

AQUIFER PROTECTION ELEMENT

GOAL:

Protect, maintain, and restore the Floridian Aquifer to ensure the quality and availability of potable water resources for present and future generations. (MOVED FROM PUBLIC FACILITIES ELEMENT)

Objective 1:

Land development regulations shall include siting requirements for land use which assist in the protection of groundwater aquifer recharge and protection of existing and future groundwater supplies. (MOVED FROM PUBLIC FACILITIES ELEMENT)

Policy 1.1:

Wellhead protection area (WHPA) requirements for current and future wells will continue to be enforced within Dunnellon. These requirements will be consistent with Marion County's WHPA requirements. These guidelines will serve to protect the City's existing wellfields from contamination. Wellhead protection areas will consist of two zones which shall be defined as:

- A. Primary Zone - For all wells within the City meeting the above criteria, the boundary of the primary zone shall be defined by a 500 foot radius from the wellhead. This area shall be a zone of exclusion for all uses except existing uses that functionally related to the water supply system, open space, parks, and playgrounds. No parking areas, structures, or other impervious surfaces, other than those surfaces that are accessory to existing uses, will be allowed in this zone. The above referenced allowable uses, materials, and substances shall be consistent with Chapters 62-521, 38I-30, and 62-555.312, F.A.C.
- B. Secondary Zone - The boundary of this zone shall be defined by a 1,000 foot radius from the wellhead. Existing wells, of any size or depth, must be currently permitted or properly abandoned, prior to the issuance of any development or demolition permit. Prohibited uses, materials and substances shall be consistent with Chapters 62-521, 38I-30, and 62-555.312, F.A.C. Within this zone, any use other than low density residential, existing non-residential use, or handling, production or storage of hazardous materials and substances shall be considered non-conforming. The following uses shall also be prohibited within this zone:
 - 1. Landfills or sludge disposal sites;
 - 2. Effluent spray fields;
 - 3. Discharge to ground water through manmade conduits, except for septic tanks and stormwater treatment facilities;
 - 4. Feedlots or other concentrated animal waste;

5. Stormwater facilities where recharge occurs into a potable water aquifer; and All uses specified in the Comprehensive Plan - Future Land Use Element. (MOVED FROM PUBLIC FACILITIES ELEMENT)

Policy 1.2:

The City shall review the Southwest Florida Water Management District’s regulations regarding high aquifer recharge areas on an annual basis. In case of changes to these regulations, amendments shall be made to the Land Development Code to reflect the new regulations set forth by the water management district. (MOVED FROM PUBLIC FACILITIES ELEMENT)

Objective 2:

Implement water quality protection strategies for the two springsheds that exist in Dunnellon.

Policy 2.1:

The City will prohibit the sale and use of fast release pesticides within city limits.

Policy 2.2:

The City shall provide funding for programs which assist in educating residents about proper use of fertilizers and irrigation practices

Policy 2.3:

The City will incorporate the principles of the Florida Yards and Neighborhoods Program into local landscaping ordinances.

Objective 3:

Maintain reasonable and appropriate potable water usage (125 gal/person/day) consistent with the current Conservation Element amendments of the Comprehensive Plan.

Policy 3.1:

The City will promote water conservation through the enforcement of the adopted Florida Building Code which requires such items as low-volume commodes, water flow restrictions for showers and spigots, and similar devices in all new construction and renovations, and will comply with the appropriate water management district water use restrictions. (MOVED FROM PUBLIC FACILITIES ELEMENT)

Policy 3.2:

Use of the lowest quality water available for appropriate uses, through water storage systems (i.e. rain barrels) and gray (reclaimed) water supply facilities. (MOVED FROM PUBLIC FACILITIES ELEMENT)

Policy 3.3:

The City shall require compliance with the Southwest Florida Water Management District regarding irrigation practices and other water restrictions measures. (MOVED FROM PUBLIC FACILITIES ELEMENT)

Policy 3.4:

Participate in water conservation and protection program of the Southwest Florida Water Management District. (MOVED FROM CONSERVATION ELEMENT)

Policy 3.5:

Encourage the use of native vegetation in landscaping, which reduces irrigations needs. (MOVED FROM CONSERVATION ELEMENT)

Policy 3.6:

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 FROM CONSERVATION ELEMENT)

Policy 3.7:

Maintain a water conservation program which includes: progressive rate structures; leak detection and remediation programs; and educational programs. (MOVED FROM CONSERVATION ELEMENT)

Policy 3.8:

Coordinate with the Southwest Florida Water Management District in development of organized procedures to be followed during emergency water supply interruptions. (MOVED FROM CONSERVATION ELEMENT)

