INFRASTRUCTURE ELEMENT

GOALS, OBJECTIVES AND POLICIES

~~Water: Future projections based on countywide population growth suggest that even by 2045, daily water demand is expected to reach approximately 81608.94 GPD, remaining well below the current LOS threshold. These findings demonstrate that Levy County's municipal and unincorporated potable water systems can support growth through 2050. However, localized service constraints should be further evaluated at the municipal level.~~ **Water:** Future projections based on countywide population growth indicate that overall potable water demand is expected to remain within adopted level-of-service standards through the planning horizon. However, updated regional water supply planning, localized utility conditions, and County-owned system responsibilities indicate that potable water supply should continue to be evaluated at both the countywide and system-specific levels. Levy County should continue coordinating with the Suwannee River Water Management District, Southwest Florida Water Management District, municipalities, public utility providers, and regional partners to monitor demand, permitted capacity, conservation measures, water loss reduction, reuse, alternative water supply opportunities, emergency reliability, and localized service constraints through 2050.

~~Wastewater: Future projections based on countywide population growth trends show that even by 2045, wastewater demand is expected to reach only 1,07,7163 GPD, remaining well within acceptable service levels. These findings confirm that Levy County's municipal wastewater systems are operating efficiently within established LOS thresholds, with ample capacity to accommodate future growth through 2050.~~ **Wastewater:** Future projections and available infrastructure data indicate that wastewater flows remain below the adopted level of service standard where central sewer is available; however, much of unincorporated Levy County continues to rely on onsite sewage treatment and disposal systems. Future wastewater planning should focus on maximizing existing centralized systems, addressing localized service constraints, supporting septic-to-sewer or advanced treatment where environmentally beneficial and legally authorized, and coordinating regional utility alternatives.

~~Solid Waste: Future projections based on population growth suggest that by 2045, daily waste generation will increase to approximately 263,759.5 pounds (131.88 tons), remaining well below the county's adopted LOS threshold. These findings indicate that Levy County's solid waste management infrastructure can substantially accommodate projected population growth through 2050. However, local collection and disposal efficiencies should continue to be monitored to ensure long-term sustainability.~~ **Solid Waste:** Solid waste generation and long-term disposal capacity should continue to be monitored and actively managed through the 2050 planning horizon. Recent planning and operating information indicate that per capita solid waste generation, daily waste intake, storm-related debris, and construction and demolition debris may exceed the County's adopted level of service standard and place additional pressure on existing disposal capacity. To address these needs, the County should continue evaluating recycling, yard-waste diversion, transfer stations, disaster debris management, collection efficiency, landfill life-extension strategies, Class I disposal capacity, development of a new Class III debris cell, and other operational or capital improvements at the Levy County Solid Waste Management Facility.

Element Guide:

Stormwater Management Sub-Element

Objective 1 **Stormwater and Floodplain Protection**
Stormwater Management Level of Service
Natural Drainage/ Water Quality

Aquifer Recharge Sub-Element

Objective 1 **Natural Groundwater Recharge Areas, Discharge Features, and Wetland Preservation**
Wetland Preservation

Objective 2 **Water Conservation**

Solid Waste Sub-Element

Objective 1 **Solid Waste Management and Services**
Landfill Timeframe and
Management Solid Waste Level of
Service

Potable Water Quantity And Quality Sub-Element

Objective 1 **Water Source Protection and Potable Water Supply LOS**
Water Transfers
Monitoring Groundwater Resource

Objective 2 **Estuary and Living Marine Resources**

Objective 3 **Discourage Urban Sprawl**
Provision of Service in Municipal Service Districts/ Guidelines
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Objective 4 **Potable Water Facility, LOS, Operations and Deficiencies**
Potable Water Level of Service
Interlocal Coordination
Facility Operation and Maintenance
Capital Improvement Priorities

Objective 5 **Water Conservation**
Natural Resource Protection
Water Supply Protection

Sanitary Sewer Sub-Element

Objective 1 **Discouraging Urban Sprawl**
Sanitary Sewer Level of Service
Wastewater Treatment Systems
Guidelines
Centralized Wastewater Treatment Systems Guidelines

Private Package Treatment Plants / Residential single-family developments in Municipal Service Districts
Package Treatment Plants / Other residential development Outside Municipal Service District/ Private Package Treatment Plant for non-residential development

Objective 2 Treatment Plant Failures
Monitoring Program
Interlocal
Coordination

Utilities Sub-Element

Objective 1 Utility Guidelines

Stormwater Management Sub-Element

Goal:
~~Ensure that stormwater management systems are adequate to reduce the risk of public endangerment and property damage from long term flooding and protect surface and ground water quality.~~ Ensure that stormwater management systems are adequate to reduce the risk of public endangerment and property damage from flooding, maintain natural drainage functions, protect surface and groundwater quality, support aquifer recharge, and improve resilience to extreme rainfall, storm surge, and other flood-related hazards.

Objective 1: Stormwater and Floodplain Protection

~~Review and update the land development regulations annually to assure that stormwater and floodplain management standards are consistent with local, state and federal management regulations.~~ Maintain and periodically update land development regulations to ensure that stormwater and floodplain management standards remain consistent with applicable local, state, and federal regulations and support water quality, floodplain protection, natural drainage, aquifer recharge, and long-term community resilience.

Policy 1.1 Land development regulations shall implement development standards for flood-prone and wetland areas. New development shall be required to provide on-site water retention and/or detention areas adequate to accommodate any increased stormwater run-off unless exemption is permitted under the applicable Water Management District regulation.

Stormwater Management Level of Service

Policy 1.2 Stormwater management facilities shall meet the following level of service standards and guidelines:

A Standard: The design of stormwater management facilities shall comply with the applicable Water Management District standards for stormwater quantity (i.e., F.A.C. Chapter 62-330 for Suwanee River Water Management District (SRWMD) and South West Florida Water Management District (SWFWMD)).

Guideline: On-site post-development stormwater management and runoff conditions shall not exceed the rate and volume of pre-development conditions.

