

# CONSERVATION ELEMENT

## Goals, Objectives, and Policies

**Adopted: August 22, 2011**

### **Introduction**

The City of Winter Haven has just completed two long-range plans for water resource management that will help guide future land use decisions. The *Sustainable Water Resource Management Plan* was adopted by the City Commission on December 13, 2010 and envisions a series of water storage/wetland restoration projects that make additional water available for both lakes and people. There are two primary components of this plan, the first being a series of interconnected wetland storage projects which can store water for the future, mitigate flooding, as well as create new waterfront amenities for future growth. The second component is to infiltrate stormwater into sandy soils using raingardens and other low impact stormwater technologies to improve water quality and store water in aquifers for lakes and public supply. It is the conclusion of this plan that using the natural infrastructure to provide water resource services for the future will be the most cost effective and sustainable way to manage water long term.

The second plan completed in January, 2011 is the *Chain of Lakes Water Quality Management Plan*. This plan presents a long-term watershed approach to improve water quality. It suggests that treating stormwater is only one component in a wide array of options to improve water quality and that other items such as aquatic plants, wetland areas, organic soils (muck) and hydrology also play a key role. Each lake has a set of recommendations as to how proceed in determining what could benefit water quality the most. One of the primary recommendations in this plan is to also infiltrate stormwater into sandy soils where possible to clean stormwater and enhance water supplies.

These two plans are the culmination of many years of planning and experience. They play a significant role in the core concepts of the Conservation Element that follows.

**THE CONSERVATION GOAL: To protect, manage, and enhance the natural resources and environmental quality of Winter Haven.**

**GOAL ONE: Achieve high levels of water quality that will support recreation, wildlife, and commerce in the City's lakes through the reduction of direct point and non-point sources of pollution.**

*Objective 1.1: Implement a program of activities to maintain the quality of lakes and their drainage basins; and improve the quality of lakes determined by local and state agencies and local lakes management groups to be functioning below the desired level.*

**Policy 1.1.1:** Continue to undertake studies of lakes to determine their problems and needs, and implement management strategies.

**Policy 1.1.2:** Identify non-point sources of pollution and maintain a priority list of City lakes that can be improved by retrofitting stormwater systems.

**Policy 1.1.3:** Coordinate with other governmental agencies to eliminate the introduction of pollutants and noxious plants and animals into the City's lakes.

**Policy 1.1.4:** Coordinate with other governmental agencies in bacteriological monitoring and routine surface water quality analysis of the City's lakes.

**Policy 1.1.5:** Maintain and enforce land development regulations that define the standards and criteria to manage and control the practice of "grand-fathering" existing stormwater run-off into area lakes, so that at the time of redevelopment or change of land use, on-site retention shall be required.

**Policy 1.1.6:** By 2014, revise the stormwater management land development regulations to incorporate recommendations from the *2010 Sustainable Water Resource Management Plan* and the *2011 Chain of Lakes Water Quality Management Plan*.

**Policy 1.1.7:** All new development shall be connected to sanitary sewer. In the event the municipal sewer system is not available at the time of development, hook up will be required immediately upon availability of gravity sewer within 200 feet of any property line, or with the presence of pressure sewer at the property.

When their use is required due to a lack of sewer service, septic systems shall be a minimum of 150 feet from the regulatory high water elevation, or further upland, if so required by the Polk County Health Department.

**Policy 1.1.8:** Continue sponsoring education programs that educate the public about the City's lakes and water resources.

**Policy 1.1.9:** Maintain lakeshore protection zone regulations as part of the City's land development regulations wherein special restrictions on development and related activities are applied. At the minimum, development will be restricted within a shoreline protection zone between a lakeshore and 30 feet landward of the high water mark wherein vegetation clearance is limited and only marine dependent structures and activities are allowed.

*Objective 1.2: Implement a program of activities intended to improve surface water quality.*

**Policy 1.2.1:** Implement the *Chain of Lakes Water Quality Master Plan* to improve water quality.

**Policy 1.2.2:** Include priorities of *Chain of Lakes Water Quality Master Plan* in Capital Improvements Plan of the Comprehensive Plan.

