

GOALS, OBJECTIVES AND POLICIES

INFRASTRUCTURE ELEMENT

Goal 1: To provide needed public facilities in a manner that protects investments in existing facilities and supports orderly, efficient growth while protecting natural resources.

Objective 1.1: To ensure that, at the time a development permit is issued, adequate facility capacity is available, or that the permit is conditioned on the availability of facilities necessary to serve the development.

Policy 1.1.1: The County shall be consistent with all requirements of Rule 62-40, F.A.C., and designate the twenty-five year, twenty-four hour storm event as the design criteria to be used to calculate pre-development peak hour rate and volume and require that post-development rates shall be equal to or less than that calculation. No development will be approved which, as shown through the existing Land Development Code mandated review, would allow further degradation of water quality or increased discharge quantity. The following level of service standards are hereby adopted, and shall be used as the basis for determining the availability of facility capacity and the demand generated by the development:

FACILITY/SERVICE AREA	MINIMUM LEVEL OF SERVICE STANDARD	
Sanitary Sewer	(1) Minimum average daily flow to be treated from domestic units shall be 250 gallons per Equivalent Dwelling Unit per day. (2) Wastewater effluent shall meet standards defined by State law, permit requirements of the Florida Department of Environmental Protection and Water Management District and County ordinance when discharged to groundwater or surface water in the County.	
Solid Waste Facilities	Average Solid Waste Generation Rate 3.1 pounds per capita per day.	
Drainage/Stormwater Facilities	(1) <i>Stormwater quality:</i> No discharge from any stormwater discharge facility shall cause or contribute to a violation of water quality standards as provided for in County ordinances, federal laws and State statutes. (2) Stormwater management systems shall provide for adequate control of stormwater runoff.	
	Flooding Reference	Flood intervals in years
	Emergency shelters and essential services buildings	100
	Habitable buildings	100
	Employment/service centers	100
	Roads: Roads should be passable during flooding. Roadway flooding, <6" depth at the outside edge of payment is considered passable.	Evacuation Roads: 100 Arterials: 100 Collectors: 25 Neighborhood: 25
S Sites: Flooding refers to standing water	Urban (>1 unit/acre): 5 Rural: 2	

	<p>in agricultural land, developed open or green space (yards and parking lots, etc.) and undeveloped lands designated for future development. This does not include areas incorporated into the stormwater or basin master plans as floodway, floodplains, or flood storage areas.</p>	
	<p>(3) All drainage facilities within the County shall be designated to meet the water quality standards and design criteria consistent with Rule 62-25, F.A.C. and Rule 62-346 F.A.C.</p>	
<p>Potable Water <i>Average Water Consumption Rates</i></p>	<p>(1) System capacity shall be based on 250 gallons per Equivalent Dwelling Unit per day based on maximum daily flow plus the maintenance of minimum fire flow standards. (2) Minimum potable water quality shall be as defined by the U.S. Environmental Protection Agency, except where the State or County may impose stricter standards.</p>	

(a) Stormwater management systems serving new development or redevelopment shall be designed such that the post-development stormwater volume and peak discharge rate do not exceed pre-development conditions for a twenty-five year, twenty-four hour design storm and shall provide stormwater treatment as required by Water Resource Implementation Rule 62-40 Florida Administrative Code (F.A.C.) or Water Management District regulations, such that water quality standards are met in receiving waters. The County shall require coordination with the Florida Department of Environmental Protection (FDEP) or the Northwest Florida Water Management District (NFWFMD) to ensure that all development and redevelopment activity further complies with Rule 62-25, F.A.C. and Rule 62-346 F.A.C., and Section 208 of the Federal Water Pollution Control Act.

(b) Plans for single-family residential structures shall include methods to minimize stormwater impacts by using site suitable best management practices which maximize infiltration of stormwater and minimize the off-site discharge of stormwater.

(c) Stormwater levels of service and stormwater master plans shall be developed for any area identified for designation as an urban service area, including Panacea, Shell Point, Crawfordville, and the Woodville Highway area, in conjunction with said designation. The County shall seek grants to fund county-wide stormwater assessment, which assessments will identify the causes of existing stormwater management deficiencies and specific remedies, including intergovernmental agreements to correct said deficiencies and improve water quality. The County shall estimate the cost and funding requirements to rectify existing deficiencies and shall amend the Comprehensive Plan and capital improvements element such that existing deficiencies may be corrected.

