

CONSERVATION ELEMENT

I. PURPOSE

The purpose of the Conservation Element is to provide a guide for the conservation, use and protection of natural resources located within the City. The Element is intended to protect and enhance the public health, safety, welfare and quality of the environment. In addition, the Element establishes a plan and policy direction concerning conservation of natural resources and will provide a basis for decision-making by City officials. As growth continues in the City, the need for protection and management of the City's natural resources will increase. Policies to maintain and enhance these resources, as well as to shape growth patterns of the City, are included.

II. GOALS, OBJECTIVES AND POLICIES GOALS, OBJECTIVES AND POLICIES

LONG TERM CONSERVATION GOAL: CONSERVE, PROTECT AND APPROPRIATELY MANAGE THE NATURAL RESOURCES OF THE CITY TO ENSURE THE HIGHEST ENVIRONMENTAL QUALITY POSSIBLE.

A. AIR QUALITY

GOAL 1: THE CITY SHALL PROTECT ITS AIRSHED AND SEEK OPPORTUNITIES TO ATTAIN THE HIGHEST AIR QUALITY POSSIBLE AND REDUCE GREENHOUSE GAS EMISSIONS.

Objective 1.1: The City shall continue to meet or exceed the minimum air quality levels established by the Florida Department of Environmental Protection and shall continue to work on strategies to reduce greenhouse gas emissions.

Policy 1.1.1: The City shall cooperate with the State and County in monitoring the existing Air Pollution Inventory System (APIS) facilities.

Policy 1.1.2: Industrial land uses shall be located where they minimize their impact on current air quality standards.

Policy 1.1.3: The city will require monitoring of all co-generation plants emissions where applicable.

Policy 1.1.4: The City shall reduce the potential for automobile emissions pollution by the following means:

- a) Require vegetative buffer strips between new arterial roadways and residential development that meets or exceeds pre-development conditions or accomplishes requisite noise reduction or visual screening.
- b) Promote alternative transportation modes which help to reduce greenhouse gas

emissions, through the dissemination of information on car-pooling, public transit, and bicycle and pedestrian facilities.

- c) The city will promote alternative forms of transportation to reduce congestion and idle zones.

Policy 1.1.5: The City shall require that the Building Division be notified before the demolition of structures in order to complete an asbestos check of the buildings.

Policy 1.1.6: The City shall continue to identify greenhouse gas reduction initiatives and measures to be implemented for both City vehicles, and City-Owned or City-Operated facilities.

Policy 1.1.7: In order to reduce greenhouse gas emissions, the City shall continue to implement additional policies and strategies that specifically address energy conservation in the Conservation Element.

B. SURFACE AND GROUND WATER SYSTEMS

GOAL 2: THE CITY SHALL PROTECT AND CONSERVE THE QUALITY AND QUANTITY OF ALL WATER SOURCES AND GROUNDWATER RECHARGE AREAS.

Objective 2.1: The City shall protect and enhance its groundwater and surface water resources including the environmental resources in and around the Grassy Waters Preserve/Water Catchment Area (GWP/ WCA) to provide for adequate water supply, help offset the City's carbon footprint associated with greenhouse gas emissions, to improve surface water drainage and to provide a means to promote the conservation and reuse of freshwater resources.

Policy 2.1.1: The City shall continue to monitor groundwater and surface water quality and levels and shall continue to remain in permit compliance with the Florida Department of Environmental Protection (FDEP) and the South Florida Water Management District (SFWMD).

Policy 2.1.2: The City shall cooperate and comply with Palm Beach County's Wellfield Protection Ordinance for existing and future public waterwells.

Policy 2.1.3: The City shall seek ways to optimize the integrity of its source water supply elements, its wetland storage and recharge areas and minimize to the fullest extent future degradation affecting water supply quality and quantity by, but not limited to, limiting adverse usage, add additional recharge areas, and/or add alternative water supply areas, and eliminate or reduce harmful and detrimental run-off from peripheral lands to all public water supply wetlands and reservoir lakes (Lake Mangonia and Clear Lake).

Policy 2.1.4: The City shall protect the Surficial Aquifer System by controlling land uses and preventing any use that might contaminate or reduce the quality level of the aquifers.

Policy 2.1.5: The City shall work with other agencies to improve the surface water systems of the GWP/WCA components that provide for groundwater recharge and surface water replenishment consistent with the conceptualized Comprehensive Everglades Restoration Plan (CERP) initiatives for the Loxahatchee River Watershed Restoration Project (LRWRP). These components include:

- a) The capacity improved conveyance of the M Canal; through projects directed at widening and removal of base sediments.
- b) The control structures forming the discharge to the C-18 Canal and eventually the Loxahatchee River; and
- c) The provision of aquifer storage and recovery wells to store excess wet weather flows for discharge during low flow conditions.
- d) The provisioning of additional wetland storage units through wetland hydration project initiatives.
- e) The provisioning of means of controlling, protecting, and improving water quality (WQ) throughout the GWP/WCA watershed.
- f) The provisioning of measures to prevent, reduce, and control harmful and detrimental run-off from immediate land surfaces proximate to Lake Mangonia and Clear Lake as a means of increasing overall health of the aquatic source water supply and improve the purity of the water.

