

## **CONSERVATION ELEMENT GOALS, OBJECTIVES AND POLICIES**

### **GOAL**

To manage, conserve and protect Dunnellon's natural resources through a balance of man's activities with sound environmental practices.

### **AIR QUALITY**

#### **Objective 1:**

The City of Dunnellon currently enjoys good ambient air quality. However, the City recognizes air quality may be negatively affected by future land uses. Therefore, it is the City's objective to maintain existing high standards of ambient air quality within the planning timeframe.

#### **Policy 1.1:**

All proposed commercial development which may impact air quality shall undergo the site plan review process, where the following standards shall be enforced:

- A.     ⚡—Any proposed industrial uses will be located in areas deemed to have the least impact on air quality standards.
- B.     ⚡—The applicant shall include documentation that ambient air quality in the City will not be lowered.
- C.     The applicant shall use adequate landscaping to promote air quality and effectively reduce noise and view impacts to adjacent property.

#### **Policy 1.2:**

The City shall promote the use of alternative modes of transportation where economically feasible, including bicycle paths and walking trails.

#### **Policy 1.3:**

The City shall cooperate with any local, state, or federal agency programs, which monitor or otherwise contribute to maintenance of air quality.

### **SURFACE WATER QUALITY**

#### **Objective 2:**

The Rainbow River and Withlacoochee River are irreplaceable recreational and aesthetic resources to the City. The City shall ensure that existing and future land uses do not contribute to a decrease in surface water quality, through enforcement of the following policies and through

requirements for development and density limitations according to provision of central sewer facilities and criteria for site plan review.

**Policy 2.1:**

The surface waters of the City, including lakes, rivers and wetlands, shall be designated conservation areas. The following requirements shall apply to property along rivers, navigable coves, and abutting wetlands:

- A.     ⚡All waterfront development shall use methods of stormwater treatment which filter stormwater prior to direct discharge into surface waters, consistent with SWFWMD and DEP rules for Outstanding Florida Waters.
- B.     ⚡Minimum setbacks of not less than 150 feet from the ordinary high water line of rivers, navigable coves, and abutting wetlands shall be established for all development along the river. This area shall be known as the river corridor protection area.
- C.     ⚡All development permits shall be conditioned upon an applicant obtaining all necessary state and federal permits before commencement of the development.
- D.     ⚡No dredging or filling will be allowed in wetlands, except where prohibition would deny all reasonable use of the property; in such cases, activities meeting this standard shall replace wetlands by type, form and function according to the standard imposed by the state or federal agency.
- E.     ⚡For existing and new development, clearing of shoreline and wetland vegetation within 150 feet of the ordinary high water shall be limited to that required to provide access to the shoreline; in no case shall clearing exceed 10 percent of the total shoreline of each property.
- F.     The removal of healthy, non-nuisance trees shall be in accordance with the tree ordinance.
- G.     ⚡No hazardous, toxic, chemical, petroleum, nuclear waste, or liquid sludge shall be discharged into lakes or wetlands. No bulk hazardous wastes including septic tank effluent or liquid sludge shall be stored within 1,000 feet of the rivers' edge (ordinary high water), except those that obtain appropriate permits by DEP.
- H.     ⚡The construction of new boat ramps along the rivers shall be designed to direct runoff away from the river.
- I.     ⚡Any development adjacent to surface waters shall incorporate Best Management Practices (BMP) for stormwater treatment and for any permissible application of fertilizers and pesticides.

**Policy 2.2:**

Minimum setbacks of not less than 50 feet from water bodies and wetlands outside of the river corridor protection area shall be required for all development.

~~**Policy 2.3:** Future improvements or widening of the City's roadways and drainage structures will include retrofitting for stormwater treatment. (MOVED TO PUBLIC FACILITIES ELEMENT) [This policy may be relocated to the Infrastructure Element. However, until the element is updated, the policy is retained.]~~

**Policy 2.3:**

~~**Policy 2.4:** The City shall seek funding sources for improvement of existing stormwater outfalls, such as stormwater utility districts, or alternative methods of reducing stormwater pollution, such as street cleaners. (MOVED TO PUBLIC FACILITIES ELEMENT) [This policy may be relocated to the Infrastructure Element. However, until the element is updated, the policy is retained.]~~

~~**Policy 2.5:**~~

The City shall coordinate with the Southwest Florida Water Management District Surface Water Management and Improvement Program (SWIM) program regarding continuing measures or funding sources available for preservation of the Rainbow River.

