

**Conservation Element
Goals, Objectives and Policies**

GOAL C1 Orange County shall conserve, protect, and enhance the County's natural resources including air, surface water, groundwater, vegetative communities, wildlife listed as threatened, endangered, or species of special concern, soils, floodplains, recharge areas, wetlands, and energy resources to ensure that these resources are preserved for the benefit of present and future generations. Lands located within the Wekiva Study Area shall be considered high priority for protection. All development shall meet the requirements of the Wekiva River Protection Act and the Wekiva Parkway and Protection Act.

OBJ C1.1 Orange County shall continue to implement State and Federal mandated programs to maintain or improve air quality, continue to monitor and protect air quality, and ensure that the County continues to meet or exceed all applicable air quality standards.

POLICIES

C1.1.1 Orange County shall continue its current comprehensive monitoring, compliance, permitting, and enforcement programs, in order to protect and maintain air quality.

C1.1.2 The Orange County Environmental Protection Division shall continue to implement an air monitoring program and follow the air quality guidelines of the Florida Department of Environmental Protection and Orange County Ordinances. (Amend. 12/00, Ord. 00-25)

C1.1.3 Orange County shall promote and educate the public, through public seminars, dissemination of information and media presentations, about mass transit, carpooling, bikeways, park-n-ride lots, and other alternative transportation modes. The use of hybrid and alternative fuel vehicles as well as electric vehicles should be promoted as the market develops for these options. The use of low sulfur diesel fuel for both on-road and off-road diesel equipment should be used. This will be done in order to reduce automobile emission pollution, as proposed in the Traffic Circulation and Mass Transit Elements.

C1.1.4 Orange County shall regulate businesses and industries that have an impact on air quality and ensure that proper pollution control devices are used and maintained. This policy shall be achieved through Interlocal Agreements with the Department of Environmental Protection. (Added 12/00, Ord. 00-25)

C1.1.5 Orange County shall continue to enforce regulations regarding open burning, and other practices such as land clearing that have an adverse impact on air quality in Orange County.

C1.1.6 Orange County shall investigate and continue to promote, through incentives and education, the use of alternatives to open burning such as mulching, composting, leaving the existing vegetation where possible, air curtain incinerators, and best available control technology.

~~C1.1.7~~ Orange County's standards for the placement of transit facilities shall continue to, at a minimum, address impacts to water quality; wildlife (flora and fauna) listed as threatened, endangered, or species of special concern; scenic rivers; rare upland vegetative communities; noise; air pollution; and waste disposal. (Added 12/00, Ord. 00-25, Policy 1.1.9)

OBJ C1.2 Orange County shall continue to identify important sources of surface water pollution in Orange County and coordinate the development and implementation of pollution abatement devices, methods and programs with local governments, State, and Federal agencies. (Added 12/00, Ord. 00-25)

POLICIES

- C1.2.1 ✖ Orange County shall maintain acceptable water quality standards for surface water bodies, ensuring an aquatic environment that meets or exceeds Orange County, State and Federal standards. (Added 12/00, Ord. 00-25)
- C1.2.2 ✖ Orange County shall continue to enforce water quality standards by identifying all point and significant non-point sources of water pollution, and expand programs to reduce the harmful impacts of these pollutants on the natural environment. Orange County shall implement projects to reduce pollutant loads as required by Basin management action plans (BMAP) through the FDEP's TMDL program. (Amended 6/10, Ord. 10-07)
- C1.2.4 Orange County shall protect lakes and streams and continue to maintain a surface water monitoring program and follow the water quality guidelines of the Florida Department of Environmental Protection (FDEP) and Orange County Ordinances. (Added 12/00, Ord. 00-25, Policy 1.2.4; Amended 6/10, Ord. 10-07)
- C1.2.5 Orange County shall continue to protect shoreline vegetation by restricting the removal of desirable native vegetation through implementation of the Land Development Code and the Lakeshore Protection Ordinance requirements. (Added 12/00, Ord. 00-25, Policy 1.2.5-r; Amended 6/10, Ord. 10-07)
- C1.2.6 Orange County shall continue to improve design standards, monitoring, construction and maintenance requirements for stormwater retention/detention systems, and shall ensure compliance of these requirements to prevent degradation of the receiving surface water bodies. These requirements shall be included in the Land Development Code and shall apply to all new projects. (Added 12/00, Ord. 00-25, Policy 1.2.6-r)
- C1.2.7 ✖ ✖ Orange County shall continue to implement the approved Wekiva River Protection Ordinance, the Econlockhatchee River Protection Ordinance Plan, and the requirements of the Wekiva Parkway and Protection Act by continuing to adopt regulations in the Land Development Code and through the acquisition of environmentally sensitive lands within these basins to protect these river resources and other Outstanding Florida Water Bodies and Outstanding National Resource Waters. These regulations and acquisitions shall ensure protection and maintenance of water quality, water quantity, aesthetics, open space, historical/archaeological resources, rare upland habitat, wildlife habitat, and floodplains and recreational values. (Added 12/00, Ord. 00-25, Policy 1.2.7-r; Amended 6/10, Ord. 10-07)
- C1.2.8 Orange County shall continue to develop, prioritize, and implement feasible and specific criteria for water quality when applicable in accordance with the State's Class III water quality standards for all surface waters, lakes, and rivers. (Added 12/00, Ord. 00-25, Policy 1.2.8-r)
- C1.2.9 ✖ Orange County shall on an ongoing basis identify and prioritize lakes that are in need of restoration, through the analysis of specific water quality parameters and following the water quality guidelines of the Florida Department of Environmental Protection (FDEP) and Orange County Ordinances. (Added 12/00, Ord. 00-25, Policy 1.2.11-r)
- C1.2.10 ✖ Orange County, in conjunction with the Water Management Districts and other State agencies, shall on an ongoing basis, seek funding and implementation of lake

management plans for those water bodies in greatest need of restoration. (Added 12/00, Ord. 00-25, Policy 1.2.12)

