



Chapter 6 Conservation Element

CHAPTER 6

CONSERVATION ELEMENT

Goals, Objectives, and Policies



INTRODUCTION

Understanding that the City of DeLand is part of a global system and that actions taken by the City contribute to the surrounding environment, the Conservation Element provides the framework for the preservation, protection, and enhancement of the City of DeLand's natural resources. The Conservation Element identifies specific resources in the City that need to be protected as well as monitored through time to ensure these protections continue over time.



GOAL c-1: Conservation: Conserve, protect, and appropriately manage and restore the City's natural resources in order to enhance the quality of natural systems, including the following:

- a) Air
- b) Landlocked Lakes and Associated Floodplains
- c) Wetlands
- d) Flora and Fauna
- e) Surficial and Floridan Aquifers
- f) Surface and Groundwater Supplies
- g) Reduction of greenhouse gas emissions

Objective c1.1: *Protect Air Quality.* The City shall coordinate with Volusia County and utilize the Volusia County air quality clearing house information to ensure development meets or exceeds the minimum air quality standards established by the Florida Department of Environmental (FDEP) and shall participate in regulatory programs to prevent and/or minimize known nonpoint sources of air pollution.

Policy c1.1.1: *Cooperate with FDEP Air Quality Monitoring Activities.* The City of DeLand shall cooperate with FDEP in the monitoring of air quality and in the placement of air monitoring devices in the City of DeLand if such activity is deemed necessary by FDEP.

Policy c1.1.2: *Air Pollution and Land Use Regulations.* The City shall continue to protect against the degradation of air quality by applying land use controls which promote compatibility with existing land uses and natural systems and by enforcing nuisance abatement regulations governing emission of smoke and particulate matter. In addition, site plan review standards shall include consideration of prevailing wind directions, pollution abatement factors and the reduction of green house gas emissions in the site plan review process.



Objective c1.2: *Ensure Water Quality and Quantity.* The City shall continue to conserve and protect the quality of current and projected future water sources and surface water runoff and continue to coordinate water supply and quality issues with state, Saint Johns River Water Management District, regional, county and pertinent local governments.

Policy c1.2.1: *Surface Water Management and Land Use.* The City shall protect groundwater from point and non-point sources by assisting the State and SJRWMD in managing water quality by preventing the discharge of poor-quality stormwater into public water bodies. Land development projects shall incorporate the following performance standards in order to protect the quality of the City's water resources:

- a. Surface water management systems shall be designed and constructed to meet the following standards:
 - Limit the allowable stormwater peak discharge detained from a site to be developed or altered to the predevelopment or pre-alteration peak discharge for the 100-year/24-hour-duration storm.
 - In addition, the City's land development regulations governing surface water management shall include the following considerations:
 - Incorporate a floodplain management standard that requires that no net reduction occur in flood storage for any development within the impacted area. The intent is to allow some development to occur in floodplains but only where drainage improvements are constructed which provide compensatory storage in order to alleviate flood problems within the impacted area. However, no development shall be allowed within the flood hazard area. (floodway).



- The stormwater management ordinance shall include mandatory retention and/or detention of stormwater discharge from developed or altered sites that in the City Engineer's discretion are volumetrically sensitive. Stormwater facilities shall be designed for the 100-year/24-hour duration storm. Furthermore, the ordinance shall incorporate applicable St. Johns River Water Management District stormwater management criteria.
 - Implement the use of low impact development (LID) standards for new development.
- b. A vegetated and functional littoral zone shall be established as part of the surface water management system of landlocked lakes occurring on all property. Prior to construction of the surface water management system for any phase of a project, the developer shall prepare a design and management plan for the wetland/littoral zone that will be developed as part of these systems.