~~**Policy 2.6:** The development of any new project along the rivers shall provide a stormwater management system including retention/detention areas, swales and other devices, which filter out pollutants before the stormwater enters the river. (MOVED TO PUBLIC FACILITIES ELEMENT) [This policy may be relocated to the Infrastructure Element. However, until the element is updated, the policy is retained.]~~

**Policy 2.4:**

~~**Policy 2.7:** Water collected in agricultural drainage systems shall be routed through vegetated buffer areas, such as field borders and grassed swales, to provide treatment consistent with SWFWMD standards. (MOVED TO PUBLIC FACILITIES ELEMENT) [This policy may be relocated to the Infrastructure Element. However, until the element is updated, the policy is retained.]~~

~~**Policy 2.8:**~~

The City shall prohibit the sale and use of fast-release fertilizers within the City limits.

~~**Policy 2.9** Redevelopment plans shall include site design providing for stormwater treatment on site. (MOVED TO PUBLIC FACILITIES ELEMENT) [This policy may be relocated to the Infrastructure Element. However, until the element is updated, the policy is retained.]~~

**Policy 2.5:**

~~**Policy 2.10:** The City shall coordinate with Federal, State and local enforcement agencies to effectively enforce established regulations. [This policy may be relocated to the Infrastructure Element. However, until the element is updated, the policy is retained.]~~

**Policy 2.11:**

The City shall prohibit any commercial water withdrawal or diversion of the Rainbow River, and the Withlacoochee River.

**Objective 3:**

The City of Dunnellon is enrolled in the Federal Emergency Management Agency Flood Insurance Program, which designates areas where flooding may incur hazards to public safety and property. In order to reduce such hazards, the City shall continue to enforce its existing floodplain management ordinance, and, to ensure the optimum level of enforcement of the ordinance, maintain mandatory site plan review criteria and additional requirements for development within the floodplain.

**Policy 3.1:**

All proposed development in the flood plain shall provide compensatory storage of floodwater to ensure other areas do not become flood-prone.

**Policy 3.2:**

Development meeting the criteria in Policy 3.1 shall be permitted if the finished elevation of first floor construction is at least one (1) foot above the 100-year flood elevation.

**Policy 3.3:**

Criteria for development in the floodplain shall include the use of anchoring to prevent flotation, use of piers and breakaway walls, protection of water quality and habitat functions of the floodplain, and other criteria deemed necessary by the City to protect public health and safety. Septic tanks shall be prohibited in the 100-year floodplain.

**LAND RESOURCES**

**Objective 4:**

At this time, there are no areas within the City considered suitable for extraction of minerals. However, it is the City's objective to conserve, protect and appropriately use mineral resources within the City, through enforcement of the following policy:

**Policy 4.1:**

No mining activities will be allowed within City limits.

**Objective 5:**

The soils of Dunnellon are subject to erosion problems; areas undergoing development activity are especially prone to wind erosion. It is the City's objective to protect soils through incorporation of the following requirements and criteria for site plan review.

**Policy 5.1:**

The City shall require that “Best Management Practices” be followed during development activities:

- A.     ⚡—Use of hay bales or other effective means to prevent erosion on areas of steep slope shall be required.
- B.     ⚡—Shorelines and wetlands shall be protected with filter berms or fabric screens, as appropriate to prevent siltation into water bodies and wetlands;
- C.     ⚡—All site preparation and landscaping, as shown on the site plan if required for new development, shall be completed prior to certificate of occupancy.
- D.     ⚡—Other best management practices may be required by the City where needed to reduce or eliminate erosion.

**Policy 5.2:**

All landscaping within 150 feet of the ordinary high water line of the rivers shall be native and / or naturalized that ensures the stabilization of soils. The planting of species listed on the Florida Exotic Pest Plant Council’s *Invasive Plant List* is prohibited.

**Policy 5.3:**

Stabilization of banks shall be accomplished by planting of native and / or naturalized vegetation or use of riprap, and not by seawalls; construction of new seawalls is prohibited.

**Policy 5.4:**

Existing seawalls requiring maintenance and repair shall be faced with riprap for stabilization and prevention of undercutting and erosion.

**Policy 5.5:**

The City shall require the use of best agricultural practices on agricultural land to minimize erosion and ensure compatibility with protection of natural systems according to the requirements of the applicable permitting authority.

**Policy 5.6:**

The City shall seek the assistance from the Southwest Florida Water Management District SWIM program and Marion County to remediate erosion problems at the CR 484 bridge tubing and canoe pickup site.

