

Comprehensive Plan
CONSERVATION ELEMENT
GOALS, OBJECTIVES and POLICIES

Prepared for

The City of Deltona

Prepared by

IVEY, HARRIS & WALLS, INC.

631 S. Orlando Avenue, Suite 200

Winter Park, Florida 32789

(407) 629-8880

TABLE OF CONTENTS

WATER RESOURCES	3
GOAL 1.....	3
Objective A.....	3
Objective B.....	5
Objective C.....	6
Objective D.....	7
Objective E.....	9
Objective F.....	10
AIR QUALITY	13
GOAL 2.....	13
Objective G.....	13
Objective H.....	14
Objective 4H.....	16

WATER RESOURCES

GOAL 1

Ensure the protection and improvement of the natural functions and quality of the City of Deltona's Water Resources.

9J-5.013 (2)(a)

Objective A

To prevent the further degradation of the ambient water quality of the City's surface water resources, to maintain and restore to acceptable levels those surface waters which exceed Federal, State and local pollutant standards.

9J-5.013(2)(b)(2)

Policy 1A

On-site sewage disposal systems and associated drain fields shall be discouraged within the flood plain of surface water bodies as provided for in land development regulations, to the extent that such systems are designed and located so as to not contribute to the degradation of ambient water quality as consistent with Rule 10D-6.

9J-5.013(2)(c)(1, 6)

Policy 2A

Best management practices which control erosion and limit the amount of sediment reaching surface waters shall be required for construction, agriculture, silviculture, excavation, dredge and fill, and stormwater management activities.

9J-5.013(2)(c)(1, 6)

Policy 3A

The City shall develop standards for stormwater which discharge into surface water bodies in order not to degrade the ambient water quality of the receiving water body.

9J-5.013(2)(c)(1, 6)

*Policy 4A (added by Ordinance 10-2001 adopted at second reading by the Deltona City Commission
December 12, 2001)*

Surface and Stormwater Treatment. The City will continue to implement and update, from time to time, adopted surface and stormwater management regulations that assure that systems are designed to meet or exceed current standards, and can be practically and easily maintained.

Enforcement of these requirements are intended to increase retention of stormwater, minimize degradation of surface waters and protect wetlands through treatment of stormwater runoff. At a minimum, surface and stormwater treatments may include, but are not limited to:

- 1. Appropriate on-site retention or detention in accordance with adopted local and state regulations including filtration, exfiltration, establishment of littoral zones in lake management systems and wetland areas and use of grassy areas for filtration.*
- 2. Protection of wetlands and environmentally sensitive areas; and*
- 3. Management and protection of the quantity, timing and quality of water releases and discharges.*

Policy 5.A

Retrofit of Substandard Drainage Systems. Retrofitting of substandard public drainage systems shall ovvur during repair, expansion, or redevelopment activities. This policy is intended to address water quality problems resulting from inadequate systems, or those systems constructed previous to a complete understanding of the effects of stormwater runoff on water quality.

Policy 6.A

Improve Water Quality in all Waters of the State, including Creeks, Rivers, Canals and Shorelines Connected to Waters of the State. The City shall participate with surrounding local governments to improve water quality in drainage basins within the County; and provide assistance to improve water quality in other mutually shared drainage basins.

Policy 7.A

Drainage Basin Plans Must Meet Adopted Water Quality Standards. All drainage basin plans shall be designed to meet water quality standards of surface water bodies by assuring that the rate, timning and quality of runoff meet adopted local and state water quality standards.

8.A

Design of Drainage Outfalls. All drainage outfall and irrigation connections, including those associated with agricultural uses, shall be designed to maintain, and where possible, improve water quality.

9.A

The City shall coordinate with existing resource protection plans of other government agencies, including; Volusia County Department of Environmental Resource Management; St. Johns River Water Management District; Florida Game and Freshwater Fish Commission; Florida Department of Environmental Protection; Army Corp of Engineers; and U.S. Fish & Wildlife Service (and others). Specifically the City will coordinate with resource protection efforts of the St. Johns River Water Management SWIM Plan by furthering:

- a. Maintain and/or enhance the environmental resources of local lakes to benefit the lake and regional ecosystem.*

- b. *Identify other restoration projects thaty will provide environmental benefits to areas within the SWIM Planning Area.*

Objective B

Protect and enhance the natural hydrologic functions and wildlife habitat attributes of surface water resources, wetlands, and the floodplains associated with these waters.

