

## F. CONSERVATION ELEMENT

The intent and purpose of the City's Conservation Element is for the conservation, use and protection of natural resources in the area, including air, water, water-recharge areas, wetlands, soils, beaches, shores, flood plains, harbors, bays, minerals, and other natural and environmental resources. The maps for this element generally identify and depict these areas.

### Conservation Needs Summary

The following summarizes the needs identified in the Conservation Element:

- The protection, maintenance, and continued management of Clearwater's surface water resources, including both interior and coastal waters, are important for their natural functions.
- Clearwater's groundwater supplies are important and must be protected to ensure the continuance of the City's ability to provide potable water.
- The protection, maintenance, and continued management of Clearwater's shorelines, especially its barrier island beach shorelines, is critical. These areas provide an important social and economic function as these natural resources for Clearwater's tourism industry. Clearwater Beach, Sand Key, and the geographic proximity to Caladesi Island State Park are some of the most important and unique resources the City possesses.
- The protection, maintenance, and continued management of the City's seven hundred sixty (760) acres of natural wetlands including tidal swamps and marshes, both interior and coastal, are critical to the continued existence of both plant and animal wildlife and wildlife habitat. These areas contribute to Clearwater's quality of life. Wetlands shall not be destroyed, disturbed, or altered to prevent them from performing their natural functions, except through the implementation of State or City mitigation standards.

Public awareness and education programs are an important component in promoting and preserving the natural environment and the use of "Florida friendly" vegetation.

- Black, red, and white mangrove trees are important to the continuance of many species of marine life. Protection of these resources is crucial to the food chain necessary to sustain marine life and shoreline stabilization.
- Protection of the edges or "ecotones" associated with the different ecosystems is important to natural function and Clearwater's quality of life.
- Scenic vistas shall remain designated as "scenic and/or non-commercial highways or corridors." They are specifically: Memorial Causeway; Edgewater Drive; the Courtney Campbell Causeway/Parkway which is also designated a Florida Scenic Highway; Bayshore Boulevard; and Bayside Bridge.
- Tampa Bay has been ranked top priority for the Surface Water Improvement and Management Program (S.W.I.M.). Clearwater and other municipalities contiguous to Tampa Bay will

continue to cooperate and participate in the effort of cleaning-up the bay and restoring marine life and shellfish fisheries.

- Soil erosion is an issue that must continue to be managed for all applicable properties in the City through the site plan review process.
- Shade trees provide a number of valuable functions that include noise reduction, heat reduction, buffering, aesthetic beauty, and replenishment of ambient oxygen. The City of Clearwater will continue to administer tree regulations requiring sufficient plantings through the Community Development Code, and provide assistance to private property owners as needed.
- The City should continue to cooperate and participate in all efforts recommended by the Pinellas County Environmental Management Department, Division of Air Quality, toward the attainment of cleaner and healthier ambient air quality.
- Land uses which are associated with hazardous wastes and/or hazardous materials should be restricted from locating within designated wellfield protection areas that have been delineated on the future land use map. Cooperation from all other adjacent local governments is crucial to the success of this proposal, and will be coordinated through the Intergovernmental Coordination Element.
- The City of Clearwater will continue coordinate and participate with Pinellas County in an effort to provide a temporary storage and transfer facility to serve residential households in disposing of hazardous/toxic wastes and unused hazardous/toxic materials.

## GOALS, OBJECTIVES AND POLICIES

### **F.1 GOAL - TO PROTECT AND CONSERVE ALL ASPECTS OF THE NATURAL ENVIRONMENT AND TO ENHANCE NATURAL FEATURES WHICH CONTRIBUTE TO THE EXISTENCE OF THE NATURAL QUALITIES AND CHARACTERISTICS OF CLEARWATER'S SENSITIVE ENVIRONMENT.**

#### **F.1.1 Objective - The City shall continue to protect and improve ambient air quality.**

##### Policies

F.1.1.1 Require all new residential and non-residential development to provide a specified amount of Florida friendly shade trees based on an established desired ratio of pervious to impervious surface areas. Shade trees will serve to provide heat reduction, noise abatement, buffering, replenishment of oxygen, and aesthetic beauty.

F.1.1.2 The City of Clearwater shall cooperate with the Tampa Bay Regional Planning Council and Pinellas County in their efforts to develop plans for improving and monitoring air quality.