Policy 2.1.6: The City shall coordinate with the SFWMD to implement water conservation programs.

C. ECOLOGICAL RESOURCE PROTECTION

GOAL 3: THE CITY SHALL IDENTIFY, MANAGE AND PROTECT ECOLOGICAL COMMUNITIES, WILDLIFE, MARINE LIFE, ESTUARINE RESOURCES AND ESTABLISH PROGRAMS TO CONTROL OR ERADICATE INVASIVE NON-NATIVE SPECIES

Objective 3.1: The City's wetland and significant native upland vegetative areas shall be conserved and protected from physical and hydrologic alterations that cause negative impacts to their functions.

Policy 3.1.1: The City shall continue to enforce land development regulations to ensure that

development proposals identify the location and extent of wetland and significant native upland vegetative areas, and identify measures to preserve them. Where alteration of wetland and native upland vegetative areas is unavoidable to ensure reasonable use of the property, the City shall require minimization of impacts followed by requirements for appropriate mitigation/compensation.

Policy 3.1.2: The City shall continue to purchase or otherwise acquire control over undeveloped lands and buffer areas adjacent to the GWP/WCA and manage these lands such that:

- a) Wetland hydroperiods and wildlife habitats are conserved or restored.
- b) Surface and groundwater flows are enhanced thus reducing seepage losses from the GWP/WCA.
- c) The lands will serve as a protective buffer to the GWP/WCA from surrounding land uses.
- d) Combined with enhanced Best Management Practices (BMP's) these lands provide an opportunity to accept excess quality stormwater runoff for increasing storage to promote surficial groundwater and surface water recharge.

Policy 3.1.3: Any lands acquired by the City for the purposes specified in Policy 3.1.2 shall be designated "Conservation" land on the Future Land Use Map.

Objective 3.2: The City shall coordinate with applicable agencies to identify, manage, and protect unique native vegetative communities, marine and estuarine resources, and endangered and threatened wildlife (herein collectively referred to as listed species) that are located within the City.

Policy 3.2.1: The City shall coordinate with the U.S. Fish and Wildlife Service, the U.S. Department of Environmental Protection, the SFWMD, the Florida Fish and Wildlife Conservation Commission, and other applicable agencies to update, when necessary, comprehensive inventories and management plans for City-Owned or City-Managed Environmentally Sensitive Lands, including those with unique native vegetative areas.

Policy 3.2.2: The City shall protect, preserve, and maintain natural resources while maximizing, where possible, recreational opportunities by participating in land acquisition programs such as, but not limited to, the Florida Forever Program, the Save Our Rivers program, the Conservation and Recreation Lands program, and Palm Beach County's Environmentally Sensitive Land Acquisition program.

Policy 3.2.3: The City shall continue to enforce land development regulations which include provisions to protect ecological communities around the City's GWP/WCA and other native vegetative communities through the following standards:

- a) Clustering of dwelling units away from sensitive portions of the ecological community.
- b) Reducing in intensity and density of development near sensitive portions of the ecological community.
- c) Preventing detrimental fragmentation of native vegetative communities.
- d) Requiring buffering of sensitive ecological areas.
- e) Prevent degradation of existing quality of ecological communities and protect from harm to hydrologic integrity.

Policy 3.2.4: The City shall comply with all State and Federal regulations which pertain to listed species.

Policy 3.2.5: The City shall consult with all applicable regulatory agencies prior to the issuance of a land use approval that would result in an adverse impact to any listed species.

Policy 3.2.6: The City shall require an environmental assessment or Environmental Impact Statement, and a habitat and wildlife management/protection plan for listed species concurrent with site plan submittal depicting best management practices to protect listed species' habitat. The level of environmental review will be determined based on whether the proposed actions will significantly affect the quality of the human environment as provided in the City's Land Development Regulations. When applicable or prudent to protect long-term values, function and benefits of the City's Conservation Areas, the City shall require a complete and thorough cumulative impact analysis in accordance with applicable state and federal rule and regulations.

Policy 3.2.7: The city shall protect listed species through the use of tools such as, but not limited to, conservation easements, transfer of development rights and fee simple acquisition and zoning.

Policy 3.2.8: The City shall promote education and outreach programs that promote the conservation, protection and preservation of listed plant and animal species as well as promotion of and water conservation and stewardship of the City's Conservation Areas.

