

1.5 A BRIEF ASSESSMENT OF SUCCESSES AND SHORTCOMINGS RELATED TO EACH ELEMENT [163.3191(2)(H)]

CHAPTER NINE - DRAINAGE SUB-ELEMENT

INTRODUCTION

The Drainage Sub-Element has 1 Goal:

Goal 9.1 Ensure the protection of the surface and groundwater for the residents of Volusia County.

Stormwater management has been integral part of Volusia County regulations. In 1978, Volusia County passed a stormwater management ordinance that established performance and design standards for the management of stormwater runoff. In 1986, the Volusia County Charter was amended to allow the County to enact minimum performance and design standards for the management of stormwater runoff that apply County-wide. All 16 municipalities in Volusia County are required to adopt ordinances that meet or exceed the County's minimum standards for stormwater runoff.

The Drainage Sub-Element is implemented through Volusia County's Stormwater Utility. Until the County established a Stormwater Utility in 1992, stormwater funding was limited to the following: Mosquito Control District maintaining ditches for mosquito control but serving a subordinate function of stormwater management; stormwater management was also an ancillary function of the County's road program; any other funding for stormwater management came from the County General fund. However, the Stormwater Utility gave Volusia County an established annual source of funding for stormwater management that did not exist before in Volusia County.

The permanent source of funding eliminated the jurisdictional problem of the Mosquito Control District ditches serving the stormwater needs of adjacent development. With the Stormwater Utility, Volusia County reimburses the Mosquito Control District for the stormwater maintenance function of these ditches, which were built for the purposes of mosquito control. In addition, the Stormwater Utility funds watershed studies which serves as base line data needed to determine the appropriate level of service, design capacity and service area. As a result of the Utility's funding, the County will be able to complete all the watershed studies required in the Stormwater Master Plan originally completed in 1992. Recently, the County more than doubled its stormwater utility fee to meet the Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES) rules, and the Florida Department of Environmental Protection (FDEP) rules on TDML (Total Daily Maximum Load), which regulate stormwater pollution. The new stormwater fee increased the County's budget in stormwater management from \$600,000 to \$2.1 million dollars per year.

The EAR-based amendments will result in no changes to this Goal.

OBJECTIVE ANALYSIS

Objective 9.1.1

By 1996, Volusia County shall fund and complete comprehensive watershed studies for all areas currently developed, or developing with essentially urban land uses, and areas where the Future Land Use Map has designated essentially urban land uses within the unincorporated County, as part of an overall Stormwater Master Plan. The County shall continue to assess other watersheds for flooding and pollution problems and for changes in land use in the event detailed Watershed Master Plans may be warranted in the future.

Objective Achievement Analysis

The objective will be reworded to recognize the completed urban drainage basin studies. As noted earlier, the increase in County stormwater utility fees will aid the County in completing all of its drainage basin studies. Historically, the amount of revenue raised by the utility forced Volusia County to concentrate on drainage basin studies in the unincorporated areas that had urban land uses. Stormwater fees are based on the amount of impervious surface of development. Typically commercial projects generate more revenue than residential development since the amount of impervious surface (on which the utility fee is based) from parking requirements is quite substantial. Development in the unincorporated area is primarily residential and does not generate as much stormwater revenue.

The amount of money generated by the County's Utility was not only insufficient to complete drainage basin studies, but the completion of needed stormwater quality projects along the Halifax River, Indian River and Mosquito Lagoon was not possible. However, the County is also working with adjoining municipalities on construction of regional stormwater facilities that would meet the needs of incorporated and unincorporated areas in a cost efficient manner. With the price of land needed for stormwater retention escalating, the County and the municipalities recognize that regional stormwater facilities can save money and provide better and more comprehensive stormwater management.

Policy Relevance

There are 5 Policies under this Objective that will remain as currently worded.

Objective 9.1.2

Volusia County shall at a minimum maintain current standards regulating the design, construction and management of drainage systems through stormwater management.

Objective Achievement Analysis

The Objective will remain as currently worded. Stormwater management in Volusia County has been required since 1978, when the County passed a stormwater management ordinance that established performance and design standards for the management of stormwater runoff. In 1986, the Volusia County Charter was amended to

allow the County to enact minimum performance and design standards for the management of stormwater runoff that apply County-wide. All 16 municipalities in Volusia County were required to adopt ordinances that meet or exceed the County's minimum standards for stormwater runoff.

The County's Level of Service for Drainage is the 25 year 24 hour storm event delineated in Policy 9.1.1.2, and the applicable water quality rules of the St. Johns River Water Management District. The County also establishes watershed management plans through drainage basin studies. There are 16 drainage basins identified in Stormwater Master Plan. At the time of the first EAR, Volusia County concentrated its drainage basin studies in urban basin areas. It was not that rural watershed basins were not important, but the urban basins were facing the immediate threat from stormwater pollution. Rural areas in Central Volusia County were in the Natural Resource Management Area (NRMA) and contained low intensity land uses such as Forestry Resource and Conservation. The County, through its Endangered Lands Purchase Program, purchased a significant amount of land (as well as development rights) in the center of Volusia County that helps keep these basins in a natural condition.

Policy Relevance

There are 7 Policies under this Objective that will remain as currently worded.

Objective 9.1.3

Volusia County shall develop minimum standards to regulate stormwater discharge into surface waters and primary sinkholes in karst terrain through the use of percolation ponds and other appropriate methods.

Objective Achievement Analysis

The Objective will remain as currently worded. The County minimum standards on stormwater meet what is required by this Objective.

Policy Relevance

There are 2 Policies under this Objective that will remain as currently worded.