Policy 3.9:

Enforce state laws requiring low volume plumbing fixtures for new construction through building permit procedures. (MOVED FROM CONSERVATION ELEMENT)

Policy 3.10:

Participate in water conservation and protection programs of the SWFWMD, and seek assistance in the development of a water shortage plan, which establishes preparations for emergency water supply interruptions. Develop mechanisms to ensure appropriate procedures are followed during district-declared and local emergency water supply interruptions, as required by Chapter 373.609, Florida Statutes by establishing chain-of-command communication between the Southwest Florida Water Management District, the city clerk, public utilities director, plant

operators, newspapers, law enforcement and local citizens. Information on water shortage and conservation programs shall be disseminated through the monthly billing statement. **(MOVED FROM INFRASTRUCTURE ELEMENT)**

Objective 4:

Limit the use of impervious surfaces to increase land availability for aquifer recharge.

Policy 4.1:

Design of parking lots, sidewalks, buildings, and other impervious surfaces shall minimize connections between impervious surfaces through the following techniques. Not all techniques may be required to accomplish the requirement to minimize connections:

- A. Directing flows from roof drains to vegetated areas or to rain barrels or cisterns for reuse of the water;
- B. Directing flows from paved areas to vegetated areas;
- C. Locating impervious surfaces so that they drain to vegetated buffers or natural areas; and
- D. Breaking up flow directions from large paved surfaces. **(MOVED FROM FUTURE LAND USE ELEMENT)**

Policy 4.2:

Porous pavement materials, such as pervious concrete, pervious asphalt, or other pervious or porous materials shall be used to minimize the amount of impervious surface within all development. **(MOVED FROM FUTURE LAND USE ELEMENT)**

Policy 4.3:

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 FROM CONSERVATION ELEMENT)**

Policy 4.4:

Require that at least 40 percent of all landscaping plans use native or drought-tolerant vegetation and other xeriscape practices in landscaping, which requires minimum watering. **(MOVED FROM INFRASTRUCTURE ELEMENT)**

Objective 5:

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 FROM CONSERVATION ELEMENT**)

Policy 5.1:

The City shall cooperate with any state, federal, or local programs concerning hazardous waste.(**MOVED FROM CONSERVATION ELEMENT**)

Policy 5.2:

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

- A. Develop an emergency response system addressing accidents involving hazardous waste.
- B. Ensure that location of the site will not degrade quality of groundwater or surface water or other natural resources.
- C. 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.
- D. Coordinate with State, Regional and County officials to demonstrate that compliance with the above requirements will satisfy all regulations and policies.(**MOVED FROM CONSERVATION ELEMENT**)

Policy 5.3:

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 FROM CONSERVATION ELEMENT**)

Policy 5.4:

- A. All new underground storage tanks within the City shall be required to provide a double lining, consistent with [DEP rules](#). All land use requests for installation of underground storage tanks shall not be issued development orders until approved by the Marion County Underground Storage Tank Program to ensure consistency with [DEP rules](#).
- B. All existing underground storage tanks within the City shall be inspected annually in accordance with the Marion County Underground Storage Tank Program. Existing hazardous substance storage tank systems shall be required to meet performance standards of [DEP Rules](#).
- C. Prior to permitting of demolition or redevelopment of land uses which contain underground storage tanks, the developer shall be required to submit closure plans consistent with [DEP Rules](#). to the Marion County Underground Storage Tank Program officials for prior approval.

- D. Should the City police, fire department, public works personnel or other staff become aware of any spills throughout the City, the Public Works Director shall report the information within 24 hours to the Marion County Underground Storage Tank Program and request assistance under the program towards enforcement of cleanup procedures.
- E. Above ground storage tanks systems shall meet the standards of DEP Rules. (MOVED FROM INFRASTRUCTURE ELEMENT)

Policy 5.5:

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 FROM CONSERVATION ELEMENT)

Policy 5.6:

The City shall verify that adequate potable water supplies are available, consistent with adopted level of service standards, prior to issuing development orders. (MOVED FROM CONSERVATION ELEMENT)

Policy 5.7:

Coordinate with SWFWMD in the protection of aquifer recharge areas after such information on prime recharge areas is made available. As soon as such information becomes available, the City shall amend the comprehensive plan to protect prime recharge areas. As an interim measure, the following impervious surface ratios shall apply to new development and redevelopment: all new subdivisions and nonresidential development shall provide a minimum of 35 percent pervious (porous) open space or green area, except within the historic district. (MOVED FROM INFRASTRUCTURE ELEMENT)