- C1.2.11 ~~AX~~ Orange County shall prohibit the direct or indirect discharge of hazardous, toxic, chemical, petroleum, nuclear waste, heated water discharges or liquid sludge pollutants into surface waters or wetlands systems. (Policy 1.2.14; Amended 6/10, Ord. 10-07)
- C1.2.12 ~~AX~~ Orange County shall prohibit the location of petroleum businesses where they will negatively affect the quality of surface waters and the surficial Aquifer or the Floridan Aquifers. (Added 6/95, Ord. 95-13, Policy 1.2.15-r; Amended 6/10, Ord. 10-07)
- C1.2.13 ~~AX~~ Where appropriate Orange County shall control non-native invasive aquatic plants in its waterways to promote good water quality and positive recreational benefits to its citizens and visitors. (Added 12/00, Ord. 00-25, Policy 1.2.16-r)
- C1.2.14 Orange County will reduce pollutants to the "maximum extent practicable" through implementation of pollution control measures, including compliance inspections of private and public facilities, for point and non-point discharges in accordance with County Code Chapter 15 Article II, Section 15-39; NPDES MS4 Permit FLS000011; FAC 62-624; 40 CFR 122.26; and Section 402(p)(3)(b) of the Federal Clean Water Act.
- C1.2.15 Orange County shall identify areas within the County that are susceptible to impacts associated with nutrient loadings from specific activities including lawn and turf fertilizer application and reclaimed water irrigation. These susceptible areas shall include but are not limited to: TMDL impaired waterbodies, Outstanding Florida Waters, Outstanding National Resource Waters, and waterbodies with declining water quality associated with nutrient loads and areas adjacent to surface water conveyance system that drains to a waterbody of special interest. The County will make efforts to reduce the potential impacts from these specific activities. The identified areas will also be used for planning and future use considerations.(Amended 6/10, Ord. 10-07)
- C1.2.16 Orange County shall perform or have performed the routine collection and disposal of nutrient laden leaf litter debris from all streets and roadways within the unincorporated portions of the County. In order to prevent these materials from entering the stormwater systems that drain to our surface waters, the activities should be performed at a minimum frequency of monthly for commercial/industrial areas and bi-weekly in residential areas.

OBJ C1.3 Orange County shall protect the natural functions of floodplains and flood zone areas to maintain flood-carrying and flood-storage capacities, to protect life and property, and to continue to maintain its eligibility in the National Flood Insurance Program by implementing the following policies.


POLICIES

- C1.3.1 Orange County shall continue to improve and enforce the Orange County Floodplain Management Ordinance by requiring compensatory storage for encroachment in floodplains, restricting encroachment in floodways, and requiring habitable structures to be flood proofed. (Added 12/00, Ord. 00-25)
- C1.3.2 Orange County shall continue to identify and recommend, to the State and the Water Management Districts, floodplains that would warrant acquisition under the Conservation and Recreation Lands Program, Florida Forever Program and the Save Our Rivers Program. (Amended 6/10, Ord. 10-07)
- C1.3.3 Orange County shall strengthen floodplain protection requirements for riverine systems by adopting regulations prohibiting floodplain encroachment without compensating storage. (Added 12/00, Ord. 00-25)

C1.3.4 Orange County shall, on an ongoing basis, in conjunction with other appropriate agencies such as the Water Management Districts, identify and prioritize problem floodplain areas in need of corrective measures. (Added 12/00, Ord. 00-25)

OBJ C1.4 Orange County shall protect identified wetland areas and existing native wildlife (flora and fauna) habitats by implementing the following policies.

POLICIES

C1.4.0  Environmentally Sensitive Lands, per 9J-5, Florida Administrative Code and Chapter 163, Florida Statutes, for the purposes of this Comprehensive Plan shall mean at a minimum Class I conservation areas as defined in Conservation Policy C1.4.1, and their adjacent uplands, rare upland habitat including but not limited to sandhill and scrub, and those wetland and upland systems that support any Threatened, Endangered Species, or Species of Special Concern. (Added 8/92, Ord. 92-24)

C1.4.1 Orange County shall continue to adopt regulations that protect and conserve wetlands. Such regulations shall include criteria for identifying the significance of wetlands.

Class I conservation areas shall mean those wetland areas that meet at least one of the following criteria:

- A. Any wetland of any size that has a hydrological connection to natural surface water bodies or Floridan aquifer; or
- B. Any wetland of any size that is within a lake littoral zone; or
- C. Any large isolated uninterrupted wetlands forty (40) acres or larger; or
- D. Any wetland of any size that provides critical habitat for federal and/or state listed threatened or endangered species.

Class II conservation areas shall mean those wetland areas that meet any of the following criteria:

- A. Consist of isolated wetlands or formerly isolated wetlands that by way of man's activities have been directly connected to other surface water drainage; and are greater than or equal to five (5) acres; or
- B. Are less than 40 acres and do not otherwise qualify as a Class I conservation area.

Class III conservation areas shall mean those wetland areas that meet all of the following criteria:

- A. Isolated wetlands less than five (5) acres; and do not otherwise qualify as a Class I or Class II conservation area. Stormwater ponds are not considered conservation areas.

The removal, alteration or encroachment within a Class I Conservation Area shall be allowed only in cases where no other feasible or practical alternatives exist that will permit a reasonable use of the land or where there is an overriding public benefit. The protection, preservation and continuing viability of Class I conservation areas shall be the prime objective of the basis for review of all proposed alterations, modifications, or removal of these areas.

Removal, encroachment or alteration for Class II conservation areas should be presumed to be allowed unless removal, encroachment or alteration is contrary to the public interest. Removal, encroachment or alteration may be allowed in Class III conservation areas.

When encroachment, alteration or removal of a conservation area is permitted, habitat compensation or mitigation as a condition of development approval shall be required.