The plan should:

- i. Include typical cross sections of the surface water management system showing the average water elevation and the -3-foot contour (i.e., below average elevation);
- ii. Specify how vegetation is to be established within this zone, including the extent, method, type and timing of any planting to be provided; and
- iii. Provide a description of any management procedures to be followed in order to assure the continued viability and health of the littoral zone. The littoral zone as established should consist entirely of native vegetation and should be maintained permanently as part of the water



management system. As a minimum, 10 square feet of vegetated littoral zone per linear foot of lake shoreline should be established as part of the surface water management system.

a. Class III Waters (i.e., water bodies which currently support recreation and foster maintenance of fish and aquatic wildlife). All lakes within or adjacent to the City of DeLand are Class III waters. These waters shall be protected by incorporating the following provisions into the City's land development regulations:

- i. Dredging activities shall be limited to FDEP approved dredging.
- ii. Ensure good water quality by coordinating with the FDEP and the St. Johns River Water Management District in monitoring the quality of stormwater runoff and all discharge. The City shall notify the appropriate agency with jurisdiction as potential issues or problems are identified by the City.
- iii. Limit the use of Class III waters to water-dependent activities that are not contrary to the public interest and satisfy a community need.
- iv. Limit modification of aquatic grass beds (grass beds) only to those cases involving overriding public interest.
- v. Where modification of grassbeds is permitted the City shall assure that:
 - (a) A determination of overriding public interest has been demonstrated by the applicant prior to modification of grassbeds.
 - (b) Project runoff, including nitrogen, phosphorous, and other nutrients, shall be



controlled to prevent an increase in water turbidity, decrease in fish or aquatic wildlife propagation, or other degradation of water quality.

(c) Projects damaging grassbeds during construction shall incorporate mitigative techniques which re-establish conditions favorable to natural regeneration of the grassbeds.

(d) Special attention shall be given to stipulations cited in (a) through (c) above during the development review process. The City shall coordinate closely with state and federal agencies during the permitting processes to insure the intent of these policies is carried out. Public interest is that which benefits either the majority of the citizens of the City or a significant minority of the citizens of the City.

Policy c1.2.2:

Areawide Documentation and Monitoring of Stormwater Issues. The City shall coordinate with the East Central Florida Regional Planning Council, the Saint Johns River Water Management District and the Department of Environmental Protection (FDEP) in matters regarding documentation of:

- Stormwater management practices;
- Stormwater construction and maintenance costs; and
- Monitoring of selected stormwater management facilities.

Finally, the City shall coordinate with the East Central Florida Regional Planning Council (ECFRPC), FDEP the St. Johns River Water Management District and other entities as directed in a unified state program directed at



educating the general public on the known nonpoint source pollution problems and available stormwater management practices to abate nonpoint source impacts on water quality.

Policy c1.2.3: *Regulate Agricultural Activities to Preserve Water Quality.* Land development regulations shall include stipulations requiring that agricultural activities shall:

- a. Not be conducted adjacent to existing waterways and surface water Management activities shall comply with all applicable policies of the FDEP, St. Johns River Water Management District, and other agencies having appropriate jurisdiction as well as state laws;
- b. Maintain natural drainage patterns;
- c. Promote the use of surface water supplies and reclaimed ("graywater") for irrigation purposes;
- d. Prohibit the expansion of agricultural activities into wetland areas; and
- e. Use best management principles and practices in order to reduce pesticide and fertilizer runoff, prevent soil erosion, and preserve water quality.

Policy c1.2.4: *Regulate Wastewater Treatment Discharge to Preserve Water Quality.* Land development regulations shall incorporate the following performance standards in order to protect water quality:

- a. All new residential subdivisions as well as multiple family and nonresidential development within the City of DeLand which are served by existing or planned future expansions to the City of DeLand wastewater collection and disposal system shall be required to connect to the public wastewater system.
- b. In areas where developments cannot be connected to the public sewer, private wastewater disposal systems are acceptable as interim measures providing such facilities are approved by the City Utilities



Director's office. Notwithstanding all private wastewater disposal systems shall be designed to facilitate mandatory hookups to the public wastewater system when the public system becomes available.

- c. The City of DeLand shall promote water conservation through implementation of reclaimed water distribution to new subdivisions. All new residential subdivisions within the City's reclaimed water service area shall include lines for reclaimed water. The City will look for opportunities to expand reclaimed water to all areas of the City. All developments with more than 100 eru's shall provide storage and pumping facilities for peak flow attenuation and reclaimed water augmentation.

