusia County may acquire and upgrade wastewater systems to eliminate service voids in sanitary sewer service areas.
- 6.1.2.5 Existing package treatment plants shall be connected to a central sewer system when connection to said system is available. When an existing privately-owned package treatment facility is phased out and connected to a central public wastewater system, the owner of said private plant may be required to assume the cost of the connection.
- 6.1.2.6 Volusia County shall require the utilization of a central sewer system where connection to a central system is available. The use of existing septic tanks serving land uses within the sewer service areas may continue in the manner consistent with the requirements specified by the County's Comprehensive Plan and local and state regulations.

OBJECTIVE:

- 6.1.3 Volusia County shall continue to maintain, and expand where feasible, its program of effluent recharge, reuse and disposal.

POLICIES:

- 6.1.3.1 Volusia County shall require use of recovered wastewater for irrigation and non-potable use for all new development and other appropriate uses, where such use can be feasibly implemented and permitted by the Florida Department of Environmental Protection as determined by Volusia County's land development regulations.

- 6.1.3.2 Volusia County shall comply with State regulations for water quality, especially with respect to wastewater plant operations and effluent disposal and, if necessary, develop an appropriate alternative management strategy which may include reduction in wastewater effluent loadings and discharge rates.
- 6.1.3.3 Volusia County may participate in long-term agreements with land owners to accept reclaimed water.
- 6.1.3.4 As provided in the Water Supply Facilities Work Plan, Volusia County shall develop a dual water system utilizing reclaimed wastewater.
- 6.1.3.5 Volusia County shall encourage the use of reclaimed water by establishing differential rates and fees for its supply.
- 6.1.3.6 Volusia County may, where practical and economically feasible, develop and implement an environmentally sound program for the use of natural systems, such as wetlands, for wastewater disposal provided that the implementation of such a program does not present a hazard to public health.
- 6.1.3.7 Volusia County shall continue to require provisions for reuse, where County or other utility owners supply it.
- 6.1.3.8 Volusia County shall, to the extent feasible, provide facilities to allow the use of recovered wastewater for agricultural and other purposes, where County or other utility owners supply it.
- 6.1.3.9 Volusia County shall implement reuse programs and facility improvements as identified in the County's most recently adopted Water Supply Facilities Work Plan that is incorporated into the Potable Water Sub-Element.
- 6.1.3.10 Volusia County shall continue to develop a reclaimed water distribution system to ensure that reclaimed water is available to a sufficient number of users so that available reclaimed water is utilized for landscape irrigation within the Southwest, Deltona North, and Southeast service areas.
- 6.1.3.11 Volusia County shall utilize non-potable water to be supplied by the City of Sanford, pursuant to the Joint Participation Agreement with this City, to augment the County's reclaimed water system during periods of high demand within the Southwest and Deltona North water supply planning areas.
- 6.1.3.12 Volusia County shall coordinate with the St. Johns River Water Management District to incorporate selected reclaimed water projects into the District Water Supply Plan.

OBJECTIVE:

- 6.1.4 Volusia County shall develop plans to extend wastewater facilities and to expand wastewater treatment capacity necessary to accommodate projected 2020 wastewater service needs.

POLICIES:

- 6.1.4.1 Volusia County shall annually designate a portion of its capital improvements budget for its wastewater disposal system as determined by the applicable standards contained in this Sub-element.
- 6.1.4.2 Volusia County shall collect and use impact fees to offset the cost of capacity necessitated by the impact of new users.
- 6.1.4.3 Volusia County shall begin planning for expanded or replacement wastewater treatment facilities on or before the annual average wastewater flows exceed 80% of the permitted capacity.
- 6.1.4.4 Volusia County shall develop, or update, on an as needed basis, wastewater collection and treatment facility master plans for selected County sewer service areas.

OBJECTIVE:

- 6.1.5 Throughout the planning period, Volusia County shall coordinate the provision of sanitary sewer service to the unincorporated area based upon the Comprehensive Plan, so as to ensure the efficient and economical delivery of this service.

POLICIES:

- 6.1.5.1 Volusia County shall coordinate its utility and transportation construction and planning efforts to take advantage of the most economical construction and maintenance costs.
- 6.1.5.2 Volusia County shall negotiate sewer service area agreements with adjacent municipalities to better coordinate the orderly, efficient, and economical provision of wastewater service.
- 6.1.5.3 If the County is unable to establish an agreement with a municipality for the provision of wastewater service, then the County will be responsible for providing wastewater service within the area.
- 6.1.5.4 All affected utility providers, having established interlocal agreements, in cooperation with Volusia County, will develop conceptual wastewater facility plans for areas at the urban periphery of utility provider's jurisdiction consistent with the County's Future Land Use Element. As long as such services can be provided by extension of existing central systems, Volusia County shall not propose to construct any interim facilities without completing an analysis documenting that such construction is more cost-effective than extension of existing central system.
- 6.1.5.5 Notwithstanding the provisions of Policy 6.1.1.19, the County may provide, or allow the provision of, wastewater service within the agreed upon municipal or private utility service area in a manner which is consistent with the adopted interlocal agreement. Should any existing interlocal agreement be amended or any new interlocal agreement

be structured, the provisions of Policy 6.1.1.19 shall be included in the provisions of said interlocal agreement.

- 6.1.5.6 The duties and responsibilities which flow from an interlocal agreement previously entered into between the County and a municipality shall prevail over subsequent amendments to the Comprehensive Plan until and unless such interlocal agreement is renegotiated as deemed appropriate by the County and a municipality.
- 6.1.5.7 The County shall initiate a program with the owners of the various privately-held wastewater systems (especially the area-wide systems) serving portions of the unincorporated region. The purpose of this program will be to foster coordination and may include the submission of periodic reports by the utility to the County.
- 6.1.5.8 The County shall seek to establish and strengthen ties to the Florida Public Service Commission and other appropriate regulatory agencies.

OBJECTIVE:

- 6.1.6 Throughout the planning period, Volusia County shall provide for the correction of County wastewater systems having unacceptable capabilities/capacities and areas lacking sufficient treatment and/or disposal facilities.

POLICIES:

- 6.1.6.1 Volusia County shall designate a portion of its annual budget to be used for the correction of existing deficiencies in its sanitary sewer systems.
- 6.1.6.2 The County may create Special Assessment districts encompassing existing lots or subdivisions, in the manner prescribed by State and County rules and regulations, for the purposes of installing central wastewater systems.
- 6.1.6.3 The County may seek alternative sources of funding, (i.e., grants and loans) to finance wastewater system construction and/or expansion.