The basis for mitigation shall be determined by using UMAM as the sole basis for evaluation. In the case where a mitigation bank has not been awarded credits using UMAM, the mitigation shall be no less than the following:

Class I conservation areas: case by case basis, but not less stringent than the mitigation requirements for Class II conservation areas.

Class II conservation areas:

- A. Freshwater marshes and wet prairies – 1.5:1.
- B. Cypress wetlands – 2.0:1.
- C. Hydric hammocks, bayheads, and mixed hardwood swamps – 2.5:1.

Class III conservation areas: 1:1.


For off-site, unlike, or other mitigation proposals, ratios shall be determined on a case-by-case basis. The regulation shall stipulate that the following types of mitigation shall be given priority:

- A. Restoration of non-functional wetlands;
- B. Off-site preservation of wetland and upland systems;
- C. Creation of type-for-type mitigation areas adjacent to preserved Class I Conservation Areas or that connect Class I, II and/or III conservation areas; and,
- D. Creation of type-for-type mitigation areas. (Added 8/92, Ord. 92-24; Amended 12/00 Ord. 00-25)

- C1.4.2 Orange County shall coordinate with the Army Corps of Engineers, the Florida Department of Environmental Protection and the St. Johns River and South Florida water management districts to identify and regulate wetland areas under their jurisdiction.
- C1.4.3 By 2011, Orange County shall establish regulations in the Land Development Code concerning upland buffer areas adjacent to wetlands, major riverine systems and Outstanding Florida Waters, and Outstanding National Resource Waters, in order to protect water quality, preserve natural wetland functions, and preserve wildlife and plant species listed as threatened, endangered, or species of special concern. (Added 12/00, Ord. 00-25; Amended 6/10, Ord. 10-07)
- C1.4.4 The future land use designation of Preservation shall be established to recognize publicly or privately owned lands of significant environmental importance for the purposes of environmental protection. Publicly owned lands designated Preservation shall be lands owned by federal, state, or local governments acquired for environmental preservation, rehabilitation, or management. Privately owned lands such as wetland mitigation banks, Regional Offsite Mitigation Areas and environmentally sensitive properties owned by the Florida Audubon Society, Nature Conservancy or similar types of non-profit entities, may be designated as Preservation so long as formal consent is provided.

Compatible very-low impact recreational or educational uses, such as hiking, non-motorized boating, bird watching, horseback riding, fishing, primitive camping, and nature study, that use natural amenities of the site for public benefit are allowable uses in the Preservation designation, so long as these uses avoid development encroachment into warranted, environmentally-sensitive areas. All other uses are prohibited. Furthermore, development within areas designated Preservation cannot exceed a 0.1 Floor Area Ratio. (Deleted 12/00, Ord. 00-25; Added 05/03, Ord. 03-03, Policy 1.4.4-r; Amended 6/10, Ord. 10-07)
- C1.4.5 The Conservation/Wetlands designation on the Future Land Use Map shall serve as a conceptual indicator of conservation and wetland areas. The precise delineation of these

areas shall be determined through site specific studies and field determinations that assess the extent of wetland vegetation, consistent with Conservation Policy C1.4.1. If an area designated as Conservation/Wetlands on the Future Land Use Map is determined to be a developable area, the Future Land Use Map designation shall be as shown. (Added 12/00, Ord. 00-25)

- C1.4.6 All attempts should be made to mitigate wetland or surface water impacts within the County. Off-site mitigation or out of County mitigation for all Classes of wetlands (i.e. I, II, and III) will be considered only when, 1) the mitigation site deemed as appropriate (i.e. functional equal or like for like) mitigation to offset any direct or secondary impacts and, 2) is located within the same hydrologic basin as the impact or 3) the applicant can demonstrate that mitigation area will have spillover benefits to the basin where the impact is to occur. This includes Orange County Capital Improvement Projects. The Board of County Commissioners may approve out of County mitigation areas on a case by case basis; this includes mitigation banks, which benefit the County's wetland resources. (Added 6/95, Ord. 95-13; Amended 12/00, Ord. 00-25)
- C1.4.7 Orange County shall protect identified wetland areas and existing wildlife (flora or fauna) habitat through the control and maintenance of invasive non-native (exotic) plants and animal species on County owned environmentally sensitive lands. The Orange County Environmental Protection Division has adopted an internal Standard Operational Procedure for the identification and tracking of invasive/exotic Plant Species that is applicable for all Green PLACE properties. Maintenance and control of invasive/exotic plant and animal species is conducted by contractual and in-house resources. Orange County shall continue to identify funding sources and grants to assist in the maintenance and control activities. (Added 12/00, Ord. 00-25; Amended 6/10, Ord. 10-07)
- C1.4.8  Orange County shall continue to seek out innovative partnerships and opportunities to preserve and conserve its natural resources in a balanced approach that ensures multiple and compatible uses of those lands while providing just compensation to the landowner. (Added 12/00, Ord. 00-25)
- C1.4.9 An upland buffer of a minimum of 25 feet is recommended for all Class I, II, and III wetland systems unless scientific data dictate a larger or smaller buffer based on wetland function or local conditions. Other County Ordinances may require larger buffers. This shall be incorporated into Chapter 15 of the Orange County code by 2012. (Amended 6/10, Ord. 10-07)

OBJ C1.5 Orange County shall require proper soil management practices to avoid erosion as outlined in the County's National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer (MS4) permit. This objective shall be made measurable by implementing the following policies.

