CONSERVATION

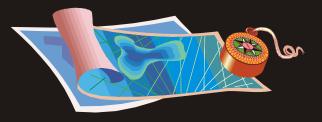
CONSERVATION ELEMENT

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VISION 2020







CONSERVATION ELEMENT INTRODUCTION

Seminole County has an abundance of significant natural resource areas. Most notable are the Wekiva, St. Johns and Econlockhatchee Rivers that are of statewide significance. The St. Johns (and tributaries) has been designated an Outstanding Florida Water and an American Heritage River, and the Wekiva has received federal designation as a Wild and Scenic River. 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.

The County's flood prone and wetland ordinances were critical steps to providing countywide protection of wetlands. An extensive network of wetlands under conservation easement was established through the County's wetland protection program. Land acquisition efforts by Seminole County and the State have led to the conservation of major wetland systems in the Econlockhatchee, Wekiva, St. Johns and Lake Jesup basins. A continued focus on the conservation of intact wetland systems in the rural portion of the County is necessary to supplement these acquisition programs.

Recognizing the past successes and the challenges to the future, the County finds it seems warranted to develop guidelines that vary for different kinds of wetlands in urban versus rural areas. For wetland systems in urban areas, mitigation would be allowed where wetland function and value have been severely compromised. However, for most wetlands in urban areas, a plan for preserving, enhancing, and incorporating these areas with compatible land uses should be encouraged. These compatible land uses may include parks, stormwater facilities, trails, floodplain preservation areas, and buffers between different types of development. For rural areas, sustaining existing land uses and approved development intensities should be a priority, along with preserving and enhancing wetland systems through innovative conservation strategies.

Considering the growth patterns of the County, it will become 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 recent environmental legislation and preserving the County's natural amenities. Program components address the quantity and quality of resources including groundwater, floodplain, wetlands and upland communities, soils, air quality, and open space. The long-range plan includes implementation of the following major studies and programs:

- Groundwater Assessment Model
- Water Conservation Programs
- Recharge Area Overlay Zoning District Implementation
- Expanded Water Reuse Systems
- Wellfield Protection Regulations
- Underground Tank Program
- Continued Well Capping Program
- Xeriscape Ordinance





- Educational Brochures
- Continued Wetlands Management Program
- Open Space Standards and Preservation Regulations

The success of these programs will depend 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:

- 1987 Conservation Element
- 1995 Conservation Element
- 1998 Evaluation and Appraisal Report
- Natural Resources Inventory
- Spring Hammock Management Plan
- Florida Fish and Wildlife Conservation Commission Change Detection Data
- St. Johns River Water Management District Wetlands Trend Analysis
- 2000 Seminole County Wetland Trend and Policy Study





CONSERVATION ELEMENT ISSUES AND CONCERNS

Issue CON 1 Soils

Soils provide several resource functions including; drainage, stormwater filtration, water storage, aquifer recharge and ground stabilization.

Since 1980, Seminole County has maintained a contract with the Soil Conservation Service to provide ongoing evaluation of soils potential through the review and planning of development, roadways, facilities, and wetlands, and assistance to the agricultural community. The Soil Conservation Service is in the process of updating the Seminole County Soil Survey and Supplement, which will more accurately rate and rank soils for various land uses. It will be increasingly necessary to more thoroughly evaluate soils limitations to development. Seminole County shall continue to coordinate with the Soil Conservation Service to identify alternative development standards for use in areas with soil limitations, which will minimize alteration of vital soil functions. Further alternatives should be identified to correct and minimize further degradation and adverse water quality impacts from areas where soil erosion problems have been identified or anticipated. *Exhibit FLU: General Soils* provides a view of the Soil Conservation Service's most recent database broken out by general soil categories.

Issue CON 2 Recharge Protection

The most effective aquifer recharge areas are often located within areas most suitable to development. Development performance standards and other mechanisms must be implemented to ensure the preservation of the most effective recharge areas.

The Floridan Aquifer is the primary source of potable water for Seminole County. Replenishment of the Aquifer occurs primarily from rainfall to recharge areas. The most effective recharge areas are generally high, dry uplands with highly permeable soils and poor surface drainage. Within Seminole County, most effective recharge areas are located within the southwest part of the County, the I-4 corridor and the Geneva area. These areas are clearly shown in *Exhibit FLU: Recharge Areas*. In order to ensure that functions of most effective recharge areas are maintained, including, but not limited to, the protection of water quality, measures should be implemented to maximize preservation of these areas.

These measures include the increase of open space areas and protection of native vegetation. This is particularly important within the southwest and west portions of the County which are highly urbanized thus leading to a greater amount of impervious surfaces. Other areas to be evaluated include use of natural retention areas, minimizing lowering of the water table, septic systems and treated effluent used for spray irrigation. Other specific issues concerned with the quantity and quality of groundwater supplies will be addressed separately within this Element.