B. Standard: Water discharge treatment shall be consistent with F.A.C. Chapter 62-330.

Guideline: Discharge equal to ambient conditions, with treatment of the first one (1) inch.

Policy 1.3 All developments shall comply with the provisions of the Land Development Code regulating stormwater and floodplain management.

Natural Drainage/ Water Quality

Policy 1.4 Stormwater quality will be managed to treat or eliminate stormwater discharge to or into sinkholes or other natural drainage areas (i.e., wetlands, marshes, waterbodies, etc.). New developments shall ensure that stormwater discharge into natural drains meets water quality standards in F.A.C. Chapter 62-330.

Policy 1.5 The adopted level of service for floodplain protection is the 100-year flood elevation and/or consistent with National Flood Insurance Program requirements.

Policy 1.6 The County should use best available data, including FEMA floodplain mapping, water management district criteria, local drainage information, storm surge data, vulnerability assessments, and post-storm observations, to inform stormwater, floodplain, drainage, and public infrastructure planning.

Policy 1.7 The County should encourage low-impact development, conservation design, preservation of natural drainage patterns, vegetated swales, floodplain storage, wetland protection, and other nature-based stormwater practices where such practices are feasible and consistent with applicable permitting requirements.

Policy 1.8 Drainage and stormwater capital improvements should prioritize public health and safety, repetitive flooding, evacuation and emergency access, protection of public facilities, springs and aquifer protection, coastal resilience, and correction of documented deficiencies.

Aquifer Recharge Sub-

Element Goal:

~~Protect the quality and supply of ground water through the proper management of development activities in aquifer recharge/discharge and flood-prone areas.~~ Protect the quality and supply of groundwater, springs, wetlands, karst features, aquifer recharge and discharge areas, flood-prone lands, and connected surface waters through proper management of development activities, stormwater, wastewater, water conservation, and public facility planning.

Objective 1 Natural Groundwater Recharge Areas, Discharge Features and Wetland Preservation

~~Identify the sensitive features of the land and provide land development regulations standards to ensure the adequate provision of stormwater facilities and floodplain management.~~ Identify sensitive features of the land and maintain land development regulation standards that protect natural groundwater recharge and discharge areas, wetlands, floodplains, karst features, sinkholes,

springsheds, and other environmentally sensitive resources while ensuring adequate stormwater facilities and floodplain management.

Policy 1.1 Proposed land uses and development will be reviewed to identify natural groundwater recharge/discharge (i.e., wetlands, floodplains) areas and karst characteristics of the land using the best available data including, but not limited to, topographic maps delineating the 100- year and 10-year flood elevations and FEMA maps.

Policy 1.2 Review and revise Land Development Regulations to protect sensitive portions of the land from development.

Wetland Preservation

Policy 1.3 Jurisdictional wetlands shall be protected and preserved. New development shall preserve the total area of jurisdictional wetlands on site and protect the natural drainage features of associated wetland systems. All watercourses shall be preserved in a natural state to protect the natural drainage features of the land. However, development necessary for essential public uses may be allowed in such areas consistent with Conservation Element Policy 3.1.

Policy 1.4 The County shall coordinate aquifer recharge, wetland, karst, and stormwater protection policies with the Conservation Element, Springs Protection Element, Coastal Management Element, and applicable water management district criteria.

Policy 1.5 Proposed public facility improvements, utility extensions, and development approvals should account for aquifer recharge, karst sensitivity, springsheds, wetlands, flood-prone lands, and natural drainage systems when determining appropriate site design, facility location, and mitigation measures.

Objective 2: Water Conservation

~~Conserve water and water resources to protect springs.~~ Conserve water and water resources to protect springs, aquifer recharge, groundwater supply, estuarine water quality, agriculture, and long-term public water supply needs.

Policy 2.1 The use of landscaping best management practices as described in the most recent version of Guidelines for Model Ordinance Language for Protection of Water Quality and Quantity Using Florida Friendly Lawns and Landscapes (Florida Department of Environmental Protection) will be incorporated in the landscape ordinance.

Policy 2.2 Levy County will establish guidelines for managing existing and future lawns and landscapes at all Levy County facilities using the educational guidelines contained in the University of Florida Extension's Florida Yards and Neighborhoods Program, Environmental Landscape Management (ELM) principles, and Best Management Practices. Such guidelines shall include practices that are designed to reduce nitrate infiltration into ground and surface water.

Policy 2.3 All golf course siting, design, construction, and management shall implement the prevention, management, and monitoring practices detailed in the golf course siting, design, and management chapter of the most recent version of Protecting Florida's Springs Manual Land Use Planning Strategies and Best Management Practices. These practices are derived from the Audubon International Signature Program.

Policy 2.4 Levy County will establish a model water ordinance for Florida-Friendly Fertilizer Use on urban landscapes and priority focus areas of all Outstanding Florida Springs by July 1, 2025.

Policy 2.5 The County should continue coordinating water conservation, fertilizer

management, Florida-Friendly Landscaping, irrigation efficiency, reuse, and public education efforts with the Springs Protection Element and with applicable state and regional water resource programs.

Policy 2.6 County facilities should incorporate water conservation, Florida-Friendly Landscaping, native vegetation, efficient irrigation, and low-maintenance landscape practices where feasible.

Policy 2.7 The County should encourage public and private development to reduce potable water demand through conservation fixtures, reuse where available, drought-tolerant landscaping, efficient irrigation, and other water-saving practices consistent with applicable law.

Solid Waste Sub-Element

Goal:

~~Protect the environmental and economic quality of the County through the proper management and disposal of solid and hazardous waste to meet the current and future demands of the County.~~ Protect the environmental and economic quality of the County through the proper management, disposal, reduction, diversion, recycling, and monitoring of solid, hazardous, yard, construction, demolition, and disaster-generated waste to meet current and future demands while extending facility life and protecting public health, safety, and natural resources.