POLICIES

- C1.5.1 Orange County shall continue to work with the Natural Resource Conservation Service to rate and classify Orange County's soils according to their development potential.
- C1.5.2 Orange County shall on an ongoing basis, assist the Soil Natural Resource Conservation Service with those activities directed at minimizing soil erosion, including the adoption and enforcement of Best Management Practices for agriculture and urban development. (Added 12/00, Ord. 00-25)
- C1.5.3 Orange County shall assist the Water Management Districts, Florida Department of Environmental Protection and other applicable agencies to improve soil management adjacent to Orange County surface water bodies. This assistance may include, but not be

limited to, protection and planting of desirable native species of vegetation and erosion control measures. (Amended 6/10, Ord. 10-07)

- C1.5.4 Orange County shall incorporate regulations into the Land Development Code concerning soils and their suitability for future development. These regulations shall include restricting development in areas with hydric soils, preservation of groundwater recharge areas, and controlling the location of individual on-site sewage disposal systems. (Amended 6/10, Ord. 10-07)
- C1.5.5 Orange County shall continue to require and enforce State recommended Best Management Practices to protect soils during development activities. (Added 12/00, Ord. 00-25)
- C1.5.6 Orange County shall provide information regarding training opportunities that instruct private entities and County Staff on erosion control and best management practices. Training of inspectors is available through the Florida Stormwater, Erosion and Sediment Control Training and Certification Course.
- C1.5.7 Orange County shall require development in/or near contaminated soils to properly address the contamination prior to any approvals allowing disturbance of the contaminated soils with land clearing, mass grading and/or construction. (Added 6/10, Ord. 10-07).
- C1.5.8 Development on any soils in which buried waste is found shall comply with the guidelines established in the most recent version of the "Guidance for Disturbance and Use of Old Closed Landfills or Waste Disposal Areas in Florida," published by the Florida Department of Environmental Protection. (Added 6/10, Ord. 10-07)

OBJ C1.6 Orange County shall require that mining be regulated to prevent adverse impacts to air, groundwater, surface water, and other natural resources by implementing the following policies. (Added 12/00, Ord. 00-25)

POLICIES

- C1.6.1 Orange County shall regulate any proposed mining activities to ensure such uses are compatible with their surroundings and are environmentally acceptable.
- C1.6.2 Orange County shall prohibit mining activities that adversely impact prime water recharge areas and/or lower groundwater potentiometric surface elevations.
- C1.6.3 By December 1992, Orange County shall develop landscape and grading standards for mine reclamation that provide for the restoration of previously mined land. Such standards shall be included in the Land Development Code.
- C1.6.4 Orange County shall require that a reclamation plan and proof of financial responsibility has been provided by mining operators as a condition of permit approval. Such requirements shall be included in the Land Development Code.
- C1.6.5 Orange County shall require and enforce erosion control practices during mining activities and shall require State recommended Best Management Practices to protect: soils, receiving waters, and open drainage facilities as well as to prevent fugitive air emissions through site management, engineering controls and with dust control techniques. (Added 6/10, Ord. 10-07)

OBJ C1.7 Orange County shall manage and protect plant and wildlife species designated as threatened, endangered or species of special concern through

programmatic and planning approaches for ecosystem analysis and through adoption of land development regulations. (Added 12/00, Ord. 00-25; Amended 6/10, Ord. 10-07)

POLICIES


- C1.7.1 Orange County shall assist in the application of, and compliance with, all State and Federal regulations that pertain to plants and wildlife listed as threatened, endangered, or species of special concern.
- C1.7.2 In addition to consulting with the appropriate State agencies, Orange County shall require management plans for land use permits that would result in harm to any wildlife or plants listed as threatened, endangered, or species of special concern found on site or determined to use the site. Such requirements shall be included in the Land Development Code and, at a minimum, shall require a habitat survey and management plan approved by or otherwise satisfactory to and in full compliance with the regulations promulgated by the Florida Fish and Wildlife Conservation Commission, the County, and any other state or federal agency with jurisdiction. (Added 8/92, Ord. 92-24; Amended 12/00, Ord. 00-25, Policy 1.7.2-r; Amended 6/10, Ord. 10-07)
- C1.7.3 Orange County must establish on an ongoing basis, an education and incentive program to encourage private landowners to use environmental management practices that protect habitat for plants and wildlife listed as threatened, endangered, or species of special concern. (Added 12/00, Ord. 00-25)
- C1.7.4 Land containing plants and wildlife listed as threatened, endangered, or species of special concern, or that is part of a riverine corridor system shall be given priority for environmentally sensitive land acquisition and protection.
- C1.7.5 ~~Orange County shall, through conservation easement and fee simple land acquisition, discourage fragmentation and are to be identified in the Open Space Element as referenced in Open Space Policies 1.1.5 and 1.1.6. Wherever possible, public and private open space areas shall be connected together to establish corridors for wildlife movement. A priority for wildlife/open space corridors shall be given to land located within the Wekiva Study Area to connect the Wekiva River area to the Ocala National Forest (Added 8/92, Ord. 92-24; Amended 12/00, Ord. 00-25, Policy 1.7.5-r; Amended 6/10, Ord. 10-07)~~ *
- C1.7.6 ~~Orange County shall, through the County's Legislative Delegation's actions, continue to implement the provisions of the Florida Blue Belt amendment as a means for preserving rare uplands and recharge areas, recognizing that uplands in Orange County are rare ecosystems that contain both high recharge areas and habitat for endangered, threatened and species of special concern. The County will encourage citizens to take advantage of this new legislation through public education initiatives. (Added 12/00, Ord. 00-25)~~
- C1.7.7 Orange County shall amend the Orange County tree ordinance and associated land development regulations, in order to require preservation of valuable tree species that provide valuable habitat for animals, prohibit indiscriminate clearing, and require replacement and maintenance measures. These regulations shall be included in the Land Development Code. (Added 12/00, Ord. 00-25)
- C1.7.8 Orange County shall continue to protect land such as, rare uplands, that provide habitat for plants and wildlife listed as threatened, endangered, or species of special concern through land use planning requiring buffers, open space, management plans, and/or clustering; Orange County's process of development review ensures that rare upland areas are inventoried for any possible endangered species that may necessitate habitat

protection. Orange County shall also consider incentive programs such as density bonuses, acquisition, or purchase of development rights as a means of preserving these areas. The critical upland habitats of the Longleaf Pine-Turkey Oak vegetation communities ("sandhill"), Xeric Oak Scrub, Sand Pine Scrub, Pine Flatwoods and areas of Type A soils located within the Wekiva Study Area shall be considered high priority for protection efforts. All areas that are to be set aside as protected open space shall be identified on development plans. (Added 12/00, Ord. 00-25; Amended 10/09, Ord. 2009-28)