## **FLORAL AND FAUNAL RESOURCES**

### **Objective 6:**

Manage, conserve, and protect all natural communities and wildlife, especially species designated of special status by the Florida Fish and Wildlife Conservation Commission, Florida Department of Agriculture and Consumer Services, and U.S. Fish and Wildlife Service, through the following requirements and site plan review process.

### **Policy 6.1:**

Require innovative techniques for new development to protect wildlife species, through site design methods which direct development away from wildlife, such as buffering, cluster housing, and other methods.

### **Policy 6.2:**

Provide incentives for the establishment of conservation easements and preservation areas for new development of private and public lands containing endangered, threatened or species of special concern on-site.

### **Policy 6.3:**

Coordinate with Federal, State and local agencies in enforcement of regulations that pertain to endangered, threatened and species of special concern.

### **Policy 6.4:**

Ensure that development design mitigates any negative impacts through management plans which include Best Management Practices. The City shall seek assistance, as appropriate, from the Florida Fish and Wildlife Conservation Commission prior to approval of new development in areas known to be inhabited by endangered or threatened species.

### **Policy 6.5:**

Enforce regulations, which restrict disturbance of wetlands by development activity; including requiring setbacks, prohibiting dredge and fill, requiring mitigation at the rate of two (2) acres of wetlands for each one (1) acre of disturbed wetlands, unless a more strict standard is imposed by a state or federal agency, and limiting vegetation clearing.

### **Policy 6.6:**

Encourage use of native and / or naturalized species for landscaping of new development, while prohibiting planting of invasive or aggressive exotic vegetation, including Brazilian pepper, melaleuca, ear tree, and Australian pine.

**Policy 6.7:**

Enforce the tree protection ordinance, for the protection of native species, and elimination of undesirable, aggressive exotics.

**Policy 6.8:**

Implement and enforce policies in the Future Land Use Element, which limit density and intensity of development of areas, designated for conservation on the Future Land Use Map.

- A. ~~6.8.1~~—Non-jurisdictional uplands, as determined by SWFWMD, FDEP, or USACOE, shall be investigated for the possibility of plant and animal species of special concern through the databases of the Florida Fish and Wildlife Conservation Commission and the Florida Natural Areas Inventory. Should either of these data banks show a probability of listed species, the property should be ground-truthed. If evidence of listed species is found, the City shall consider an amendment to the Future Land Use Map to designate the area as “conservation” land use. A wildlife management plan consistent with Policies 6.3 and 6.4 shall be implemented.

**Policy 6.9:**

Cypress trees shall be protected and subject to removal only in extenuating circumstances which are enumerated and regulated by City ordinances.

**Policy 6.10:**

The City shall coordinate with Federal, State and local programs for the protection of the most vulnerable ecological communities, including acquisition through state and federal programs.

**Policy 6.11:**

Development projects directly adjacent to the Rainbow and Withlacoochee Rivers shall be required to provide an inventory of endangered or threatened animal species and measures to mitigate adverse impacts.

**Policy 6.12:**

The City shall maintain coordination with all agencies having natural resource management plans, including the Department of Environmental Protection (which has jurisdiction over the Rainbow River Aquatic Preserve and Outstanding Florida Waters) and Florida Freshwater Fish and Game Commission (which has jurisdiction over fisheries and endangered species), and Southwest Florida Water Management District which has nominated the Rainbow River to the Surface Water Improvement and Management Program.

**Policy 6.13:**

The City shall coordinate with Marion County, Citrus County, the Department of Community Affairs, and the Withlacoochee Regional Planning Council regarding any resource management plans initiated by those agencies.

**Policy 6.14:**

The City shall adopt land development regulations to provide development standards for protection of sandhill habitat.

**GROUNDWATER AND POTABLE WATER RESOURCES**

**Objective 7:**

~~Provide for the management of hazardous waste in order to protect environmental quality, potable water supplies, and health, safety, and welfare of Dunnellon's population, through implementation of monitoring and other programs upon adoption of the plan, and through policies for siting of new land uses involving hazardous waste.~~ **(MOVED TO AQUIFER PROTECTION ELEMENT)**

~~**Policy 7.1:** The City shall cooperate with any state, federal, or local programs concerning hazardous waste.~~ **(MOVED TO AQUIFER PROTECTION ELEMENT)**

~~**Policy 7.2:** Prior to any activity that stores, uses or produces hazardous waste, the responsible party shall:~~

~~:- Develop an emergency response system addressing accidents involving hazardous waste.~~