Objective 1 Solid Waste Management and Services

~~Ensure adequate solid waste facilities and disposal services to accommodate future needs and prevent and/or remedy deficiencies.~~ Ensure adequate solid waste facilities, disposal capacity, transfer options, collection services, recycling and diversion programs, and disaster debris management strategies to accommodate future needs and prevent or remedy deficiencies.

Policy 1.1 The County will continue to investigate and develop feasible methods to improve disposal services and prevent deficiencies. These methods will include, but are not limited to:

a. Coordinating the extension of services by ~~pursing~~ pursuing interlocal agreements to provide collection services within the Municipal Service Districts;

b. Monitoring the capacity and projected demand on existing facilities;

c. Increase the landfill capacity by reducing waste volume. Methods include implementing recycling, chipping and yard waste composting programs.

d. Consider a licensing and/or franchising program for solid waste providers in the County.

Policy 1.2 The County shall identify appropriate locations for the development or use of transfer stations as warranted due to development proposals and/or population density increases, and when economics indicate support for such facilities. The County shall consider development agreements for the provision of solid waste transfer facilities when determined to be appropriate by the Board of County Commissioners.

Policy 1.3 Site criteria for waste management transfer facilities shall be specified in the land development regulations and shall address, at a minimum, provisions for the following:

a. ensuring compatibility of a subject waste management facility within the given area;
b. access by collection vehicles, automobiles, and, where applicable, transfer vehicles;

c. safeguards against water and ground pollution originating from the disposal of wastes;
d. security, such as fencing, gated entrances, lighting, and/or manned facilities, and;
e. buffering from adjacent uses.

Policy 1.4 The County shall encourage the use of best management practices for livestock and equine waste and will partner with the Florida Department of Environmental Protection, Florida Department of Agriculture and Consumer Services and other agencies that promote best management practices in order to protect the quality of surface and groundwater resources and minimize hazards to health, welfare and safety.

Policy 1.5 The County should continue to evaluate recycling, yard-waste composting, chipping, construction and demolition debris management, household hazardous waste collection, electronics recycling, and other waste diversion strategies to reduce demand for landfill disposal.

Policy 1.6 The County should maintain disaster debris management procedures and identify the temporary debris management sites, contracts, interlocal agreements, and operational protocols needed to support hurricane, flood, wildfire, and other disaster recovery operations.

Landfill Timeframe and Management

Policy 1.~~5~~ 7 The Levy County Landfill is designed to handle all future solid waste disposal needs to the year 2034.

Policy 1.~~6~~ 8 The County will monitor and adjust solid and hazardous waste management operations to:

a. Accommodate changes in disposal technologies;

b. Meet State and Federal regulatory standards;

c. Efficiently handle changes in composition and quantity, including hazardous waste;

d. Protect the environmental quality of the County; and

e. Prevent deficiencies.

Policy 1.~~7~~ 9 Alternative disposal methods will be evaluated on a periodic basis, with recommendations from the County Engineer.

Policy 1.10 The County shall continue to evaluate, plan, permit, fund, and construct solid waste facility improvements necessary to maintain adequate long-term disposal capacity, including expanding Class I solid waste disposal capacity, developing Class III debris disposal capacity, improving transfer stations, managing storm debris, managing construction and demolition debris, recycling, yard-waste processing, and other operational improvements necessary to protect public health, environmental quality, and fiscal sustainability.

Policy 1.11 The County shall maintain and periodically update solid waste and disaster debris management strategies to address debris from hurricanes, flooding, severe storms, wildfires, construction activity, and other events. These strategies may include temporary debris management sites, Class III debris disposal capacity, mutual aid, contractor coordination, state and federal

reimbursement procedures, transfer operations, vegetative debris processing, public communication, and post-disaster monitoring of landfill capacity.

Solid Waste Level of Service

Policy 1.~~8~~ 12 The Level of Service Standard for solid waste is 2.8 pounds of waste generation per person, per day or an equivalent residential unit (ERU) for non-residential development. This standard will be used in determining the available facility capacity and the demand generated by proposed development.

Policy 1.~~9~~ 13 The generation of waste shall be calculated for new development using the adopted level of service standard. The projected impact shall be used as the basis for determining the capacity and improvement needs to maintain adequate solid waste disposal service.

Policy 1.14 The County should monitor actual solid waste generation rates and compare those rates to the adopted level of service standard. If monitoring indicates a sustained discrepancy between actual generation and the adopted standard, the County may evaluate whether operational improvements, additional diversion measures, facility improvements, or a legally sufficient level of service update is warranted.

Policy 1.15 Solid waste planning should be coordinated with growth management, capital improvements, disaster recovery, recycling, yard waste management, transfer station planning, and public education.

Potable Water Quantity and Quality Sub-Element

Goal:
~~Protect, maintain and conserve the source, quality and supply of potable water to serve existing and future development and population needs.~~ Protect, maintain, conserve, and coordinate the source, quality, reliability, resilience, and supply of potable water to meet the needs of existing and future development and population in a manner that supports compact growth, public health, aquifer protection, springs protection, coastal resilience, and efficient infrastructure investment.

Objective 1 Water Source Protection

~~Coordinate with the Water Management Districts to develop water supply and quality protection standards, monitoring systems, and other measures to enhance the quality and supply of potable water.~~ Coordinate with the Water Management Districts, municipalities, public facility providers, utility districts, and regional partners to protect potable water sources, maintain water supply reliability, evaluate service area needs, support conservation, and align water supply planning with future land use decisions.

Policy 1.1 The County will coordinate with the Water Management Districts to develop water plan policies to ensure that the projected increase of water use and drainage for agricultural, residential and commercial uses are met and to address potential demands for water transfers to other counties.

Water Transfers

Policy 1.2 The Board of Levy County Commissioners is opposed to inter-basin transfers of water.

Monitoring Groundwater Resources and Potable Water Supply LOS

Policy 1.3 The County will ensure that an adequate water supply will be available for current and future demands. The County will support studies by the Water Management Districts to inventory groundwater resource availability and identify safe water consumption and/or withdrawal quantity thresholds.

Policy 1.4 The County will use Water Management District study recommendations to prepare and consider for adoption, land development regulation standards for water withdrawal standards, including safeguards and guidelines.