Issue CON 3 Ground Water Supply

Both the quantity and quality of available potable water supplies is an increasing concern as Seminole County continues at a high rate of growth.



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In 1986 Seminole County undertook a Ground Water Supply Study to assess the availability and quality of potable water supplies. The study includes a Countywide (including portions of Orange County) model of the Floridan Aquifer and evaluated; existing and future water demands, critical water supply areas; salt-water intrusion and future wellfield locations. The groundwater study final report was issued in August 1991. This report estimated that the County is currently overdrafting more potable water than is being recharge. The study reports that the County will not be able to meet projected water demands without substantial conservation programs. A task force of County, municipal and private water supply agencies was created to assess study results and develop recommended water conservation programs, and recommend further study needs. Upon completion of the Ground Water model a study will be conducted to identify wellfield protection zones surrounding public well fields, which are depicted in Exhibit FLU: Existing Water Supply Wells. A wellfield protection ordinance has been adopted to regulate and develop performance standards for uses within protection zones, which may impact groundwater quality. Since that time, the St. Johns River Water Management District has completed a lengthy study process of the water supply issues of the entire St. Johns River basin, of which Seminole County is a part. Seminole County has been designated as priority water caution area as a result of this study process, known as Water 2020. This study indicated that the Floridan Aquifer, our primary source of groundwater is scheduled to significantly decrease in volume during the next planning horizon and it identified alternatives for water supply to offset these decreases, most notably, surface water. There are multiple issues related to establishment of a surface water supply system, including siting of facilities, costs, and minimum flows and levels, to name a few. Seminole County recently (2000) partnered with the St. Johns River Water Management District to initiate a feasibility study of surface water opportunities within the middle basin and is currently providing staff representatives on several key advisory groups relative to the entire water supply planning process. Seminole County should maintain an active role in this process and play a major role as a facilitator of interests with the various stakeholders.

Issue CON 4 Air quality

Air quality is an issue requiring increased attention as Seminole County continues to grow. It may become necessary to evaluate the feasibility of establishing an air quality-monitoring program and to review and amend existing regulations.

Air quality in Seminole County is currently monitored by either the Florida Department of Environmental Protection or required as part of major development (DRI) approval. The County itself does not have an air quality monitoring program as Seminole County has no major point source generators and auto traffic historically has not been congested enough to warrant monitoring. However, anticipated future traffic increases may require monitoring.





Seminole County should evaluate the necessity and feasibility of establishing an air quality-monitoring program. This may be necessary with the County's continued high growth rate. This evaluation may include monitoring and analysis requirements for major transportation construction projects, non-DRI projects with projected high traffic volumes and areas of high traffic congestion. Further, the existing ordinance governing the release of toxic matter into the air, needs to be reviewed and revised in light of the effects toxic emissions can have over wider areas.

Issue CON 5 Mining and borrow pit operations

The County's current ordinance on borrow pits does not sufficiently address how site reclamation/mitigation will be accomplished.

The County's borrow pit ordinance, which covers digging other than dredge and fill operations, was reviewed and revised in 1994. The revised ordinance strengthened existing standards or added new standards in the areas of geological assessment, site access, environmental impact assessment, excavation, dewatering, hauling and enforcement.

While the revised ordinance requires that a reclamation plan be submitted with the application for operation, no criteria are established for the evaluation of such a plan. The Department of Environmental Protection, Division of Resource Management, Bureau of Mine Reclamation (BR) is responsible for establishing reclamation rules. The BR claims jurisdiction over any excavation of a resource, including soil, and requires that a Notice of Intent to Mine (NOITM) be filed with it when certain criteria of excavation size, speed, use, etc., are met. Approval of the reclamation plan is not required before removal can begin.

Issue CON 6 Wetlands

Wetlands perform a variety of functions, including flood/stormwater storage, moderation of groundwater flow, removal of contaminants, nutrient cycling, and maintenance of plant and animal communities. Conservation of intact wetland systems (including upland buffers, isolated and connected wetlands) is beneficial to wildlife and the residents of Seminole County.

Seminole County adopted a wetland protection program in the early 1980's. This program included the production of the Wetlands Overlay Zone, a Wetlands Field Guide, and wetland regulations in the Land Development Code. Since then, Seminole County has improved the natural resources database, including the incorporation of the St. Johns River Water Management District (SJRWMD) wetland and natural community Geographic Information System (GIS) data set, of which wetlands have been made consistent with Exhibit FLU: Wetlands.

The development of planning standards for natural resources, along with detailed performance standards included within the County's Land Development Code, established restrictions on development activities in wetlands. The SJRWMD has developed more comprehensive wetland policies since the mid 1980's including protocol for isolated wetlands, a statewide-wetland methodology, and detailed guidelines for mitigation. Concomitant with these efforts at the local and regional level, the U.S. Army Corps of Engineers (ACOE) has expanded their jurisdiction over isolated wetlands and reduced the acreage threshold for which an Individual Permit is required.