Policy c1.2.5:

Protect Floridan and Surficial Aquifer Recharge Areas. The City's land development regulations shall include that require retention of open space for all development in order to preserve the quality and quantity of groundwater resources within the surficial and deep aquifers.

The City shall develop quantifiable methods of determining City stormwater catchment and infiltration as a method of recharge, and shall promote and maintain stormwater catchment systems in a manner which favors recharge to the maximum extent possible.

The City shall also analyze the feasibility of alternative land management practices such as transfer of development rights that may direct high-density development away from high recharge areas.

Consistent with East Central Florida Regional Planning Council and St. Johns River Water Management District policy, development activities within recharge areas shall be regulated to avoid reduction in the volume of recharge.

Such development activity shall not be permitted to increase the total volume of post development runoff or reduce the quality of ground water



below applicable state standards. Since nearly all of the City's potable water supply is drawn from the Floridan Aquifer, the City shall coordinate with Volusia County and other appropriate entities to assure that measures to safeguard wellfields are instituted.

Policy c1.2.6:

Deep Aquifer Water Conservation. In order to protect the quality and quantity of the Floridan aquifer, the City shall:

- a. Coordinate with the St. Johns River Water Management District and other applicable regulatory agencies in identifying free flowing deep aquifer wells and in requiring corrective measures, including capping, plugging, or installing regulatory devices which control the discharge of water from the deep aquifer.
- b. Coordinate with Volusia County to institute a county-wide, comprehensive wellfield and aquifer recharge area protection program.
- c. Analyze stormwater management improvements with consideration to the protection of groundwater recharge quality and quantity.



Policy c1.2.7:

Conservation of Potable Water Supply. To conserve potable water supply and to achieve a reduction in the current rates of water consumption, the land development regulations shall incorporate the following performance standards:

- a. Potable water irrigation meters will not be approved for new construction. Reclaimed water lines shall be installed in subdivisions within the City's reclaimed water service area.
- b. Encourage adherence to installation of water saving plumbing fixtures compliant with the State Water Conservation Act (Section 553.14, F.S.) in all new construction or renovations. Also, the City of DeLand shall conserve water supply through use of a leak detection program designed to curtail wasteful loss of potable water resources.
- c. Encourage application for the City's Water Star program whereby home and property owners may seek reimbursement of a percent of water and sewer impact fees through the installation of water efficient appliances and technologies.
- d. To reduce demand for irrigation water (which in turn often places greater demand upon potable water sources), new development shall employ and/or preserve native vegetation and/or use drought-resistant plants for landscaping to the greatest practicable extent. New development shall utilize Florida-Friendly Landscaping principles, Florida-Friendly landscape materials, minimize the use of potable water for irrigation, avoid runoff of excess fertilizers and pesticides, and provide habitat for wildlife.
- e. The City shall promote the installation and establishment of drought resistant and native plants selected to fit the naturally occurring or altered character of the proposed planting location which, once



established, eliminates the need for formal irrigation and provides habitat for existing Florida native flora and fauna.

- f. The City shall promote the use of stormwater management in a manner which facilitates the use of stormwater for irrigation to existing and proposed plants and landscaping through the application or minimal grading and/or naturally occurring topography, passive catchment and/or engineered catchment and constructed conveyance.
- g. To encourage water conservation, the City shall apply a block rate structure when assessing water bills whereby the fee per gallon of water consumed increases incrementally with the increase in the volume of water used.

Policy c1.2.8: *Emergency Conservation of Water Sources.* The City shall coordinate with the St. Johns River Water Management District (SJRWMD) in implementing emergency water conservation measures based on the SJRWMD plans for management of the region's water resources.

Policy c1.2.9: Dredge and fill within lakes shall be prohibited, with the exception of elevated docks and walkways. Buffers shall be established adjacent to surface waters, including wetlands, the landward extent of which shall be based on scientific evaluation of site-specific conditions, including the nature of the existing soils, vegetation, topography, hydrology, water quality, wildlife, and the resource protection status of the receiving waters. Buffer zones shall consist of intact natural communities or planted native vegetation comprised of canopy, shrub and understory layers.