9J-5.013(2)(b)(2)

Policy 1B

Prior to 2004, natural shoreline buffers or setbacks shall be reviewed for surface water bodies, the extent of which will depend on, at minimum: existing soils; cover and type of vegetation; topography; wildlife habitat; ambient water quality; and the protective status of the water body.

9J-5.013(2)(c)(1,3,6,8&9)

Policy 2B

Periodic, removal or control of nuisance submerged, emergent, or floating vegetation shall be limited to that necessary to provide reasonable access, and aquatic weed control as defined by the appropriate agencies. Any use of chemical herbicides for such purposes shall ensure that water quality and ecological integrity are not degraded.

9J-5.013(2)(c)(6)

Policy 3B

The City shall ensure that withdrawals from or discharges to surface water bodies which alter hydroperiods or water stage levels do not adversely impact water dependent ecosystems.

9J-5.013(2)(c)(8)

Policy 4B

Undisturbed segments of flood plains shall be protected through public acquisition, land use controls, conservation easements, or other methods as appropriate.

9J-5.013(2)(c)(9)

Policy 5B

Proposed structures located within the flood plain of surface water bodies and within flood prone areas, shall be required to utilize building methods as provided in land development regulations, to the extent that fill material required for construction or other impervious surfaces will not reduce the ability of the floodplains to store and convey floodwaters, or degrade the natural physical and biological functions of protected habitat without approved mitigation. Impacts of fill in the floodplains and flood prone areas shall be considered both site specifically and cumulatively.

9J-5.013(2)(c)(9)

Policy 6B

Dwelling unit densities shall be limited within the flood plains of surface water bodies and in other flood prone areas as provided for in land development regulations, in that allowable densities do not create potential flood hazards, or degrade the natural functions of the flood plain. Dwelling unit density determinations in the floodplain shall consider both site specific and cumulative impacts.

9J-5.013(2)(c)(9)

Objective C

Protect and appropriately utilize the physical and ecological functions of natural drainage ways and patterns.

9J-5.013(2)(b)(4)

Policy 1C

Land planning and development proposals shall identify areas where soils, vegetation, hydrogeology, topography, and other factors indicate where water flows or ponds. These areas shall be utilized to the maximum extent feasible, without significant structural and natural habitat alteration, for on-site stormwater management, after appropriate on-site water quality treatment and should be integrated into an area-wide stormwater management design. Where wet detention systems are employed, they should mimic natural systems as appropriate.

9J-5.013(2)(c)(1)

Policy 2C

Isolated wetlands may be considered for integration into a stormwater management system. In such cases, natural hydroperiods and stage elevations shall be designed to maintain or improve the existing wetland community. No direct discharge will occur in the wetland community without appropriate water quality treatment.

9J-5.013(2)(c)(1)

Policy 3C

The City shall establish criteria and standards for the mitigation of environmentally sensitive lands and critical habitats which are destroyed or altered. The standards shall provide for, at minimum, collection of a mitigation fee to be used specifically for the acquisition and management of environmentally sensitive lands, and/or preservation or replacement of like kind habitat.

9J-5.013(2)(c)(3,5,8&9)

Policy 4C

Land use activities adjacent to environmentally sensitive lands, including conservation areas designated in the Future Land Use and Recreation/Open Space Elements, shall be limited to non-intensive uses such as low density residential. Otherwise, proposed land use activities

must ensure that such activities will not degrade the natural physical, biological, aesthetic, or recreational functions of such lands.

9J-5.013(2)(c)(5,7,8&9)

Policy 5C (added by Ordinance 10-2001 adopted at second reading by the Deltona City Commission December 12, 2001)

Prior to 2003, removal or control of submerged, emergent, or floating vegetation shall be limited to that necessary to provide reasonable access, and aquatic weed control as defined by the appropriate agencies. Any use of chemical herbicides for such purposes shall ensure that water quality and ecological integrity are not degraded.

Objective D

To minimize, and eliminate where reasonably achievable, impacts to ecological communities which degrade their natural physical and biological function as a result of land development activities.

