



CONSERVATION ELEMENT INTRODUCTION

The Conservation chapter or “Element” of the Comprehensive Plan is required by State Law to explain how the community will conserve, use and protect natural resources, including air, water, aquifer recharge areas, wetlands, waterwells, estuarine marshes, soils, beaches and shores (if any), floodplains, rivers, bays, lakes, harbors, forests, fisheries and wildlife, marine habitat, minerals and other natural and environmental resources. The Conservation Element is connected to the Future Land Use Element in two ways:

- A A future land use map or map series contained in the Future Land Use Element is required to identify existing and planned waterwells and cones of influence, where applicable; beaches and shores, including estuarine systems, where applicable; rivers, bays, lakes, floodplains and harbors; wetlands; minerals; and soils.
- B The future land uses identified on the maps are required to be consistent with State law and rules.

Seminole County has an abundance of natural resource areas, most notable are the Wekiva, St. Johns, and Econlockhatchee Rivers that are of statewide significance. The St. Johns River (and tributaries) is an Outstanding Florida Water Body and an American Heritage River, and the Wekiva River is an Outstanding Florida Water Body and federally designated Wild and Scenic River. The Wekiva River System Advisory Management Committee (established by Congress in 2000), with consultant assistance, is currently developing management goals and objectives that address five Outstanding Resource Values identified for the Wekiva River Wild and Scenic designation. The Econlockhatchee River is also an Outstanding Florida Water Body.

These rivers, in addition to numerous wetlands, lakes, and streams, provide not only habitat to a substantial wildlife population, but also offer attractive community assets and recreational opportunities. The preservation of both the quantity and quality of these resources is vital to the function of these resources and necessary to ensure the continued attractiveness of Seminole County. The County is firmly committed to implementing the provisions of Article II, Section 7 of the Constitution of the State of Florida regarding natural resources and scenic beauty. Seminole County is also committed to supporting the principles of the Central Florida Regional Vision (“How Shall We Grow?”) and the Envision Seminole 2045 Plan, including the principle to “preserve open space, recreational areas, farmland, water resources and regionally significant natural areas.”

The County's adoption of floodprone and wetland ordinances were critical steps to providing Countywide protection of wetlands. The County's wetlands protection program has established an extensive network of wetlands under conservation easements. Land acquisition efforts by Seminole County and the State of Florida have led to the conservation of major wetland systems in the Econlockhatchee, Wekiva, St. Johns, and Lake Jesup Basins. An ongoing focus on the conservation of intact wetland systems in the rural portion of the County serves to supplement these acquisition programs.

Considering the growth patterns of the County, it is increasingly important and challenging to maintain the quality of the County's natural resources. The Conservation Element addresses the long-range implementation of programs aimed at meeting environmental legislation and preserving the County's natural amenities. Program components address the quantity and quality of resources, including groundwater, surface water, floodplain, wetlands, upland communities, soils, air quality, and open space. The long-range plan includes implementation of the following major studies and programs:

- A Groundwater Assessment Model



- B Water Conservation Programs
- C Natural Lands Program
- D Recharge Area Overlay Zoning District
- E Expanded Water Reuse Systems
- F Wellfield Protection Regulations
- G Underground Tank Program
- H Well Capping Program
- I Energy Conservation and Greenhouse Gas Reduction
- J Educational Brochures
- K Seminole County Watershed Atlas
- L Wekiva Parkway and Protection Act, Master Stormwater Management Plan Support
- M Open Space Standards and Preservation Regulations

The success of these programs depends to a large degree upon community support and involve a significant amount of coordination with the municipalities and environmental agencies. Primary sources of information used to produce this Element include the following:

- A 1987 Conservation Element
- B 1995 Conservation Element
- C 1998 Evaluation and Appraisal Report
- D 2006 Evaluation and Appraisal Report
- E 2001 Conservation Element
- F Natural Resources Inventory
- G Spring Hammock Natural Lands Program Management Plans
- H Florida Fish and Wildlife Conservation Commission Change Detection Data
- I St. Johns River Water Management District Wetlands Trend Analysis
- J 2000 Seminole County Wetland Trend and Policy Study
- K The 2007 Central Florida Regional Growth Vision (How Shall We Grow?)
- L Seminole County Ten Year Water Supply Plan (Work Plan)



CONSERVATION ELEMENT GOALS, OBJECTIVES AND POLICIES

GOAL

Preserve, properly manage and enhance the quantity, quality and function of Seminole County's natural resources for existing and future generations such as the following natural resources: air, surface waters, groundwater supplies, soils/minerals, wetlands, native habitat and wildlife, floodplain, endangered, threatened and species of special concern, open spaces, aquifer recharge areas, and historic and archaeological resources.

OBJECTIVE CON 1 GROUNDWATER PROTECTION

The County shall continue to make use of new and existing studies as the basis for establishing programs that protect both the quantity and quality of groundwater resources and recharge areas.

Policy CON 1.1 Groundwater Model/Assessment

The County shall continue to work with the St. Johns River Water Management District, United States Geological Survey, Department of Environmental Protection, and interested parties to evaluate its long-range water conservation plan as part of the District regional water supply planning process, including participation in working groups and advisory groups on water supply planning, minimum flows and levels, and other aspects of the process, including facilitation of input from stakeholder groups.

Policy CON 1.2 Recharge Area Protection/Conservation Measures

The County shall implement conservation measures identified in the 2022 10-Year Water Supply Facilities Work Plan, required by Chapter 163, Florida Statutes regarding groundwater conservation measures and policies for the regulation of water usage, water use restrictions, and irrigation alternatives, and shall evaluate the implementation of these measures as part of each Comprehensive Plan Evaluation and Appraisal Report.

Policy CON 1.3 Recharge Area Protection

The County shall continue to enforce the Aquifer Recharge Overlay Zoning Classification, which sets alternative design criteria and standards to protect the functions of most effective aquifer recharge areas and shall evaluate the need to update these criteria and standards as part of future updates to the County's Land Development Code.

Policy CON 1.4 Recharge Area Reuse

The County shall continue to evaluate the use of septic systems and effluent reuse systems within most effective recharge areas and determine any long-term negative impacts on groundwater quality and, if appropriate, adopt and develop additional regulations governing these systems.

**Policy CON 1.5 Wellfield Protection**

The County shall continue to monitor and provide protection for areas surrounding public water supply wellfields according to the criteria set out in *Policy FLU 2.2.4 Wellfield Protection*.

Policy CON 1.6 Intergovernmental Wellfield Protection

The County shall pursue agreements, as needed, with municipalities and private water utilities for development and implementation of the Wellfield Protection Program.

Policy CON 1.7 Wellcapping Program

The County shall continue to inform the St. Johns River Water Management District (District) with regard to newly identified free flowing wells for action by the District's Abandoned Artesian Well Plugging Program. The County has an existing cost sharing agreement with the District for controlling Abandoned Artesian Wells. The County shall continue to participate in this cost sharing program.

Policy CON 1.8 Geneva Freshwater Lens (Bubble) Protection

A The County shall continue to evaluate the potential for acquisition of lands within the Geneva Freshwater Lens Area, as depicted in *Exhibit FLU: Resource Protection Areas*, and shall establish appropriate land use densities and measures to protect its critical recharge functions.

B The County shall coordinate with the St. Johns River Water Management District to evaluate the need for developing a sub-regional groundwater flow model for evaluating cumulative impacts to the Geneva Freshwater Lens for use when considering water well permit applications. Use of this model may serve as a method of reducing withdrawals that result in encroachment of chloride into this valuable natural resource.