CON-5



The effectiveness of these policies and regulations has reduced wetland impacts, even in urbanizing areas of Seminole County. As a result, the combined effort of Seminole County, the SJRWMD, and the ACOE has resulted in the conservation of a substantial acreage of wetlands in the portions of Seminole County that were developed since 1985. In addition, local and state land acquisition programs have resulted in the purchase, or conservation of environmentally sensitive wetlands and uplands in the County. The protection of these conservation lands provides one component of the framework for a conservation strategy that can assure the long-term conservation of significant wetland systems in the rural portions of the County.

The County should continue to enforce wetland protection measures within the urban service area and coordinate regulatory efforts with the SJRWMD and the ACOE. In addition, the County should evaluate measures that will sustain the mosaic of isolated and connected wetlands surrounded by diverse uplands that exist in the rural landscape and other recognized environmentally sensitive areas of the County.

Additional measures for the protection of these systems should be evaluated along with the concentration of mitigation efforts, acquisition programs, and partnerships with other agencies and private landowners.

Since preservation, restoration, reclamation or impact mitigation of disturbed land is important not only to the County's appearance but also to the quality of its environmental habitat, it is important to establish criteria for such plans. The State standards and those of other jurisdictions should be reviewed and criteria for preservation /restoration /reclamation /mitigation should be established.

Issue CON 7 Energy

The new planning horizon also brings new problems related to growth, and perhaps one area that is starting to receive national attention is energy conservation. Several states are already experiencing energy supply problems, and based on general facts about Florida's energy consumption habits, there is a strong potential for energy crises to develop. The potential exists, however, to save large amounts of energy through the development of efficiency programs for the various types of energy being consumed by Seminole County. Most of Florida's energy usage is for transportation and electric power generation. Florida depends heavily on petroleum, ranking third behind Texas and California. Florida relies heavily on electricity, ranking third of all states in 1997. Only small amounts of fossil fuels are produced in Florida. The imbalance between consumption and production has created an energy deficit, making Florida one of the nation's largest net fossil fuel consumers.





Petroleum products used for transportation, natural gas used by consumers, and most of the energy used for electrical generation are imported into the state. A portion of the electric power used in Florida is obtained from other states through bulk transmission lines. Florida Gas Transmission has historically supplied natural gas to Florida via a pipeline extending across the state from supply sources in the western gulf region. New natural gas transmission pipelines are being planned in Florida (one of which is scheduled to traverse a portion of Seminole County.

The sun, which creates heat and causes great demand for electricity to operate air conditioning systems, also offers a solution through solar energy. Solar energy is the main renewable energy source abundant in Florida.

Primary energy consumed in Florida by source in 1997

-	Petroleum	51.8%
-	Coal	21.4%
-	Natural Gas	15.6%
-	Nuclear	7.5%
-	Other	3.7%

Energy consumption by sector in Florida in 1997

-	Transportation	35.4%
-	RESIDENTIAL	27.4%
-	Commercial	21.5%
-	Industrial	15.6%

Simple changes in the types of light bulbs used and the schedule for turning lights on and off can have a significant effect on energy savings. Another way for commercial, governmental, industrial and institutional offices to become more energy efficient is through the development of comprehensive energy efficiency and conservation plans. Education of homeowners about simple activities to save energy is important. The state may be able to promote additional conservation programs by providing incentives to the power providers to earn a profit on investments in new conservation programs that are not currently available.

Florida's growing population, coupled with suburban sprawl and the market trend toward larger residences, is contributing to higher energy demand and overall use. State and local governments are developing examples of improved building design and construction that are more energy and resource efficient (Florida Department of Community Affairs and Treasure Coast Regional Planning Council, 1999). With Vision 2020, Seminole County is attempting to follow the national trend toward traditional neighborhood design, which preserves natural resources and is significantly more energy efficient. It is our intent that the associated policies with this issue will serve to provide a platform from which a more comprehensive energy conservation plan will be developed in the future.









CONSERVATION ELEMENT GOALS, OBJECTIVES AND POLICIES

GOAL

Preserve, properly manage and, where possible, enhance the quantity, quality and function of Seminole County's natural resources for existing and future generations; to include, but not be limited to 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

By 2005, build upon existing studies to establish a program to protect both the quantity and quality of groundwater resources and recharge areas.

Policy CON 1.1 Groundwater Model/Assessment

The County shall work with the St. Johns River Water Management District, USGS, Department of Environmental Protection, and interested parties to evaluate its long range water conservation plan as part of the Water 2020 process, including participation in working groups and advisory groups on 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 evaluate its groundwater conservation measures and policies for regulation of water usage, reduction of land use densities in critical areas, water use restrictions and irrigation alternatives as part of each Comprehensive Plan Evaluation and Appraisal Report (EAR).