**Policy 1.2.3:** Continue to coordinate all water improvement activities for the City's lakes with the Southwest Florida Water Management District (SWFWMD) and the Lake Region Lakes Management District.

**Policy 1.2.4:** Work towards restoring optimal lake levels to improve overall lake health, function, recharge, and usability by recharging stormwater and storing floodwaters.

*Objective 1.3: Control soil erosion by requiring all construction and exposed sites to implement the best management practices consistent with other local and State governmental agencies.*

**Policy 1.3.1:** Maintain and enforce land development regulations that define the standards and criteria for erosion control, consistent with those of other local and State governmental agencies.

**Policy 1.3.2:** Criteria for Winter Haven's inspection of development sites during construction activities shall include erosion control standards.

**Policy 1.3.3:** Adopt land development regulations that define the standards and criteria to permit the use of alternative forms of paving of off-street parking lots, such as open paving blocks with grass inserts and other similar methods, to reduce the need for retention ponds by 2014.

**GOAL TWO: Protect groundwater by eliminating further contamination and maintain current supplies, in order to achieve the highest level possible for potable water supplies.**

*Objective 2.1: Implement groundwater protection program measures that are consistent with SWFWMD, the County, and the Region.*

**Policy 2.1.1:** Adopt Land Development Regulations that define the standards and criteria that will be consistent with the aquifer recharge protection regulations as adopted by SWFWMD.

**Policy 2.1.2:** Continue to use treated wastewater and recycle stormwater for irrigation and other non-potable uses, when possible. As addressed in the *2010 Sustainable Water Resource Management Plan*, explore the use of rapid infiltration basins.

**Policy 2.1.3:** All land within a 400 foot radius of an existing public supply potable water well shall be designated as a wellhead protection area, and be so identified on existing and future land use maps.

**Policy 2.1.4:** Within wellhead protection areas, the following shall be prohibited: Landfills; facilities for bulk storage, handling or processing of materials on the Florida substance list; activities that require the storage, use handling production or transportation of restricted substances, agricultural chemicals, petroleum products, hazardous toxic waste, medical waste, or similar substances; feed lots or other commercial animal facilities; mines; and excavation of waterways or drainage facilities which intersect the water table.

**Policy 2.1.5:** Abandoned wells shall be plugged or capped through implementation of existing programs of SWFWMD.

**Policy 2.1.6:** Land use plans and approvals shall identify and enforce provisions to protect recharge areas and well fields from contamination by incompatible activities. Future land use designations shall take into account the location of existing and future water supply sources.

**Policy 2.1.7:** Coordinate the locations of designated collection sites for used oil and grease with other governmental agencies so that the materials may be properly disposed.

*Objective 2.2 Protect the environment from the effects of the storage and transportation of hazardous materials.*

**Policy 2.2.1:** A hazardous waste inventory shall be maintained through coordination with other involved governmental agencies, to identify locations and types of hazardous wastes produced, stored, or transported within the City.

**Policy 2.2.2:** Coordinate with other governmental agencies to develop an emergency contingency plan to respond to accidents involving hazardous materials.

**Policy 2.2.3:** Maintain and enforce codes and standards requiring the proper disposal of hazardous wastes. Periodically review, and update as necessary, all codes addressing the disposal of hazardous wastes to ensure consistency with all federal and state guidelines.

*Objective 2.3: Work towards the preservation and restoration of the City's natural hydrologic functions in order to improve lake levels and stabilize flows of the Peace Creek and Peace River systems.*

**Policy 2.3.1:** The *2010 Sustainable Water Resource Management Plan* is hereby adopted by reference as a support document to the Comprehensive Plan.

**Policy 2.3.2:** The post development hydrologic condition of each site should equal or exceed the predevelopment/natural hydrologic condition.

- For the sandy/ridge areas, close to 100 percent of stormwater should be percolated into the ground.
- For the lower lying valley/flood conveyance areas, historical wetlands and floodplains should be preserved for stormwater treatment, wetland mitigation, flood water storage, water supply, and habitat restoration.
- Investigate land use tools, such as overlay ordinances, which should be coordinated and adopted by other local governments in the watershed. Approach Polk County and the Central Florida Regional Planning Council about the possibility of a watershed based ordinance.