- C1.7.9 Orange County shall, on a continuous basis, identify and recommend to the State and other appropriate agencies rare uplands that would warrant acquisition under appropriate land acquisition programs. Orange County shall pursue long-term revenue sources for purchases of rare upland habitat that warrants acquisition. (Added 12/00, Ord. 00-25)
- C1.7.10 Orange County shall use the Conservation Trust Fund, Florida Forever and other available funding sources to acquire rare upland and wetland vegetative communities and identified wildlife corridors. (Added 12/00, Ord. 00-25)
- C1.7.11 Orange County is currently conducting a natural habitat evaluation. The evaluation is being conducted by the Florida Natural Areas Inventory organization. The final results of the evaluation and other evaluations shall be used in prioritizing land for acquisition based on its ability to provide the following: habitat corridors, high ranking vegetative cover, species diversity, hydrologic function, ecological integrity and aquifer recharge potential. (Added 12/00, Ord. 00-25; Amended 6/10, Ord. 10-07)
- C1.7.12 Orange County shall continue to seek long term revenue sources and partnerships for open-space acquisition and maintenance that will serve to balance habitat related goals with those for improved passive recreation areas and citizen education programs. (Added 12/00, Ord. 00-25)

OBJ C1.9 Orange County shall require the protection of natural resources by minimizing adverse impacts from adjacent developments. This objective shall be made measurable by implementing the following policies.

POLICIES

- C1.9.1  Orange County shall cooperate with the Florida Department of Environmental Protection, the Florida Fish and Wildlife Conservation Commission and the Florida Division of Forestry to improve the management of Wekiva Springs State Park, Rock Springs Run State Reserve, Tosohatchee State Reserve, Seminole Ranch Wildlife Management Area, Neighborhood Lakes, Joshua Creek Conservation Area, Hal Scott Preserve and Split Oak Forest Preserve. (Amended 6/10, Ord. 10-07)
- C1.9.2 Orange County shall continue to require compatible land uses and enhanced protective mechanisms, such as, but not limited to, Notices of Proximity, buffers, vegetative buffers, setbacks, density restrictions, easements, physical barriers, pollution abatement swales, erosion control techniques, treatment of stormwater runoff, and fire management that will permit continued habitat management practices in areas adjacent to major, managed natural resources. This is necessary in order to minimize adverse impacts from development and allow continuation of management activities for these areas. (Added 12/00, Ord. 00-25; Amended 6/10, Ord. 10-07)
- C1.9.3 Orange County shall continue to establish Interlocal Agreements with adjacent counties and municipalities to protect rare upland vegetative communities and all wetland vegetative communities that are located in more than one jurisdiction. (Added 12/00, Ord. 00-25)

OBJ C1.10 Orange County shall conserve energy resources for future generations. This objective shall be made measurable by implementing the following policies.

POLICIES

- C1.10.1 Orange County shall continue to implement an energy conservation program that requires new developments to incorporate energy efficient buildings and site design techniques to the extent practical and feasible. Preliminary Subdivision Plans and Development Plans and all commercial plans shall include a list of the energy efficient measures that will be incorporated into the buildings and used in the site design techniques. If the developer can show that a 15% higher energy performance will be achieved (on an annual basis) over the existing code required building practices then the comprehensive plan goal cited above, "to the extent practical and feasible," will be met. Refer to the Florida Green Commercial Building Standard and the Leadership in Energy and Environmental Design (LEED) Green Building Rating System standards for guidance. Another option to comply with this policy is to achieve an energy certification from one of the organizations listed above that is at least equivalent to the 15% goal stated above. (Added 12/00, Ord. 00-25-r)
- C1.10.2 Orange County shall continue to diversify the County fleet through the use of hybrid vehicles and alternative fuel vehicles as they become available on the market. The County shall continue to closely monitor vehicle manufacturers alternate fuel programs and consider such vehicles when purchasing new fleet vehicles. It is anticipated that plug-in electric hybrid cars will be made available on the market and they will be incorporated into the fleet as appropriate. The County will continue to participate with manufacturer testing of hydrogen powered buses and fueling facilities. The County will promote the use of all these vehicles by the general public by encouraging the construction of the necessary infrastructure. (Added 8/92, Ord. 92-24, Policy 1.10.2-r; Amended 6/10, Ord. 10-07)
- C1.10.3 Orange County shall investigate and implement alternative means of reducing the County's solid waste and dependency on fossil fuels.
- C1.10.4 ~~Orange County shall investigate and implement ways of reducing Styrofoam consumption throughout Orange County including its own facilities, in the interest of reducing harmful chlorofluorocarbon (CFC) discharge to the atmosphere.~~
- C1.10.5 ~~Orange County shall investigate and implement ways to reduce its new paper products consumption by such means as using recycled paper products.~~
- C1.10.6 Orange County, shall continue to implement ways of reducing fossil fuel consumption in new County facilities by such means as including solar panels, solar water heaters, double or triple pane windows, wide roof eaves to maximize exterior wall shading, passive solar design concepts, and higher insulation values. Orange County shall offer incentives to builders/developers who demonstrate energy conservation in building design to include options that supplement existing utilities. Such incentives shall be included in the energy conservation program referenced in Conservation Policy C1.10.1. (Added 12/00, Ord. 00-25)

OBJ C1.11 Orange County shall protect and conserve groundwater quantity and quality by implementing the following policies.