C Development must demonstrate that groundwater withdrawals do not adversely affect water quality and water quantity of the Geneva Freshwater Lens.

D Agricultural uses must demonstrate compliance with Best Management Practices recommended by the Office of Agricultural Water Policy, Florida Department of Agriculture and Consumer Services.

Policy CON 1.9 Effluent Reuse

The County shall evaluate its expanded effluent reuse program as part of each Comprehensive Plan Evaluation and Appraisal Report. The program shall, at a minimum, evaluate the following:

- A Implementing expanded dual-line systems for County operated wastewater facilities in an economically and environmentally sound manner;
- B Requiring new development to install dual-line systems lines at the time of development where reuse programs are programmed or exist. This includes the identification of service areas where reuse may be applied and development of a phased implementation program;
- C Implementing existing sewer agreement takeback provisions;
- D Mechanisms to transport and dispose of reuse water within the most effective recharge areas;



- E Incentives for encouraging reuse systems; and
- F Determining when reuse programs may be appropriate.

Policy CON 1.10 Florida-Friendly/Waterwise Landscaping Regulation

The County shall continue to promote the use of Florida-Friendly/Waterwise landscaping irrigation techniques through updates and evaluations of County landscape regulations, which set standards for the use of native and drought tolerant species, removal of exotics, vegetative clearing, and efficient irrigation to maximize conservation of water resources. The updated arbor ordinance, adopted in 2023, requires all new landscaping material to be from the Florida-Friendly Landscaping Guide and/or be a native species.

Policy CON 1.11 Safe Withdrawal Rates

The County shall coordinate with the St. Johns River Water Management District (District) and surrounding jurisdictions to determine safe withdrawal rates and appropriate land use intensities to ensure an adequate water supply for existing and future needs and shall seek cooperation with the District on continued development of a water budget model.

Policy CON 1.12 Private Well Withdrawal

The County shall cooperate with the St. Johns River Water Management District to monitor the impacts of private well withdrawals on the Floridan Aquifer.

Policy CON 1.13 Minimize Water Withdrawal/Transport

The County shall minimize the withdrawal or transport of water to future developments that would adversely impact existing well production.

Policy CON 1.14 Emergency Water Conservation

The County shall continue to utilize, as necessary, the Emergency Water Conservation ordinance to enable the County to limit water usage, including restrictions on reclaimed water use, by methods that may include, but are not limited to, citations with fines in order to enforce restrictions and surcharges for excessive consumption and use methods as are otherwise authorized by law. The ordinance shall, at a minimum, be consistent with the St. Johns River Water Management District's Emergency Water Conservation requirements.

Policy CON 1.15 Ten-Year Water Supply Facilities Work Plan

- A The County shall assess projected water needs and sources for at least a 10-year planning period as part of creating and maintaining a Water Supply Facilities Work Plan (Work Plan) that is adopted by reference as supporting documentation to the Potable Water Element. Capital projects planned during the first five years of the Work Plan shall also be shown in the Capital Improvements Element.
- B The Work Plan shall address each major type of water supply project, groundwater use optimization, conservation, reuse, and development of alternative water supply sources and water resources. For each project type, a detailed description of the project schedule, major activities and capital projects shall be provided and updated, as necessary.

Policy CON 1.16 Coordination with Regional Water Supply Plan



The Work Plan shall be updated within 18 months following an update to the District Regional Water Supply Plan. The County shall coordinate with the St. Johns River Water Management District's most recent Water Supply Plan when proposing or amending the 10-year Water Supply Facilities Work Plan (Work Plan). This coordination shall be documented in the text of the Work Plan with each amendment. Where appropriate and feasible, the Work Plan shall include collaborative approaches with other local governments for water supply source use and development, and water resource development.

Policy CON 1.17 Articulation of Water Conservation and Reuse Programs and Practices

Water conservation and reuse programs and practices that are part of the Seminole County Water Supply Facilities Work Plan (Work Plan) are detailed in Potable Water Element *Policy POT 5.9 Water Conservation Programs and Practices* and *Policy POT 5.10 Reclaimed Water Programs and Practices*.

OBJECTIVE CON 2 SURFACE WATER PROTECTION

The County shall continually evaluate its ongoing surface water quality program to protect and, where necessary and feasible, enhance the quality of surface waters.

Policy CON 2.1 Water Quality Assessment

The County shall, through its ongoing water quality monitoring program, identify areas of need for more intense sampling and shall partner with the appropriate agencies to accomplish these investigations. The County shall, with each Evaluation and Appraisal Report, evaluate the need for more intense sampling to address the continuous nature of surface water quality programs and processes.

Policy CON 2.2 Water Quality Improvement

The County shall continue to implement, as part of the Federal and State mandated Total Maximum Daily Load (TMDL) policies, a program to identify and improve surface water quality associated with stormwater runoff within receiving waters, which are below established standards.

Policy CON 2.3 Best Management Practices

The County shall evaluate every five (5) years, after coordination with the Agricultural Extension Agency, Natural Resources Conservation Service and other appropriate agencies, its Water Conservation and Sensitive Lands Plan and Best Management Practices (BMPs) to minimize agricultural, horticultural and silvicultural impacts to both surface water quantity and quality, wetland and floodplain areas. This evaluation shall include a review and incorporation of any applicable new BMPs established by the Division of Forestry, Florida Department of Environmental Protection, St. Johns River Water Management District, Department of Agriculture and Consumer Services, and other agencies.

In addition to this Plan, all activities permitted within designated wetland and floodprone areas, including agriculture and silviculture shall, at a minimum, comply with the County's existing Floodprone and Arbor Ordinances to ensure the protection and function of these resource areas.

**Policy CON 2.4 Water Body Building Setback**

The County shall continue to require that building setbacks for new primary buildings on lots created after 2015 be placed at least 50 feet from the normal high-water line of natural water bodies.

Policy CON 2.5 Wekiva River

- A The County shall continue to manage and regulate development along the Wekiva River to ensure its continued designation as an Outstanding Florida Water Body and Wild and Scenic River, and shall continue to ensure that all development maintains consistency with the Wekiva River Protection Act and Wekiva Parkway and Protection Act (see Future Land Use Element for other policies relating to the Wekiva River).
- B The County shall enforce all clearing and building setbacks or protection/buffer zones and areas along the Wekiva River as imposed by rules of the St. Johns River Water Management District, any State agency or as may be otherwise imposed by law, provided that a minimum 200 foot clearing and building setback shall be set along the Wekiva River, as measured from the normal high-water line or the landward limit of established conservation areas, to serve as a scenic and environmental buffer to maintain the status quo of the natural environment and prevent public harm.
- C As additional protection, development activity (including the placing or depositing of fill within wetlands and the 100-year floodplain identified by FEMA), within the Wekiva River Protection Area shall be prohibited except in cases of overriding public interest. Where wetland values are degraded due to overriding public interest, mitigation efforts shall occur. Floodplain impacts will require compensating storage.

Policy CON 2.6 Water Quality Design Techniques

The County shall continue to evaluate and, if appropriate, enact, alternative development (design, construction and maintenance) standards which enhance water quality. This evaluation shall include, at a minimum, a review of the following:

- A Non-structural storm water management system designs;
- B Littoral zone vegetation requirements;
- C Vegetation removal and management standards;
- D System designs that conserve uplands and populations of listed species; and
- E Low Impact Development practices.

