

SANITARY SEWER ELEMENT

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SANITARY SEWER

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**Seminole
County
Comprehensive
Plan
Element**

SANITARY SEWER ELEMENT INTRODUCTION

Sanitary sewer services are provided to residential and nonresidential unincorporated Seminole County users through County, City, and private central sewer systems. The County has four (4) sanitary sewer service areas:

- A Southwest Service Area - This area is served by wholesale agreements with Utilities Inc., and the City of Altamonte Springs;
- B Southeast Service Area - This area is served by the Iron Bridge Wastewater Treatment Plant located south of Oviedo and operated by the City of Orlando. By agreement, the County has reserved a proportional share of the facility's treatment capacity;
- C Northwest Service Area - This area is served by one County owned wastewater treatment facilities, the Yankee Lake Regional Water Reclamation Facility. This service are also provides wholesale sewer service to portions of the City of Lake Mary; and
- D Northeast Service Area – This area is served by one County owned wastewater treatment facility - the Greenwood Lakes Wastewater Treatment Plant. This service also provides wholesale service to the City of Longwood and a portion of the City of Lake Mary.

Additional sanitary sewer services are provided to unincorporated users by the cities of Altamonte Springs and Sanford and by three private sewer utilities – Aqua America, Palm Valley Association, and Utilities Inc. of Florida.

The County operates the sanitary sewer system as a fee-based enterprise. To ensure a continued supply of wastewater treatment, the County's Environmental Services Department prepares an annual budget and five year capital plan for maintenance, replacement and capacity expansion based on a five year master plan. Additionally, the County works with the cities and private utilities to share wholesale services.

Public health and safety is furthered by requiring central sewer hookup where new developments are constructed near available centralized sewer service, and by requiring reclaimed water distribution systems within all new development to meet Federal and State requirements, and an industrial pretreatment ordinance has been adopted.



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SANITARY SEWER ELEMENT ISSUES AND CONCERNS

MONITORING OF PROPOSED REGULATION

Issue SAN 1 Disposal of Sludge

The County could face significant capital expenditure to dispose of sludge should landfilling be prohibited. Rule 62-640, Florida Administrative Code, "Domestic Wastewater Sludge", establishes minimum requirements for domestic sludge which is applied to land, distributed and marketed, or used for reclamation. The County currently disposes of wastewater sludge at an offsite facility. However, future revisions may institute such regulation. Potential expenses could be additional treatment of sludge, stricter regulation of the pretreatment process, obtaining disposal areas and/or paying disposal fees.

Issue SAN 2 Reuse of Reclaimed Water Rule

The costs of future expansion, modification, or new construction of reclaimed water systems could be significant under the Reuse of Reclaimed Water Rule (Rule 62-610, Florida Administrative Code). Rule 62-610 deals with treated effluent wastewater used for irrigation, sprinkling, car washing, fire fighting, etc. The County currently utilizes approximately 1,000,000 gallons per day in the Northeast Service Area and approximately 30,000 gallons per day in the Northwest Service Area for reclaimed water irrigation. This amount will increase over time. The Rule will need to be carefully monitored as it could be amended to require significant capital expenditure to modify existing or build new wastewater reuse and land application systems. Proposed revisions to the Rule would set new design, operation and maintenance criteria needed to reach the required degree of treatment for reuse water.

Issue SAN 3 Protection of Groundwater and Surface Water

In 2004, the Florida Legislature enacted the Wekiva Parkway and Protection Act (the "Act") found in Part III, Chapter 369, Florida Statutes. The Act specified four (4) requirements:

- A Section 369.320 of the Act requires local governments within the Wekiva Study Area to develop a wastewater facility plan for joint planning areas and utility service areas where central wastewater systems are not readily available. A requirement of the wastewater facility plan is the delineation of lands within the utility service area to be served by central facilities, and a phase-out of existing onsite septic tank systems where central facilities are available.
- B The Act required the Florida Department of Environmental Protection (FDEP) to study the efficacy and applicability of water quality and wastewater treatment standards needed to achieve nitrogen reductions protective of surface and groundwater quality within the Wekiva Study Area, and report to the Governor and the Department of Community Affairs.