Policy 1.1.2: All improvements for replacement, expansion or increase in capacity of facilities shall be compatible with the adopted level of service standard for the facilities.

Policy 1.1.3: The Public Works and Planning and Community Development Departments shall jointly develop procedures to update facility demand and capacity information as development orders and permits are issued.

Policy 1.1.4: The Planning and Community Development Department shall prepare annual summaries of capacity and demand information for each facility and service area.

Policy 1.1.5: Consistent with the urban growth policies of the Future Land Use Element of this Plan, provision of centralized sanitary sewer and potable water shall be limited to the urbanizing areas shown in the support documents of this plan.

Policy 1.1.6: The Planning and Community Development Department will coordinate with all local governments within the designated service areas to ensure their comprehensive plans and development permit procedures are compatible with County policy.

Policy 1.1.7: The County will revise its land development regulations to prohibit development that would rely on groundwater withdrawal that could cause saltwater intrusion to natural systems, and to regulate land use and development to protect the functions of natural drainage features. This will be done by requiring major water users to connect to central public or private water systems with adequate capacities and by requiring drainage improvements which will maintain post-development conditions equal to pre-development conditions.

Objective 1.2: To maintain a five-year schedule of capital improvement needs for public facilities to be updated annually in conformance with the review process for the Capital Improvements Element of this Plan.

Policy 1.2.1: The following entities will be consulted during the Capital Improvements Plan update process for the purpose of evaluating and ranking capital improvements projects proposed annually for inclusion in the five-year schedule of capital improvements needs: Planning and Community Development Department, Solid Waste Department, and Public Works Department. These entities will provide the results of the annual review of the capital improvements schedule to the Division of Planning and Zoning by July 15 of each year. The Division of Planning and Zoning will forward the review to the Planning Commission by July 30, in accordance with the review schedule set forth in part B, Monitoring and Evaluation, of the Infrastructure Element of this Plan.

Policy 1.2.2: Proposed capital improvements projects will be evaluated according to the following priority level guidelines:

Level One - Whether the project is needed to protect public health and safety, to fulfill the County's legal commitment to provide facilities and services, or to preserve or achieve full use of existing facilities.

Level Two - Whether the project increases efficiency of use of existing facilities, prevents or reduces future improvement costs, provides service to developed areas lacking full service or promotes in-fill development.

Level Three - Whether the project represents a logical extension of facilities and services.

Objective 1.3: To implement mandatory requirements for inspections, operations and maintenance of on-site wastewater treatment systems.

Policy 1.3.1: Use of on-site wastewater treatment systems shall be limited to the following conditions:

- (a) Existing septic tank and package treatment plants may remain in service until such time as centralized service is made available, or the systems fail to properly perform;
- (b) The County shall maintain in its land development regulations a provision that existing septic systems shall be replaced with performance-based septic systems when the existing system fails or otherwise requires replacement, or modification as determined by the Department of Health. As part of such land development regulations, the County will provide an exception from the requirement of replacing or modifying a system with a performance-based septic system if the system's owner has demonstrated a financial hardship to the satisfaction of the County, and that the user cannot afford to upgrade the system without public funding. The County shall define the financial hardship test by resolution. If such a demonstration is made, the system's owner must replace the system but a performance-based septic system shall not be required until sources of funding are available to assist those owners who cannot afford to pay for the upgrade;
- (b) The County shall diligently seek sources of funding through the SHIP program and other sources, to assist those who cannot afford to upgrade failed systems as required.
- (c) Septic systems for new development shall be limited to performance-based septic systems as certified by the Department of Health;
- (d) All existing and new septic systems shall be inspected every three years by a licensed septic system contractor for maintenance or upgrade, and
- (e) Use of package treatment plants shall be limited to those with business and management plans approved by the County.

Policy 1.3.2: The Public Works Department shall develop and implement inspection, operation and maintenance guidelines for package treatment plants, utilizing private sector sources for implementation whenever possible. The Public Works Department may perform such functions through contractual agreement with facility owners.

