



Stormwater Management Element Evaluation and Appraisal

Major Issues Assessment

Issue 6: Encourage Infill and Redevelopment in Central and East Gainesville.

The 1991 and 2000 Comprehensive Plans recognized that Gainesville was largely characterized by existing low density and intensity development with few large parcels of vacant land. Recent analyses indicate that East Gainesville and central portions of Gainesville have lost population over the past twenty to thirty years as population shifted westward (including to areas in western, unincorporated Alachua County).

While several redevelopment and infill policies were included in the 2000 Plan and there have been notable successes near the UF Campus in College Park and University Heights, Gainesville still has not redeveloped to its full potential, and East Gainesville lags in development and redevelopment. Several prominent redevelopment attempts (including University Corners, Gainesville Greens, and Stadium Club) have stalled or failed in the last three years due to the economy. The economic downturn has resulted in fewer redevelopment projects coming forward and an increased number of vacant buildings and closed businesses. Even in the economic boom times, there were redevelopment areas that did not see significant activity.

The most notable redevelopment incentives in the current comprehensive plan are related to the Transportation Concurrency Exception Area (TCEA), which provides redevelopment trip credits and minimizes requirements in Zone A (which includes East Gainesville and the area around the University of Florida campus). The 2000-2010 Comprehensive Plan also increased residential densities in redevelopment areas and thus encouraged the redevelopment of underutilized parcels. However, Community Redevelopment Agency (CRA) staff has pointed out that confusion about special area plans and the lack of greater incentives in the redevelopment areas may hamper redevelopment efforts. Further, CRA staff indicates that inadequate infrastructure (primarily water/wastewater lines) limits redevelopment and development potential in central and East Gainesville.

Analysis of Existing Objectives and Policies

The policy of the Stormwater Management Element that pertains to Issue 6 is Policy 1.5.2, as shown in the Major Issues Evaluation Matrix for this Element. See Table 1. The policy has been achieved and is ongoing; the recommendation is that it remain in place.

Issue 8: Strengthen Natural Resource Protection.

The Comprehensive Plan includes numerous policies with respect to the protection of natural resources, but the Uplands map in the Environmentally Significant Land & Resources map series merits review for inclusion of additional significant uplands. Assessment should be made in the EAR regarding the need for comprehensive plan amendments pertaining to the protection of other natural resources, particularly considering that additional environmental protections have been proposed for the City's land development regulations. Similarly, determination should be made in the EAR as to the need to amend the comprehensive plan to provide protection for annexed land with Alachua County Strategic Ecosystem designation.

There is considerable concern about the long-term water supply for our region. The St. Johns River Water Management District conducts water supply assessments to identify areas where projected future uses cannot be sustained by proposed water resources without unacceptable impacts to water resources and related natural systems of the region. Such areas are designated as Priority Water Resource Caution Areas (PWRCA).

Prior to the Water Management District's draft 2008 Water Supply Assessment (WSA), the City and Alachua County were not identified as a Priority Water Resource Caution Area. However, the draft WSA identifies most of the District, including the Gainesville area, as a *Potential* PWRCA. As of September 2009 the District was continuing to refine the groundwater flow simulation models used in the WSA. Once model review/refinement model is complete, the District will publish the final 2008 WSA, which will include PWRCA designations. It is not certain at this time whether or not the Gainesville area will be in a PWRCA, but the determination is expected to be made. The PWRCA designation would require amendments to Gainesville's comprehensive plan within 18 months after the District approves (expected in December 2010) the 2010 Water Supply Plan. Such amendments could include increased water conservation measures, greater expansion of reclaimed water service, and possibly development of alternative water supplies.

Whether or not the City is designated as a Priority Water Resource Caution Area, assessment should be made in the EAR as to whether current policies in the Comprehensive Plan need to be amended to meet updated statutory requirements pertaining to water supply. In addition, assessment should be made in the EAR as to whether current comprehensive plan policies need to be updated regarding water conservation, including the use of reclaimed water. Assessment should also be made in the EAR as to whether the comprehensive plan should address Low-impact development (LID), which is a set of stormwater management features and practices that mimic natural hydrologic functions on developed land and that are intended to conserve natural systems. LID addresses both water quantity and water quality.

LID is a method of land development that works with nature to manage stormwater in a way that reduces the amount of stormwater generated or the amount of nutrients that pollute the stormwater. This can reduce the impact on built areas and promote the natural movement of water within an ecosystem or watershed. The Florida Department of

Environmental Protection (DEP) and the State's five water management districts are in the process of formulating a revised statewide stormwater rule to reflect current conditions that show that current design and performance criteria do not properly address nutrient loadings from typical stormwater runoff conditions. As part of this rulemaking, a menu of LID concepts is to be developed, including establishing credits for compliance with certain LID features. The City will have to comply with these practices once they are finalized.