POLICIES

- C1.11.1 Orange County's Environmental Protection Division shall continue to implement its monitoring program and procedures to mitigate adverse impacts, if detected, of private businesses in the unincorporated area that use, generate or produce any material

characterized or listed on the Resource Conservation and Recovery Act's or the Environmental Protection Agency's hazardous waste lists as required in the Aquifer/Wellfield Protection regulations. (Added 12/00, Ord. 00-25)

- C1.11.2 ✂ Orange County shall coordinate and cooperate with the St. Johns River Water Management District and South Florida Water Management District in the enforcement of the provisions of their emergency water shortage plans, and in the implementation of the appropriate groundwater conservation and protection programs outlined in the Regional Water Supply Plans of the St. Johns River Water Management District and the South Florida Water Management District.
- C1.11.3 Orange County, a designated Primary Water Resource Caution Area, will draft and include incentives in the update of the Land Development Code to encourage water conservation measures and water wise landscaping principles, and the use of native vegetation or other drought resistant species, in order to reduce the irrigation demand for potable water in new developments or redevelopment. (Added 12/00, Ord. 00-25)
- C1.11.4 Orange County shall use the water quality and quantity protection, preservation, and conservation measures as designated in the objectives and policies of the *Potable Water, Wastewater and Reclaimed Water* and the *Aquifer Recharge* Elements, to protect groundwater quality and quantity.
- C1.11.5 Orange County shall develop regulations supporting the use of stormwater runoff for irrigation of agricultural areas, open space and landscaped areas to facilitate aquifer recharge and reduce potable water demands, in accordance with the SJRWMD's "District Water Supply 2020 Plan 2005." Such regulations shall be included in the Land Development Code. (Added 12/00, Ord. 00-25, Policy 1.11.5-r)
- C1.11.6 Aquifer recharge areas typically comprise Hydrologic Soil Group Type "A," as indicated on the Soil Survey Map for the County prepared by the Natural Resources USDA Soil Conservation Service. Regulations shall be adopted as part of the Land Development Code that require a detailed soils report prepared by a geotechnical engineer to be submitted to the County prior to site development plan approval if such soils exist on-site. If the site is determined to be within a high recharge area, retention of the total run-off generated by a 25-year frequency, 24-hour duration storm event from the developed site will be required. (Added 8/92, Ord. 92-24; Amended 12/00, Ord. 00-25, Policy 1.11.6-r)
- C1.11.7 Orange County shall identify and take action to combat sources of pollution that could threaten groundwater quality such as malfunctioning drainwells, improperly installed septic tanks, and improper disposal of hazardous waste areas. For areas inside the urban service area, with failing septic tanks Orange County shall investigate and prioritize the provision of Wastewater and Water utilities to these areas. This will be done through the MSTU (Municipal Services Taxing Unit) or MSBU (Municipal Service Benefit Unit) that can help provide the costs attributed to retrofitting those areas that require infrastructure improvements for wastewater and stormwater. (Added 12/00, Ord. 00-25, Policy 1.11.7)
- C1.11.8 Orange County will reduce pollutants to the maximum extent practicable through implementation of pollution control measures, and developing nonpoint source control plans, in accordance with Section 402(p)(3)(b) of the Clean Water Act, 40 CFR 122.26 and existing state regulations. (Added 12/00, Ord. 00-25, Policy 1.11.8)
- C1.11.9 The County shall protect the Wekiva Study Area through the establishment of three protection zones based upon the aquifer vulnerability data provided in the Florida Geological Survey Report of Investigation 104: Wekiva Aquifer Vulnerability Assessment (WAVA). The three Protection Zones as determined by the WAVA report are depicted in

Figure WSA-5. The Primary Protection Zone is comprised of those areas expected to most directly affect the water quality surfacing at the springs within the WSA [time of travel and reduced natural attenuation]. The Secondary Protection Zone still contributes water to the springs, but over a longer period of time and allowing for somewhat greater natural treatment and reduction of the nitrogen.

The Tertiary Protection Zone covers all other areas in the WSA, where the flow to the springs is minimal or nonexistent. As part of its analysis, the County shall determine whether certain land uses with the potential to contaminate or harm the aquifer shall be limited or prohibited within portions of the WSA. The evaluation will need to address monitoring mechanisms as well as the costs of implementation and enforcement of protection zones and land use limitations. By January 1, 2007, the Land Development Code will be revised to include protection zones and appropriate standards for development within them, including stormwater runoff.

C1.11.10 Orange County shall adopt a Water Supply Facilities Work Plan (Work Plan) which will assess existing and projected water sources and needs for at least a 10-year planning period considering the Regional Water Supply Plans of the St. Johns River Water Management District and South Florida Water Management District. The Work Plan will identify traditional and alternative water supply sources, including water conservation efforts, which the County may use to reduce or satisfy existing and projected water demands.

C1.11.11 Orange County will continue to implement the water conservation efforts identified in the Work Plan. These efforts include:

- Continued staffing of the County's water conservation program and extensive public education program;
- Continued enforcement of ordinances and policies that limit irrigation days and hours, encourage Florida Friendly landscaping, require the use of ultra-low volume fixtures, and require rain sensor devices;
- Continued water conservation practices, such as participation in Florida Friendly Landscape workshops, water use audits, toilet retrofit program, distribution system leak program, presentation and events, and participation in public awareness campaigns;
- Continued use of a tiered inclined block water conservation rate structure, including rate increases;
- Further assessment of existing water conservation program effectiveness and development of new program initiatives; and,
- Periodic review and update of existing water conservation and landscaping ordinances to promote additional improvements in water conservation.

OBJ 1.12 Orange County shall protect, preserve and enhance its vegetative resources, including, but not limited to, tree species, emergent and submerged aquatic vegetation. This shall be accomplished through the implementation of the following policies. (Added 12/00, Ord. 00-25)

POLICIES

C1.12.1 Orange County shall augment its protection of vegetated resources in urban areas, including but not limited to the tree protection ordinance. This action would ensure that high quality trees would receive greater protection in the development review process, require preservation of valuable tree species, prohibit indiscriminate clearing, require replacement and maintenance measures, and establish ratios for replacement if removal

is unavoidable. The County shall update the existing Tree Protection Ordinance by 2009. (Added 12/00, Ord. 00-25)

C1.12.2 Orange County shall encourage the planting of native trees and vegetation along the roadways, through inclusion of landscaping and buffering requirements in the Land Development Code, Activity Center development guidelines, Arbor Day promotions, and expansion of the Urban Forestry Program, in order to reduce the level of carbon dioxide in the air, dilute air pollutants, and reduce noise impacts, to enhance the aesthetic quality, design and quality of life in Orange County. (Added 12/00, Ord. 00-25, Policy 1.12.2-r)

C1.12.3 Orange County shall develop incentive programs for the conservation of existing, wetland and upland vegetative communities.