Policy CON 2.7 Intergovernmental Coordination

The County shall continue to coordinate and pursue joint programs with and seek funding, where available, from with the St. Johns River Water Management District, the Florida Department of Environmental Protection, and other agencies for surface water management studies and improvement programs. Specific programs that require further coordination include, but are not limited to, the Surface Water Improvement Program, joint projects toward the restoration of Lake Jesup, the Total Maximum Daily Load program, and the protection of the Econlockhatchee and Wekiva River Basins.

**Policy CON 2.8 Educational Brochures**

The County shall develop and distribute to homeowners associations, civic groups, schools and other organizations, educational brochures addressing surface water and lake improvement practices and related matters such as Florida-friendly Landscaping for properties within the Wekiva Study Area and all other impaired watersheds identified by the Florida Department of Environmental Protection's Total Maximum Daily Load program.

Policy CON 2.9 Environmental Education Program

The County shall continue to support and expand existing environmental programs (Natural Lands Education, Seminole Education, Restoration and Volunteer (SERV) Program, Lakewatch, Florida Friendly Landscaping Program, and Parks Education) and pursue alternatives to expand the public's knowledge of environmental programs through education, the media and other available avenues of communication. The County shall continue to provide public access to environmental data by expanding the Countywide Watershed Atlas and the Natural Lands Program Web Sites.

Policy CON 2.10 Total Maximum Daily Load

The County shall work cooperatively with the Florida Department of Environmental Protection (FDEP) to develop a proactive approach to the Total Maximum Daily Load (TMDL) process through the County's monitoring program, National Pollutant Discharge Elimination System program, Lake Management program, and County's Watershed Atlas project. These projects, and coordination between County and FDEP staff, with assistance from the County's consultant, has and will continue to enable the County to participate and have greater affect upon the development of TMDLs for all impaired water bodies, including those located within municipalities.

Policy CON 2.11 Low Impact Development Practices

The County shall amend the Land Development Code to incorporate and promote Low Impact Development principles and stormwater BMPs to better conserve, protect, and restore natural resource systems, reduce infrastructure costs, and mitigate potential environmental impacts.

Policy CON 2.12 Florida Consumer Fertilizer Task Force

The County shall adopt the recommendations of the Florida Consumer Fertilizer Task Force, established by the Florida Legislature. Seminole County Board of County Commissioners approved a Fertilizer Ordinance, effective February 28, 2017, that regulates fertilizers containing nitrogen and/or phosphorus and provides specific management guidelines for fertilizer application in order to minimize negative impacts to our natural waterbodies. This ordinance is for unincorporated Seminole County, but all seven cities within the County have adopted this ordinance, either in its entirety or in large part.

OBJECTIVE CON 3 FLOODPLAIN, WETLANDS, AND UPLAND COMMUNITIES

The County shall protect ecological systems including wetlands and uplands, which are sensitive to development impacts and provide important natural functions for maintenance of environmental quality and wildlife habitats.



Policy CON 3.1 Environmentally Sensitive Lands Overlay Area

To ensure continued compliance with the provisions of the National Flood Insurance Program and the wetlands protection programs of the St. Johns River Water Management District (District), the County shall maintain the Environmentally Sensitive Lands Overlay Area as an adopted Exhibit in the Future Land Use Element for use during review of proposed developments. Pursuant to Rule 9J-5.003, Florida Administrative Code, Seminole County hereby defines the "Environmentally Sensitive Lands Overlay" to mean areas inundated during the 100-year flood event or identified by the National Flood Insurance Program as an A Zone or V Zone on Flood Insurance Rate Maps or Flood Hazard Boundary Maps, and lands identified as Wetlands contained within Seminole County on the maps of the District. Nothing in this definition shall be construed to prohibit silviculture operations which employ the Florida Department of Agriculture and Consumer Affairs Best Management Practices as revised in 1993. The Exhibit FLU "Environmentally Sensitive Lands Overlay" shall be updated and adopted as an amendment to the Seminole County Comprehensive Plan each time the National Flood Insurance Rate Maps and/or District Wetlands maps are updated. The Environmentally Sensitive Lands Overlay shall apply to unincorporated Seminole County.

Policy CON 3.2 Countywide Wetland/Flood Regulations

The County shall encourage local governments, through joint planning agreements and intergovernmental agreements, to adopt the County's floodprone performance standards and regulations for use in reviewing and approving all new development/redevelopment proposals.

Policy CON 3.3 Wetlands Management Program

The County shall continue to protect wetlands identified as part of the Environmentally Sensitive Lands Overlay as defined in *Policy CON 3.1 Environmentally Sensitive Lands Overlay Area* through either the County Land Development process that applies to locally significant wetlands, as specified in *Policy CON 7.4 Wetland Regulation – Buffers, Performance Standards and Compatibility*, or by referring applicants to the St. Johns River Water Management District permitting process for regionally significant wetlands.

Policy CON 3.4 Open Space Regulation

The County shall continue to use and enforce, at a minimum, the open space requirements contained in the Seminole County Comprehensive Plan in *Policy FLU 2.1.5 Natural/Environmental Lands Acquisition and Management Program*, *Policy FLU 2.1.3 Green Print Coordination*, *Policy FLU 5.1.1 Performance Standards for Management of Archaeological Resources Located on Proposed Development Sites*, *Policy FLU 2.5.6 Conservation of Water Resources*, *Policy FLU 2.5.2 Cluster Development*, *Policy FLU 5.4.1 Development Standards*, *Policy FLU 5.4.8 Performance Standards for Urban Neighborhoods*, *Policy FLU 4.1.3 Crime Prevention Through Environmental Design*, *Policy FLU 4.1.3 Urban Open Space*, *On-Site Recreational Amenities and Buffering Performance Frameworks for Infill/Redevelopment Areas* and *Policy FLU 4.2.2 Mixed-Use Developments*, the implementation standards of these policies as contained in the Seminole County Land Development Code; and the definition of open space unique to the Wekiva Study Area.



Policy CON 3.5 Planned Development PD/Cluster Developments

The County shall continue to allow planned developments and cluster type developments in order to preserve large contiguous areas of wetlands and other environmentally sensitive communities. Performance standards contained in the Seminole County Comprehensive Plan and implemented by the Land Development Code shall ensure that the use of the Planned Development option is compatible with surrounding land uses and is a beneficial use within the community.

Drafter's note: Policy 3.5 operates with the assumption that there is no right to any particular land use (i.e., single family homes, townhouses, etc.) within a Planned Development (PD). All uses within a PD are subject to approval by the Board of County Commissioners (BCC) and are dependent upon satisfaction of Comprehensive Plan and Land Development Code performance standards to achieve compatibility with adjacent development, neighborhoods, development trends, etc. The BCC may impose reasonable conditions at the time of zoning approval of PDs.

Policy CON 3.6 Conservation Easements/Dedications

The County shall continue to rely upon conservation easements or require dedication of open space areas to an appropriate agency as a tool for preserving floodplain, wetland and ecologically significant communities.

Policy CON 3.7 Agency Regulation Coordination

The County shall coordinate with the St. Johns River Water Management District (District), the Florida Department of Environmental Protection, the Florida Department of Community Affairs, the Florida Fish and Wildlife Conservation Commission (FFWCC), and other appropriate agencies as required by, and in order to implement *Policy IGC 3.3 Plan Coordination*, and during the review of development proposals, to ensure that comprehensive plan amendments, development orders and permits are consistent with the Wekiva Parkway and Protection Act, Wekiva River Protection Act, the District Protection Zone rules, adopted Management Plans, and the FFWCC regulations for the protection of endangered, threatened or species of special concern (both plant and animal), and all other applicable laws, rules and regulations.