Policy 1.5 The Level of Service (LOS) for potable water supply shall be 150 gallons per capita per day.

Policy 1.6 Within 18 months of the adoption of a regional water supply plan which includes Levy County by either the SRWMD and the SWFWMD (whichever is the later of the two), the County shall amend its Comprehensive Plan to include provisions of ~~(~~Subsection 163.3177(6)(c), F.S.~~)~~:

a. Identify alternative and traditional water supply projects and conservation measures necessary to meet the water needs identified in the regional water supply plans, and,
b. Incorporate a work plan for at least a 10-year planning period for the development of water supply projects that will meet the water needs identified in the regional water supply plans to serve existing and new development.

~~In their regional water supply plans effective as of July 2018, the SRWMD and SWFWMD determined that Levy County's water supply facilities are sufficient for the ten-year planning period. Therefore, there are no alternative or traditional water supply projects identified as being necessary to meet the water needs identified in the two water management districts' regional water supply plans for the Levy County area. Until such time that water supply facilities are determined to be insufficient for the planning period, Levy County will continue with its adopted and implemented water conservation measures currently in place. In addition, the County will support and cooperate in the ongoing water conservation measures and programs directed or operated by the SRWMD and SWFWMD.~~

Regional water supply planning has been updated since the July 2018 regional water supply plans. The Suwannee River Water Management District adopted the 2024 Western Water Supply Plan, which includes portions of Levy County and identifies water supply planning needs, conservation measures, water resource protection strategies, and project options through the 2045 planning horizon. The Southwest Florida Water Management District has also updated its Regional Water Supply Plan for the 2025–2045 planning period and identifies continued water conservation, reclaimed water, alternative water supply, and traditional groundwater strategies as part of the regional approach to meeting projected demands while protecting natural systems.

Levy County should continue to coordinate with the SRWMD, SWFWMD, municipalities, public utility providers, and other appropriate agencies to maintain consistency with applicable regional water supply plans and the County's Water Supply Facilities Work Plan. This coordination should include monitoring potable water demand and permitted capacity, evaluating localized system constraints, supporting conservation-based infrastructure improvements, evaluating reuse and alternative water supply opportunities where feasible, protecting groundwater and springs resources, and coordinating regional utility planning efforts such as the Waccasassa Water and Wastewater Cooperative or any successor regional water and wastewater initiative.

Policy 1.7 The County shall maintain and periodically update its Water Supply Facilities Work Plan, as required by Section 163.3177(6)(c), Florida Statutes, to remain consistent with applicable

regional water supply plans adopted by the Suwannee River Water Management District and Southwest Florida Water Management District. The Work Plan should identify applicable traditional water supply projects, alternative water supply projects, conservation measures, reuse opportunities, water loss reduction improvements, localized system needs, emergency reliability needs, and coordination strategies necessary to serve existing and new development while protecting groundwater, springs, surface waters, estuarine resources, and natural systems.

Policy 1.8 The County should use best available water supply, utility capacity, water management district, municipal utility, regional planning, and Water Supply Facilities Work Plan information when evaluating future land use amendments, public facility investments, utility service coordination, interlocal agreements, and long-range infrastructure planning..

Policy 1.9 The County should continue to monitor and coordinate, where appropriate, with the Waccasassa Water and Wastewater Cooperative, the Suwannee River Water Management District, the Florida Department of Environmental Protection, affected municipalities, and other utility partners regarding regional water and wastewater alternatives intended to improve coastal resilience, protect water quality, support water supply reliability, and address localized utility needs. As the W3C project is redesigned following changes in municipal participation, the County should rely on updated engineering, funding, permitting, groundwater source, wellfield, facility siting, governance, and pipeline alignment information before relying on the project for concurrency, capital improvements, or land use planning decisions.

Policy 1.10 The County should encourage water supply projects, interlocal agreements, Municipal Service Areas where established by the Comprehensive Plan or interlocal agreement, reuse opportunities, water conservation measures, and infrastructure coordination strategies that maximize existing public facilities, protect the Floridan Aquifer, support compact growth, improve utility reliability, and avoid premature or inefficient utility extensions into rural areas.

Objective 2 Estuary and Living Marine Resources

~~Protect and preserve estuarine water quality and recreational and commercially important fish or shellfish areas by maintaining existing flows and levels of surface water resources and limiting the adverse impact of development.~~ Protect and preserve estuarine water quality, recreational and commercially important fish and shellfish areas, coastal wetlands, seagrass resources, and living marine resources by maintaining appropriate surface water flows and levels, reducing pollutant loading, supporting septic-to-sewer or advanced treatment where appropriate, and limiting adverse impacts from development and infrastructure decisions.

Policy 2.1 Utilize the Waccasassa Basin data available from the Suwannee River Management District to determine stormwater management needs, costs and improvements to protect water quality.

Policy 2.2 The County will request the Suwannee River Water Management District to conduct a County drainage basin study using District funds.

The priority areas upon which the drainage basin study should focus are:

a. The Bronson Municipal Service District, as shown on the Future Land Use Map.

b. The Wekiva Springs watershed area.

c. The Gulf Hammock/U.S. 19 areas.

d. Commercial marinas, campgrounds and County boat ramp facilities.

e. Rosewood, Sumner and Lukens areas.

Policy 2.3 Shoreline development and land uses in environmentally sensitive areas shall be consistent with policies and guidelines described in the Conservation and Coastal Management Element.

Policy 2.4 The County should coordinate watershed, stormwater, wastewater, septic, water reuse, and regional utility planning with the protection of the Lower Waccasassa Basin, Suwannee River, Cedar Keys, coastal waters, shellfish areas, seagrass beds, and other estuarine resources.

Policy 2.5 Utility, stormwater, and wastewater projects that provide both water quality and coastal resilience benefits should be considered for grant funding, capital improvements planning, and intergovernmental coordination, where feasible and consistent with applicable law.