Policy 3.2.9: The City shall strictly enforce the provisions of the Zoning Code relating to the protection of trees and other vegetation.

Policy 3.2.10: The City shall continue its native vegetation relocation and revegetation efforts in order to maintain a wide variety and sizable population of native plant species that may otherwise be lost or destroyed and to prevent the decline of listed plant species and their inherent habitat values.

Policy 3.2.11: The City shall conserve, protect, and provide for the appropriate use of areas suitable for the extraction of desirable soils and minerals, depicted in the Map Series by establishing criteria to ensure that all extractive use impacts on adjacent uses and the environment are minimized. In determining the negative impact of extractive activities, consideration shall be given to the proposed method of operation, the nature of surrounding land uses, and proposed rehabilitation plans. Mining and other extractive uses shall be prohibited for all non-industrial districts.

Objective 3.3: The City shall continue the Public Utilities Department's program to eliminate the negative effect of invasive exotic and nuisance species, including; including but not limited to, such species as the Australian Pine, Brazilian Pepper, and Melaleuca trees, on the region's natural systems.

Policy 3.3.1: The City shall continue to fund, on an annual basis, the eradication, treatment and maintenance of exotic, nuisance and invasive species within all City-Owned and City-Managed preserve areas.

Policy 3.3.2: The City shall continue to require the eradication and prevention of the planting of non-native invasive species which might have a detrimental effect on the region's natural systems by specifying which trees are not allowed to be planted in the City's Landscaping Code subsection of the City Zoning Code.

D. HAZARDOUS WASTES

GOAL 4: THE CITY SHALL PROTECT CITIZENS AND THE ENVIRONMENT FROM HAZARDOUS WASTES BY USING PROPER MANAGEMENT TECHNIQUES.

Objective 4.1: The City shall cooperate with the Palm Beach County Solid Waste Authority, in developing a hazardous waste management program for the proper storage, recycling, collection and disposal of hazardous wastes.

Policy 4.1.1: The City shall cooperate with the Palm Beach County Health Department and other concerned agencies in developing emergency response plans to handle accidents involving hazardous wastes.

Policy 4.1.2: The City shall promote the recycling of hazardous wastes by publicizing lists of approved recyclers.

Policy 4.1.3: The City shall consider Amnesty Days to collect hazardous wastes within West Palm Beach.

E. LOXAHATCHEE SLOUGH/RIVER WATERSHED

GOAL 5: THE CITY SHALL PROTECT AND PRESERVE ENVIRONMENTALLY SIGNIFICANT FEATURES, SUCH AS THE LOXAHATCHEE SLOUGH AND RIVER WATERSHED.

Objective 5.1: The City shall preserve and protect that portion of the Loxahatchee Slough and River Watershed which lies within its conservation jurisdiction. This segment is the City's Grassy Waters Preserve/WCA.

Policy 5.1.1: The City's GWP/WCA shall remain designated as a "Conservation" land use category on the Future Land Use Map and under the covenant stated within the Legislative Act protecting the GWP/WCA.

Policy 5.1.2: Uses allowed within the GWP/WCA shall be limited to those which are compatible with and preserve the natural character of the area, such as passive recreation, observation areas, hiking and nature trails, canoeing, primitive camping, environmental education facilities and ecological research and restoration efforts within degraded habitat areas. Active recreation uses such as playing fields, tennis courts, etc. shall also be prohibited. All residential, commercial, industrial and community service uses shall be prohibited.

Policy 5.1.3: Public access to the GWP/WCA shall be available, but managed so that the environmental values of the system can be enjoyed, but not overburdened by end users.

Policy 5.1.4: The City shall participate with the SFWMD, Palm Beach County and other appropriate agencies to re-establish the historic hydrologic connections between the three segments of the Watershed.

Policy 5.15: The City shall cooperate with Palm Beach County, the City of Palm Beach Gardens, the Town of Jupiter and the SFWMD to ensure that land development activities do not degrade the environmental values and wilderness character of the Loxahatchee Slough and River Watershed and that ambient water quality conditions characteristic of these Everglades ecosystems are maintained.

Policy 5.1.6: The City shall continue to participate in the Comprehensive Everglades Restoration Plan (CERP) initiatives, under the scope of the Loxahatchee River Watershed Restoration Plan, and assist in implementing Plan projects and improvements within the City boundaries toward this endeavor. Efforts should include enhancement of conveyance, restoration of degraded ecosystems, protection of water resources and listed species, and hydrologic structures.

