

CHAPTER 6

SANITARY SEWER ELEMENT

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A. OVERVIEW

Wastewater service within the unincorporated area includes a combination of publicly and privately owned facilities consisting of septic tanks, package plants, and central wastewater treatment facilities. Volusia County Water Resources and Utilities Division is one of many service providers in the county. It provides services to approximately seven percent of the entire county. The remaining publicly held systems are operated by the municipalities. Privately held systems, which are negotiated by developers and are subject to a binding developer order, are typically maintained by a homeowner's association and are inspected regularly by the county's Environmental Management team. The County continues to negotiate service area agreements with municipalities to maximize services to residents who live in Volusia County. A generalized map depicting service providers in Volusia County is provided as Figure 6-1. Service provider boundaries may shift to accommodate growth depending on the available capacity at each facility.

This element, which is intended to comply with the requirements of Chapter 163, Florida Statutes, represents an effort to address 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, as well as coordination efforts with municipal service providers and developers of privately-run systems. Finally, the plan incorporates the FDEP goals and objectives for implementing the Basin Management Plans (BMAP) and improving conditions within the Priority Focus Areas (PFA) of springsheds in Volusia County.

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 unincorporated Volusia County.

OBJECTIVE:

- 6.1.1 Volusia County shall require the following policies that 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 of 200 gallons per day, per Equivalent Residential Unit (ERU).
- 6.1.1.2 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.

- 6.1.1.3 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 element and the level of service standards adopted by said municipality.
- 6.1.1.4 Central sewer is not required for non-urban areas, except as required by Florida Statutes. 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 within the Priority Focus Area (PFA) identified in the FDEP Basin Management Action Plans (BMAP) for DeLeon, Gemini, and Blue Springs (Figure 6-2).
- 6.1.1.5 Central sewer systems may be installed in Rural Communities, 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 Rural Recreational area.
- 6.1.1.6 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.
- 6.1.1.7 Except as may otherwise be permitted by this 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 identified by state and federal authorities pertaining to public health, safety, or welfare or other exceptions under the guidelines delineated in the Future Land Use Element.
- 6.1.1.8 Except as may otherwise be permitted by this 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.
- 6.1.1.9 The County shall reserve the right to allow industrial and commercial land uses to continue provided that effluent is pre-treated prior to discharge to a County-owned treatment facility.
- 6.1.1.10 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).

- 6.1.1.11 For undeveloped land in unincorporated urban areas where the developer agrees to provide necessary urban services, the necessary system shall 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.).
- 6.1.1.12 Unless otherwise required by a BMAP, septic systems 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 system 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 system 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 meets the state mandated thresholds. Connection to a central system of sanitary sewer service is required when said system is available.
- 6.1.1.13 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.

- 6.1.1.14 Existing septic systems may be repaired or upgraded, provided that a central sanitary sewer system is not available, subject to any FDEP regulations contained in an adopted BMAP, TMDL, or reasonable assurance plan. However, connection to a central sanitary sewer system is required where said system is available in lieu of repairing or upgrading an existing septic tank system.
- 6.1.1.15 The establishment of central wastewater service outside of sewer service areas is prohibited except for Rural Communities, and Rural Recreational areas as provided for by this element or where the Florida Department of Environmental Protection, or other appropriate regulatory agency, has determined that such a facility is necessary to correct existing or potential problems of public health, safety, or welfare.
- 6.1.1.16 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.
- 6.1.1.17 Existing privately-owned package treatment plants that are not located in County sewer service areas, Rural Communities, 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.
- 6.1.1.18 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.
- 6.1.1.19 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 Volusia County shall maximize the use of existing facilities within sewer service areas to discourage urban sprawl.

POLICIES:

- 6.1.2.1 Volusia County shall replace and/or consolidate smaller package plants owned by the County with "advanced secondary" sewage treatment plants, or they may enlarge existing plants as determined by the county's Water Resources and Utilities Division.
- 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, or as 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, pursuant to state statute.

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 and 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 shall continue to require provisions for reuse, where County or other utility owners supply it.
- 6.1.3.7 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.
- 6.1.3.8 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.
- 6.1.3.9 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.
- 6.1.3.10 Volusia County shall coordinate with the St. Johns River Water Management District to implement projects in The Central Springs/East Coast Regional 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 2035 wastewater service needs within its sewer service area.

POLICIES:

- 6.1.4.1 Volusia County shall annually designate a portion of its capital improvements budget for its wastewater disposal system.
- 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.

- 6.1.4.5 Volusia County shall seek to lessen the land application of septage countywide by exploring pre-treatment options that allow for the septage to be received at the sanitary sewer treatment facility.

OBJECTIVE:

- 6.1.5 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 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 adopted interlocal agreements.
- 6.1.5.4 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.
- 6.1.5.5 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.
- 6.1.5.6 The County shall seek to establish and strengthen ties to the Florida Public Service Commission and other appropriate regulatory agencies.

OBJECTIVE:

- 6.1.6 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.

GOAL:

- 6.2 Protect Volusia County's groundwater and surface waters from the negative impacts of nutrient pollution from waste water.

OBJECTIVE:

- 6.2.1 Protect 1st and 2nd magnitude springs and springshed areas where the Floridian Aquifer is generally most vulnerable to pollutant inputs in the areas where there is connectivity between groundwater and the springs.

POLICIES:

- 6.2.1.1 The County shall implement the FDEP requirements prohibiting new septic systems on lots less than one-acre within the identified PFAs, unless the system includes enhanced treatment of nitrogen, as to not allow any further degradation of Gemini, Blue, and DeLeon Springs.
- 6.2.1.2 Upon the need for repair or replacement, an existing OSTDS must include at least one of the recommended FDOH nitrogen reducing enhancements, unless the OSTDS permit applicant demonstrates that sewer connections will be available within five (5) years. Connection is required when sewer becomes available.
- 6.2.1.3 All existing conventional OSTDS within the PFAs are required to adopt enhanced treatment of nitrogen or connect to central sewer no later than 20 years after BMAP adoption.
- 6.2.1.4 Volusia County shall develop a Master Wastewater Treatment Feasibility Analysis to identify specific areas where sewer lines should be extended.
- 6.2.1.5 Volusia County Water Resources and Utilities shall provide notice to OSTDS owners within their service area of the availability of sewer lines for connection no later than one (1) year prior to the date the sanitary sewer will become available.
- 6.2.1.6 All residential development on lots less than one-acre within the PFAs shall connect to central wastewater treatment facilities within one (1) year of when facilities become available, pursuant to Chapter 381.00.65, FS.

- 6.2.1.7 For residential development, the use of package treatment plants within the PFAs shall be discouraged. In areas served by wastewater treatment plants the use of package treatment plants shall be prohibited.
- 6.2.1.8 New non-residential development shall be required to connect to sanitary sewer when sewer becomes available, pursuant to state statutes.
- 6.2.1.9 New domestic wastewater disposal facilities, including rapid infiltration basins (RIBs), with permitted capacities of 100,000 gallons per day (gpd) or more are prohibited, except for those facilities that meet an advanced wastewater treatment standard for total nitrogen on an annual permitted basis.
- 6.2.1.10 Volusia County Utilities shall upgrade wastewater treatment plants to advanced wastewater standards as required by the FDEP Basin Management Action Plans for Gemini, DeLeon, and Blue Springs.
- 6.2.1.11 Volusia County shall educate its citizens about the impacts of wastewater on surface water bodies, groundwater, and springsheds.