- C The Act required that by March 2005, the Florida Department of Health (FDOH) must initiate rulemaking to implement the recommendations of the study and to achieve nitrogen reductions protective of water quality or recommend legislation for any additional statutory authority needed to implement the studies required by the Act.
- D The Act required the FDOH, in coordination with the FDEP, to study the efficacy and applicability of onsite disposal system standards needed to achieve nitrogen reductions protective of groundwater quality within the Wekiva Study Area and report to the Governor and the Department of Community Affairs.

Following to enactment of this Act, the Florida Legislature awarded funding to the FDEP and Florida FDOH to undertake additional scientific studies (beyond those studies required in the Act) to further evaluate the source(s) of nitrogen loading into surface water and groundwater within the Wekiva Study Area. These additional studies were prompted by citizens and industry contentions that onsite septic tank systems were not the significant source of nitrogen to the underlying groundwater relative to other sources.

As of 2008, the FDOH continues to refine rulemaking regarding nitrogen reductions in the Wekiva Study Area. In addition, the FDEP is in process of completing its studies regarding nitrogen reduction to groundwater and surface water within the Wekiva Study Area. The FDOH's rulemaking may affect the use of onsite septic tanks not only within the Wekiva Study Area but also Statewide.

At this point, the County continues to monitor the rulemaking efforts of FDOH and any additional State legislation regarding the use of onsite septic tank systems within the Wekiva Study Area. Once rulemaking is completed, the County will prepare a wastewater facility plan that complies with provisions of the Act.

EFFECTIVE SANITARY SEWER OPERATION

Issue SAN 4 Coordination with Other Wastewater Providers

In order to discourage urban sprawl, avoid duplication of services, maximize the use of existing facilities and plan for the provision of adequate levels of service to unincorporated users, the County relies primarily on its five year master plan and on coordination with other jurisdictions and private utilities for the provision of water and sewer services. Coordination between wastewater providers is required to continue the effective and efficient provision of service. Interlocal agreements with the cities and private sewer providers is an effective means of providing service to both unincorporated residents not within a County service area and City residents. The County currently has interlocal agreements with the Cities of Longwood, Lake Mary, Altamonte Springs, Oviedo, and Sanford, Orange County, City of Orlando and Utilities Inc. of Florida. The County should continue to evaluate interlocal agreements with municipal and/or private utilities concurrent with any County plans to expand capacity or lines. As the full urbanization of the non-rural portions of the County occurs and as redevelopment of the urbanized area begins, the County will to continue to review, renew, revise, and seek new

cooperative agreements with other jurisdictions, private suppliers and regional agencies as necessary in the area.

Issue SAN 5 Effluent Reuse for Irrigation Purpose

Effluent reuse for irrigation purposes is an effective method to increase wastewater effluent disposal capacity and maintain potable water reserves. The County requires, as part of the standard utility agreement, that customers connect to reclaimed water if available and required by the County. The County currently provides reclaimed water in the Northeast and Northwest Service Areas. Future plans call for effectively utilizing all wastewater effluent produced in the Northwest Service Area. These standard agreements allow the County to expand the reclaimed water program into all wastewater service areas if necessary. The County should continue to require effluent reuse as part of standard sewer agreements with all development.

LEVEL OF SERVICE STANDARDS

Issue SAN 6 Maintaining Adopted Levels of Sewer Service

The State requires that local jurisdictions assure that adopted levels of sewer service be maintained concurrent with the demand for those services. The goals, objectives and policies section establishes the County's level of service as 300 gallons of wastewater treatment and disposal per day (average daily flow) per Equivalent Residential Connection for each individual service area. The amount of peak facility capacity required is established as a minimum of 2.0 times the average daily flow. These levels of service shall also be applied for planning purposes to private and city utilities serving unincorporated customers unless a different level of service is authorized by the Florida Department of Environmental Protection or as adopted in a comprehensive plan.



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SANITARY SEWER ELEMENT GOALS, OBJECTIVES AND POLICIES

GOAL

The County shall provide adequate public wastewater facilities to serve existing and future development needs in a cost efficient and environmentally sound manner.