**Policy 2.3.3:** Because of lost hydrologic function by past land and water management practices, future development should help restore lost function in addition to mitigating for existing impacts. By 2014, revise the City's land development regulations to, not only prohibit additional cumulative impacts to the watershed, but also to address lost hydrologic function.

**Policy 2.3.4:** In the sandy ridge areas, restore percolation into the groundwater system to the maximum extent practicable. Historically, these areas had no surface water runoff and stored vast amounts of water in the water table. Restoring this recharge allows for multiple

future benefits, including water treatment, aquifer recharge, and enhanced lake levels.

**Policy 2.3.5:** Since using the natural infrastructure (percolation, aquifer recharge, wetland and lake storage) for water resource benefits is the most cost effective method for managing water long term, require new projects to use the natural infrastructure to the maximum extent practicable.

**Policy 2.3.6:** Work with the Florida Department of Transportation (FDOT) to require mitigation for all losses in hydrologic function, including wetlands, treatment, recharge, habitat, etc. within the Peace Creek Watershed.

**Policy 2.3.7:** Develop partnerships with Polk County, the Southwest Florida Water Management District, State of Florida agencies, other communities, and private development interests to coordinate all aspects of water resources within the Peace Creek Watershed.

**Policy 2.3.8:** Continue the concept of using nature parks, rain gardens, and swales in appropriate locations to manage water resources as well as provide amenities for residents and future growth.

**Policy 2.3.9:** Reuse water should be recharged near the area where it was withdrawn and not transferred out of the watershed area without consideration for the overall water budget.

*Objective 2.4: Implement water conservation programs to reduce water consumption.*

**Policy 2.4.1:** Enforce water use restrictions adopted by SWFWMD during water shortages declared by the District.

**Policy 2.4.2:** Continue to enforce landscape regulations requiring the use of drought tolerant and native plant species and high efficiency irrigation systems.

**Policy 2.4.3:** The City shall regularly conduct water audits to identify and correct unaccountable water losses.

**Policy 2.4.4:** The City shall adopt the SWFWMD Water Conservation Standards for per capita, per day consumption.

**Policy 2.4.5:** Winter Haven shall adopt and enforce SWFWMD water shortage plans which respond to emergency water supply interruptions.

**GOAL THREE: Protect and enhance local watersheds so that the highest level of ground and surface water quality can be achieved and maintained.**

*Objective 3.1: Minimize flood damage through the preservation of the functions of floodplains, watersheds, and other natural water storage areas.*

**Policy 3.1.1:** Compensating storage requirements necessary for the protection and conservation of the natural function of floodplains shall be in compliance with the requirements of affected agencies having jurisdiction. In addition, land development regulations will require to the greatest extent feasible, structures to be built outside of the 100-year floodplain areas, or for proposed developments lying within the 100-year floodplain, the amount of fill and disturbance will be minimized to the minimum amount necessary to accommodate the proposed use, with compensating storage provided for that amount of fill placed within the 100-year floodplain. Hazardous material or wastes will not be stored within the 100-year floodplain.

**Policy 3.1.2:** Residential development occurring within the 100-year floodplain shall not exceed a gross density of one (1) dwelling unit per one (1) acre of land. To preserve and maintain the function of the floodplain, require the clustering of residential uses that are developed on parcels located either partially or wholly within the floodplain.

**Policy 3.1.3:** Maintain and enforce the Land Development Regulations that define the standards and criteria that uphold the Flood Prevention and Protection Ordinance already in place for the City of Winter Haven.

**Policy 3.1.4:** Structures in floodplains that are damaged from natural causes, such as hurricanes shall not be permitted to be replaced, unless the structure can comply with all City regulations.

*Objective 3.2: Work with other government agencies, non-profit groups, property owners, and developers to enhance and restore natural watersheds, floodplains, and water storage areas.*

**Policy 3.2.1:** Current and historical watershed functions should be considered by future development projects, not just what is apparent today. Partnerships between future development and agencies interested in watershed restoration should be encouraged.