Policy 5.1.7: The City shall cooperate with appropriate agencies to develop best management practices (BMP's) that will be met by all land development activities that occur within the C-18 Basin and the designated Loxahatchee Slough and River Watershed Protection Area. The standards may include, but not be limited to, the following: lot coverage; ratio of impervious surface to pervious surface; building height; land use; infrastructure requirements; surface water quality and quantity requirements; and habitat fragmentation to assure systems/habitats protection. These standards shall be adopted in the Land Development Regulations within one year of their adoption into this Comprehensive Plan.

Policy 5.1.8: The City shall continue to improve the hydrological characteristics (i.e. flows, conveyance and water quality) of the GWP/WCA system to help ensure that minimum flows and levels (mfl) to the North West Fork of the Loxahatchee River are achieved. The requisite areas associated with achieving the mfl's include the L-8 tie back, the M- canal, the GWP/WCA and the G-161 flow-way system.

Objective 5.2: Future growth within the City shall continue to be regulated through the administration of the land development regulations specified within the City's Zoning Code, and Building Code.

Policy 5.2.1: The City shall continue to administer land regulations that address and regulate the following:

- a. All land use identified on the Future Land Use Map.
- b. The protection of environmentally protected lands, including the GWP/WCA, water wellfields and aquifer recharge areas.
- c. Compatibility of adjacent land use

Policy 5.2.2: The City shall prohibit any development within the GWP/WCA that is not deemed a water-related use or may harm the City's source of potable water. Restoration of degraded or damages habitat area within the City's watershed system are not considered, nor interpreted as development.

Policy 5.2.3: Development of any wetland areas or other surface waters shall conform to the applicable regulations outlined by the South Florida Water Management District and other state and federal agencies.

Policy 5.2.4: Any plans for proposed development located contiguous to the GWP/WCA shall include an environmental assessment prior to City Commission approval, to demonstrate the project will not be a detriment to the City's source of potable water.

Policy 5.2.5: Development proposed for land adjacent to the City's GWP/WCA poses special circumstances due to the importance of maintaining an adequate supply of clean potable water, the close relationship of surface and ground waters, the prevalence of wetland areas which provide water storage and cleaning functions, and the proximity of the drawdown zone of another municipality or water consumptive use patterns. Accordingly, the City shall utilize the Special Impact Zone, hereby referred to as the Water Catchment Area Special Impact Zone (WCA/SIZ), to ensure heightened site plan review and to prohibit land use and environmental incompatibilities for the area located within the City's municipal boundaries within 450 feet of the Water Catchment Area as defined by Chapter 67-2169 (Laws of Florida) and as amended.

Policy 5.2.6: The City shall require a professionally accepted and applied environmental assessment or Environmental Impact Statement or other environmental requirement the City deems appropriate for any development proposed within the WCA/SIZ as a part of the development application process. The WCA/SIZ, excluding parcels One, Two, Three, Four, Five and Six will be protected by a buffer of natural vegetation of at least 200 feet. All disturbances to existing Conservation lands within this zone shall be mitigated to compensation levels determined justly adequate to replace lost habitat structure and functional values consistent with FDEP's environmental resource program permitting rules and consistent with any other applicable state and federal agencies' rules and regulations regarding wetland mitigation as those rules change over time.

Policy 5.2.7: Existing wetland areas shall not be altered to decrease the fish, wildlife, and water quality and quantity values in the WCA/SIZ. Wetlands alteration shall be limited to degraded wetlands which are defined as having been impacted through human activities such as dredging and filling that have caused changes to the wetland hydroperiod, topography, or allowed the intrusion of non-wetland or non-native (e.g. melaleuca) plant species. As a result, the degraded wetlands do not provide fish, wildlife and water quality and quantity values equal to or greater than would be provided if these wetlands were restored on an acre by acre basis as determined by professionally accepted and applied methodologies. There shall be no discharge of surface water off-site which exceeds the historic flow of surface waters from the WCA/SIZ. No development in the WCA/SIZ shall decrease the pre-development flow and quality of water to the wetlands within the WCA/SIZ. Any loss of wetland values and functions shall be mitigated consistent with FDEP's environmental resource program permitting rules and consistent with any other applicable state and federal agencies' rules and regulations regarding wetland mitigation as those rules change over time. Mitigation shall be accomplished on site or within the GWP/WCA or WCA/SIZ through restoration of degraded wetlands or through the creation of new wetlands. All created wetland offsets will possess, within a specified time-lag period, similar or greater habitat structure and functional ecological values consistent with FDEP's environmental resource program permitting rules and consistent with any other applicable state and federal agencies' rules and regulations regarding wetland mitigation as those rules change over time.

Policy 5.2.8: All mitigation/ compensation offsets will be monitored for success for a minimum of five (5) years and reported on an annual basis. The report shall be submitted to the Watershed Management Division of the City's Public Utility Department. Lack of satisfactory fulfillment of the success criteria may determine further remedial corrective actions including; but not limited to replacements and reporting extensions.