OBJECTIVE SAN 1 ENVIRONMENTAL POLICIES

The County shall endeavor to ensure that the provision of sanitary sewer service and the operation of wastewater treatment facilities are accomplished in a manner which will minimize any adverse impacts on the environment, public safety, residential neighborhoods and/or surrounding properties through the implementation of the following policies:

Policy SAN 1.1 Wekiva River Protection Area

The County shall continue to require the use of central sewer for all new subdivisions consistent with Section 381.0065, Florida Statutes and Chapter 64E-6, Florida Administrative Code (F.A.C.) within the statutory Wekiva River Protection Area or if a similar provision is enacted by Federal, State or local law, rule or regulation. Connection to central sewer service is required where available as defined by Chapter 64E-6, F.A.C., or when a County capital project is scheduled and authorized to begin construction in the County's then current adopted annual budget or construction is committed to begin within one (1) year in an enforceable schedule contained within a binding developer's agreement. The purpose of this policy is to provide central sewer services to projects where it can be demonstrated that the provision of such services will minimize adverse water quality impacts that would otherwise be caused by the use of individual septic systems.

Policy SAN 1.2 Monitoring of Rule Revisions

The County shall continue to monitor proposed revisions to Rule 62-640 Florida Administrative Code (F.A.C.), "Domestic Wastewater Residuals" and to Rule 62-610 F.A.C., "Reuse of Reclaimed Water and Land Application".

Policy SAN 1.3 Required Connection to Central Sewer Service

The County shall require within the unincorporated urban area, as described in *Exhibit FLU: Urban/Rural Boundary*, connection to central sewer service where available as defined by Chapter 64E-6, Florida Administrative Code, or when a County capital project is scheduled and authorized to begin construction in the County's then current adopted annual budget or construction is committed to begin within one (1) year in an enforceable schedule contained within a binding developer's agreement.

Policy SAN 1.4 Onsite Sewage Treatment and Disposal Systems

The County shall continue to monitor proposed amendments by the Department of Health to Rule 64E-6.0162, Florida Administrative Code, Specific Standards for the Wekiva Study Area, regarding standards for onsite sewage treatment and disposal systems within the Wekiva Study Area.

Policy SAN 1.5 Nitrogen Reduction Goals

The County shall continue to monitor efforts by the Florida Department of Health and Department of Environmental Protection to establish wastewater treatment standards to achieve nitrogen reduction to groundwater and surface water within the Wekiva Study Area from sources such as, but not limited to, onsite sewage treatment and disposal systems and fertilizers.



OBJECTIVE SAN 2 COST EFFECTIVENESS AND MAXIMIZATION OF USE

The County shall endeavor to correct deficiencies and maximize the use of existing facility capacity by using the most cost effective means of providing wastewater transmission, treatment and disposal facilities to the service area.

Policy SAN 2.1 Continuation of User-fee Operation

The County shall continue to construct and operate County-owned and operated wastewater facilities by means of user fees and, when in the best interest of the County, make use of available Federal and State funds.

Policy SAN 2.2 Priority of Wastewater Service

The County shall establish the priority of wastewater service provision as follows in order of priority:

- A Service to existing areas that present either an immediate threat to public health or safety, or produce serious pollution problems;
- B Maintenance or upgrading of the existing wastewater system to correct deficiencies, should they arise, and to meet the adopted level of service standards; and
- C Service to new development areas.

Policy SAN 2.3 Minimum Construction Standards

The County shall provide for the regulation of construction, operation and maintenance of wastewater facilities in accordance with water and sewer design standards as set forth in the Land Development Code.

Policy SAN 2.4 Infiltration and Inflow Analysis

The County shall perform infiltration and inflow analysis as necessary for those portions of the system suspected to have infiltration and inflow problems. This effort will help to better identify system performance and maximize facility use.

Policy SAN 2.5 Reuse of Reclaimed Water

The County shall continue to require all new development to enter into reclaimed water (effluent) agreements as a condition of sanitary sewer service. Actual implementation of such agreements shall be based on, but not limited to, the following considerations: availability of effluent supply, distance from the facility, the nature of the soil and the nature of the development.

Policy SAN 2.6 Monitoring of County-Owned Facilities

The County shall continue to monitor all County-owned wastewater treatment plants to ensure the adequacy of effluent treatment and odor control.

OBJECTIVE SAN 3 LEVELS OF SERVICE

The County shall establish and maintain a set level of sanitary sewer service by providing County facilities with sufficient capacity to treat and dispose of present and projected volumes of wastewater.