~~**Objective 3 Discourage Urban Sprawl**~~
Objective 3 Efficient Utility Service and Compact Growth

~~Encourage compact urban development patterns and provide for the efficient use of existing public services and facilities in Municipal Service Districts.~~ Encourage compact, orderly, and fiscally responsible development patterns by maximizing the use of existing public facilities, directing higher-density and higher-intensity development toward Municipal Service Districts, Municipal Service Areas where established, municipalities, special districts, and other areas designated by the Comprehensive Plan, and discouraging premature or inefficient extensions of urban services into rural areas.

Policy 3.1 The County will maximize the use of existing centralized potable water facilities and discourage urban sprawl by limiting urban services to Municipal Service Districts, special districts, and urbanized and commercial areas shown on the Future Land Use map.

Policy 3.2 The County will provide for higher density and intensity land uses within Municipal Service Districts and areas with existing public facilities, including special districts. Land development regulations shall establish standards and requirements for the provision and use of centralized water supply systems.

Provision of Service in Municipal Service Districts/ Guidelines

Policy 3.3 The County will maximize the use of existing facilities using the following land development guidelines and standards in Municipal Service Districts:

a. Land use densities and intensities shall be increased in relation to available capacity of infrastructure.

b. New subdivisions shall:

1. Provide central water facilities (community wells) for densities exceeding 1 unit per acre.
2. Provide central water and sewer facilities for densities exceeding 2 ~~3~~ units per acre.

c. New subdivisions shall provide central water and sewer facilities, consistent with the Florida Department of Environmental Protection (FDEP) requirements. Private wells and septic tanks shall be provided consistent with the Florida Department of Health

in Levy County Environmental Health requirements.

Private Potable Water Facilities/Countywide

Policy 3.4 Non-residential development requiring potable water systems may be permitted in compliance with Florida Department of Health in Levy County Environmental Health.

Policy 3.5 Proposed residential developments requiring a centralized water system shall provide written confirmation that there is available capacity to meet the Level of Service standard and services are located or will be extended to serve the project concurrent with development.

Policy 3.6 The County may coordinate with municipalities and utility providers to evaluate Municipal Service Areas or similar service planning areas through interlocal agreements. Such areas may be used to coordinate potable water, wastewater, reuse, drainage, transportation access, public facility planning, annexation coordination, and future land use decisions.

Policy 3.7 Utility service extensions should be coordinated with the Future Land Use Element, Capital Improvements Element, Intergovernmental Coordination Element, Conservation Element, Springs Protection Element, and Coastal Management Element to support compact growth, protect natural resources, and avoid scattered development patterns that are costly to serve.

Objective 4: Potable Water Facility LOS, Operations and Deficiencies

~~Coordinate with the developers, appropriate municipalities, and regulatory agencies to identify and correct system deficiencies and provide adequate potable water facility operations.~~ Coordinate with developers, municipalities, public facility providers, water management districts, and regulatory agencies to identify and correct system deficiencies, maintain adequate potable water facility operations, support facility resilience, and coordinate utility service with adopted growth management policies.

Potable Water Level of Service

Policy 4.1 The Level of Service (LOS) standard for potable water supplies in unincorporated areas is 150 gallons per capita per day or an Equivalent Residential Unit (ERU) for non-residential development. If the development is located in an unincorporated area with potable water service provided by a municipal jurisdiction, that municipal jurisdiction's potable water LOS standard shall apply.

Policy 4.2 Proposed development will be reviewed to ensure that the projected impacts do not lower the level of service. New residential development consisting of more than six (6) residential units in a Municipal Service District and located at the nearest property boundary within 300 feet of centralized public potable water facilities, shall be required to connect to the centralized public potable water facility. If centralized potable water services are not available, the applicant shall provide written verification from the municipality that service or capacity is not available. Lot sizes of three (3) acres or greater shall not be required to connect to public potable water until such time as they develop at a higher density.

Interlocal Coordination

Policy 4.3 The County will pursue inter-local agreements with appropriate municipalities, to

ensure that potable water systems standards are consistent with existing potable water facility capacity and that development regulations do not conflict with planned expansions into Municipal Service Districts.

Policy 4.4 Although the provision of public centralized potable water systems is generally under the jurisdiction of municipalities and other public facility providers, the County shall coordinate with the municipalities and other public facility providers to ensure that extensions are made in the areas of greatest growth and in areas with poor soils and/or other environmental conditions least capable of supporting private water wells. This coordination shall include, but not be limited to: initiatives made by the County to share land use information with the municipalities; review of soils data in areas adjacent to municipalities; and interlocal agreements providing for water line extensions by the municipalities into adjacent unincorporated areas in conjunction with grants and other similar activities mutually agreed upon by the municipalities and the County. Interlocal agreements may be sought with municipalities to include delineation of specific service area boundaries, and schedules for facility provision.

Policy 4.5 Interlocal agreements for potable water service may include Municipal Service Areas, service area boundaries, facility timing, capacity allocation, connection policies, funding responsibilities, emergency service coordination, and procedures for sharing land use and development information.

Policy 4.6 The County should coordinate with municipalities and regional utility partners to evaluate potable water facility resilience, including backup power, emergency interconnections, water quality protection, coastal vulnerability, saltwater intrusion risk, and protection or relocation of critical facilities where feasible.

Facility Operation and Maintenance

Policy 4.5~~7~~7 The County will coordinate with the Florida Department of Environmental Protection (FDEP), and any other applicable state or federal agency to ~~assure~~ ensure that public and private potable water facilities are maintained and operated in compliance with applicable state rules.

Capital Improvement Priorities

Policy 4.6~~8~~8 Replacement and/or correction of any future facility deficiencies shall be consistent with standards set forth in the Capital Improvements and Coastal Management Element and prioritized as follows:

Priority # 1: The replacement of a facility which poses an imminent threat to the public health or safety.

Priority # 2: The replacement of essential public services; i.e. water services to County offices and departments, and County utility operations.

Priority # 3: All others.