Policy 1.3.3: Issuance of all development orders or permits will be conditioned upon demonstration of compliance with applicable federal, state and local permit requirements for on-site wastewater treatment systems.

Policy 1.3.4: The County will coordinate with appropriate federal and state agencies and amend local ordinances to require that issuance of permits for replacement or expansion of existing on-site wastewater treatment systems is conditioned upon compliance with current regulatory requirements and water quality standards.

Policy 1.3.5: The County will coordinate with Leon County and the City of Tallahassee to explore the establishment of a regional management entity for decentralized wastewater systems.

Policy 1.3.6: All new development shall connect to central wastewater treatment facilities within one year

from the date that such facilities are available or become available as provided by law. The standards for treatment are:

- a. Advanced Wastewater Treatment (AWT) levels (3mg/L for nitrogen, 5 mg/L CBOD, 1 mg/L total phosphate, 5 mg/L suspended solids, & a high level of disinfectant) for all Type I (design capacity of 500,000 gallons per day to 12.5 million gallons per day) and Type II (100,000 to 500,000 gallons per day) central wastewater treatment facilities using Rapid infiltration Basins.
- b. A treatment standard above secondary treatment of 10 mg/L for nitrogen for Type III (less than 100,000 gallons per day) facilities.

Objective 1.4: To develop an electronic asset management system by 2015 in order to manage and analyze existing infrastructure.

Policy 1.4.1: The County shall develop an inventory of existing infrastructure facilities in a format compatible with Geographic Information Systems (GIS) through the digitization of hardcopy files, the conversion of computer aided drafting and design (CADD) files, and the creation of new files in a GIS format.

Policy 1.4.1: The County shall utilize the electronic infrastructure inventory and electronic land planning data to plan necessary maintenance and expansions of infrastructure facilities, to protect and manage investments in existing facilities, and to support orderly, efficient growth and protection of natural resources.

Goal 2: To require sanitary sewer, solid waste, drainage and potable water facilities and services to meet existing and projected demands identified in the plan.

Objective 2.1: To correct existing deficiencies by undertaking the following projects by 2015:

(1) A drainage study for the urban service areas will be initiated within one (1) year of the designation of such area as an urban service area, and will identify existing deficiencies and provide recommendations for improvements.

(2) The County will encourage the maximization of public and private facilities by allowing higher densities and intensities of development only in areas so designated on the FLUM, and only where the infrastructure concurrently exists to support development proposals. Infrastructure concurrency shall be determined during the LDC mandated technical review processes.

Policy 2.1.1: Projects shall be undertaken in accordance with the schedule provided in the Capital Improvements Element of this plan.

Policy 2.1.2: Projects needed to correct existing deficiencies shall be given priority in the formulation and implementation of the annual work programs of the County Department responsible for the project.

Policy 2.1.3: No permits shall be issued for new development which would result in an increase in demand on deficient facilities prior to completion of improvements needed to bring the facility up to standard.

Policy 2.1.4: Design, siting and construction of the hazardous waste temporary storage facility will be based on the results of the 1990 update of the hazardous waste management assessment conducted by the Health Department, and will be compatible with the regional and state hazardous waste management program.

Policy 2.1.5: The Health Department and the Solid Waste Department will develop and implement a hazardous waste management program to ensure that collection, storage and transfer operations comply with the provisions of Section 403.7265, F.S.

Policy 2.1.6: The County shall seek funding for improvements to historical subdivisions within the County.

Objective 2.2: To ensure that adequate capacity is available to serve projected future needs and so as to maximize the use of existing facilities and prevent urban sprawl. The County will provide for projected demands by undertaking the following projects:

Sanitary Sewer, Potable Water and Solid Waste:

- (1) Wastewater and potable water master plans will be completed by 2015 to identify projected needs and provide recommendations for locating systems to meet demands in areas considered for designation as urban service areas.
- (2) Continue closure and monitoring of the Lower Bridge Landfill site.
- (3) Continue the development of recycling facilities at the Lower Bridge Landfill site.
- (4) Develop facilities at the landfill site to properly store, manage, and transfer, where appropriate, hazardous wastes in accordance with state and federal law..
- (6) Improve collection sites and purchase equipment county-wide to meet demands of new growth for solid waste collection and disposal.