Policy c1.2.10: *Groundwater Contamination Introduced Through Sinkhole Passages.* To protect groundwater quality from potential contamination introduced through sinkhole passages that provide rapid downward percolation to the shallow aquifer, and to protect property and life from potential damage or threat resulting from a sink collapse, the City of DeLand shall notify the



SJRWMD of any new sink developments or signs of potential activity occurring within or adjacent to the City's jurisdictional area, and shall take appropriate action to amend land use regulations to include performance criteria which regulates development activities on sites adjacent to sinkholes.

Policy c1.2.11: The City shall maintain standards to regulate direct stormwater discharge into surface waters and primary sinkholes in karst terrain, through the use of percolation ponds and other appropriate methods.

Policy c1.2.12: The City will inventory properties that have potential historic issues with hazardous substances to determine if they may pose potential impacts to the current water supply and evaluate the potential flooding hazards which could lead to contamination of surrounding properties and infiltration into aquifer or other water systems.

Objective c1.3: *Maintenance of Floodplain.* The City shall update the Floodplain Protection Standards contained in the Land Development Regulations for consistency with Volusia County's, SJWMD's, and the State of Florida's floodplain standards.

Policy c1.3.1: *Enforce Policies to Maintain Floodplain.* Consistent with ECFRPC floodplain policy, the City shall incorporate flood plain protection measures sufficient to protect and preserve the value and function of floodplains from encroachment by development. Land development regulations shall provide that flood control measures for new development minimize fill within the floodplain area defined within the City's Floodplain Protection Ordinance. Where no alternative to fill exists, compensatory storage for such fill should be provided through excavation of a volume of uplands equivalent to the loss of storage within the defined floodplain caused by the placement of fill.

Policy c1.3.2: Work with FEMA to assist in the review and evaluation of the limits of the 100- year floodplain within the corporate limits of the City.



Objective c1.4: *Protect and Preserve Wetlands.* The City’s land development regulations shall include performance criteria designed to protect and preserve wetlands from physical and hydrologic alterations.

Policy c1.4.1: *Wetland Development Restrictions.* Wetlands (i.e., wetlands shall include hydric soils and wetland species identified by the FDEP pursuant to Rule 62-340 F.A.C.) shall be protected from physical or hydrologic alterations in order to maintain natural functions. The following uses may be allowed in wetlands: approved passive recreations, open space, restricted accessway, bird sanctuary, natural stormwater retention/detention, natural preserve, or other similar land uses approved by the City pursuant to Land Development Regulations designed to carry out the intent of the Comprehensive Plan. Where one or more of the criteria outlined below are met, other land uses, with consequent adverse impacts to wetlands, may be allowed with mitigation as specified in Policy 1.4.3 provided that the impacts are unavoidable. Impacts shall be considered unavoidable when no technically feasible and economically viable on-site alternative to the proposed activity exists that would reduce or eliminate the impacts (including changes in use, reduction in intensity, or revision of the project layout).

Unavoidable impacts may be allowed under any one of the following conditions:

- a) overriding public interest, i.e., the proposed activity is essential to protection of the public health, safety or welfare, and no alternative site exists that is less environmentally sensitive; or
- b) substantially degraded wetlands, i.e., the area has been degraded to the point that it no longer performs wetland functions, as determined by the City of DeLand and St. Johns River Water Management District; or
- c) net long-term benefit to the overall site wetland functions, i.e., mitigation for wetland functions to be adversely affected by the



proposed activity would replace those same or similar functions in a manner that provides substantially greater long-term ecological value, as agreed by the City of DeLand and St. Johns Water River Management District.

Policy c1.4.2:

The wetland preservation ordinance shall address the following issues:

- a) Criteria and stipulations for protecting wetlands and managing the development review criteria;
- b) Protection of wetlands and fragile transition areas (i.e., Transition Zone, also referred to as buffer areas shall be defined as the area separating wetland and upland areas and in which development activities may be regulated to protect wetlands.) The Transition Zone is an area having a direct ground water or surface water influence and provides a buffer between wetlands and development or other land alteration activities. The purpose of the Transition Zone is to ensure the continuing function of respective wetland communities. The boundary of Transition Zones adjacent to specific wetland areas shall be established by field investigation and shall be a minimum of 25 feet.
- c) Compensatory mitigation where proposed upland development presents a potential hazard to wetland functions; and
- d) Acknowledge the City of DeLand's right to require dedication of a conservation easement to preserve wetland functions and provide for exceptions where the subject land area no longer retains the characteristics, functions, and value of a wetland.