Policy SAN 3.1 Levels of Service Standards

The County shall maintain adopted levels of service standards through the day-to-day activities of the Department of Environmental Services and the implementation of the Capital Improvements Element and the annual budget. The following levels of service standards are adopted for each individual service area:

- A 300 gallons/day/Equivalent Residential Connection. Flow demands for commercial, industrial or other special developments differing from the flow values established by the serving utility shall be established from existing records or by estimated projections, using the best available data.
- B Peak facility capacity shall be maintained at a minimum of two times the permitted capacity.
- C These levels of service shall also be applied for planning purposes to private and city utilities serving unincorporated customers unless a different level of service is authorized by the Florida Department of Environmental Protection (FDEP) or as adopted in a comprehensive plan.
- D The County shall continue to operate in compliance with all rules and requirements of FDEP as well as all other applicable rules and regulations, including but not limited to, peak day and peak hour requirements.

Policy SAN 3.2 Wastewater Master Planning

The County shall update the Wastewater Element of the Utilities Master Plan every five years. As part of the update, the County shall conduct a level of service review to determine if adjustment of the existing level is necessary based on, but not limited to, historical data and projected demand. (The Utilities Master Plan consists of Water, Wastewater and Reclaimed Water sub-elements).

Policy SAN 3.3 New and Replacement Equipment

The County shall maintain the established levels of wastewater service through the acquisition of new and replacement equipment in accordance with the Capital Improvements Element.

Policy SAN 3.4 Transmission Lines

The County shall ensure that future transmission lines are sized to adequately meet the projected demands of development according to development phasing needs based upon the adopted/accepted Utilities Master Plan which uses adopted future land uses as a basis for planning.



Policy SAN 3.5 Timing of Future Treatment Facility Expansion

The County shall provide for the timely planning, design, and construction of wastewater facilities necessary to provide proper treatment and reuse or disposal of wastewater and management of domestic wastewater residuals as prescribed in FDEP Rule 62-600.405.

Policy SAN 3.6 Adopted Sanitary Sewer Service Area Map

Exhibit SAN: Sewer Service Areas is the adopted sanitary sewer service area map for Seminole County. Whether central sewer usage is required for a particular piece of property within the service area is determined by reference to the Future Land Use Map Series, *Exhibit FLU: Services and Facilities by Classification* and the regulations governing that property according to its designation in the Series. Generally, when determined to be available in the urban area, new development or existing development with temporary septic shall connect to a central sewer system.

OBJECTIVE SAN 4 COORDINATION AND URBAN SPRAWL

The County shall coordinate the extension of sanitary sewer service or increase of facility capacity with adjacent municipal and private facilities and discourage urban sprawl through implementation of the following policies:

Policy SAN 4.1 Evaluation of Service Area Expansion

The County shall evaluate the impact on delivering adequate service to residents within the adopted service area as depicted in *Exhibit SAN: Sewer Service Areas* prior to the expansion of a sanitary sewer service area outside the adopted service area boundaries. The County shall not expand the service area if the adopted level of service in the existing service area cannot be maintained.

Policy SAN 4.2 Existing Package Plants

Existing package plants (i.e., for schools, mobile home parks) shall be requested by the County to connect to the County system when it becomes available.

Policy SAN 4.3 Interlocal Agreements

The County shall enter into interlocal agreements (including wholesale agreements) with municipal and/or private utilities to encourage the most cost effective and efficient provision of wastewater services, and to avoid unnecessary duplication of services during County expansion of capacity or lines when and where economically feasible and supportive of the County's long term water planning strategy.

Policy SAN 4.4 Extension of Service to New Development

The County shall continue to require new development to connect to the County's wastewater system or other municipal or private utility systems where possible.

Policy SAN 4.5 Methods of Providing Wastewater Treatment and Disposal Outside of the Adopted Urban Service Area

Outside the adopted Urban Service Area as depicted in *Exhibit FLU: Special Area Boundaries*, the County shall:

- A Continue to rely primarily upon individual septic tanks as the method of providing sewer service to the residents and other occupants outside the urban services area.
- B Encourage private central systems that exist as of the adoption date of this Plan to continue to provide an adequate level of service to users in their respective service areas, although the County shall discourage them from expanding their service areas.
- C New development outside adopted central sewer service areas shall not be designed nor constructed with central water and/or sewer systems.



- D Public and private central systems may be permitted in the future if it is clearly and convincingly demonstrated by the proponents of the system expansion that a health problem exists in a built but unserved area for which there is no other feasible solution. In such cases, the service area expansion plans will be updated concurrent with an areawide administrative land use update.



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