**Policy 3.2.2:** When reviewing proposed changes to the Future Land Use Map or Zoning Map, take into consideration the natural watershed, historical floodplains and wetlands, and potential water storage areas. When a specific amendment is located along the Peace Creek Canal or one of its tributaries, develop partnerships with affected property owners on developing surface water storage opportunities.

**Policy 3.2.3:** In lower valley areas, restore ditched and drained systems by creating water storage holding 'nature park' areas that will treat stormwater, restore river flows, manage floodwaters, and increase recharge capacity.

**Policy 3.2.4:** Identify and recommend to the State and SWFWMD, floodplains and historical wetlands that would warrant acquisition under the Conservation and Recreation Lands (CARL) program.

**Policy 3.2.5:** As new development occurs along major drainage systems that may be the subject of public maintenance in the future, including the Peace Creek and Wahneta Farms Canals, easements for maintenance and flood control shall be requested as part of the development approval process.

**GOAL FOUR: Protect all area wetlands from negative impacts which may occur from human activities, which could result in a lowering of the quality of life for residents of Winter Haven.**

*Objective 4.1: Define the standards and criteria necessary to protect wetlands and their function in the City's overall hydrology*

**Policy 4.1.1:** Continue to maintain and enforce land development regulations that protect identified wetlands from encroachment from development activities. Periodically review and update these regulations to ensure continued compliance with federal and state regulations as well to incorporate the latest data and studies.

**Policy 4.1.2:** Coordinate with other agencies to develop a wetlands database, which will be revised regularly as new information becomes available.

**Policy 4.1.3:** Development which occurs within a wetland shall require review by affected local and State agencies.

**Policy 4.1.4:** Upon Plan adoption, all new development and redevelopment, wholly or partly within areas identified as known or potential wetlands, or areas of wetland soils, shall be required to inventory all

such areas prior to receiving development approval. If wetlands and/or wetlands soils are found on the site, or will be affected by the development, a specific management plan with buffers to abutting and adjacent wetlands must be prepared by the developer, including necessary modifications to the proposed development to ensure the preservation of the wetland and wetland soils, and to result in no net loss of natural wetland functions.

**Policy 4.1.5:** Ensure that any lakeshore clearing to be done in the City is consistent with State permitting requirements.

**Policy 4.1.6:** When determining the quality of any on-site wetlands the following categories shall be used:

Category 1 Wetlands

Category 1 wetlands shall meet one of the following criteria:

1. Wetlands located within a lake littoral zone; or
2. Wetlands in excess of 30 acres that have retained their historic and natural hydrologic function.

Category 2 Wetlands

Category 2 wetlands shall meet one of the following criteria:

1. Wetlands between 3 and 30 acres regardless of current hydrologic function; or
2. Wetlands that have been degraded and no longer have their natural hydrological function.

Category 3 Wetlands

Category 3 wetlands shall be defined as all other wetlands not categorized as Category 1 or 2.

**Policy 4.1.7:** Development activities allowed in Category I wetlands, shall be limited to such things as passive recreational activities, including walking trails, docks, timber boardwalks for water access, wildlife management shelters, and footbridges and observation decks. Alteration of Category 1 wetlands shall be limited to five (5) percent of the wetland area. Category 1 wetlands shall be mapped Conservation on the Future Land Use Map Series.

**Policy 4.1.8:** Incompatible land uses should first be directed away from Category 2 wetlands; however, where impact has to occur it shall be consistent with rules promulgated by regulatory agencies having jurisdiction over the wetland. Such agencies include, but are not limited to, ACOE, SWFWMD, and the FDEP. Any impact allowed shall be appropriately mitigated to ensure no net loss of wetland area.

**Policy 4.1.9:** If the application of these policies within this Objective has the effect of being an unconstitutional taking of private property which results in precluding all beneficial use of the property and there is no practical alternative, then wetlands may be disturbed so long as there is no net loss of wetlands.

**Policy 4.1.10:** All commercial and industrial development involving toxic materials, hazardous wastes, pesticides, fuel storage tanks, and other uses with potential for surface water contamination, is prohibited in wetlands.