Policy CON 3.8 Econlockhatchee River Basin Protection

The County shall continue to regulate development consistent with the Seminole County Econlockhatchee River Basin Protection Ordinance to ensure its preservation as a recognized outstanding natural resource. This basin is shown on *Exhibits FLU: Resource Protection Areas* and *CON: Econlockhatchee and Wekiva River Protection Areas and Wekiva Study Area*. Minimum ordinance provisions necessary to ensure protection of the Econlockhatchee River Basin shall include:

- A A 550-foot development restriction zone;
- B Provisions for density transfers outside of protection zones and critical habitats;
- C Protection of floodplain, wetlands, and rare upland habitat;
- D Historic and archaeological resource assessments; and



E Minimal removal of native habitats.

Policy CON 3.9 Econlockhatchee River Outstanding Florida Water Designation

The County shall continue to manage and regulate development along the Econlockhatchee River to ensure its continued designation as an outstanding Florida Water Body and ensure that all development is consistent with the Econlockhatchee River Protection Overlay Standards Classification.

Policy CON 3.10 Protection of Endangered and Threatened Wildlife

The County shall continue to require, as part of the development review process, that prior to development approval, proposed development must coordinate with all appropriate agencies and comply with the US Fish and Wildlife Service and the Florida Fish and Wildlife Conservation Commission Rules as well as other applicable federal and State Laws regarding protection of endangered and threatened wildlife.

The Seminole County Bear Ordinance 2015-33 addresses areas within Seminole County in which there is a high incidence of bears foraging for food in Refuse containers and other sources, occurring at a level that poses a threat to the health, safety, and welfare of the citizens and visitors to the County. Urban Bear Management Areas have been established by the ordinance upon determination by the Board of County Commissioners should the aforementioned conditions exist. The ordinance stresses that no individual shall intentionally or unintentionally feed or provide food to bears in any manner on any public or private property within Seminole County. Within Urban Bear Management Areas, all refuse from residential properties must be secured within functioning bear resistant residential refuse containers. Recyclable materials stored outside until scheduled collection day, and/or placed at a designated collection location on scheduled collection day must be sufficiently free from residue of food and other materials so that they are not an attractant to bears. Development approvals for residential subdivisions within any Urban Bear Management Area will include the requirement that bear resistant residential refuse containers be used for all residential properties and common areas within the subdivision.

Policy CON 3.11 Planning Standards for Natural Resource

The County shall evaluate and update, as needed, the Planning Standards for Natural Resources in conjunction with the Land Development Code update scheduled for completion by 2011, and ensure the addition of appropriate State and Federal procedures and regulations pertaining to endangered and threatened species, should the State and federal regulations reflect any changes that have occurred since the County last updated its Land Development Code.

Policy CON 3.12 Central Florida Regional Growth Vision (How Shall We Grow?)

The County shall guide development in accordance with the principles of preserving open space, recreational areas, farmland, water resources, and regionally significant areas, as established by the 2007 Central Florida Regional Growth Vision (How Shall We Grow?).

OBJECTIVE CON 4 SOILS/MINERALS/BORROW PITS

The County shall minimize adverse impacts to the natural resource functions of soils prior to development.

**Policy CON 4.1 Septic Tanks**

The County shall continue to rely on the State Health Department to develop and implement guidelines and standards to regulate the location and use of septic systems on soils with low or very low potential.

Policy CON 4.2 Soil Survey

The County shall continue to use the most recent Soil Survey of Seminole County and Soil Supplement as a source of soil interpretation information for Countywide land use planning and development review and approval.

Policy CON 4.3 Public Facilities on Low Potential Soils

The County shall discourage the dedication of land for public ownership or maintenance for utilities, roads, or future public facility sites in areas where soil potential is low or very low unless these areas are to be used for passive recreation, preservation or retention, conservation easements, drainage, wildlife habitat areas or unless the overriding public interest warrants the dedication of such lands.

Policy CON 4.4 Erosion/Stream Bank Stabilization

The County shall continue to ensure, as part of the water quality program, the minimization of erosion and the stabilization of stream banks through planting of trees, shrubs and other vegetation or materials to stabilize soils and treat storm runoff.

Policy CON 4.5 Mining and Borrow Pit Operations

The County shall evaluate Land Development Code (LDC) regulations relative to Mining and Borrow Pit Operations, including the requirement for submission of restoration, reclamation and/or mitigation plans.

OBJECTIVE CON 5 AIR QUALITY

The County shall ensure that established air quality standards are maintained within Seminole County.

Policy CON 5.1 Air Quality Monitoring

The County shall continue to evaluate the need for expanding existing air quality monitoring stations within Seminole County through coordination with the Florida Department of Environmental Protection, the East Central Florida Regional Planning Council and adjacent municipalities. This evaluation, at minimum, shall include the following:

- A Adequacy of existing monitoring programs;
- B Location of existing and future areas of traffic congestion and major transportation construction areas for possible monitoring; and
- C Joint funding of ongoing monitoring programs.

Policy CON 5.2 Monitoring Regulations

The County shall evaluate, if necessary, the need to include standards and criteria for requiring ongoing air quality monitoring as part of development orders approving large projects as part of the Land Development Code.

**Policy CON 5.3 Toxic Chemical Release**

The County shall continue to rely on Land Development Code regulations governing the use and release of toxic chemicals or other matter into the air.

Policy CON 5.4 Reduction of Greenhouse Gas Emissions

The County shall continue its efforts to reduce greenhouse gas emissions from the transportation sector by incentivizing energy-efficient land use patterns through redevelopment that will reduce reliance on the automobile and by continuing support for Central Florida Regional Transportation Authority (LYNX) public transit improvements and the SunRail commuter rail to provide alternatives to the automobile. If financially feasible, the County may also make continued use of the software of the International Council for Local Environmental Initiatives , which provides a framework to track energy and waste related activities in a community, and to calculate the amounts of greenhouse gases produced by each activity and sector.

OBJECTIVE CON 6 WATER CONSERVATION

The County shall continue its ongoing efforts to conserve water by guiding land development patterns into forms that are water-conservative, and examining revisions to the Land Development Code that reduce the need for irrigation of landscaping in developed areas.

Policy CON 6.1 Water Conservation Techniques

- A Current regulations encourage the use of Florida-Friendly/Waterwise landscaping irrigation techniques. Potential changes include requirements to mandate the use of such materials for a minimum portion of the required open space for nonresidential development. The County shall ensure the changes are coordinated with and are supportive of the County's adopted irrigation and landscape ordinances and complies with the Potable Water Element *Policy POT 1.5 Conservation Devices* and Conservation Element *Policy CON 1.10 Florida-friendly/Waterwise Landscaping Regulation*.

Policy CON 6.2 Water Conservation Programs

The County shall conserve water resources through the continuation of the Seminole County Water Conservation Program, which includes, but is not limited to, the following projects:

- A Continue to operate, if financially feasible, a "demonstration garden" of Florida-friendly plants at the County's Environmental Studies Center, and prepare and implement a new site at the Seminole County Extension Office at Five Points, on U.S. 17-92, in partnership with the Seminole County Master Gardeners, in creating a Waterwise Learning Garden for citizens. The presence of this Garden shall also result in a savings of water by Seminole County.
- B Continue, if financially feasible, the public education efforts in water conservation through the provision of information via the County's website and presentations on water conservation issues throughout the community (schools, festivals, special events, civic groups and garden clubs). Expand the public education efforts through taping of programming to be aired on Seminole Government Television for a series about environmental issues (including water conservation) and a series of before and after of the Waterwise Learning Garden.