Policy 4.9 Potable water capital improvement priorities should also consider public health and safety, documented deficiencies, resilience of critical facilities, service to designated growth areas, protection of springs and groundwater, coastal hazard vulnerability, grant funding opportunities, and consistency with the Capital Improvements Element.

Objective 5 Water Conservation

Continue to promote water conservation measures, including measures described in the County's adopted water conservation ordinance, with the long-term goal of reducing per capita consumption.

Policy 5.1 The building codes will require new construction to incorporate water conservation features.

Policy 5.2 The beneficial use of reclaimed water shall be encouraged within the groundwater basin from which it was withdrawn. The County will coordinate with the appropriate Water Management District on the provision of reuse facilities.

Natural Resource Protection

Policy 5.3 The County will encourage the use of water conservation techniques in the design of new developments. Land development regulations shall:

a. Regulate and minimize development impacts to environmentally sensitive lands as set forth in the Conservation and Coastal Elements of the Plan.

b. Provide for innovative land use design techniques, including but not limited to, incentives for clustered development and the preservation of open space and existing vegetation. Land development regulations will include standards to allow for cluster subdivisions.

Water Supply Protection

Policy 5.4 The County will cooperate with the Water Management Districts in instituting water conservation measures to address drought conditions.

Policy 5.5 The County should coordinate water conservation, reuse, drought management, and aquifer protection strategies with agricultural users, municipalities, water management districts, and public facility providers.

Policy 5.6 The County should encourage reclaimed water, where feasible and environmentally appropriate, to offset potable water demand and support aquifer recharge, agricultural irrigation, landscape irrigation, and other beneficial uses consistent with applicable permits and water management district requirements.

Sanitary Sewer Sub-Element

Goal:

~~Ensure that sanitary sewer services and treatment facilities are adequately provided to support orderly, compact urban growth in a manner that protects surface and ground water quality.~~ Ensure that sanitary sewer services, wastewater treatment facilities, onsite wastewater coordination, and regional wastewater planning are adequately provided to support orderly, compact growth, protect public health, reduce nutrient loading, protect springs and groundwater, improve coastal resilience, and maintain surface and groundwater quality.

~~**Objective 1 Discouraging Urban Sprawl**~~
Objective 1 Efficient Wastewater Service and Compact Growth

~~Encourage compact urban development patterns and provide for the efficient use of existing public facilities in Municipal Service Districts.~~ Encourage compact urban development patterns and efficient use of existing and planned wastewater facilities within Municipal Service Districts, Municipal Service Areas where established, municipalities, special districts, and other areas designated by the Comprehensive Plan for centralized service.

Policy 1.1 The County will maximize the use of existing centralized sanitary sewer facilities and discourage urban sprawl by limiting urban services to Municipal Service Districts, special districts urbanized areas and commercial areas shown on the Future Land Use map.

Policy 1.2 Local ordinances dealing with wastewater treatment and disposal will be prepared and considered for adoption. These ordinances may include, but are not limited to, types and locations of sewage lines and treatment plants, hook-ups to existing public sewer systems, the location, timing and intensity of development in relation to the availability of sewer service, and the installation during construction of sewer stubs to provide future hook-ups to central sewers when they become available.

~~**Policy 1.3** The County will investigate the feasibility of allowing cluster decentralized sewage systems in rural areas to achieve water quality goals. The County will analyze costs, benefits, potential profits and the need for responsible management entities.~~

Policy 1.3 The County may evaluate decentralized, clustered, advanced, or managed wastewater systems where such systems are used to address documented water quality, public health, or environmental needs; are supported by a responsible management entity; and are consistent with applicable state law, water management district requirements, the Springs Protection Element, and the Future Land Use Element.

Sanitary Sewer Level of Service

Policy 1.4 The County will utilize a level of service standard for sanitary sewer services to ensure the availability of services in the Municipal Service District and develop future facility design requirements.

Policy 1.5 All central sewer systems shall be designed and constructed to provide a minimum average daily flow of one hundred (100) gallons per capita per day, or an Equivalent Residential Unit (ERU) for non- residential development, or if appropriate, a higher level of service as adopted by the municipal jurisdiction which commits to provide the service.

Policy 1.6 Residential population densities in any Planned Unit Development (PUD) served by a wastewater treatment plant may not exceed the gross density that would have been allowed for a conventional development, as established by the Future Land Use Element.

Policy 1.7 New residential development consisting of more than six (6) residential units in a Municipal Service District and located at the nearest property boundary within 300 feet of public sanitary sewer facilities, shall be required to connect to public sanitary sewer. If public sanitary sewer services are not available, the applicant shall provide written verification from the municipality that service or capacity is not available. Lot sizes of three (3) acres or greater shall not be required to connect to public sanitary sewer until such time as they develop at a higher density.

Wastewater Treatment Systems Guidelines

Policy 1.8 To ensure the availability of services, private package plants and centralized sanitary sewer systems may be permitted in Municipal Service Districts consistent with the guidelines and standards of this element.

It is the intent that wastewater treatment plants, centralized treatment plants and package treatment plants shall ultimately be under public ownership. Allowable private package plants shall be permitted as an interim measure and designed to provide for future hook-up to a municipal or sub-regional facility. The applicant shall be required to commit to ~~a transfer~~ transferring ownership of the system to the municipal entity.

Policy 1.9 As defined by this Comprehensive Plan:

a. Wastewater treatment plant - a facility designed to collect, transmit, treat or dispose of wastewater, excluding onsite sewage treatment and aerobic treatment systems covered by
F.A.C. Chapter 64E-6.

b. Centralized treatment plant - a wastewater system having a permitted capacity of 100,000 gallons per day or greater.

c. Package treatment plant - a wastewater treatment system having a permitted capacity of less than 100,000 gallons per day.

Centralized Wastewater Treatment Systems Guidelines

Policy 1.10 Centralized wastewater treatment systems will be limited in location to: Municipal Service Districts (MSD's); Developments of Regional Impacts (DRI's); Florida Quality Developments (FQD's); unincorporated communities recognized by the County and identified on the Future Land Use Map; and special sewer districts created by the County in accordance with State law.