Policy c1.4.3:

If it is determined by the City that wetland alteration is unavoidable, mitigation proposals shall be considered, which should include restoration of existing degraded or converted wetlands, or creation of new wetland habitat. Such mitigation activities shall replace like or similar habitat and function and shall not result in a net loss of wetland functions and values.



Preservation of upland habitat may be considered in certain instances if deemed appropriate, but shall not result in a net loss of wetlands functions and values. In no case shall mitigation activities degrade critical habitat.

Policy c1.4.4: As a result of development, there shall be no net loss of wetlands functions or values, nor shall wetlands functions and values be degraded.

Policy c1.4.5: Any wetland modification shall maintain, stands of old mature forest vegetation, if currently existing.

Policy c1.4.6: Degradation of wetlands by adjacent development shall be avoided through the use of techniques such as setbacks for structures and septic tanks, limited site clearing and stormwater management.

Policy c1.4.7: Future land uses incompatible with the protection and conservation of wetlands should be directed away from wetlands in a manner which minimizes the potential for adverse impacts to wetland function and values.

Policy c1.4.8: Non-intrusive bicycle and pedestrian pathways and boardwalks are permitted, where appropriate, in wetland buffers for passive-recreation use only.

Objective c1.5: *Combat Soil Erosion.* The City's land development regulations shall include performance standards and criteria designed to reduce the incidence of soil erosion caused by land clearing, breaches in stabilized lake shorelines, and lands having exposed soil without vegetative cover. The City shall require the sodding and seeding of cleared landscapes and/or the use of other engineering controls found acceptable by the City to prevent erosion.

Policy c1.5.1: *Implementing Erosion Control.* Land development regulations shall require that appropriate measures be taken during land clearing and building operations to assure that exposed, destabilized or otherwise altered soil is expeditiously covered with an acceptable erosion control material. These



provisions shall be applicable to the act of subdividing and installation of related improvements as well as during the development review process including the period during which improvements are being undertaken. The tree protection and erosion control measures shall be applicable to all clearing and grading activities and shall include specifications for managing vegetation and re-vegetation.

Objective c1.6: *Preventing Potential Adverse Impacts of Future Mining and Excavation Activities.* The City shall implement amended land development regulations which include performance criteria designed to regulate mining activities within the City of DeLand since the City's natural systems could potentially receive irretrievable losses from the impacts of unregulated mining operations.

Policy c1.6.1: *Regulation of Mining Activities.* Land development regulations shall restrict mining activities based on the irretrievable losses that such intense activities may potentially impose on the City's ecosystem. Land Development Regulations shall require that all mining and resource extraction including but not limited to, sand and peat excavation shall be conducted according to an excavation and reclamation plan approved by the City. Soil borings and soil surveys will be required to demonstrate compliance with this measure.

Because of the high potential for surface and groundwater contamination associated with mining and extraction activities, a horizontal impervious layer (possibly including a portion of the extracted resource) shall, be left undisturbed and unpenetrated beneath all excavated areas. The amount and location of the impervious layer to remain intact, if any, will be determined by soil surveys prior to excavation. The land development regulations shall provide procedures for managing preparation and review of the excavation and reclamation plan.



Policy c1.6.2: *Reclamation Activities.* The City shall require that mining sites, including borrow pits, located within adjacent unincorporated Volusia County undergo reclamation as a condition of voluntary annexation. The procedures and specifications for achieving such reclamation shall be incorporated in the land development regulations.

Objective c1.7: Minimize impacts on ecological communities which will adversely alter their natural functions.

Policy c1.7.1: The City shall maintain criteria and standards for an environmental assessment for wetlands, tree protection, surface and stormwater management, land clearing, protection of environmentally sensitive lands and critical habitat, and protection of endangered species.

Policy c1.7.2: The City shall coordinate with applicable governmental entities to protect environmentally sensitive lands which cross governmental jurisdictional boundaries.