9J-5.013(2)(b)(3)

Policy 1D

By 2004, the City shall inventory, monitor, and periodically update a mapping inventory of ecological communities by type (as indicated by vegetative composition), including at minimum:

Wetland Communities	Upland Communities
Freshwater marsh	Pine flatwood
Wet prairie	Mixed hardwood hammock
Bottomland hardwood swamp	Oak hammock
Cypress swamp	Cabbage palm hammock
Bay head swamp	Pine/xeric oak thicket
Mixed hardwood swamp	Scrub oak thicket
Sand pine forest	Grassland and shrub

9J-5.013(2)(c)(3)

Policy 2D

In conjunction with the Florida Natural Areas Inventory, East Central Florida Regional Planning Council (ECFRPC), and the Florida Game and Fresh Water Fish Commission (GC), and based on the information generated from the data inventory as stated in Policy 1D, the City shall determine those ecological communities which are rare, endangered, or of special concern either by type and/or geographic location. Such communities shall be considered

environmentally sensitive, and receive appropriate protections as outlined elsewhere in this Element.

9J-5.013(2)(c)(3)

Policy 3D

Based on the City's ecological data inventory, the City shall consider potential site specific, off-site, and cumulative impacts to ecological communities for land development proposals.

9J-5.013(2)(c)(3)

Policy 4D

The City shall require clustering of dwelling units and/or open space for land development projects which contain environmentally sensitive lands and critical habitats within its project boundaries, in order to preserve these resources.

9J-5.013(2)(c)(3)

Policy 5D

The City shall consider the status of endangered ecosystems and other environmentally sensitive lands when reviewing land use proposals and acquisitions.

9J-5.013(2)(c)(3)

Policy 6D

The City shall coordinate with appropriate governmental entities to protect environmentally sensitive lands which extend into adjacent counties and municipalities.

9J-5.013(2)(c)(8)

Policy 7D (added by Ordinance 10-2001 adopted at second reading by the Deltona City Commission December 12, 2001)

At a minimum, Environmentally Sensitive Areas shall contain one or more of the following natural resources:

- a) Rare, Threatened or endangered wildlife and/or vegetation, e.g., wildlife (scrub jay, osprey); vegetation (golden polypody, butterfly orchid, four-petal paw paw). A complete list is defined by the U.S. Fish and Wildlife Service, Florida Game and Fresh Water Fish Commission and the East Central Florida Regional Planning Council;*
- b) Rare and unique upland habitat that support endangered or threatened species;*
- c) Wetlands;*
- d) Special geologic formations;*
- e) Artifacts of archaeological or historic significance;*
- f) Within public water supply system wellfield cone(s) of influence;*
- g) Within floodways and areas subject to flooding.*

Objective E

To eliminate any net loss of wetlands and prevent the functional values of such wetlands to be degraded as a result of land development decisions.

9J-5.013(2)(b)(3, 4)

Policy 1E

Wetlands shall be preserved wherever possible. In cases where adverse impacts to such wetlands are found by the City to be the necessary to the overriding public interest, appropriate mitigation shall be required by appropriate permitting agency prior to land use or development approvals.

9J-5.013(2)(c)(1,3,5,6,8 &9)

Policy 2E

Isolated wetlands which are shown to be significantly degraded, or cover small areas (less 1/3 an acre), may be modified while allowing no net loss of wetlands. The City shall establish acceptable criteria and designs for wetland modification, and shall address, at minimum, provisions for:

This provision for wetland modification shall not be allowed in wetlands which are known or are found to provide habitat to wildlife species which are state of federally listed as rare, threatened, endangered, or of special concern, or locally designated as such.

9J-5.013(2)(c)(1,3,5,6,8 &9)

Policy 3E

Natural Buffer Zones or setbacks shall be required landward of all protected wetlands.

- a. Natural Buffer Zones for funding wetlands shall be determined on an individual basis with standards and formulas derived for the following criteria, at minimum: existing soil erodibility; cover and type of vegetation; slope; water table depths; water quality; wildlife; and the protective status of the receiving waters. Natural buffer zones shall consist of intact natural communities comprised predominantly of appropriate native vegetative species in the overstory, shrub, and understory layers. Activities within the Natural Buffer Zone shall be limited to those which are shown to be consistent with the intended use of this zone while providing for reasonable access to water bodies.
- b. Proposed activities adjacent to isolated wetlands shall have setbacks and natural buffers measured from the upland/wetland interface, as determined by vegetative dominance as appropriate with Rule 62.302 F.A.C. Wetlands which are hydrologically connected to a surface water body, shall require a natural buffer zone consistent with the standards provided in Subsection (a).