~~:- Ensure that location of the site will not degrade quality of groundwater or surface water or other natural resources.~~

~~:- Ensure DEP standards for transfer, handling, and storage of hazardous waste are implemented by undergoing review and approval under the Marion County Storage Tank Program.~~

~~:- Coordinate with State, Regional and County officials to demonstrate that compliance with the above requirements will satisfy all regulations and policies.~~ **(MOVED TO AQUIFER PROTECTION ELEMENT)**

~~**Policy 7.3:** Promote the collection and recycling of hazardous wastes by providing public information and programs such as Amnesty Days and the locations of approved recyclers.~~ **(MOVED TO AQUIFER PROTECTION ELEMENT)**

**Objective 8:**

~~To conserve and protect potable water resources and natural aquifer recharge areas from adverse impacts.~~

~~**Policy 8.1:** The City shall continue to research the feasibility of reuse of water, including spray irrigation and graywater, for new public and private sewage treatment facilities and stormwater facilities. Where such uses are economically viable, physically feasible, and have the least environmental impact they shall be required. (MOVED TO PUBLIC FACILITIES ELEMENT) [This policy may be relocated to the Infrastructure Element. However, until the element is updated, the policy is retained.]~~

~~**Policy 8.2:** In order to protect present and future water supplies, the City shall strictly control the types of new development within a 200 foot radius to potable water wells (This does not apply to nonpotable wells or individual wells serving a single family residence). In addition, all development shall comply with the Marion County Storage Tank Program. [This policy may be relocated to the Infrastructure Element. However, until the element is updated, the policy is retained.]~~

~~**Policy 8.3:** Owners of existing underground storage tanks within 1000 foot radius of any public potable water well shall monitor groundwater quality and report quarterly to the City. Any tank found to be leaking shall be required to report within 24 hours to the Marion County Storage Tank Program. (MOVED TO AQUIFER PROTECTION ELEMENT) [This policy may be relocated to the Infrastructure Element. However, until the element is updated, the policy is retained.]~~

~~**Policy 8.4:** Participate in water conservation and protection program of the Southwest Florida Water Management District. (MOVED TO AQUIFER PROTECTION ELEMENT) [This policy may be relocated to the Infrastructure Element. However, until the element is updated, the policy is retained.]~~

~~**Policy 8.5:** Encourage the use of native vegetation in landscaping, which reduces irrigations needs. (MOVED TO AQUIFER PROTECTION ELEMENT)~~

~~**Policy 8.6:** Coordinate with the Southwest Florida Water Management District to ensure the City and its residents comply with the requirements for water conservation during times of water shortage. (MOVED TO AQUIFER PROTECTION ELEMENT) [This policy may be relocated to the Infrastructure Element. However, until the element is updated, the policy is retained.]~~

~~**Policy 8.7:** Maintain a water conservation program which includes: progressive rate structures; leak detection and remediation programs; and educational programs. (MOVED TO AQUIFER PROTECTION ELEMENT) [This policy may be relocated to the Infrastructure Element. However, until the element is updated, the policy is retained.]~~

~~**Policy 8.8:** Coordinate with the Southwest Florida Water Management District in development of organized procedures to be followed during emergency water supply interruptions. (MOVED TO AQUIFER PROTECTION ELEMENT) [This policy may be relocated to the Infrastructure Element. However, until the element is updated, the policy is retained.]~~

~~**Policy 8.9:** Implement innovative site design techniques, which protect the aquifer and maintain aquifer recharge capabilities, such as cluster development, pervious pavement, green development, water and energy efficient development, and open space requirements. (MOVED TO AQUIFER PROTECTION ELEMENT)~~

~~**Policy 8.10:** Enforce state laws requiring low volume plumbing fixtures for new construction through building permit procedures. (MOVED TO AQUIFER PROTECTION ELEMENT) [This policy may be relocated to the Infrastructure Element. However, until the element is updated, the policy is retained.]~~

~~**Policy 8.11:** The City shall verify that adequate potable water supplies are available, consistent with adopted level of service standards, prior to issuing development orders. (MOVED TO AQUIFER PROTECTION ELEMENT) [This policy may be relocated to the Infrastructure Element or Capital Improvements Element. However, until the element is updated, the policy is retained.]~~

~~**Policy 8.12:** The City shall recognize and protect sandhill habitat.~~

**Objective 9:**

Protect, maintain, and restore water quality and quantity within the springsheds of the Rainbow Springs and Kings Bay Group in order to maintain and protect environmental, economic, recreational, and natural functions of springs as fragile resources necessary for sustaining the quality of life.