Policy CON 1.3 Recharge Area Protection

The County shall evaluate its aquifer recharge overlay zoning classification which sets alternative design criteria and standards to protect the functions of most effective aquifer recharge areas as part of each Comprehensive Plan Evaluation and Appraisal Report (EAR).

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 their use.

Policy CON 1.5 Wellfield Protection

The County shall continue to monitor Federal and State regulations to support establishment of wellfield zones of protection beyond those already established and shall consider enacting into the land development code, additional protection and programs as warranted by changes in Federal and State policy.



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Policy CON 1.6 Intergovernmental Wellfield Protection

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

Policy CON 1.7 Underground Tank Program

The County shall continue to implement and administer an underground storage tank program coordinated with and consistent with requirements of the Department of Environmental Regulation and other appropriate agencies to ensure groundwater resources are protected.

Policy CON 1.8 Underground Tank Regulations

The County shall, by 2005, review existing regulations and, if appropriate, develop County standards governing the refurbishment and replacement of underground tanks.

Policy CON 1.9 Wellcapping Program

The County shall continue to coordinate with the Soil Conservation Service and the St. Johns River Water Management District with regard to the capping of County owned free flowing wells and the funding of a joint program for capping of private wells.

Policy CON 1.10 Geneva Lens (Bubble) Protection

The County shall continue to assess the water supply limitations of the Geneva lens (bubble) and establish appropriate land use densities and measures to protect its critical recharge functions. The Geneva lens, depicted in *Exhibit FLU: Resource Protection Areas*, should be assessed in conjunction with the St. Johns River Water Management District study of the Geneva Lens.

Policy CON 1.11 Effluent Reuse

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

- A Implementing expanded effluent takeback systems for County operated wastewater facilities in an economically and environmentally sound manner;
- B Requiring new development to install effluent takeback 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;
- F Reuse programs may be appropriate; and





Policy CON 1.12 Xeriscape Regulation

The County shall continue to enforce and evaluate its Xeriscape regulations which, at a minimum, sets 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 evaluation process shall consider the existing arbor and landscaping requirements of the Land Development Code requirements with special attention given to the DEP's prohibited plant list and the Florida Exotic Pest Plant Council's Category 1 and 2 lists.

Policy CON 1.13 Safe Withdrawal Rates

The County shall coordinate with the St. Johns River Water Management 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 1.14 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 1.15 Minimize Water Withdrawal/Transport

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

Policy CON 1.16 Emergency Water Conservation

The County shall continue to utilize, as necessary, the Emergency Water Conservation ordinance to enable the County to limit water usage 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.





OBJECTIVE CON 2 SURFACE WATER PROTECTION

The County shall by 2005 evaluate its ongoing surface water quality program, by 2005, which will protect and, where 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 need for more intense sampling shall be evaluated on a periodic basis.

Policy CON 2.2 Water Quality Improvement

The County shall continue to implement, as part of the Stormwater Utility, 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 years, after coordination with the Agricultural Extension Agency, Soil 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 shall include a review and incorporation of applicable new BMP's established by the Division of Forestry and other agencies.

In addition to this Plan, all activities permitted within designated wetland and flood prone areas, including agriculture and silviculture shall, at a minimum, comply with the County's Existing Wetland, Flood Prone 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 development be placed at least 50 feet from the ordinary high water mark of water bodies.

Policy CON 2.5 Wekiva River

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. (See Future Land Use Element for other policies relating to the Wekiva River).





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

Policy CON 2.7 Intergovernmental Coordination

The County shall continue to coordinate and pursue joint programs with and seek, where available, funding from with the St. Johns River Water Management District, the Florida Department of Environmental Protection and other agencies for surface water management studies and improvements programs. Specific programs that require further coordination include, but are not limited to: Surface Water Improvement Program (SWIM), joint projects toward the restoration of Lake Jesup 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.

Policy CON 2.9 Environmental Education Program

The County shall continue to support and expand existing environmental programs (Natural Lands Education, Watershed Action Volunteers, Lakewatch, and Parks Education) and to 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 improve on providing public access to environmental data by expanding the Countywide Watershed Atlas and the Natural Lands Program Web Sites.





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 Conservation Land Use

The County shall maintain the conservation land use designation and continue to map conservation areas (100 year flood prone and wetland areas) on the County's Land Use Map for the purpose of identifying and protecting conservation areas/corridors where special zoning regulations and performance standards apply.

Policy CON 3.2 Countywide Wetland/Flood Regulations

The County shall encourage local governments, through joint planning agreements and inter-governmental agreements, to adopt the County's flood prone and wetland performance standards and regulations for use in reviewing and approving all new development proposals.