- c. In cases where the alteration of the Natural Buffer Zone is determined to be unavoidable, appropriate mitigation shall be required.

9J-5.013(2)(c)(1,3,6,8&9)

Policy 4E

If, by restriction of attainment of reasonable use through the City's land development regulations, 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 land habitat and function, and shall not result in a net loss of wetlands. Preservation of upland habitat may be considered in certain instances if deemed appropriate but shall not result in a net loss of wetlands. In no case shall mitigation activities degrade critical upland habitat.

9J-5.013(2)(c)(5,6)

Policy 5E

By year 2002, the City shall consider collecting a mitigation fee in lieu of mitigation requirements which will fund an off-site wetlands mitigation bank program. Towards that end, the City shall identify areas which are suitable for such purposes, primarily where important wetland habitats have been converted, and shall direct off-site mitigation efforts to these designated areas, which should be located within the same watershed as where the impacts will occur. To increase the program's effectiveness, the City shall coordinate with and seek the support of local municipalities, Volusia County, regional, state, and federal regulatory agencies.

9J-5.013(2)(c)(8)

Policy 6E

By 2002, the City of Deltona shall adopt and amend as appropriate to local conditions the Best Management Practices (BMP's) based on the most current available standards

Objective F

To protect habitats of wildlife species occurring in the City, particularly those which are threatened, endangered, or of special concern, to maintain, and enhance where necessary, existing species population numbers and distributions, and consistent with State and Federal law.

9J-5.013(2)(b)(4)

Policy 1F

Prior to 2004, the City shall initiate a comprehensive study to identify and inventory wildlife species, including state and federally listed species, which utilize habitat within the City. This

information shall be used in concert with the ecological community data base efforts to help determine type and occurrence of critical wildlife habitat and their boundaries.

9J-5.013(2)(c)(9)

Policy 2F

Land development proposals shall be required to protect ecologically viable habitats and prepare a suitable alternative management plan when state or federally listed vegetative and wildlife species occur within project boundaries.

9J-5.013(2)(c)(6)

Policy 3F

Prior to 2004, the City shall establish development review standards for projects which impact critical habitats. Until review standards are formulated, the City shall continue to review projects which may impact critical habitats. The type and occurrence of critical habitats which are determined by the City and the appropriate federal (USFWS) and state (FGFWFC, FDEP, ECFRPC) agencies. These review standards and development reviews shall address at minimum:

- a. proper siting of development structures and infrastructure, including clustering of dwelling units away from critical habitats;
- b. management plans which protect endangered wildlife which utilize critical habitats;
- c. mitigation plans for critical habitat which is unavoidably altered;
- d. restrictions 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.

9J-5.013(2)(c)(7)

Policy 4F

Where financially feasible, the City shall protect critical habitat through acquisition, establishment of public or private conservation easements, purchase of development rights, or through other available means as deemed appropriate.

9J-5.013(2)(c)(7)

Policy 5F

Prior to the establishment of the baseline data and management plans listed, the City shall utilize federal and state management guidelines for the particular endangered species in reviewing land development proposals.

9J-5.013(2)(c)(6)

*Policy 6F (added by Ordinance 10-2001 adopted at second reading by the Deltona City Commission
December 12, 2001)*

Concurrent with the revision of the City's Land Development Regulations, the City will adopt an ordinance restricting development, to require on-site protection and managed relocation areas for all species, which are listed and identified as Endangered, Threatened, or Species of Special Concern, and all hatitats which are critical within the City. Protection and relocation measures will be based on guidelines from appropriate State and Federal agencies and on local conditions.

Policy 7F

Natural Area Green Ways and Wildlife Corridors. In conjunction with the land preservation program to be completed in 2002, the City shall coordinate with pertinent state wildlife agencies and regional planning agencies to identify natural area greenways and wildlife corridors to link existing public parks, preserve areas and similar areas for conservation and hatitat preservation purposes. Efforts to coordinate the resources of other public and private natural resource preservation agencies will be undertaken by the City to enhance efforts to fiscally support and encourage a program of public land acquisition in conjunction with current land use planning and development regulations.