*Objective 4.2: To the greatest extent possible, require mitigation projects for locally impacted wetlands occur within the Peace Creek watershed.*

**Policy 4.2.1:** All impacts to wetlands, water quality, flood storage, and aquifer recharge should be mitigated on site to the maximum extent feasible. Where it is not possible to provide mitigation onsite, mitigation should occur within the Peace Creek Watershed.

**Policy 4.2.2:** Applications for development that involve disturbing wetlands shall provide a wetland delineation report that includes, but is not limited to: the delineation of on-site wetlands (using criteria promulgated by U.S. Army Corp of Engineers and/or Southwest Florida Water Management District and/or Florida Department of Environmental Protection); those wetlands proposed to be disturbed; the quality of the wetlands; whether the wetlands are isolated or part of a larger system; and, the description of any required mitigation activities.

**Policy 4.2.3:** Wetland restoration areas should be created in historical wetlands; and these areas should be used to further economic development by providing waterfront access, walking trails, and other amenities.

**Policy 4.2.4:** By 2014, evaluate the possibility of the City of Winter Haven establishing a mitigation bank for future development and roadway projects.

**GOAL FIVE: Maintain the current biological diversity of plant, fish, and wildlife and the natural integrity of ecological systems.**

*Objective 5.1: Winter Haven shall adopt provisions to evaluate, protect, and manage natural systems, in order to, preserve wildlife, fish, and native vegetative communities, and to maintain viable populations of existing plant, fish, and wildlife species.*

**Policy 5.1.1:** Adopt land development regulations that define standards and criteria for impact review procedures.

**Policy 5.1.2:** All new development and redevelopment, wholly or partly within areas identified as known or potential natural drainage features, including the shores of the City's lakes, shall be required to inventory all such areas prior to receiving development approval. If natural drainage features and lakeshores will be altered by the development, a specific management plan with buffers for the lakes and drainage features must be prepared by the developer, including necessary modifications to the proposed development, to ensure the preservation and protection of natural drainage features and lakeshores.

**Policy 5.1.3:** Require all new developments and redevelopment, wholly or partly within areas identified as known or potential habitats for endangered or threatened vegetative and wildlife species be required to inventory all listed species prior to receiving development approval. If listed species are found on the site or would be affected by the development, a specific management plan must be prepared by the developer, including necessary modifications to the proposed development, to ensure the preservation of the listed species and their habitat.

**Policy 5.1.4:** Maintain and enforce the Landscape Ordinance to promote conservation of native vegetative communities on development sites. By 2014, revise and update the landscape ordinance to include provisions requiring the use of Florida-friendly landscaping.

**Policy 5.1.5:** Winter Haven shall coordinate with state and other governmental agencies in the conservation of endangered plant, fish, and wildlife species.

**Policy 5.1.6:** Winter Haven shall cooperate with other governmental agencies, to improve aquatic habitat by monitoring lake water quality.

**Policy 5.1.7:** Require the removal of invasive plant species upon discovery for all new development and redevelopment projects within the City.

**Policy 5.1.8:** Remain active as a Tree City U.S.A. and provide trees for the purpose of aesthetics and energy conservation.

**GOAL SIX: Prevent the further degradation of the ambient air quality, improve present ambient air quality, and ensure a future clean air environment.**

*Objective 6.1: Winter Haven shall maintain Land Development Regulations that define standards and criteria to improve and maintain a high level of air quality, energy efficiency, and work in conjunction with other governmental agencies.*

**Policy 6.1.1:** Maintain and enforce the industrial performance standards for all industrial developments, as adopted in the City's land development regulations.

**Policy 6.1.2:** Maintain and enforce Land Development Regulations that define the standards and criteria to require both natural and man-made buffers between incompatible land uses and along arterial streets.

**Policy 6.1.3:** Maintain and enforce regulations pertaining to disposal of garbage and refuse, hazardous waste, and incinerators.

**Policy 6.1.4:** Maintain and enforce building codes that establish standards and criteria requiring the use of energy efficient products in the construction industry.

**Policy 6.1.5:** Through the Future Land Use Plan, encourage a compact, mixed use, built environment to reduce vehicle trips and vehicle miles traveled, which in turn will lower emissions.

**Policy 6.1.6:** By 2014, develop and implement land development regulations which address the clearing of development sites and the disposal and burning of vegetative matter in the City.