**Policy 7.1:**

**Policy 9.1:** In order to minimize the contribution of nitrates to groundwater with its resultant effects on increased growth of vegetation in the spring and river and loss of water clarity, and to foster long-term stewardship of springs, the City shall adopt special design standards and best management practices (BMPs) as appropriate to City needs and characteristics for all development located within the City of Dunnellon.

A. ∴ All development shall comply with the following setback standards:

**TABLE 9.1.1 7.1.1 Setback Standards from Specific Features.**

Feature	Minimum Setback (Feet)
3 <sup>rd</sup> magnitude and smaller springs	100
Spring runs and rivers	150

1. The minimum setbacks set forth in this Policy and in Policy 2.1.B [~~Reference to Policy 2.1.B is a scrivener error and is intended to reference Policy 2.1.2.~~] for lots of record recorded on or before October 27, 2008, shall be 25 feet or other setback set forth in any deed restriction or on any plat; provided, however, that the setback shall prevent erosion, trap the sediment in runoff, and filter out nutrients.
  - a. The setback from springs and spring runs shall be measured from the ordinary high water line.
  - b. Where a lot of record is too small to accommodate development in compliance with the setbacks set forth in Table ~~9.1.1~~7.1.1, an allowable use may be established provided that it complies with the river corridor protection standards established by the city. Standards established by the City shall incorporate the following principles:
    - The building and associated paved areas are located the maximum distance possible from the features listed in Table ~~9.1.1~~7.1.1.
    - A swale and berm are located between the development and the spring, spring run, or river, and
    - The swale and berm are designed to direct drainage away from the feature.
- B. ~~÷~~The City shall consider and adopt as appropriate regulations to minimize potential adverse impacts of development on environmentally sensitive lands. Development applications that may impact karst features will be required to provide geophysical analysis with at least the following information: the characteristics of on-site soils, locations of geologic features including sinkholes, depressions, and swallets; depth of the water table; location of the Florida Aquifer relative to ground surface and thickness and extent of the bedrock or other confining layers over the aquifer.
- C. ~~÷~~Where a geophysical analysis confirms a direct connection to the aquifer, a comparative nitrate loading analysis shall be prepared by a licensed professional geologist using professionally acceptable methodology based on the designation on the Future Land Use Map at the time of proposed development, considering the maximum intensity possible under the proposed land use designation. The analysis must demonstrate that there is no significant and measurable net increase in nitrate loading to groundwater. The analysis shall also demonstrate that there will be no stormwater discharge into any sinkholes.

**Policy ~~9.27.2~~:**

Landscaping design and maintenance practices shall be implemented that reduce impacts to land in the City.

- A. ~~÷~~Removal of vegetation shall be limited to the minimum necessary to accommodate development. Buildings and other disturbed areas shall be located to avoid removal of native vegetation to the maximum extent feasible.

- B. ~~÷~~Native, Florida friendly or naturalized species shall be used in all landscape areas in order to avoid or minimize the use of irrigation and fertilizers.
- C. ~~÷~~The land area within the required setback set forth in Table ~~9.1~~ [7.1.1](#) is designated as a buffer and all native vegetation shall be retained, except for minimal removal necessary to provide for pedestrian paths or boardwalks. Paths and boardwalks shall not exceed four (4) feet in width except where required for compliance with the Americans with Disabilities Act and shall not be paved.
- D. ~~÷~~All landscaping for development in the City shall conform to the best management practices as stated in the *Guidelines for Model Ordinance Language for Protection of Water Quality and Quantity Using Florida Friendly Lawns and Landscapes*. (Florida Department of Environmental Protection and University of Florida, September 2, 2003.)
- E. ~~÷~~The City shall establish guidelines for managing existing and future lawns and landscapes at all City facilities using the educational guidelines contained in the University of Florida Extension’s Florida Yards and Neighborhoods Program, Environmental Landscape Management (ELM) principles and Best Management Practices. Such guidelines shall include practices that are designed to reduce nitrate infiltration into ground and surface water.

**Policy 9.37.3:**

The City shall initiate discussion with Marion County, SWFWMD, DEP and other appropriate entities regarding preparation of a carrying capacity study for uses of the Rainbow River. When such a study is prepared, the City will amend its Comprehensive Plan and adopt implementation mechanisms consistent with the study.

**Policy 7.4:**

[Protect groundwater recharge areas and wellhead protection areas as specified in the Aquifer Protection Element.](#)