Policy 2.2.1: The Planning and Community Development Department will annually review growth and development statistics, including Bureau of Economic and Business Research (BEBR) medium population projections, to determine if the list included in Objective 2.2 will meet the needs of future development. Where changes are made to timing or size of projects, projected capacity to serve new development will be reviewed and the need for changes in other parts of this plan will be evaluated.

Objective 2.3: To ensure the protection of the functions of the natural drainage system by requiring all improvements to meet stormwater management standards pursuant to Rule 62-40.432, F.A.C., on Surface Water Protection and Management and regulations set by the NFWFMD, affecting preservation of such natural drainage features.

Policy 2.3.1: No development will be permitted except in conformance with local regulations meeting standards of the National Flood Insurance Program. No development requiring stormwater management permits from the NFWFMD or FDEP will be permitted unless such permits or exemptions have been issued.

Objective 2.4: To promote techniques for conservation of potable water.

Policy 2.4.1: New development will be required to identify sources of water for non-potable use so as to preserve potable water for activities requiring water which meets drinking water standards. Large developments (such as DRI's and FQD's) shall include separate irrigation water distribution systems, and shall utilize treated effluent for irrigation purposes where the project also includes a treatment plant capable of providing treated effluent under applicable state standards.

Objective 2.5: To protect the functions of groundwater recharge areas, springs, and springsheds.

Policy 2.5.1: New development will be required to maintain surface and groundwater flow rates and volumes at pre-development levels so that the natural function of groundwater recharge areas is maintained.

Policy 2.5.2: Substantial redevelopment projects shall comply with the standards for stormwater runoff that apply to new development. Substantial redevelopment shall be based upon the value and amount of cumulative improvements to the site, as provided by the land development regulations and the NFWFMD.

Policy 2.5.3: Best management practices shall be used in combination as part of a BMP treatment plan to protect water quality and minimize flooding. BMPs shall be used in the design of stormwater management facilities and systems. The following stormwater BMPs shall be instituted to reduce nitrate loading:

- a. All residential subdivisions shall use vegetated swales with swale blocks or raised driveway culverts whenever possible, except when soil, topography, or seasonal high water conditions are inappropriate for infiltration as determined by a professional engineer licensed in the State of Florida.
- b. Vegetated infiltration areas shall be used to provide stormwater treatment and management on all sites except when soil, topography, or seasonal high water conditions are inappropriate for infiltration as determined by a professional engineer licensed in the State of Florida. Design of the stormwater systems for residential and commercial uses shall use bio-retention areas (below grade vegetated areas) to increase stormwater treatment and reduce stormwater volume. Downspouts for both residential and commercial development shall be directed from the roof to vegetated areas for uptake.
- c. Whenever infiltration systems are not feasible, wet detention systems shall be used for stormwater treatment and management.
- d. Per paragraph 62-346.301(1)(h), F.A.C. developments shall utilize the Northwest Florida Water Management District karst sensitive criteria.
 - i. Sensitive karst features, including sinkholes with a direct connection to the aquifer and stream-to-sink features, shall not be utilized as stormwater management facilities.
 - ii. All development approval by the County shall require the applicant to submit to the County a copy of the FDEP or NFWFMD stormwater permit and the NPDES notice of intent to be covered by the construction generic permit prior to any land clearing.
- e. All components of the stormwater treatment and management system shall be in common ownership and shall be maintained by the responsible legal entity identified in the FDEP or NFWFMD

stormwater permit, typically a homeowner or property owners association.

f. The studies required in Future Land Use Policy 13.8 shall be used to characterize on-site soils and determine locations of geologic features including sinkholes, solution pipes, depressions, and depth of soil to lime rock. Sensitive karst features like sinkholes with a direct connection to the aquifer and stream-to-sink features shall be protected.

Policy 2.5.4: The Wastewater Facility Plan shall be updated every five years in order to establish a comprehensive method to ensure adequate levels of wastewater collection, treatment, disposal, and reuse.