Policy CON 3.3 Wetlands Management Program

The County shall continue to rely on the Flood Prone (FP-1) and Wetland (W-1) Overlay Zoning Classifications to prevent public harm; to protect the public health, safety and welfare; guide and protect and preserve wetlands and other environmentally sensitive areas for natural water management and hydrologic functions; for use by aquatic and wetland dependent wildlife; habitat of endangered, threatened or species of special concern; recreation, open space and buffer areas. Species (both plant and animal) identified as endangered, threatened or of special concern are those listed by the U.S. Fish and Wildlife Service, Florida Game and Florida Fish and Wildlife Conservation Commission, Florida Natural Areas Inventory, U.S. Department of Agriculture or otherwise listed under Chapter 39-27, Florida Administrative Code or its successor provisions. (See detailed "Comprehensive Wetlands Management Strategy" at rear of this element.)

Policy CON 3.4 Wetlands Regulation

In order to protect and sustain the functions and values provided by wetlands, the County shall by July 2001 make all appropriate changes to the W-1 and FP-1 Zoning Overlay Classifications to accomplish the following, which shall serve as the general guidelines for regulation of wetlands:

- A Evaluate appropriate buffer zones, size thresholds, and wetland classification methods for use in assessing wetland impacts in urban and rural portions of the County,
- B Develop a strategy to ensure the retention of wetland functions and values throughout the County,





- C Modify the Land Development Code to establish areas where no loss of wetlands is appropriate and to require the conservation of wetland systems (including upland buffers, the mosaic of isolated and connected wetlands, natural hydrologic patterns, and natural processes such as fire) in the Econlockhatchee and Lake Jesup Basins, the Wekiva River Protection Areas (consistent with Future Land Use Policy 14.9), which are shown in *Exhibit CON: Econlockhatchee and Wekiva River Protection Area*), and the rural areas of the County, which are depicted in *Exhibit FLU: Special Area Boundaries*.
- D Coordinate efforts with the SJRWMD and the ACOE that maximizes the benefits of receiving mitigation projects (preservation and restoration) in the Wekiva, Jesup, and Econlockhatchee River basins, and in the rural areas of the County,
- E Identify intact wetland systems for which comprehensive protection is necessary, and consider means of providing permanent protection through regulation, acquisition, purchase of development rights, external partnerships, and other measures,
- F Work with local, state, and federal entities that own land in the County to establish a cohesive plan for the management of wetlands and other natural resources, and
- G Assess the effectiveness of wetland conservation, permitting, and regulatory programs of the SJRWMD and the AOCE on an annual basis.

Policy CON 3.5 Flood Prone Overlay Zoning District

The County shall continue to rely on the Flood Prone (FP-1) Overlay Zoning Classifications (shown in *Exhibit FLU: Flood Plains*) and develop Planning Guidelines for Surface Water Management for the protection and identification of allowable uses in flood prone areas and to maintain effective surface water management practices.

Policy CON 3.6 Wetland/Flood Prone Regulations

Impacts to wetlands/floodplains beyond what is otherwise allowed in the land development regulations and Comprehensive Plan is prohibited unless the project has a special reason or need to locate within wetlands (or wetland protection areas), there is a clear demonstration of overriding public interest, and there is no feasible alternative. In such cases, impacts to wetlands shall be kept to the minimum feasible alteration, while preserving the functional viability of the wetland to the maximum extent feasible. All impacts to wetlands shall be mitigated in accordance with the applicable provisions in the Comprehensive Plan and land development regulations.

Policy CON 3.7 Open Space Regulation

The County shall continue to use and enforce, at a minimum, the open space requirements of the Planned Unit Development zoning classification and the County's arbor and landscaping regulations as set forth in the Land Development Code.





Policy CON 3.8 PUD/Cluster Developments

The County shall encourage planned unit developments and cluster type developments in order to preserve large contiguous areas of wetlands and other environmentally sensitive communities.

Editors note: Policies 3.7 and 3.8 operate under the assumption that there is no right to any particular land use within a PCD or a PUD. All uses within a PCD or PUD are subject to the approval of BCC and are dependent upon compatibility with adjacent development, neighborhoods, development trends, etc. The BCC may impose reasonable conditions at the time of zoning approval of PCD's and PUD's.

Policy CON 3.9 Conservation Easements/Dedication

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 3.10 Agency Regulation Coordination

The County shall coordinate with the St. John's River Water Management District, the Department of Environmental Protection, the Florida Department of Community Affairs, the Florida Fish and Wildlife Conservation Commission, and other appropriate agencies during the review of development proposals to ensure that development orders and permits are consistent with the Wekiva River Protection Act, the St. Johns River Water Management District Protection Zone rules, adopted Management Plans, the Florida Fish and Wildlife Conservation Commission 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 3.11 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 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 critical native upland habitat;
- D Historic and archaeological resource assessments; and
- E Minimal removal of native habitats.