#### **F.1.2 Objective - The City shall continue to protect floodplains, drainage ways, and all other natural areas having functional hydrological characteristics.**

##### Policies

F.1.2.1 Any construction in the one hundred (100) year floodplain shall comply with all requirements and standards of the Federal Emergency Management Agency of the Federal Flood Insurance Administration, and the City's building codes.

F.1.2.2 Construction and development activities in natural drainage channels shall be prohibited, except for public flood protection projects designed to correct specifically identified pre-existing flood conditions and for which no reasonable alternative flood control measures are available; such activities shall not increase the flood potential for areas outside the project target area, nor shall the overall water quality of the affected drainage channels be reduced as a result of the activities.

F.1.2.3 The City shall support the development of water quality specific level of service criteria as required within the provisions of the National Pollution Discharge Elimination System (NPDES) permit issued to Pinellas County by the Florida Department of Environmental Protection.

F.1.2.4 Utilize design methods that will trap stormwater sediments before entering surface waters.

- F.1.2.5 Cooperate and coordinate activities with the Southwest Florida Water Management District (SWFWMD) and the Florida Department of Environmental Protection (FDEP) in the implementation of the Surface Water Improvement and Management (SWIM) Program including maintaining and upgrading the quality of water of Tampa Bay and Clearwater Harbor.
- F.1.2.6 Natural filtration techniques and methods such as grassy swales and natural wetland water storage should be implemented when appropriate to provide purification of stormwater runoff before entering any surface waters.
- F.1.2.7 Transfer of development rights should be implemented to provide alternatives to development and degradation of wetlands and other natural resources.
- F.1.2.8 Protect all natural drainage channels from destruction or any restriction of their functional use and regulate protection through the Clearwater Community Development Code: this policy may be waived for any public flood conditions when it can be demonstrated that: (a) No reasonable alternative flood control measures are available; (b) The project will not increase the flood potential for areas outside the project target area; and (c) Overall water quality of the affected drainage channel will not be reduced as a result of the project.
- F.1.2.9 Design and approve future redevelopment of Clearwater's downtown waterfront with consideration of the natural bluff features through the Future Land Use Plan, the Community Development Code, *Clearwater Downtown Redevelopment Plan*, and in accordance with the City Charter.
- F.1.2.10 Monitor and enforce City requirements for treatment ponds and environmental mitigation sites.

**F.1.3 Objective - The City shall continue to maintain and enhance the City's wildlife and natural native vegetation resources.**

Policies

- F.1.3.1 Prohibit destruction and disturbance of all conservation land uses to protect wildlife and plants especially those that are threatened or endangered species. This policy shall include known, professional wildlife management and habitat restoration techniques.
- F.1.3.2 Limit alteration of all urban forests utilizing the Community Development Code; protect natural and mitigated wetlands, marine life, shoreline vegetation, and wildlife habitat in the City from disturbance and destruction.
- F.1.3.3 Continue to monitor surface waters within the City, and support and coordinate these efforts with Pinellas County's surface water monitoring program.
- F.1.3.4 Prohibit development that will needlessly disturb or destroy native vegetation. This shall be achieved through the site plan review process and site inspections.

F.1.3.5 Adopt and continue administering regulations providing for the protection of threatened and endangered species and species of special concern.

F.1.3.6 The City of Clearwater shall not dredge or intentionally disturb or disrupt the sea floor of any sea waterbody without necessary required permits issued by the Florida Department of Environmental Protection, Southwest Florida Water Management District (SWFWMD) and Army Corps of Engineers. Mitigation shall be recognized as intrinsically worthwhile and not as primary justification for spoil disposal.

**F.1.4 Objective - The City shall continue to manage all conservation areas located in the City to prevent any unnatural disturbance or adverse impacts from the developed urban environment.**

Policies

F.1.4.1 The City shall maintain and enhance Memorial Causeway and continue beautification efforts to ensure its major contribution as a “unique/scenic view” on the Countywide Scenic/Non-Commercial Corridor Map, an aesthetic gateway and landmark to Clearwater Beach.

F.1.4.2 The City shall maintain and enhance Edgewater Drive as a “unique/scenic view” on the Countywide Scenic/Non-Commercial Corridor Map to ensure its major contribution as an aesthetic gateway and landmark of Clearwater.

F.1.4.3 The City shall maintain and enhance the Courtney Campbell Causeway/Parkway as a “unique/scenic view” on the Countywide Scenic/Non-Commercial Corridor Map, a Florida Scenic Highway, an aesthetic gateway and landmark of Clearwater.

