

GOAL CON 1

To preserve, properly manage and, where possible, enhance the quantity, quality and function of Lake County's natural resources for existing and future generations; to include, but not be limited to the following natural resources: air, surface waters, groundwater, soils/minerals, wetlands, native habitat and wildlife, floodplain, endangered, threatened and species of special concern, open spaces, ecological landscapes, spring systems, karst features aquifer recharge areas, and historic and archaeological resources.

OBJECTIVE CON 1.1: GROUNDWATER PROTECTION

Lake County shall utilize best available information in coordination with federal, state, and local agencies to protect both the quantity and quality of groundwater resources, protect recharge areas, and prevent excessive groundwater drawdown caused by withdrawal.

Policy CON 1.1-1 Groundwater Model/Assessment

The County shall work with the St. Johns River Water Management District, Southwest Florida Water Management District, USGS, Department of Environmental Protection, and interested parties to evaluate its long range water conservation plan as part of the water supply planning 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 1.1-2 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 1.1-3 Recharge Area Protection

The County shall incorporate an aquifer recharge overlay classification which sets standards to protect the functions of most effective aquifer recharge areas as part of each Comprehensive Plan Evaluation and Appraisal Report (EAR).

Policy CON 1.1-4 Recharge Area Reuse

The County shall continue to evaluate the use of septic systems and effluent reuse systems within most effective recharge areas

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and determine any long term negative impacts on groundwater quality and, if appropriate, adopt and develop additional regulations governing their use.

Policy CON 1.1-5 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 regulations, additional protection and programs as warranted by changes in Federal and State policies.

Policy CON 1.1-6 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 Regulations 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 1.1-7 Safe Withdrawal Rates

The County shall coordinate with the St. Johns River Water Management District, Southwest Florida 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.

Policy CON 1.1-8 Private Well Withdrawal

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

OBJECTIVE CON 1.2: SURFACE WATER PROTECTION

Lake County shall continue to evaluate and identify sources of surface water pollution within the County and coordinate the development and implementation of pollution abatement methods and programs with local governments, State, and Federal agencies.

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Policy CON 1.2-1 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 1.2-2 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 1.2-3 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.

OBJECTIVE CON 1.3: SPRINGSHEDS AND SPRINGSHED PROTECTION ZONES

Maintain and restore important environmental features within springsheds and springshed protection zones.

Policy CON 1.3-1 Protection of Sensitive Resources

Protect sensitive resources through the acquisition of land within the delineated springsheds and protection zones to preserve and protect the natural qualities of these valuable natural resources.

Con 3.1.1 Use available acquisition funding programs such as the state's Florida Forever Program, Florida Community Trust, and others to acquire fee simple ownership or less than fee through conservation easements on land within the delineated

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springshed that have been identified as critical or sensitive resources.

Con 3.1.2 Provide for periodic sampling and testing of the surface and ground water quality within springsheds and springshed protection in coordination with any City/County sampling and testing with the USGS, State Department of Environmental Protection and the Water Management Districts.

Policy CON 1.3-2 Educate The Public

Establish programs that educate the public about the relevance of the springsheds to their community and region, and the vital hydrological systems of which they are a part.

Con 1.3-2.1 Coordinate with the local colleges, school board and individual schools to develop environmental literacy programs for school-aged children regarding springshed.

Con 1.3-2.2 Work with the media to formulate a campaign to enhance the environmental literacy of community residents with respect to the natural values and threats facing local springsheds.

Con 1.3-2.3 Educate, encourage and assist farmers owning property within springsheds, especially if within the primary or secondary protection zones, to engage in fanning, best management practices that minimize use of water, fertilizers, herbicides and pesticides and reduce erosion.

Policy CON 1.3-3 Regulation of Land Use Activities

Regulate land uses activities that have a demonstrated potential to cause the contamination of water within springsheds or protection zones.

Con 1.3-3.1 Require the construction of appropriate stormwater management systems.

Con 1.3-3.2 Require a minimum percentage of dedicated open space for all new development projects in designated springshed protection secondary zones through the use of clustering techniques.

Con 1.3-3.3 Guide development away from designated springshed primary protection zones. Such guidance may include a variety of approaches such as designation of land use type and density restrictions, buffer requirements, additional stormwater management treatment requirements, land acquisitions and easements and sponsorship of voluntary incentive-based local stewardship programs.