AIR QUALITY

GOAL 2

Ensure the highest quality of life, protect and improve air quality for the protection of the natural environment and the health, safety, and welfare of the citizens of the City of Deltona.

9J-5.013(2)(b)(1)

Objective G

To maintain or exceed current levels of air quality exceeding minimum acceptable air quality standards as established by EPA and FDEP.

9J-5.013(2)(b)(1)

Policy 1G

The City of Deltona should work with the Department of Environmental Protection in developing an air quality database, monitoring, and assessment system with information regarding primary air pollutants as well as volatile organic compounds to determine ambient air quality.

9J-5.013(2)(c)(8)

Policy 2G

Businesses which request development orders shall be required to install all appropriate pollution control devices and practices, and demonstrate that all necessary air quality permits have been approved prior to occupancy.

9J-5.013(2)(c)(8)

Policy 3G

As specified in the Transportation, and Capital Improvements Elements, the City of Deltona shall encourage alternative modes of transportation by, at minimum: encourage mass transit system, establish a City-wide car pooling information network, promoting the use of bicycles by requiring bike facilities, requiring improved pedestrian sidewalks on and off site, building and/or constructing vehicle parking bays and passenger shelters to accommodate buses and ride-shares.

9J-5.013(2)(c)(8)

Policy 4G

Industrial or other facilities which emit air pollutants shall be sited to avoid detrimental impacts to schools (grades K-12), nursing homes, residential neighborhoods and highly urbanized centers to reduce adverse impacts of air pollution on adjacent residents.

9J-5.013(2)(c)(8)

Policy 5G

Newly developed industrial parks, industrial subdivisions, public and private utilities, and arterial roads shall have a vegetation buffer between them and other land use types. This buffer shall include a mix of both taller overstory trees and shrubs (scrub, bushes, etc.).

9J-5.013(2)(c)(8)

Objective H

To minimize the impacts of mineral extraction activities on natural systems, while allowing appropriate utilization of the mineral resources.

9J-5.013(2)(b)(3)

Policy 1H

Prior to 2004, the City shall determine and inventory those areas with the highest suitability for mineral extraction, based on the quality of mineral deposits, and the patterns of land use and natural systems, and shall prevent incompatible land uses into these areas.

9J-5.013(2)(c)(2)

Policy 2H

Proposed mineral extraction activities shall minimize impacts to environmentally sensitive lands and critical habitats. In cases where adverse alteration of such lands are unavoidable, appropriate mitigation shall be required.

9J-5.013(2)(c)(2)

Policy 3H

The City shall establish standards for reclamation of excavation sites so as to resemble a natural system to the greatest extent feasible, including, at minimum:

- a. creation of sinuous shorelines;
- b. bank gradients properly sloped to establish planted littoral shelves with appropriate submerged and emergent vegetation;
- c. fish stocking, if warranted;
- d. ambient water quality testing;
- e. completion of the reclamation plans;

- f. compliance with standards established for artificial lakes by the SJRWMD and other appropriate agencies.
- 9J-5.013(2)(c)(2)

Policy 4H

To incorporate the inherent limitation of existing soils in land planning and development, and minimize impacts which result in soil erosion.

9J-5.013(2)(b)(2)

Policy 5H

Prior to any land disturbance, development activities shall indicate on a site plan areas of highly erodible soils, as defined by the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) or the Florida Department of Agriculture, and take adequate measures to ensure that soil erosion is avoided, including utilization of all appropriate Best Management Practices.

9J-5.013(2)(c)(6)

Policy 6H

Building construction in soils which are determined to be hydric in character, as defined by the NRCS and the Florida Department of Agriculture, shall be regulated to the extent that proposed construction activities will not adversely impact the natural physical and biological functions of protected resources without appropriate mitigation.

9J-5.013(2)(c)(6)

Policy 7H

Silvicultural and agricultural activities shall utilize the most current Best Management Practices to prevent soil erosion and subsequent siltation of surface water bodies.

9J-5.013(2)(c)(6)