- C Continuation, if financially feasible, of the program for the provision of appropriate irrigation systems for single-family homes. A study is underway during 2008 to evaluate whether such systems can also be provided to "commercial" water users (which includes multi-family residential uses).
- D Continue enforcement of Water Conservation Ordinance 2009-24, which is in accordance with Rule 40C-2.042(2) (a) and (b), Florida Administrative Code, with a trained team of employees who patrol service areas of the County for violation of water limits. Identification of violators results either in outreach opportunities to educate, or imposition of fines when restrictions are continually disregarded.

OBJECTIVE CON 7 COMPREHENSIVE PROTECTION OF WETLANDS

The County shall protect the natural functions provided by wetlands with strategies that direct incompatible uses away from wetlands by first avoidance of the wetland on a site, or minimization of impacts, and then either a conservation easement and setbacks and/or the use of techniques that provide for mitigation of potential impacts on wetlands, consistent with the Uniform Mitigation Assessment Method used by the St. Johns River Water Management District. The natural functions of wetlands vary depending upon the type, location, and classification, but could be affected by the degree of historic alteration. For purposes of fulfilling this objective, urban wetlands will refer to wetlands within the County's urban area (i.e., wetlands outside of the County's Rural Area as established in the Comprehensive Plan) and not contained in the Wekiva River Protection Area. Studies have found that in aggregate, the wetland systems in the Wekiva River Basin, Lake Jesup Basin, and the Rural Area are higher in quality and function, and provide connectivity of a regional significance. The wetlands in other portions of the County also provide value even if not as a part of a regional system. The County's strategy for sustaining the functions of those wetland systems in the urban area, and in rural areas other than those with special protections shall include the following directives:

Policy CON 7.1 Land Acquisition and Associated Management Plans

The County shall focus on completion of management plans associated with lands acquired via the County's Natural Lands Program. The County shall continue to acquire, as monies are available, and partner with other agencies to acquire areas of environmental sensitivity and wetlands in the Wekiva River Basin, Lake Jesup Basin, the East Rural Area, and the Geneva Freshwater Lens Area.

Policy CON 7.2 Special Area Protection

The County shall continue to enforce and apply all special federal, State, and local provisions that relate to protection of wetlands and their functions, including:

- A The Wekiva River Protection Area as defined in Section 369.303(9), Florida Statutes, *Policy FLU 2.2.5 Wekiva and Econlockhatchee River Protection* and *Objective FLU 2.3 Protection of the Natural Resources of the Wekiva Study Area* and its policies, contained within the Seminole County Comprehensive Plan;
- B The Wekiva Global Compliance Agreement;
- C All provisions set forth in the Land Development Code of Seminole County relating to protection of wetlands and intended to implement the wetland protection policies of this Plan;
- D The Econlockhatchee River Protection Ordinance;



- E Standards set forth in this Plan which protect the Rural Area; and
- F All State and Water Management District wetland protection requirements, including:
 - 1 The St. Johns River Water Management District's Wekiva and Econlockhatchee Riparian Habitat Protection and Water Quality Zone Standards; and
 - 2 The St. Johns River Water Management District's Drainage Basin Rules as applicable to Nested Basins and Specially Designated Basins.

Policy CON 7.3 Future Land Use Designations

The County shall continue to utilize the Future Land Use designations as contained within this Plan to direct incompatible uses away from wetlands, including:

- A The use of special planning techniques;
- B The application of the Environmentally Sensitive Lands Overlay; and
- C Reliance on the Urban/Rural Boundary and the associated protection provided therein to wetlands.

Policy CON 7.4 Wetland Regulation-Buffers, Performance Standards and Compatibility

- A Upland buffers adjacent to protected wetlands provide habitat for some wetland dependent species, and protection from detrimental effects of development adjacent to the wetland.
- B The County shall require a 15-foot minimum, 25-foot average wetland buffer in areas outside of the Wekiva River Protection Area and the Econlockhatchee River Protection Area that will protect the function of the wetlands and the dependent organisms. Acceptable uses within the designated upland buffers include restoration, enhancement, and pervious trails.
- C The County's Development Review Process shall continue to guide development that may impact locally significant wetlands outside of the Wekiva River Protection Area and Econlockhatchee River Protection Area in a manner consistent with and supportive of the regulations contained in Rule 40C-4.302(2), Florida Administrative Code (FAC) and the regulations contained within the St. Johns River Water Management District *Applicant's Handbook: Management and Storage of Surface Waters* dated November 5, 2008. The County shall continue to direct applicants with proposals that affect wetlands regulated by the St. Johns River Water Management to the District to apply for the necessary permits. Locally significant wetlands are those wetlands that due to function, size, rarity or endangerment retain or provide benefits of local significance to the natural or human environment, regardless of ownership, but are not included within a regionally significant wetlands system. In particular, development that may impact locally significant wetlands by physically affecting the wetland through the inclusion of catwalks (boardwalks), docks and gazebos shall be directed by the following performance standards:
 - 1 The structure and foundation system of a catwalk (boardwalk) or dock shall be designed so as not to impede, interrupt, or impound surface water flows.



- 2 Construction shall take place only during the dry season (usually October through May).
 - 3 The use of heavy equipment shall be minimized. Any clearing of vegetation shall be confined to the immediate right-of-way of the catwalk or dock and shall not exceed a width equal to the width of the catwalk or dock plus five feet to either side.
 - 4 There shall be no temporary filling of the wetland for construction or any other purposes except in those wetlands where filling is permitted.
 - 5 All pilings shall be driven to the desired depth and shall not be jetted into the soil.
- D Wetland Compatibility Criteria. For purposes of reviewing land use and land development applications which include the potential disruption of locally significant wetlands, no encroachment on such wetlands shall be acceptable except for construction of, or improvement of, public facilities that benefit the general public.
- E The Seminole County Comprehensive Plan through this Policy, and the Land Development Code as implementer of this Policy, shall continue to require dedication to the County or Water Management District of all post-development wetlands as conservation easements.

Policy CON 7.5 Wetland Regulation-Location: Urban

Urban wetlands still maintain functions that provide value to the community, therefore, pre-development hydrology/hydro-period in these wetlands shall be maintained. In addition, the ability of urban wetland systems to retain their existing functions shall not be compromised by development activities in Seminole County. These functions may include:

- A HYDROLOGIC PROCESSES
- 1 - Storage of surface water
 - 2 - Storage of sub-surface water
 - 3 - Moderation of groundwater flow
 - 4 - Dissipation of energy
- B BIOCHEMICAL PROCESSES
- 1 - Nutrient cycling
 - 2 - Contaminant removal
 - 3 - Retention of particulates
 - 4 - Carbon export

Policy CON 7.6 Wetland Regulation-Location: Rural

Wetlands in the Rural Areas also retain those functions listed above in *Policy CON 7.5 Wetland Regulation-Location: Urban* and, because of the existing mosaic of upland and wetland systems, provide additional functions and values related to the habitat component of wetlands. In conjunction with the Land Development Code update, the County will evaluate the need to require additional measures for protection of this habitat component. These additional measures of habitat protection will include a concentrated effort to sustain large tracts of intact



wetland systems through acquisition, conservation easement, and the encouragement of comprehensive mitigation tracts.