Private Package Treatment Plants/Residential single-family developments in Municipal Service Districts

Policy 1.11 Private package treatment plants to serve residential single-family developments, including mobile home developments, shall be prohibited unless compelling information exists to demonstrate that the lack of a package wastewater treatment plant poses a significant health or environmental problem for which there is no other feasible solution Levy County may allow private package treatment plants to serve residential development in Municipal Service Districts on a case by case basis. A permitting process shall be established in the Land Development Code which requires, at a minimum, that the applicant demonstrate the following:

a. consistency with Policy 1.13 (b - g) of this element;
b. that alternative systems of wastewater disposal are not feasible;
c. that there will be no adverse impacts on water quality; and
d. adequate protection of County or public financial or other resources in the event of the need for subsequent County or public operation of such plant.

Package Treatment Plants/ Other residential development

Policy 1.12 Private package plants for non-single-family housing development, recreational vehicle parks, mobile home parks, congregate living facilities and other residential development outside of single-family residential development in a municipal service district may be permitted consistent with Policy 1.13.

Outside Municipal Service District/Private Package Treatment Plant for non-residential development

Policy 1.13 Private package treatment plants are permitted outside the Municipal Service Districts provided that they must meet or exceed the following standards:

a. Locations:

1. **Recognized unincorporated Communities and Commercial Areas -** Permitted in each of the named unincorporated communities and areas designated Commercial on the future land use map.

2. **Rural Commercial Nodes-** On Strategic Intermodal System (SIS) - Permitted at each rural commercial node on the SIS. On non-SIS roadway- Must meet or exceed one of the following thresholds:

   a. 200 platted lots outside of a Municipal Service District (or homes constructed) within a one-mile radius of the proposed location.

   b. 1,000 vehicles per day, average daily traffic on an abutting road.

   c. The distance to any other developed rural commercial node is two (2) miles or greater.

3. **For the purpose of Retrofitting** - Permitted in instances where "retrofitting" of an existing on-site system is necessary to correct a health hazard or to meet state environmental standards.

4. **Water Dependent Uses** - Permitted for water-dependent uses, which for the purposes of this Comprehensive Plan are defined as activities which can be carried out only on, in adjacent to, or connected to bodies of water (lakes, rivers, the Gulf, etc.) because the use requires access to the water body for: waterborne transportation, including ports or marinas; recreation; public utilities (electric generation, water supply, etc.); aquaculture; or other uses that are dependent upon large quantities of water or water bodies.

5. **Industrial Areas -** Permitted for industrial areas shown on the Future Land Use Map.

6. **Specialized Uses-** Institutional, tourist/entertainment, and resource-based recreation.

b. Densities of Development:

In no instance may gross densities be increased above those levels shown for the area on the Future Land Use Map. As used here, gross density is the number of dwelling units divided by the acres in the total development. Subdivisions which were recorded and met all then-current regulations and which predate the comprehensive plan (prior to 1990) are vested and may develop at the platted density, provided they meet all other applicable regulations.

c. Design:

General

1. For each private wastewater treatment plant to be installed, the applicant,

based on sound engineering principles, shall demonstrate that the particular design or unit proposed has a history of satisfactory treatment and operation when operated under conditions similar to those anticipated for the subject project.

Capacity

2. Wastewater treatment plant design shall address variable influent flow conditions, including provisions for treatment of all anticipated wastewater conditions and flows.

3. Wastewater treatment plants may be restricted to allow operation at no greater than 75% of the design capacity.

Pretreatment

4. Pre-treatment shall be required for industrial and other waste not classified as domestic wastewater.

Future Expansion

5. A suitable unobstructed area adjacent to the plant site and not less than twice the area of the plant site shall be reserved for future plant facility needs. This area shall provide for all setbacks, buffers, and other regulatory requirements.

6. A suitable unobstructed area not less than twice the area required for effluent disposal shall be reserved for future effluent disposal needs. This area shall provide for all setbacks, buffers, and other regulatory requirements.

Emergency back-up

7. Each wastewater treatment plant must be provided with an emergency back-up power supply capable of providing full plant operations. The back-up power supply shall be tested and operated for not less than one hour each week. This weekly operation shall be documented in the facility log.

Waivers

8. Should specific project conditions warrant, the County may waive certain requirements or impose more stringent and additional design standards. The County will consider waiving requirements only when the applicant can demonstrate that:

   a. Alternate standards promote flexibility, economy and are equal to or exceed minimum state requirements for wastewater treatment systems so as to provide reasonable environmental safeguards; and
   b. The proposed alternate standards are appropriate for the particular application.

d. Facility Monitoring:

Each wastewater treatment plant must be supervised and managed by a licensed sewer plant operator. A log of the supervisory and maintenance activities shall be maintained onsite for inspection by Levy County. An individual in responsible charge of the wastewater treatment plant shall be available on a daily basis, including weekends and holidays.

e. Operations/Maintenance:

A firm or individual specializing in the operation, repair and maintenance of wastewater treatment plants must be responsible for the operation and maintenance of the facility at all times. This may be the same firm that conducts monitoring as required by subsection d. above.

f. Financial Responsibility:

The owner of a wastewater treatment plant shall demonstrate proof of financial assurance to the satisfaction of the Board. This is intended to provide assurance that the facility will be properly operated and maintained. Such proof will also provide that, in the event of abandonment or other event that necessitates County or public operation of the plant, County and other public financial resources will be protected. The Board reserves the right and authority to deny any project which it considers not to be financially responsible. Financial responsibility may be reviewed on an annual basis.

g. Shutdown Order:

If any wastewater treatment plant is not operated in a manner which meets or exceeds regulatory standards or is operated in an unsatisfactory manner as determined by the Board, the Board may order the termination of the Certificate of Occupancy (or Occupational License) for those structures served by the system accompanied by a shut down of the facility.

Policy 1.14 The County should coordinate septic-to-sewer, septic retrofit, enhanced nutrient-reducing onsite sewage treatment and disposal systems, and wastewater treatment improvements in areas where such improvements would protect springs, groundwater, coastal waters, public health, or documented water quality needs.