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Con 1.3-3.4 Restrict incompatible land uses near karst features and prohibit untreated stormwater from entering these features.

Con 1.3-3.5 Require investigation of all surface and sub-surface conditions for land uses that have the potential for contamination of the delineated springsheds or protection zones around and up gradient of the springsheds.

OBJECTIVE CON 1.4: SILVICULTURE ACTIVITIES

Lake County shall require that silviculture activities are conducted in a manner compatible with the need to protect, conserve and appropriately use natural resources associated with wetlands and surface waters.

Policy CON 1.4-1 Within the delineated springshed and springshed protection zones, encourage silviculture activities in a manner compatible with the need to protect and conserve the springshed.

Policy CON 1.4-2 Follow the best management practices outlined in "Silviculture Best Management Practices Manual" (Florida Department of Agriculture and Consumer Services, Division of Forestry).

Con 1.4-2.1 Monitor existing special management zones, as established by the Manual, to ensure that such zones provide buffering between forestry operations and sinkholes in order to reduce or eliminate nonpoint pollutants such as sediment, nutrients, logging debris, chemicals, and water temperature fluctuations and to protect natural in stream or near- stream habitat functions or values.

OBJECTIVE CON 1.5: WETLANDS AND UPLAND COMMUNITIES

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

Policy CON 1.5-1 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

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special zoning regulations and performance standards apply.

Policy CON 1.5-2 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 1.5-3 Wetlands Management Program

The County shall establish a Conservation overlay layer (GIS) to depict environmentally sensitive areas in order 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.*

Policy CON 1.5-4 Wetlands Regulation

In order to protect and sustain the functions and values provided by wetlands, the County shall: [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 Regulations 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), [D] 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, [E] 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 [F] Assess the

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effectiveness of wetland conservation, permitting, and regulatory programs of the Water Management Districts on an annual basis.

- Policy CON 1.5-5 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 1.5-6 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 Regulations.
- Policy CON 1.5-7 Conservation Easements/Dedication**
The County shall 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 1.5-8 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.

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Policy CON 1.5-9 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 1.5-10 Natural Resource Standards
The County shall 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.

OBJECTIVE CON 1.6: MINNING AND BORROW PITS

The County shall regulate extraction activities to minimize adverse impacts to air quality, surface waters, groundwater, wetlands, and other natural resources.

Policy CON 1.6-1 Soil Conservation Service
The County shall continue the funding of the Lake 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 1.6-2 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 1.6-3 Soil Survey
The County shall use the most recent Soil Survey of Lake County and Soil Supplement as the source of soil interpretation information for Countywide land use planning and development review and approval.

Policy CON 1.6-4 Mining and Borrow Pit Operations
The County shall continue to evaluate and enforce its Land Development Regulations relative to Mining and Borrow Pit Operations, including criteria of submitted restoration, reclamation and/or mitigation plans.

OBJECTIVE CON 1.7: AIR QUALITY

Lake County shall implement State and Federal guidelines to improve and protect air quality, and ensure that the County meet or exceed all applicable air quality standards.

Policy CON 1.7-1 Air Quality Assessment

Lake County shall maintain its ambient air resources for compliance with State and National Ambient Air Quality Standards (NAAQS) and shall utilize its monitoring program established for the waste to energy facility in addition to the new county-wide air quality monitoring program established by the Lake County Pollution Control Board to monitor its ambient air quality.

Policy CON 1.7-2 Reduce Point-source Air Pollution Emissions.

The County shall attempt to facilitate a reduction in total air emissions by all current sources listed for Lake County on the DER Air Pollution Inventory System (APIS) by proper enforcement of applicable State (Chapter 17-2, F.A.C.), and Federal regulations. The County shall require facilities found to be chronically non-compliant with these standards to utilize the best available control technologies prior to re-issuance of their operating permits. Lake County will follow up on complaints and the appropriate agencies will be notified. New developments which emit air pollutants shall be required to be monitored and locate their facilities away from schools, hospitals, or residential neighborhoods.

Policy CON 1.7-3 Air Pollution from Hazardous Materials.