Policy c1.7.3: For all sites of five (5) acres or more, a professional environmental survey/assessment shall be conducted as part of the development review process. Sites less than five (5) acres may be required to provide an environmental survey/assessment on a case-by-case basis if determined to have environmentally sensitive elements. The survey shall include the following:

- a. The size and distribution of native vegetative communities;
- b. Wildlife populations, including state and federally listed endangered and threatened plant and animal species and species of special concern;
- c. The identification of all wildlife corridors and the feasibility of maintaining such corridors;
- d. Prepare an on-site protection and management plan; and



- e. In the event that the post-development habitat is not ecologically viable, an off-site protection and management plan shall be prepared.

Policy c1.7.4: The City shall require implementation of conservation measures, such as clustering of dwellings and/or the preservation of contiguous open space in order to preserve environmentally sensitive lands. Environmentally sensitive lands are defined as areas suitable for the purpose of conserving or protecting natural resources or environmental quality, including areas designated for such purposes as protection of water quality, wildlife management, protection of vegetative communities or protection of wildlife habitats.

Policy c1.7.5: Where appropriate, existing expanses of natural vegetation communities shall be shown on site plans and incorporated into landscaping buffers and open spaces. Open space and/or other conservation lands or areas may not be located on or within individual residential parcels.

Objective c1.8: *Protect Wildlife Habitat.* The City shall protect habitats of wildlife species occurring in the DeLand area, especially those which are threatened, endangered, or of special concern, to maintain and enhance, where necessary, existing species population numbers and distribution.

Policy c1.8.1: Development plans shall incorporate an on-site management plan for the preservation of habitat for species listed as endangered, threatened or of special concern, where predevelopment habitat is determined to be ecologically viable based on the survey required by Policy c1.7.3. An off-site management plan for such species shall be required where post-development habitat is determined not to be ecologically viable, and where relocation and/or off-site management is determined to be acceptable an acceptable alternative by the governing regulatory agency, based upon the survey required by Policy 1.7.3.



Policy c1.8.2: Establish development review standards for projects which impact critical habitats, which shall be determined by the City and appropriate federal (USFWS) and state (FGFWFC, FDEP, ECFRPC) agencies, based upon the surveys which are required in Policy 1.7.3. These review standards shall address at a minimum:

- a. The proper siting of development structures and infrastructure, including clustering of dwelling units away from critical habitats;
- b. Management plans that protect endangered wildlife that utilize critical habitats;
- c. Mitigation plans for critical habitat which may be lost or altered; and
- d. Restriction of the use of critical habitats to those which are found to be compatible with the requirements of wildlife species which are threatened, endangered or of special concern.

Policy c1.8.3: Where feasible, the City shall protect critical habitat through the use of conservation easements or developer contributions to a fund established for the purpose of purchasing land classified as habitat for species listed as endangered, threatened or of special concern. The City may either purchase habitat independently or jointly with Volusia County and/or other local governments.

Policy c1.8.4: The City will protect from destruction, revision and/or alteration the +/-1.28 acres of recreated and restored Live Oak - Palm Hammock vegetation at Painter's Pond Park.

Objective c1.9: The City shall commit to leading the community by demonstrating sustainable stewardship by reducing City operating costs; providing a healthy work environment for City staff and visitors; protecting, conserving and enhancing the City's resources and establishing community standards of sustainable living and practices. The City shall take necessary steps to meet the goal to transition to 100% renewable energy by 2075.