Policy CON 7.7 Wetland Regulation-Mitigation

Seminole County will regulate wetlands within the urban and rural areas in order to protect and sustain their functions and values. In conjunction with the Land Development Code update, the County will evaluate the need to provide additional criteria which will allow for mitigation of impacts to wetlands caused by the development actions. The following framework will be used to create this wetland mitigation process:

- A The County shall accept mitigation required by the St. Johns River Water Management District (District) for impacts that occur within the urban area as defined by *Objective CON 7 Comprehensive Protection of Wetlands*.
- B For impacts to wetlands in the Rural Area, the County shall create criteria that will rely upon mitigation that will be to the maximum extent possible to act as disincentive for impacting the high quality areas contained within the Rural Area. These ratios may be within the upper-range of the ratios accepted by the District.
- C As additional protection, development activity (including the placing or depositing of fill within wetlands and the one hundred (100) year floodplain identified by FEMA), within the Wekiva River Protection Area shall be prohibited except in cases of overriding public interest. Where wetland values are degraded due to overriding public interest, mitigation efforts shall occur. Floodplain impacts will require compensating storage.
- D Seminole County shall pursue agreements with the District that allow the brokerage of mitigation projects for impacts to Nested and Special Basins as fee simple dedications to the Seminole County Natural Lands Program.
- E Creation, Enhancement, and Restoration projects proposed as mitigation shall be evaluated based on the type, quality, size, and location of the wetlands being impacted, and shall not be encouraged in lieu of Preservation and Upland Conservation.

Policy CON 7.8 Wetland Regulation-Intergovernmental Coordination

Seminole County shall coordinate efforts with the St. Johns River Water Management District and the US Army Corps of Engineers to maximize the benefits of mitigation in the Wekiva, Jesup, and Econlockhatchee River Basins, and in the Rural Areas of the County.

Policy CON 7.9 Management of Publicly Owned Wetlands

Seminole County shall continue to coordinate with local, State, and federal entities that own land in the County to implement projects for the management of wetlands and other natural resources.

OBJECTIVE CON 8 ENERGY CONSERVATION

The County shall conserve and properly manage energy resources for existing and future generations by supporting efforts for achieving energy conservation and sustainability and by implementing energy conservation measures and practices.

**Policy CON 8.1 Review of County Energy Measures**

The County shall review, with each Comprehensive Plan Evaluation and Appraisal Report, existing Countywide energy conservation measures and practices, and, if necessary adopt additional Comprehensive Plan policies that further the goal of achieving measurable results in energy conservation. The review shall include an evaluation of the effect of County plans, programs, and policies and determine how to reduce energy impacts and make efficient use of energy resources. The review may also include the use of the International Council for Local Environmental Initiatives software, which provides a systematic framework for local governments to track energy and waste-related activities in a community, and to calculate the amounts of greenhouse gases produced by each activity and sector.

Policy CON 8.2 State and Federal Incentives

The County shall support incentives by the State and federal government to promote energy efficiency and conservation, including solar and other clean alternative energy sources.

Policy CON 8.3 Coordinated Energy Conservation

The County shall endeavor to coordinate with the municipalities to promote energy conservation and education.

Policy CON 8.4 Alternative Energy Sources

The County shall encourage the development of power generating facilities that are more energy-efficient and rely on clean alternative energy resources, such as natural gas, fuel cells, or solar energy.

Policy CON 8.5 Florida Energy Code and requirements of Florida Statute

The County shall continue to enforce the Florida Energy Code to ensure that construction meets or exceeds required energy conservation requirements and shall ensure that its Building Code complies with the energy conservation requirements of Florida Statutes for residential construction, as noted in *Policy HSG 11.1 Renewable Energy Resources in Residential Development*.

Policy CON 8.6 Coordination with Electrical Power Companies

The County shall provide growth projections and other data, as needed, to the power companies to coordinate better on estimating future energy consumption by new growth.

Policy CON 8.7 Use of Alternative Energy Sources

The County shall continue to use solar power, or other forms of alternative power, where available and feasible.

Policy CON 8.8 Energy Efficiency Measures in Fleet Services

The County shall endeavor to increase fuel efficiency in County fleet vehicles to an industry average of 35 miles per gallon, consistent with federal legislation approved in 2007.

Policy CON 8.9 Energy Conservation Measures in Leased Space

The County, when entering into contracts for leased space, will request energy conservation measures to be included in the contract from the leasing agency.

**Policy CON 8.10 Energy Education Efforts by the County Extension Service**

The County Extension Service will continue to provide energy related educational programs and energy conservation materials to County employees, the public, and for school age children.

Policy CON 8.11 Policy Review

The County shall review new policies, programs, and work plans for their effect on energy conservation and efficiency.

Policy CON 8.12 Promote Alternative Modes of Travel to Minimize Fuel Consumption

The County shall continue to support efforts put forth in the *County Transit, Pedestrian and Bicycle Multi-Modal Mobility Strategy and Quality/Levels of Service Mobility Strategy* of the Transportation Element (*Policy TRA 2.1.1*) and the *Energy Conservation Overlay* of the Future Land Use Element (*Policy FLU 4.2.4 Urban Centers and Corridors Overlay*), to increase mass transit ridership, use of SunRail commuter rail, bicycle and other alternative modes of travel as a means to minimize fuel consumption, and to encourage redevelopment in a more energy-efficient land use pattern that will enable more use of alternative modes of travel.

Policy CON 8.13 Continue the preservation of energy conservation features to discourage urban sprawl, reduce vehicle miles traveled and absorb carbon dioxide from the air

Seminole County shall continue its policies of acquiring environmental features, where financially feasible, while maintaining its existing network of preserved/managed lands, parks, treed roadways and enforcing wetlands rules. Benefits of preserved environmental features include a strong water recharge system, protection of the natural resources valued by those attracted to Seminole County, guidance of development away from more remote areas (thus reducing urban sprawl and vehicle miles traveled), reduction of heat effects in urban areas, and the absorption of carbon dioxide from the air.



CONSERVATION ELEMENT COMPREHENSIVE WETLANDS MANAGEMENT STRATEGY

INTRODUCTION

Seminole County uses a multi-faceted system to direct incompatible land uses away from wetlands. To date, this system has managed to preserve most of the wetland acreage in the urban area; however, the function of impacted systems has been altered (Econ Basin Study, Soldier's Creek Basin Study 2001, J. Exum and C. Shadrix). There are three primary methods by which the County directs incompatible land uses away from wetlands, and several secondary methods, all of which are described in the following narrative.

Primary Methods of Directing Incompatible Uses Away from Wetlands

- **Identification of Environmentally Sensitive Lands.** The first of these is the identification of environmentally sensitive lands that are to be preserved during the development process. As stated in *Objective FLU 5 Future Land Use Map Foundation*, preservation, preservation of natural resources is one of the foundations of the County's Comprehensive Planning process, innovative planning techniques and land development regulations.
- **Land Acquisition.** The second primary means of protecting wetlands is reliance on land acquisition via the County's Natural Lands Program, the St. Johns River Water Management District, and the Florida Department of Environmental Protection. To date, there are over 18,000 acres of the County's 41,000 acres of wetlands in public ownership, which translates to roughly 43% (source: Seminole County Information Technology Services).
- **Special Areas.** The County and State have designated areas (Future Land Use Element) for special consideration to protect wetlands. These include the Wekiva River Protection Area and the Econlockhatchee River Protection Zone, as well as the special East Rural Area.

Secondary Methods of Directing Incompatible Uses Away from Wetlands

The secondary methods of directing incompatible uses away from wetlands are through the implementation and execution of the Comprehensive Plan's Future Land Use designations, and the Land Development Code of Seminole County.

- **Special Techniques.** For example, allowing clustering of development, or planned development, in exchange for preserving open areas, which protects natural resources from development.
- **The Environmentally Sensitive Land Overlay.** This method, which could be considered the cornerstone of wetlands protection techniques, limits the permitted uses on wetland properties.
- **The Urban/Rural Boundary.** This Boundary forms the foundation for both wetland regulation and for the land uses that are assigned throughout the County. The County's Comprehensive Plan includes criteria regarding the locational analysis component of Standards for Amending the Urban/Rural Boundary (FLU Element) that further protect wetlands.