Policy CON 3.12 Econlockhatchee River Outstanding Florida Water Designation

The County shall continue to assist the Florida Department of Environmental Protection in the evaluation of the Econlockhatchee River for special designations.





Policy CON 3.13 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 to 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.

Policy CON 3.14 Natural Resource Standards

The County shall continue to evaluate and update the Planning Guidelines for Natural Resources and include in these standards appropriate State and Federal procedures and regulations pertaining to endangered and threatened species.



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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 Soil Conservation Service

The County shall continue the funding of the Seminole Soil Conservation District as an ongoing Countywide program which provides soils evaluation for the Agricultural Extension Service, reviews of development plans, public facilities location, and wetlands identification.

Policy CON 4.2 Septic Tanks

The County shall continue 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 4.3 Soil Survey

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

Policy CON 4.4 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 4.5 Erosion/Stream Bank Stabilization

The County shall, as part of the water quality program, evaluate a program to minimize erosion and stabilize stream banks through planting of trees, shrubs and other vegetation to stabilize soils and treat storm runoff.

Policy CON 4.6 Mining and Borrow Pit Operations

The County shall continue to evaluate and enforce its Land Development Code policies relative to Mining and Borrow Pit Operations, including criteria of submitted 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. Consideration, at minimum, shall include the following:

- A Review adequacy of existing monitoring programs;
- B Location of existing and future areas of traffic congestion and major transportation construction areas which may be monitored; and
- C Joint funding of ongoing monitoring programs.

Policy CON 5.2 Monitoring Regulations

The County shall evaluate, if necessary, the Land Development Code to include standards and criteria for requiring ongoing air quality monitoring as part of development orders approving Developments of Regional Impact (DRI) and large non-DRI projects and shall, if necessary, update the land development code by 2006..

Policy CON 5.3 Toxic Chemical Release

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



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OBJECTIVE CON 6 ENERGY CONSERVATION

The County shall, with each Evaluation and Appraisal Report, provide an analysis of existing Countywide energy conservation measures and produce if necessary, new Comprehensive Plan policies and/or elements that will further the goal of measurable results in energy conservation.

Policy CON 6.1 State and Federal Incentives

The County shall support incentives by the state and federal governments to promote energy efficiency and conservation and the use of solar and other clean alternative energy sources.

Policy CON 6.2 Coordinated Energy Conservation

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

Policy CON 6.3 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 6.4 Energy Programs

The County shall encourage participation in the following programs, as well as others that may apply:

- U.S. Environmental Protection Agency's Energy Star Buildings and Green Lights Program to increase energy efficiency through lighting upgrades in buildings,
- Rebuild America
- Building for the 21st Century
- Million Solar Roofs
- Energy Smart Schools
- National Industrial Competitiveness through Energy
- U.S. Department of Environmental Protection's Pollution Prevention (P2) Program





OBJECTIVE CON 7 COMPREHENSIVE PROTECTION OF WETLANDS

The County shall protect the functions provided by wetlands. These functions 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 Urban Services Area that are not contained in the Wekiva River Protection Area. Through intense study, it has been identified that in aggregate, the wetland systems in the Wekiva Basin, Lake Jesup Basin, and the Rural Area are higher in quality and function, and provide connectivity of a regional significance. The County's strategy for sustaining the functions of those wetland systems in the urban service area, and in rural areas shall include the following directives:

Policy CON 7.1 Land Acquisition

The County shall continue to acquire (as part of its Natural Lands Program) and partner with other agencies to acquire areas of environmental sensitivity including wetlands that exist in the Wekiva Basin, The Lake Jesup Basin, and The Rural 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 and;
- B The Wekiva Global Compliance Agreement; and
- C All provisions set forth in the Land Development Code of Seminole County relating to protection of wetlands; and
- D The Econlockhatchee River Protection Ordinance; and
- E Standards set forth in this Plan which protect the Rural Area;
- 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 Zone Standards; and
 - 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; and
- B The application of the Conservation Land Use; and
- C Reliance on the Urban/Rural Boundary and the associated protection provided therein to wetlands.

Policy CON 7.4 Wetland Regulation-Buffers

Upland buffers adjacent to protected wetlands provide habitat for some wetland dependent species, and protection from deleterious effects of development adjacent to the wetland. By December 31, 2001, the County shall establish a minimum buffer requirement in the Urban Service Area, and in rural areas and specially protected basins that will protect the function of the wetlands and the organisms that depend on them.



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Acceptable uses within the designated upland buffers include restoration, enhancement, and pervious trails.

Policy CON 7.5 Wetland Regulation-Size

Wetlands less than 0.5 acre in size that are not utilized by threatened or endangered species do not require mitigation by the St. John's River Water Management District (SJRWMD). Seminole County shall assess by December 31, 2001 whether the size threshold should be removed in all specially protected basins, and rural areas.