C1.12.4 Orange County shall continue to implement invasive/exotic plant species control on Orange County Green PLACE properties, continue to conduct prescribed fire events and restoration of degraded habitats with native vegetation. (Amended 6/10, Ord. 10-07)

GOAL C2

Orange County's goal is to protect, enhance and maintain the unique and irreplaceable values, functions, diversity and benefit of the natural resources within the Econlockhatchee River Basin, Wekiva Protection Area and the Lake Apopka Drainage Basin. (Amend. 12/00, Ord. 00-25, Goal 2)

OBJ C2.1 All new development within the Wekiva Protection Area shall be residential at very low densities, agricultural or low intensity recreational in character.

POLICIES

C2.1.1 *The Future Land Use Map shall establish the permitted land use, densities and intensities for the Wekiva River.

C2.1.2 *Within the Wekiva River Protection Area, development that is not residential, agricultural or low intensity recreational in character shall be prohibited. Amendments to the Future Land Use Map that would allow a residential density greater than 1 DU/5 Acres shall be denied.

OBJ C2.2 The natural resources of the Wekiva River shall be protected. This objective shall be made measurable by implementing the following policies.

POLICIES

C2.2.1 A buffer zone is hereby established five hundred and fifty (550) feet from the landward limit of waters of the State FAC § 62-340, or edge of the Wekiva River, or from the landward edge of the wetlands associated with the Wekiva River, whichever is the greater. In no case shall development activities be permitted closer than five hundred fifty (550) feet from the river's edge except for created forested or herbaceous wetlands, and passive recreation when it is clearly demonstrated by the applicant that the areas shall not adversely affect aquatic and wetland-dependent wildlife, water quality, groundwater table or surface water levels. An upland buffer a minimum of 25 feet and an average of 50 feet shall be required for all Class 1, Class II or Class III wetland systems/conservation areas, that are not associated with the Wekiva River, that occur within the Wekiva Study Area. Larger buffers can be applied if scientific data on wetland function or

local conditions dictates it. This shall be incorporated into Chapter 15 of the Orange County Code by 2012. (Added 12/00, Ord. 00-25; Amended 6/10, Ord. 10-07)

- C2.2.3 In order to preserve native vegetation to the maximum extent possible, clustering of development or submission as a Planned Development (PD) shall be encouraged within the Wekiva River Protection Area.
- C2.2.4 Where endangered, threatened plants and animals or species of special concern are known to be present, or are likely to be present, the developer of any subdivision, or planned development, shall be required as part of the development review process to liaise with the Florida Fish and Wildlife Conservation Commission in order to protect the above plants and animals within the Wekiva River Protection Area. This requirement shall be included in the Land Development Code.
- C2.2.5 Within the 100 Year Floodplain of the Wekiva River, developments shall be required to minimize the clearance of native vegetation. Prior to construction plan submittal, a vegetation clearing plan shall be submitted to the County for review and approval. Clearing of vegetation will only be permitted, where necessary, in order to complete the development. Such requirements shall be included in the Land Development Code. (Amended 6/10, Ord. 10-07)
- C2.2.6 The County shall continue to monitor surface water quality within the Study Area in order to identify potential pollutant sources and track long term trends in quality. The County shall follow the requirements of any Basin Management Action Plan (BMAP) developed under the Total Maximum Daily Load (TMDL) Program. (Added 12/00, Ord. 00-25)
- C2.2.7 Pre-development and post-development stormwater run-off rates shall be equal. (Added 12/00, Ord. 00-25)
- C2.2.8 Developments that have the potential to degrade groundwater quality shall be prohibited.
- C2.2.9 Within the 100 Year Floodplain of the Wekiva River, septic tank use shall be discouraged. Where public utilities are available, new development will be required to hook-up to these facilities. In order to obtain a Septic Tank Permit within the Floodplain, the applicant must demonstrate that there will be no detriment to water quality. Such requirements shall be included in the septic tank regulations of the Land Development Code.
- C2.2.10 In order to protect the water quality of the Wekiva River, and to protect the River's rural character, the density or intensity of development permitted on parcels adjacent to the River shall be concentrated/clustered on the portion of the parcel furthest from the River.
- C2.2.11 In order to protect the Wekiva River, parcels shall not be subdivided so as to interfere with the buffer zone established in Conservation Policy C2.2.1.
- C2.2.12 Orange County shall coordinate with the St. Johns River Water Management District to monitor and manage the quantity of groundwater withdrawals, in order to prevent saltwater contamination due to a decline in potentiometric surface.
- C2.2.13 Orange County shall coordinate with the City of Apopka concerning implementation of the required provisions of the Wekiva River Protection Act through meetings on an as needed basis.

OBJ C2.3

Orange County shall protect and preserve the surface water quality and quantity, wildlife populations and habitat, aesthetics, open space, historical and archaeological resources, floodplains, wetland areas, native upland areas

and recreation lands of the Econlockhatchee (Econ) River Basin by implementing the following policies.