Tertiary Methods of Directing Incompatible Uses Away from Wetlands

Tertiary methods of wetland protection included:

- Application of the Environmentally Sensitive Land Overlay through continued implementation of *Policies FLU 1.1 Environmentally Sensitive Lands, 1.2 Floodplain Protection, 1.3 Wetlands*



Protection, 1.4 Conservation Easements, 12.8 Compliance Agreements Between Seminole County and the Florida Department of Community Affairs, 12.9 Wekiva River Protection Area Environmental Design Standards, and Objective FLU 13 Protection of the Natural Resources of the Wekiva Study Area and its policies used to protect wetlands from incompatible uses.

LAND ACQUISITION

The purchase of environmentally sensitive lands is perhaps the most significant tool used to protect wetlands. Three primary public entities have purchased thousands of acres of environmentally sensitive lands in Seminole County: the Seminole County Natural Lands Program, the St. Johns River Water Management District, and the Florida Department of Environmental Protection. Seminole County, which has adopted as its motto "Florida's Natural Choice", has long recognized the value of preserving its natural environment, not only for the sake of preservation, but also to achieve other important economic and community development goals. The Seminole County Comprehensive Plan was amended in 1987 and embraced the basic tenants of sustainable development. The Plan recognized the importance of balancing urban growth with the preservation of the County's pristine natural resources, including the St. Johns River, the Wekiva River, and the Econlockhatchee River, as well as over 55 listed species of plants and animals. In 1990, the voters of Seminole County approved a referendum that allocated \$20 million dollars towards the purchase of ecologically valuable lands for the purpose of preservation and passive recreation.

The passing of the natural lands referendum presented more than just an opportunity for the County to preserve natural resources, it also represented an opportunity for the County to partner with State and federal agencies to purchase lands and provide a larger base from which to fund purchases. To date, over one-fifth of Seminole County has been set aside in public ownership. This was made possible largely due to the active support of the community, including land donations from property owners and developers. This program made it possible to try and protect some of the systems that together form a mosaic of high-quality wetlands and uplands that extend into other counties of the region, resulting in the protection to date of approximately 43% of wetlands in Seminole County. In 2000, the voters of Seminole County continued the commitment to preservation by approving an extension of five million dollars for purchase of additional natural lands and \$20 million dollars for the development of greenways and trails. To date the County has acquired one additional Natural Lands Property and completed three signature trail corridors. The Exhibit *FLU: Greenways, Blueways, and Major Trails* clearly depicts the extent of publicly owned land in Seminole County to date.

FUTURE LAND USE MAP

Objective FLU 5 Future Land Use Map Foundation states "The County shall continue to develop and enforce innovative planning techniques and land development regulations designed to support the Central Florida Regional Growth Vision...and regionally significant natural areas. The Future Land Use Map series embodies strategies designed to build long term community value, discourage urban sprawl and ensure that public facilities and services are provided in the most cost-effective and efficient manner. This serves as one of the cornerstones for the form of development on the urban and rural landscapes, and clearly states as an objective that preservation of natural resources is a priority. *Exhibit FLU: Future Land Use Map* details the focus of land use in the County, which is notably dominated to the east by the areas assigned the Environmentally Sensitive Lands Overlay identification, illustrated by the use of a symbol imposed on top of areas with Future Land Use designations that include, but are not limited to, Rural 3, Rural 5, Rural 10, and Low Density Residential. From a view of this map, it is important to point out several items. First, there are the Resource Protection Areas, illustrated on *Exhibit FLU: Resource Protection Areas*, and include the Wekiva River Protection Area, the Econlockhatchee River Basin, and the Geneva Lens Area, the latter of the two are contained within the designated



East Rural Area. These areas are already receiving special protection from state and County regulations above and beyond that which is normally required. Second, it is also important to point out that the Wekiva River Protection Area (WRPA) has protection via the Wekiva Global Compliance Agreement (and subsequent amendment to policy by the Seminole County Comprehensive Plan) that allows no wetland impacts, and requires a 50 foot upland buffer around all wetlands in the WRPA, which is in addition to the St. Johns Water Management District Riparian Habitat Protection Zone (RHPZ) and protection zone requirements. The Econlockhatchee River also has a RHPZ requirement by both the County and the District. These areas are considered special areas in this process and described in greater detail below. With the exception of these special areas, only a small area within the designated urban area is the focus of discussion. This includes the portions of the County surrounding the cities of Altamonte Springs, Casselberry, and Winter Springs, and the area south of the City of Oviedo. There are relatively few wetlands in these areas compared to those in public ownership and those in the East Rural Area. Most of these wetlands are surrounded by intense development by the municipalities, although the predominant land use assigned by Seminole County is Low Density Residential, and Planned Development (see "Unique Planning Techniques").

SPECIAL AREAS

As stated previously, there are three special areas in the County that make up roughly 75% of the County's landform (unincorporated area): "The Wekiva River Protection Area", The Econlockhatchee River Basin, and the "East Rural Area," which includes much of the Econlockhatchee River Basin. *Issue FLU 11 Protection of Rural Areas* describes the protection of the Wekiva and Econlockhatchee areas. The "Wekiva River Protection Area" and "East Rural Area" represent two separate and distinct areas within Seminole County where the Comprehensive Plan sets forth specific policy guidance for the long-term maintenance of rural character.

In 1988, the Florida Legislature enacted the "Wekiva River Protection Act" for the purpose of protecting the natural resources and rural character of the "Wekiva River Protection Area" as defined in the Act. To comply with the Act, the County amended its Comprehensive Plan creating a set of Plan policies to ensure the maintenance of the rural density and character in the aggregate, protect natural resources, and ensure the long-term viability of the Wekiva River Protection Area (WRPA) (see *Objective FLU 14 Revitalization of Major Corridors* and the *Exhibit FLU: Future Land Use Map* of this Plan). In 1999, with assistance from the Florida Department of Community Affairs, various environmental groups and citizens, the County adopted a Plan objective and additional set of Plan policies, substantially based on the "1999 Wekiva Special Area Study", to provide greater protection for this area. The Comprehensive Plan also establishes that wetlands within the WRPA shall be protected, and a 50 foot upland buffer shall be required around all wetlands. As additional protection, development activity (including the placing or depositing of fill within wetlands and the 100-year floodplain identified by FEMA), within the Wekiva River Protection Area shall be prohibited except in cases of overriding public interest. Where wetland values are degraded due to overriding public interest, mitigation efforts shall occur. Floodplain impacts will require compensating storage.

The Wekiva and Econlockhatchee River Basins were also designated as Nested Basins by the St. Johns River Water Management District in 2000, meaning that most of the mitigation projects for wetlands in these areas are required to remain within the basin. This is in addition to the requirement for compliance with 550 foot Riparian Habitat Protection Zones for both basins. The Lake Jesup Basin was designated by House Bill 2365 as a Special Basin unto itself during the 2000 session, which created additional requirements that exceed those with nested status.