Policy CON 7.6 Wetland Regulation-Classification

Wetlands will be classified using the Florida Land Use Cover and Classification System (FLUCCS) unless otherwise specified by the SJRWMD for use in their permit application processes.

Policy CON 7.7 Wetland Regulation-Location: Urban

Urban wetlands still maintain functions that provide value to the community; predevelopment 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:

HYDROLOGIC PROCESSES

- Storage of surface water
- Storage of sub-surface water
- Moderation of groundwater flow.
- Dissipation of energy

BIOCHEMICAL PROCESSES

- Nutrient cycling
- Contaminant removal
- Retention of particulates
- Carbon export

Policy CON 7.8 Wetland Regulation-Location: Rural

Wetlands in the rural areas also retain those functions listed above in Policy CON 7.7 and, because of the existing mosaic of upland and wetland systems provide additional functions and values related to the habitat component of wetlands. By December 31, 2001, the County shall amend the Seminole County Land Development Code 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 7.9 Wetland Regulation-Mitigation

Seminole County will regulate wetlands within the urban and rural areas in order to protect and sustain the functions and values provided by them By December 31, 2001, the Land Development Code of Seminole County shall be amended to provide 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 progress:

- A The County shall accept mitigation required by the St. Johns River Water Management District for impacts that occur within the Urban Area as defined by Objective 7.
- B For impacts to wetlands in the Urban Area, the County shall accept ratios that encourage mitigation projects to be conducted within the Wekiva River Protection Area, the Rural area, and the basins designated by the St. Johns River Water Management District as Special or Nested. As an incentive to mitigate in these areas, Seminole County may accept ratios within the lower range of those accepted by the St. Johns River Water Management District.
- C 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 St. Johns River Water Management District.
- D Mitigation projects must take into consideration the type, quality, location, and size of the wetlands being impacted.
- E Seminole County shall pursue agreements with the St. Johns River Water Management 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.
- F 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 and the establishment of a County-run comprehensive wetland mitigation program funded in part through the payment of fees in lieu of performing mitigation activities.

Policy CON 7.10 Wetland Regulation-Intergovernmental Coordination

Seminole County shall coordinate efforts with the SJRWMD and the US Army Corps of Engineers (ACOE) to maximize the benefits of mitigation in the Wekiva, Jesup, and Econlockhatchee River basins, and in the rural areas of the County.

Policy CON 7.11 Management of Publicly Owned Wetlands

Seminole County shall continue to work with local, state, and federal entities that own land in the County to establish a cohesive plan for the management of wetlands and other natural resources.

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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 services area, however, the function of impacted systems has been altered (Econ Basin study, Soldier's Creek Basin study 2001, J. Exum and C. Shadrix, in prep.). There are three primary methods by which the County directs incompatible land uses away from wetlands, and several secondary methods, all of which will be discussed in the following narrative:

Primary Methods of Directing Incompatible Uses Away from Wetlands

- **Future Land Use Map Designation.** The first of these is the Future Land Use Map designations, illustrated in Exhibit FLU: Future Land Use Map. As stated in Objective FLU 5, a specific goal of the map designations is to "protect natural resources," which includes wetlands.
- 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 17,000 acres of the County's 41,000 acres of wetlands in public ownership, which translates to roughly 42 percent (source: St. Johns River Water Management District 2000 data).
- **Special areas**. There are special areas that have been designated by state agencies and the County (Future Land Use Element) where special consideration is given to protection of 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 executed through the implementation and execution of the Future Land Use designations, and the Land Development Code of Seminole County.

- **Special Techniques**, such as clustering, protects natural resources from development.
- The Conservation Land Use Designation, which could be considered the cornerstone of our wetlands protection techniques, limits the permitted uses on wetland properties and
- The urban/rural boundary forms the foundation for both wetland regulation and for the land uses that are assigned throughout the County and new criteria have been added to the locational analysis component of Standards for Amending the Urban/Rural Boundary (FLU Element) that protect wetlands further.

Tertiary Methods of Directing Incompatible Uses Away from Wetlands

- **Application** of the Conservation Land Use
- Development review process,
- **Zoning** (through the W-1 (wetlands) zoning overlay, which is used to protect wetlands from incompatible uses).

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LAND ACQUISITION

The purchase of environmentally sensitive lands is perhaps the most significant tool used to protect wetlands. There are three primary public entities that 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 desirability 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 42 percent of wetlands in Seminole County. The voters of Seminole County recently continued the commitment to preservation by approving in the elections of 2000 an extension of five million dollars for purchase of additional natural lands and fifteen million dollars for the development of greenways and trails that will connect these areas. The Exhibit FLU: Conservation and Trails Corridors clearly depicts the extent of publicly owned land in Seminole County to date.