F.1.4.4 The City shall maintain and enhance Bayshore Boulevard as a “unique/scenic view” on the Countywide Scenic/Non-Commercial Corridor Map to ensure its major contribution as an aesthetic gateway and landmark of Clearwater.

F.1.4.5 The bluff geographic area located along the bayfront from the southernmost City limits to the northernmost City limits is a unique topographic characteristic which should be preserved or developed with consideration of its features.

F.1.4.6 The City shall protect the urban forest from destruction or disturbance due to inappropriate proximity to incompatible land uses through the site plan review process.

**F.1.5 Objective - The City shall continue to maintain the wetland inventory of 760 acres as identified in the City’s 2005 Wetlands Survey.**

## Policies

- F.1.5.1 Wetlands shall not be dredged and filled or disturbed in any manner other than by natural phenomenon and their natural functions shall be protected, except through the implementation of State or City mitigation standards.
- F.1.5.2 The City shall protect and preserve riverine floodways from all new land uses other than recreational and/or open space through site plan review and enforcement of the Community Development Code.
- F.1.5.3 The City shall protect and prevent disturbance of any natural wetland areas whether publicly or privately owned, by utilizing assessments and authority provided by the Florida Department of Environmental (FDEP), the Southwest Florida Water Management District (SWFWMD), Pinellas County and the Army Corps of Engineer.
- F.1.5.4 The City shall within the limits of state legislation protect all mangrove species from disturbance and/or destruction and to provide public awareness of mangrove resources and their importance and value to the food chain of marine life through the strict enforcement of the City tree protection ordinance.

**F.1.6 Objective - The City shall continue to protect beaches, sand dunes, and dune vegetation for their natural function and for their recreational open space uses.**

## Policies

- F.1.6.1 Unauthorized motor vehicles shall be prohibited from parking on the City's beaches.
- F.1.6.2 Unauthorized motor vehicles shall be prohibited from operating on the City's beaches and dunes.
- F.1.6.3 Development and/or construction of any structures shall not be built seaward of the Coastal Construction Control Line, unless approved by the Florida Department of Environmental Protection and the City of Clearwater.
- F.1.6.4 Beach and beach dunes shall not be disturbed or destroyed by any form of construction or development with the exception of wooden boardwalk structures which provide access to and from beach areas.
- F.1.6.5 All beaches, dunes, and associated vegetation shall be protected by local ordinance.
- F.1.6.6 Shoreline development shall be prohibited from obstructing views of the Gulf of Mexico, Clearwater Harbor and Old Tampa Bay where public access is designated.
- F.1.6.7 All dune vegetation shall be protected by local ordinance and by provision of dune walk-over structures for beach access.

F.1.6.8 Access to recreational areas and facilities shall not be eliminated or reduced as a result of public or private improvement and/or acquisition of rights-of-way, bridges, accessways, or development.

**F.1.7 Objective - The City shall continue to manage and protect all City-owned lands that are in their natural state, and to provide educational information programs and create public awareness.**

Policies

F.1.7.1 Recognize the importance and functions of Clearwater's natural ecosystems and ecotones as an integral component of Clearwater's urban environment.

F.1.7.2 Interface and integrate the City's recreation and parks open space system with emphasis on conservation and recreation open space land uses.

F.1.7.3 The City shall continue to recognize Moccasin Lake Nature Park, an environmental and energy education center, as a unique facility that provides educational programs and activities dealing with natural sciences, habitat, wildlife, alternative energy systems and recycling.

F.1.7.4 The City shall establish conservation easements for the benefit of the general public to provide pedestrian ingress and egress to and from natural areas.

F.1.7.5 Provide education programs to encourage preservation of the natural environment and promote the use of "Florida friendly" and drought tolerant vegetation and ground cover in an effort to conserve water.

**F.1.8 Objective - The City shall continue to protect all City owned and maintained potable water wells from contamination by potentially dangerous land uses and associated activities which could contaminate groundwater aquifers.**

Policies

F.1.8.1 The City shall continue to administer a wellfield protection ordinance which will recognize wellfields as sensitive areas surrounding potable water wells which must be protected from contamination by land uses associated with activities involving: automobile repair shops; electroplating; ship building; gasoline stations; plastic products; oils/greases; photo processing; and/or any land use associated with hazardous wastes and materials.