Policy 1.15 Within springsheds, Outstanding Florida Springs Priority Focus Areas, coastal watersheds, or other environmentally sensitive areas, the County should coordinate wastewater planning with the Springs Protection Element, Conservation Element, Coastal Management Element, FDEP basin management action plans, water management district programs, and applicable state onsite sewage treatment and disposal requirements.

Policy 1.16 The County should continue to monitor regional wastewater planning efforts, including the Waccasassa Water and Wastewater Cooperative or successor regional utility initiatives, and should update comprehensive plan, capital improvement, and interlocal coordination assumptions as project scope, participating jurisdictions, groundwater source locations, treatment facility locations, pipeline alignments, permitting, and funding commitments are refined.

Objective 2 Treatment Plant Failures

~~Coordinate with Health Department (FDOH), the Department of Environmental Protection (DEP), the appropriate Water Management District and the land-owner to expedite the repair or elimination of failed septic tanks and sewage treatment plants deficiencies.~~ Coordinate with the Florida Department of Health, the Florida Department of Environmental Protection, the appropriate Water Management District, municipalities, public facility providers, and landowners to expedite the repair, replacement, upgrade, connection, or elimination of failed septic tanks and deficient sewage treatment plants.

Policy 2.1 The Levy County Development Department shall coordinate the review of deficient sanitary sewer systems with the appropriate agency within 30 days of notice of deficiency.

Policy 2.2 Existing systems will be repaired, reconstructed or replaced, or a hookup provided to a municipal system. The County will take over, or construct and generate, a sewer system only if no reasonable alternative exists.

Policy 2.3 The County will consider the fiscal costs and implementation alternatives associated with establishing On-Site Wastewater Management Districts [O.S.W.M.D.].

Monitoring Program

Policy 2.4 The County shall develop a monitoring program for wastewater treatment plants. This program is intended to be funded, at least in part, by annual assessments to wastewater treatment plant owners. The minimum frequency of compliance inspections would be monthly. The wastewater treatment plant owner shall be charged a reasonable fee for reinspections resulting from unsatisfactory regular inspections.

Interlocal Coordination

Policy 2.5 Although the provision of public centralized wastewater treatment systems is generally under the jurisdiction of municipalities and other public facility providers, the County shall coordinate with the municipalities and other public facility providers to ensure that extensions are made in the areas of greatest growth and in areas with poor soils and/or other environmental conditions least capable of supporting septic tanks. This coordination shall include, but not be limited to: initiatives made by the County to share land use information with the municipalities; review of soils data in areas adjacent to municipalities; and interlocal agreements providing for sewer line extensions by the municipalities into adjacent unincorporated areas in conjunction with grants and other similar activities mutually agreed upon by the municipalities and the County.

Policy 2.6 Where failed or deficient wastewater systems create a public health, water quality, groundwater, springs, or coastal resource concern, the County should evaluate available corrective options, including repair, replacement, advanced treatment, connection to central sewer, grant funding, interlocal coordination, or other measures authorized by law.

Policy 2.7 The County should coordinate with municipalities and public facility providers to identify areas where wastewater deficiencies, aging onsite systems, poor soils, high groundwater, coastal vulnerability, or nutrient concerns may warrant future utility planning or capital improvement evaluation.

Utilities Sub-Element

Goal:

~~Ensure that electric utilities are adequately and efficiently provided through coordination with private and state entities.~~ Ensure that electric, broadband, communications, and other utility systems are adequately, efficiently, resiliently, and compatibly provided through coordination with private utilities, public agencies, municipalities, state and regional entities, and affected communities.

Objective 1: Utility Guidelines

~~Permit utility companies the maximum amount of flexibility in providing essential public services while protecting the environmental and aesthetic quality of the County.~~

Permit utility companies flexibility in providing essential public services while protecting the environmental quality, scenic character, agricultural lands, conservation lands, rural communities, public safety, and aesthetic quality of the County.

Policy 1.1 Encourage utility facilities to locate in areas that efficiently serve designated growth areas, and minimize adverse impacts to the appearance and character of neighborhoods and ~~community~~ communities.

Policy 1.2 Encourage the utilization of common corridors for utility distribution systems.

Policy 1.3 Encourage the use of underground transmission lines where feasible.

Policy 1.4 Essential public utilities shall be permitted in all of the land use classifications and consistent with standards and guidelines in the Capital Improvement, Conservation and Coastal Elements.

Policy 1.5 Subdivision regulations shall specify location criteria and ensure there are adequate provisions of public facilities and services by new developments. Adequate utilities and services will be confirmed by the Levy County Development Department prior to the issuance of a development order.

Policy 1.6 The County will maintain close contact with public utilities that provide essential services to the County through direct contact and the development of guidelines to ensure continuity and availability of service.

Policy 1.7 The County should support expansion of broadband, communications, and technology infrastructure in a manner that improves access for residents, businesses, farms, schools, emergency services, and remote work opportunities while minimizing adverse impacts to rural character and environmentally sensitive lands.

Policy 1.8 The County should encourage major linear utility corridors, transmission lines, pipelines, and similar infrastructure to use existing rights-of-way, common corridors, co-location, and previously disturbed areas where feasible in order to reduce fragmentation of agricultural lands, forestry lands, conservation lands, wildlife habitat, and rural communities.

Policy 1.9 The County should seek early coordination with utility providers, state agencies, regional entities, municipalities, and affected communities regarding the location, design, mitigation, and community impacts of major utility facilities or corridors.

Policy 1.10 Utility planning should be coordinated with future land use, transportation, emergency management, conservation, coastal resilience, springs protection, and capital

improvements planning to ensure that essential services are reliable, resilient, and consistent with Levy County's long-term growth management framework.

Implementation Note: Policies that establish new mandatory development review standards, prohibit otherwise allowable utility alternatives, or create more restrictive or burdensome requirements should be reviewed by the County Attorney for consistency with applicable state law, including SB 180, vested rights, and other property rights considerations before adoption or application.