- Policy c1.9.1: In order to demonstrate a measurable standard in the conservation of natural resources and minimization of the City’s carbon footprint and waste profile, the City shall maintain its Gold Florida Green Local Government Designation as prescribed by the Florida Green Building Coalition, Inc. and work towards obtaining Platinum status.
- Policy c1.9.2: The City shall design, construct and operate City facilities to minimize environmental impacts by incorporating the use of resource and energy efficient materials, renewable resources, alternative energy sources, water conservation, waste reduction, recycling and pollution prevention practices
- Policy c1.9.3: In order to achieve energy efficiency and to reduce green house gas emissions, the City shall review energy audits on all City facilities annually. The City shall subsequently implement recommended upgrades and improvements to the extent possible
- Policy c1.9.4: The City shall appoint and maintain a Sustainability Green Team comprised of City staff to recommend policies, guidelines, goals and strategies to promote sustainability throughout public and private facilities and properties within the City of DeLand.
- Policy c1.9.5: The City shall continue ongoing education activities to promote the use of resource and energy efficient materials, renewable resources, alternative energy sources, water conservation, waste reduction, pollution prevention and green house gas emission reduction practices. The City shall provide educational materials at public events and explore opportunities to promote and partner with organizations that focus on sustainability.
- Policy c1.9.6: In order to provide guidance and technical assistance to the residents of DeLand, the City shall seek training and certification of select employees in the application process for and implementation of Florida-Friendly Landscaping TM Program and Florida Green Building Collation, Inc. standards for green building principles and certification.



TABLE OF AMENDMENTS - CONSERVATION ELEMENT

CYCLE 09-2 EAR

Adopted by Ordinance No. 09-37

Date: November 16, 2009

Updated Goals, objectives and policies as directed for EAR based amendments

CYCLE WSP

Adopted by Ordinance No. 2009-07

Date: February 16, 2009

Addressed consistency with Water Supply Plan

Goal 1 – added water supplies

Obj. 1.2 – added SJRWMD and local governments for coordination

Policy 1.2.1 – protecting groundwater

Policy 1.2.4 – subdivisions to use conservation and reclaimed water

Policy 1.2.5 – added measuring stormwater contribution

Policy 1.2.7 – promoting conservation

CYCLE 01-1

Adopted by Ordinance No. 2001-08

Date: April 2, 2001

Deleted Support Section from Conservation Element.

CYCLE 99-D1

Adopted by Ordinance No. 99-1

Date: May 17, 1999

Policy 1.4.1 – revised to allow for limited development in wetlands.

Policy 1.4.2 – defined Transition Zones as 25 feet.

Policy 1.4.3 – new policy allows mitigation for development in wetlands.

Policy 1.4.4 – defined no net loss of wetlands.

Policy 1.4.6 – development adjacent to wetlands.

Policy 1.4.7 – directing incompatible land uses away from wetlands.



CYCLE 98-2

Adopted by Ordinance No. 98-06

Date: September 9, 1998

Replaced Dept. of Environmental Regulations and Dept. of Natural Resources
with Department of Environmental Protection

Replaced Map 1

Added text concerning the creation of the Volusia Water Alliance

Revised text concerning lakes within the city

Added text concerning City's participation in FEMA Flood Insurance Program

Added text concerning an updated floodplain map

Inserted updated floodplain map

Added text regarding annexed property containing wetlands

Inserted updated wetlands map

Inserted updated topography map

Revised text concerning sinkholes

Inserted text stating the city will update the soil limitations map

Updated sinkholes map

Inserted text stating the city is in process of updating vegetation map

Inserted text concerning Cypress Swamp

Changed 1989 to 1995

Revised text concerning updated floodplain map

Revised text concerning protection of wetlands

Added text concerning the City's water quality program

Added text concerning wellhead protection

Added policy 1.2.12 concerning wellhead protection zones

Added policy 1.4.6 & 1.4.7 concerning protection/conservation of wetlands

Policy 1.10.1: deleted "By Nov. 1991 the City of DeLand shall participate" and added "work"

Fixed numeric error in Objective 1.14.

Deleted objective 1.9 - policy 13.4 as duplicative; text appeared twice

Reformatted entire element due to a switch in software



CYCLE 97-1

Adopted by Ordinance No. 98-07

March 16, 1998

Objective 1.1: revised date

Objective 1.2-1.6 and 1.12: deleted date and indicated implementation

Deleted Objective 1.9 and subsequent policies; renumbered objectives accordingly

Objective 1.10-1.11: deleted date

CYCLE 95-2

Adopted by Ordinance No. 95-27

October 2, 1995

Objective 1.14: Adding references to Painter's Pond

Policy 1.14.1: Adding references to Painter's Pond

Policy 1.14.2: Adding references to Painter's Pond

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