F.1.8.2 Land uses which are associated with any toxic and/or hazardous materials shall be prohibited within the recommended distance established by environmental officials thus preventing possible accidental contamination of fresh and sea water bodies, streams, creeks, lakes, ponds, fresh and saltwater swamps and marshes, retention/detention areas, drainage ditches or any other designated natural conservation protection area.

- F.1.8.3 The Clearwater Parks and Recreation Department shall utilize xeriscape technology where soils and vegetation are suitable, in an effort to conserve potable water. The intent of this approach is to provide continued landscape beauty at a reduced cost.
- F.1.8.4 The City shall not exceed its permitted consumptive use quantity authorized by the Southwest Florida Water Management District (SWFWMD) in consideration and consistent with SWFWMD's Regional Water Supply Plan.
- F.1.8.5 The City shall not emit wastewater effluent from a wastewater disposal facility that does not meet U.S. Environmental Protection Agency (E.P.A.) and Florida Department of Environmental Protection (F.D.E.P.) water quality effluent standards.
- F.1.8.6 The City shall obey and enforce any emergency water shortage advisory notices issued by the Southwest Florida Water Management District. The City shall research and establish the most cost effective program to implement irrigation systems utilizing reclaimed water for other private land uses.
- F.1.8.7 The City shall continue to develop its reuse of treated wastewater for irrigation of City parks, both public and private, golf courses and other appropriate City owned properties, followed by studies of a phased expansion of the reclaimed water program into residential areas for private lawn watering purposes, in an effort to conserve potable water and replenish groundwater and aquifer supplies.
- F.1.8.8 The City shall consider adoption of an ordinance that will prohibit the irrigation and/or the sprinkling of all yards, lawns, and plant material with potable water during designated hours if SWFWMD water restrictions are lifted.
- F.1.8.9 Pesticide dealers, auto paint and repair shops, salvage yards, and other small-quantity generators of hazardous waste identified as per Florida State Law shall provide storage of hazardous products and by products outside of the elevation of the 25-year flood plain, shall not cause the direct discharge of runoff from said storage areas into water of the State, and shall have containment/separation traps of adequate size to prevent any discharge in case of a spill or accident.

**F.2 GOAL - DISCHARGES OF STORMWATER SHALL BE MANAGED TO PROVIDE FLOOD PROTECTION FOR THE CITIZENS OF THE CITY OF CLEARWATER AND TO PRESERVE, PROTECT, AND ENHANCE THE WATER QUALITY OF RECEIVING WATERBODIES.**

- F.2.1 Objective - The City shall continue to protect, improve and enhance surface waters from stormwater runoff discharging into both interior and coastal surface waters.**



## Policies

- F.2.1.1 The City shall incorporate water quality protection and enhancement criteria into all City stormwater management plans.
- F.2.1.2 The use of natural alternatives, the conservation of natural drainage systems, and the protection and improvement of the quality of receiving waters shall be a goal of the City stormwater management plans.
- F.2.1.3 A stormwater utility fee or other adequate funding mechanism shall be continued to provide the necessary funding mechanism to achieve this goal.
- F.2.1.4 The City shall continue to implement a stormwater ordinance requiring redeveloped sites other than single-family residential areas, to incorporate water quantity and quality controls consistent with new development regulations, recognizing that case-by-case limitations may call for partial controls, off site improvements or payments in lieu of improvements to achieve this goal.
- F.2.1.5 Management plans shall be developed for waterbodies with known or suspected water quality problems in the City to include Tampa Bay, Clearwater Harbor, Stevenson Creek, Allen's Creek, and Alligator Creek.
- F.2.1.6 The City shall systematically and timely prepare and update watershed or waterbody specific management plans in accordance with the Surface Water Improvement and Management (SWIM) program. These plans shall include both water quality and flood control considerations and recommended funding sources.
- F.2.1.7 The City shall prioritize and implement all City approved stormwater management plans.
- F.2.1.8 All City stormwater management plan projects within watersheds of the City shall comply with applicable SWIM Plans for that waterbody or watershed.
- F.2.1.9 The City shall coordinate with and supplement the County's surface water monitoring program.
- F.2.1.10 The City will encourage the use of "Low Impact Development" techniques for stormwater management, such as minimal land disturbance, the preservation of native vegetation, and the minimization of impervious cover, through site plan and internal review processes.