In 1991, the County's Comprehensive Plan was amended, based on the "1991 East Seminole County Rural Area Plan" to create the "East Rural Area" of Seminole County (see *Objective FLU*



11 *Preserve Rural Lifestyles in Seminole County* and the *Exhibit FLU: Future Land Use Map* of this Plan). This Plan amendment created and assigned a set of Rural future land use designations (Rural-3, Rural-5, and Rural-10) and associated rural zoning classifications (A-3, A-5, and A-10) to properties within the East Rural Area. These land use designations and zoning classifications, together with Plan policies and Rural subdivision standards, were established to preserve and reinforce the positive qualities of the rural lifestyle of the East Rural Area. In 1999, the Comprehensive Plan was amended, based on the "1999 Chuluota Small Area Study" to further strengthen the rural character of the East Rural Area. The East Rural Area of Seminole County is distinguished from the County's predominantly urban area by the Urban/Rural Boundary (see the *Exhibit FLU: Future Land Use Map* of this Plan).

Policy FLU 3.2.1 Recognition of East Rural Area states, "The County shall continue to enforce Land Development Code provisions and land use strategies that recognize East Seminole County as an area with specific rural character rather than an area anticipated to be urbanized. It shall be the policy of the County that Rural Areas require approaches to land use intensities and densities, rural roadway corridor protection, the provision of services and facilities, environmental protection and Land Development Code enforcement consistent with the rural character of such areas." *Policy FLU 3.1.8 Rural Cluster Development* sets guidelines for cluster development in the Rural Area, and includes as an objective the protection of natural resources.

In addition to the studies cited above, the Board of County Commissioners approved the Seminole County 2006 Rural Character Plan. In summary, this Plan identifies issues and concerns affecting preservation of the East Rural Area and an evaluation of Comprehensive Plan policies and land development regulations. The Comprehensive Plan also attempts to provide a balance and thoughtful series of recommendations designed to maintain and protect the rural character of the East Rural Area. The Plan represents a collaborative effort between Seminole County and the citizens of the East Rural Area and includes recommendations for tools or strategies to preserve the rural character and lifestyle of the East Rural Area.

East Rural Boundary

Having established that the East Rural Area contains a high-quality mosaic of valuable wetland and upland systems, it is important to recognize that the County has adopted a limited number of land use designations of very low density in the Rural Area to protect these resources. This entire program is detailed in the Future Land Use Element under the heading, "RURAL LAND USE CATEGORIES," which defines the criteria for the Rural-3, Rural-5, and Rural-10 Future Land Use designations. Seminole County requires an amendment to the Urban/Rural Boundary to allow for a land use change beyond these three designations, and has added protection of wetlands to the criteria for amendment of this boundary (see FLU Element, Standards for Amending the Urban Rural Boundary).

Unique Planning Techniques

An effective by-product of the Future Land Use designations is the application of unique planning techniques, such as clustering. Clustering is one of the most effective tools for preserving wetlands during development, when applied properly. Currently, clustering is encouraged in the Wekiva River Protection Area (*Objective FLU 2.3 Preservation of the Natural Resources and the Rural Character of the Wekiva River Protection Area*) and the East Rural Area (*Policy FLU 3.1.8 Rural Cluster Development*). There are demonstrated examples of the success of this technique in Seminole County (Alaqua Lakes, Magnolia Plantation). Additionally, the preservation or creation of contiguous open space is encouraged in Planned Developments through compact development.



Environmentally Sensitive Lands Overlay

Perhaps the most important component of wetland protection resulting from the Future Land Use Element is the Environmentally Sensitive Lands Overlay. The County uses this tool to regulate development and preserve environmentally sensitive areas including both wetlands and floodplains. By definition, the Environmentally Sensitive Lands area is an overlay that includes the extent of floodplains and wetlands in Seminole County. This information is consistently based on the most recent data provided by the St. Johns River Water Management District. These data are subject to the limitations of existing data from a variety of sources, including National Wetlands Inventory and US Geological Survey Data. In most cases, the extent of wetlands from a jurisdictional standpoint is determined via ground-truthing as part of an official wetlands survey. This is discussed as a process in the latter part of this section. The Environmentally Sensitive Lands Overlay is implemented for wetland protection via the regulation of development consistent with the provisions of the Land Development Code of Seminole County (LDC), and contains very specific criteria and performance standards that preserve wetlands to the maximum extent possible. In conjunction with the LDC update, the County will evaluate the need to provide a more comprehensive series of wetland regulations that includes the significance, type, land use, extent, development compatibility, and performance standards prior to County review and approval. In addition to these standards, dedication to the County of all post-development wetlands is required (see *Policy FLU 2.2.1 Floodplain Protection*).

The Environmentally Sensitive Lands Overlay is used to identify where wetlands exist and is applied as one of the first steps in a developer's process of site evaluation. Typically, the developer is responsible for having on-site wetlands delineated and signed off by the jurisdictional agencies (US Army Corps of Engineers, Florida Department of Environmental Protection, St. Johns River Water Management District, and Seminole County's Natural Resources Officer). Once this is completed, the regulations apply to the jurisdictional wetland lines, and the other portions of the property are evaluated using the underlying future land use designations.

Contained within the Definition Section of the Future Land Use Element is a detailed description of allowable uses within areas identified as Sensitive Environmental Lands on the Future Land Use Map. These uses are determined by the County to be compatible with wetlands and passive in nature. This section of the Future Land Use Element also describes the previously mentioned process of verification of the jurisdictional lines of wetlands and floodplains, and describes in greater detail the special provisions associated with the Environmentally Sensitive Lands areas.

Zoning

Once the intent of the Future Land Use designation and the application of the Environmentally Sensitive Lands Overlay have been realized, zoning becomes yet another tier of compatibility. The Comprehensive Plan sets forth the long-range potential uses of property in the context of a lawful planning horizon, and provides for a wide array of potential zoning classifications within each future land use designation. The compatibility of zoning districts is generally evaluated using *Exhibit FLU: Compatible Transitional Land Uses*. This application relates only to the future land use designations that are underlying any overlaid designations, such as Environmentally Sensitive Lands. A key point when speculating how zoning is applied, provides that a property owner is not entitled to all zoning classifications or the most potentially dense or intense zoning classification within a future land use designation. Numerous planning, timing, compatibility, public facility, and other generally acceptable planning issues affect the appropriateness of assigning a particular zoning classification or approving a particular future land use designation with regard to a particular parcel of property. *Exhibit FLU: Future Land Use Designations and Allowable Zoning Classifications*, provides a clear picture of the allowable zoning districts per future land use designation. All policies of the Future Land Use Element work to further this goal. FLU Policies 1.1-



3.2 specifically address protection of natural resources and compatibility issues, which ultimately affect allowable zoning compatibility. Of importance is to reference previous discussion regarding the portion of the County that does not fall within a special area (within the urban area adjacent to the cities of Altamonte Springs, Casselberry, Winter Springs, and Oviedo). Most of these areas are adjacent to heavily urbanized areas, and the County has designated these areas predominately with the Low Density Residential Future Land Use designation with some having received the Planned Development Future Land Use designation. Planned Development allows for the Planned Development (PD) zoning classification, which encourages the preservation or creation of open space through compact development. PD zoning is also allowed in other future land use designations, such as Suburban Estates and Low Density Residential to provide for compact development while maintaining the overall allowable density of the underlying future land use designation. These considerations notwithstanding, the Environmentally Sensitive Lands Overlay and process applies in some of these areas, as shown on the Future Land Use Map, as an additional layer of protection.

CONCLUSION

Seminole County continues to be a highly desirable place to work, play, live, and learn through the achievement of redevelopment, compact, mixed-use development, and the preservation of the natural resources upon which the logo "Florida's Natural Choice" is based. The Comprehensive Plan provides a systematic approach to how the protection of wetlands is achieved, and when applied in accordance with this Plan, these components adequately serve to direct incompatible uses away from all wetlands and preserve the high-quality mosaic of interconnected wetland and upland systems that are of regional significance.