POLICIES

- C2.3.1 The Land Development Code shall provide for the protection of the Econ River Basin through mechanisms such as upland buffers, specific restrictions within a 2,200 foot total width protection zone, requiring habitat and historical/archaeological resource assessments and protection, allowing for mitigation, open space or density credits, requiring landscaping to include use of native plant species, utilization of wetland areas as part of drainage facility systems, requiring State or Federal listed species protection, clustering of development, restricting floodplain encroachment, and limiting forested habitat fragmentation. (Added 12/00, Ord. 00-25)
- C2.3.2 Orange County shall coordinate, through provision of information and technical assistance, with the St. Johns River Water Management District and adjacent counties for the development of consistent regulations protecting the Econ River Basin.
- C2.3.3 Orange County shall support educational programs promoting the scenic and natural values of the Econ River Basin through provision of information and technical assistance, and attendance at appropriate meetings.
- C2.3.4 Orange County shall continue to monitor surface water quality in the Econ River Basin in order to identify potential pollutant sources and track long term trends in quality. The County shall follow the requirements of any Basin Management Action Plan (BMAP) developed under the Total Maximum Daily Load (TMDL) Program. (Amended 6/10, Ord. 10-07)

OBJ C2.4 Orange County shall help restore, protect and preserve the surface populations and habitat, aesthetics, open space, historical and archaeological resources, floodplains, wetland areas, native upland areas and recreation lands of the Lake Apopka River Basin by implementing the following policies.

POLICIES

- C2.4.1 Orange County shall support, through the provision of information, technical assistance, planning, land acquisition land use designations, and intergovernmental coordination the restoration of Lake Apopka through the Lake Apopka SWIM Program, the Lake Apopka Planning Initiative and the efforts of the Lake Apopka Restoration Council. Orange County shall also support the South Florida Water Management District's Lake Butler SWIM Program. (Added 12/00, Ord. 00-25)
- C2.4.2 Orange County shall continue to monitor surface water quality in the Lake Apopka Basin in order to identify potential pollutant sources and track long term trends in quality. The County shall follow the requirements of any Basin Management Action Plan (BMAP) developed under the Total Maximum Daily Load (TMDL) Program. (Amended 6/10, Ord. 10-07)

GOAL C3 Orange County's goal is to reduce the County's green house gases (GHG) emissions to prevent global warming and to set the pace for a livable sustainable community.

OBJ C3.1 GHG emissions generated by County actions shall be reduced to prevent global warming. The reductions, based on 2005 GHG emissions, shall be as follow: 15% by the year 2010; 28% by the year 2015; 40% by the year 2020.

POLICIES

- C3.1.1 By the year 2012, 60% of all County owned vehicles should be either hybrids or use alternative fuel. (Amended 6/10, Ord. 10-07)
- C3.1.2 The County shall reduce vehicle miles traveled by using mobile technology in vehicles such as computer connections to office.
- C3.1.3 By the year 2010, the County shall reduce petroleum consumption by 20%, using the year 2005 as the base.
- C3.1.4 The County shall support mass transit and multimodal transportation centers.
- C3.1.5 The County shall increase, as feasible, the number of miles of bicycle trails and roadside bicycle lanes.
- C3.1.6 The County shall make all possible efforts to participate in a pilot program for plug-in hybrid vehicles.
- C3.1.7 The County shall continue to support hydrogen projects as feasible, such as testing of the Orange County Convention Center 12-passenger hydrogen buses.
- C3.1.8 The County shall continue supporting the methane recovery at the Orange County Landfill and ensure that all new cells recover methane gas rather than flaring.
- C3.1.9 The County shall recover methane gas at County wastewater treatment plants or use other technologies to reduce GHG emissions.
- C3.1.10 The County shall identify jurisdictions on a regional and even worldwide basis to partner in formal agreements to reduce GHG emissions. Encourage local municipalities to develop local climate action plans to work together on this issue. Consider establishing a "sister" city in the United Kingdom to share ideas and plans.
- C3.1.11 The County shall partner with various agencies that have the ability to support the Orange County Climate Change Plan and can assist in reducing GHG emissions. Explore partnerships with Orlando Orange County Expressway Authority to encourage the use of alternative fuel vehicles and/or car pooling.

OBJ C3.2 Orange County shall set the pace to become a livable sustainable community.
POLICIES

- C3.2.1 The County shall continue applying for grants and committing funds for projects like the solar photovoltaic (PV) panels at the Orange County Convention Center (OCCC). This, up to 1-megawatt, system will help the OCCC reduce their energy consumption from fossil fuel.
- C3.2.2 The County shall partner with electric utilities to develop green power programs, and also sell renewable energy credits (RECs) from the OCCC project to generate more alternative energy on County owned buildings.
- C3.2.3 The County shall retrofit County buildings with renewable energy systems. This supports hurricane mitigation efforts to have decentralized energy available. Efforts shall be made to have 15% of power supplied to all County owned buildings from alternative energy sources within 15 years.
- C3.2.4 The County shall develop a program to encourage Clean Tech or green businesses within the County.
- C3.2.5 The County shall support new technologies for generation of energy from solid waste, including garbage. Set up and encourage pilot programs when feasible.

- C3.2.6 All new County buildings shall at least meet the minimum points for Leadership in Energy and Environmental Design (LEED) recognition for certification. (Amended 6/10, Ord. 10-07)
- C3.2.7 The County shall create incentives to support green building and green development, for private sector such as reduced fees, and expedited permit review.
- C3.2.8 The County shall encourage all county sponsored or financially supported projects to build green.
- C3.2.9 The County shall support revision of the building code and/or energy code to support greater efficiencies. The County shall support state effort and consider adopting local ordinance as needed.
- C3.2.10 The County shall develop a program to reward water conservation. This could include creating water conservation credits when a new permit demonstrates less water will be used.
- C3.2.11 The County shall make efforts to establish an incentive program to increase solar hot water heaters and PV panels on residential homes and businesses within the County.
- C3.2.12 The County shall encourage redevelopment of properties thru the State Brownfield Program. Redevelopment of former landfills as defined by the State and "brownfield development" standard shall comply with County's Planned Development process, S38-1201, OCC. The proponent for redevelopment of a former landfill shall enter into a developer's agreement with the County delineating specific procedures and/or conditions to deal with any environmental issues before redevelopment. (Added 6/10, Ord. 10-07)