FUTURE LAND USE MAP DESIGNATION

Objective FLU 5 states, "The County shall continue to develop and enforce innovative planning techniques and land development regulations designed to protect residential neighborhoods, enhance the economic viability of the community, promote the efficient use of infrastructure, and preserve natural resources. 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 Conservation Future Land Use. From a view of the map, it is important to point out several items. First, there are the Resource Protection Areas, which are 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 two of



which are contained within the designated Rural East Area. These areas are already receiving special protection from State and County regulations above and beyond that which is normally required. It is also important to point out at this juncture that the Wekiva Protection Area (WRPA) has new 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 in addition to the St. Johns Water Management District RHPZ and protection zone requirements. The Econlockhatchee River also has an RHPZ requirement by both the County and the St. Johns River Water Management District. These areas are considered special areas in this process and will be discussed in greater detail below. With the exception of these special areas, only a small area within the designated Urban Services 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 Rural East 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 (which will be discussed regarding "unique planning techniques."

(Revised: Amendment 04S.TXT04.4; Ordinance 2004-25, 06/08/2004)

SPECIAL AREAS

As stated previously, there are three special areas in the County that make up roughly 75 percent of the County's land form (unincorporated): 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 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's Comprehensive Plan was amended to create a set of Plan policies that would 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 (see Objective FLU 14 and the *Exhibit FLU: Future Land Use* 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 Plan also establishes that wetlands within the WRPA shall be protected and a 50-foot upland buffer shall be required around all wetlands in the WRPA.

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 stay within the basin. This is in addition to their requirements of 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 and the *Exhibit FLU: Future Land Use* 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 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 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 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* of this Plan).

Policy FLU: 11.1 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: 11.4 sets guidelines for cluster development in the rural area, and includes as an objective the protection of natural resources.

Urban/Rural Boundary

Having established that the 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 them. This entire program is detailed in the Future Land Use Element under the heading entitled, "RURAL LAND USE DESIGNATION SERIES," and it defines the criteria for the R-3, R-5, and R-10 land uses. Currently, Seminole County requires amendment of 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 Planned Developments, the Wekiva Protection Area (Objective FLU: 14) and the Rural area (FLU Policy 11.4). There are demonstrated examples of the success of this technique in Seminole County (Alaqua Lakes, Magnolia Plantation).

Conservation Land Use

Perhaps the most important component of wetland protection resulting from the Future Land Use Element is the Conservation Land Use. The County uses the Conservation Land Use to regulate development and preserve environmentally sensitive areas where not only wetlands are important, but also floodplains. By definition the Conservation Land Use is an overlay that includes the extent of floodplains and wetlands in Seminole County. This information is always 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 United States 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 Conservation land use designation is implemented for wetland protection via the regulation of development consistent with the Wetlands Overlay Zoning Classification (W-1). The Wetlands Overlay Zoning Classification is part of the Land Development Code of Seminole County, and contains very specific criteria and performance standards that preserve wetlands to the maximum extent possible. The W-1 overlay is scheduled for more a more scientifically-based overhaul, which shall be completed by July, 2001, 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 1.2). The primary change will occur in the form of a switch from a percent impact based program (previously, only 10% of wetlands on site were allowed to be impacted) to a mitigation based program which focuses maximum protection on the Rural area of the County along with the Wekiva River Protection Area. The specific mechanisms will be contained in the Land Development Code of Seminole County; however, the intent of this narrative as policy is to identify the rationale that there are important functional differences of systems in the Rural area that are vital to the natural wealth of the County.

The W-1 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 the wetlands on a site delineated and signed off by the jurisdictional agencies (U.S. 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 land use designations.

Contained within the definition section of the Future Land Use Element is a detailed description of allowable uses within areas designated Conservation 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 Conservation Land Use.

Zoning

Once the intent of the Future Land Use designation and the application of the Conservation Land Use 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 land use designation. The compatibility of zoning districts is generally evaluated using Exhibit FLU: Appropriate transitional land uses. This application relates only to the land use designations that underlying any overlaid designations, such as Conservation. A key point when speculating how zoning is applied, is this: A property owner is not entitled to all zoning classifications or the most potentially dense or intense zoning classification within a 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 land use 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 here 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

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Altamonte Springs, Casselberry, and Winter Springs, and Oviedo). Most of these areas are adjacent to heavily urbanized areas, and the County has designated them predominately with the Low Density Residential Land Use with some having received the Planned Development Future Land Use. Planned Development allows for the PUD and PCD zoning districts, both of which encourage clustering, and to receive consideration for the higher densities allowed within the Low Density Residential Future Land Use, PUD zoning is encouraged. These considerations not withstanding, the Conservation Land Use and process applies in some of these areas, as shown on the Future Land Use Map, as an additional layer of protection.

Conclusion

Vision 2020 proposes to provide that Seminole County continues to be a great place to work, play, live, and learn. These livable components may be achieved with this Vision through the encouragement of redevelopment, compact, mixed-use development, and the preservation of the natural resources upon which the logo "Florida's Natural Choice" was based. The 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.