Lake County shall monitor hazardous materials users and hazardous waste generators to ensure that contamination of the air by volatile pollutants released in the clean up, use or disposal of hazardous materials shall not exceed levels which may cause significant harm to human health or the environment. This policy shall be incorporated within the hazardous materials management program. Lake County will follow up on complaints and the appropriate agencies will be notified

OBJECTIVE CON 1.8: ENERGY CONSERVATION

The County shall, promote the use of renewable energy sources and energy conservation practices.

Policy CON 1.8-1 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 1.8-2 Coordinated Energy Conservation

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

Policy CON 1.8-3 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 1.8-4 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 1.9: 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, Lake County shall continue to adopt regulations which protect and conserve wetlands. Including, criteria for identifying the significance of wetlands.

Policy CON 1.9-1 Land Acquisition

The County shall continue to acquire (as part of its Public Lands Acquisition Program) and partner with other agencies to acquire areas of environmental sensitivity.

Policy CON 1.9-2 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.

Policy CON 1.9-3 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 layer

Policy CON 1.9-4 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. The County shall establish a minimum buffer requirement in rural areas and specially protected basins that will protect the function of the wetlands and the organisms that depend on them.

OBJECTIVE CON 1.10: ENVIRONMENTAL LAND ACQUISITION

Lake County shall seek the acquisition of environmentally sensitive lands utilizing revenue bonds from the Lake County Land Acquisition program, and partnering to the greatest extent possible with federal, state, and local agencies, as well as with private conservation entities as appropriate.

Policy CON 1.10-1 Land Use Impacts on Natural Resources.

The County shall adopt within the land development regulations and shall give consideration within all land use planning, to the impact of land use on water quality and quantity; the availability of land and other natural resources to meet demands; and the potential for flooding.

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Policy CON 1.10-2 Land Management to Enhance Wildlife.

Agricultural and silvicultural operations shall utilize "Agricultural Best Management Practices" of the Department of Environmental Regulation, "Silviculture Best Management Practices" by the Florida Department of Agriculture and Consumer Services and the requirements of Chapter 373 and 403, Florida Statutes to enhance wildlife populations. Wetlands shall not be fenced so as to restrict the movement of wildlife, however, fences shall be allowed to separate ownership.

Policy CON 1.10-3 Natural Areas Network.

Lake County shall develop through its Land Development Regulations criteria for establishing natural area networks by connecting existing natural areas for the purposes of wildlife enhancement, endangered species population maintenance and restoration, retention of aquifer recharge capabilities, establishing open space networks between existing urbanized areas and controlling urban sprawl.

OBJECTIVE CON 1.11: LAND MANAGEMENT AND USE

Lake County shall develop the land use regulations that are most appropriate and capable of providing for responsible growth without significant adverse impact to the County's natural resources.

OBJECTIVE CON 1.12: FLOODPLAINS

Lake County shall protect the 100 year floodplain so that natural hydrological functions are maintained to the greatest extent possible.

**OBJECTIVE CON 1.13: CONSERVATION OF WILDLIFE POPULATIONS
AND HABITAT**

Lake County shall conserve, appropriately use, and protect fisheries, wildlife, wildlife habitat and the freshwater habitat resources of the county.

**OBJECTIVE CON 1.14: CRITICAL HABITAT AND DESIGNATED SPECIES
PRESERVATION**

Lake County shall maintain viable habitat for species designated as endangered, threatened, or species of special concern. Mitigation or relocation of species shall be consistent with all applicable state and federal regulations and recommendations.

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GOAL CON 2

To ensure the preservation and long-term viability of Lake County's premier ecological landscapes for the benefit of present and future generations.

OBJECTIVE CON 2.1: GREEN SWAMP AREA OF CRITICAL STATE CONCERN

Lake County shall preserve the integrity of the Green Swamp as an intact ecosystem of statewide significance by protecting its discrete and intra-dependent natural resources including but not limited to hydrologic regimes, wetland and upland communities, ecologic connectivity, wildlife, and aquifer recharge.

OBJECTIVE CON 2.2: WEKIVA-OCALA GREENWAY

Lake County shall preserve the integrity of the Wekiva Ocala Greenway as an intact ecosystem of statewide significance by protecting its discrete and intra-dependent natural resources including but not limited to its springs, springshed, river system, karst features, wetland and upland communities, ecological connectivity, and wildlife.

OBJECTIVE CON 2.3: LAKE WALES RIDGE

Lake County shall establish a program to secure the protection of rare and native upland communities unique to the Lake Wales Ridge.