Analysis of Existing Objectives and Policies

The policy of the Stormwater Management Element that pertains to Issue 8 is Policy 1.7.2 as shown in the Major Issues Evaluation Matrix for this element. See Table 1. Although the policy has been achieved and is ongoing, the recommendation is that it be updated to address the acquisition of other environmentally sensitive lands. As written, the policy refers only to wetland areas. There are currently no policies in the Stormwater Management Element that address the LID concept. It is recommended that a new policy be developed to encourage the use of LID concepts and possibly adopt any LID guidelines that may be created by the DEP and the water management districts.

The other Major Issues, which follow, are not applicable to the EAR assessment of the Stormwater Management Element:

- Issue 1: Clarify Activity Center, Mixed-use, and Urban Design Requirements;
- Issue 2: Establish Policies for the Reduction of Greenhouse Gases within the City;
- Issue 3: Encourage Livable Neighborhoods for People of All Ages;
- Issue 4: Fund Transportation Choice;
- Issue 5: Amend Future Land Use Map as Justified by Data and Analysis;
- Issue 7: Navigate the New Economy; and

Unforeseen or Unanticipated Changes

The Public Works Department completed a strategic plan in 2007. One of the challenges to be met in the coming years is the evaluation of the long-term capital improvement needs associated with meeting requirements of the National Pollutant Discharge Elimination System (NPDES) stormwater permitting program and Total Maximum Daily Load (TMDL) programs and the revenue streams available to provide necessary funding. An additional 25 cents per Economic Residential Unit (ERU) per budget year has been added to help meet the funding demands of the NPDES and TMDL programs. Other sources of funding including grants and earmarks through state and federal appropriations have been obtained and continue to be pursued.

Another unforeseen issue is potential changes in Gainesville's water supply planning. In 2010 the City may be designated as a Priority Water Resource Caution Area (PWRCA), which will require Comprehensive Plan changes in the 2011-2012 time period.

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Recommended Changes

The recommended changes that are needed to address Issue 8, Strengthen Natural Resource Protection are:

- Update Policy 1.7.2 to address the acquisition of other environmentally sensitive lands.
- Add a new policy that addresses Low Impact Development.

Table 1

Major Issues Evaluation Matrix – Stormwater Management Element
Issue 6 – Encourage Infill and Redevelopment in Central and East Gainesville

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>1.5.2 Within the Enterprise Zone Area 3 (Downtown/Central City Business District) the City will allow an alternative means of stormwater treatment. If a project is to use an off site stormwater management facility, applicable provisions of the Code of Ordinances will be considered satisfied upon issuance of a Water Management District permit for the project.</p>	<p>Allowance of an alternative means of stormwater treatment within the Enterprise Zone Area 3 (Downtown/Central City Business District).</p>	<p>Yes, and ongoing. The Depot Stormwater Park continues to develop. It will serve as the master stormwater basin for the downtown area, allowing redevelopment to occur at higher densities in the area. This will encourage compact development and provide a more urban-like development and design pattern. Likewise, the SW 5th Avenue Tumblin Creek regional stormwater park basin located in the 600 block of SW 5th Avenue was completed during the planning period. The basin has provided stormwater credits to commercial and residential developments within the Tumblin Creek watershed such as The City's Parking Garage, Jefferson 2nd Avenue and The Sanctuary.</p>	<p>None.</p>

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Table 1

Major Issues Evaluation Matrix – Stormwater Management Element
Issue 8 – Strengthen Natural Resource Protection

<p>1.7.2 The City shall acquire rights to wetland areas in order to further the open space objectives of the Conservation, Open Space and Groundwater Recharge Element of this Plan, and to retain the intrinsic stormwater management functions of wetland areas. The hydrological and ecological functions of related wetland areas should be preserved, restored, enhanced or created where appropriate.</p>	<p>The acquisition of rights to wetland areas in order to further the open space objectives of the Conservation, Open Space and Groundwater Recharge Element of this Plan, and to retain the intrinsic stormwater management functions of wetland areas.</p>	<p>Yes, and ongoing. For many years, the City has acquired environmentally sensitive lands in order to reserve these areas for stormwater and recreational functions. The City has purchased property to protect the natural features, including wetlands (Cofrin Nature Park, John Mahon Nature Park and Split Rock Conservation Area). The City has used funds from the Florida Communities Trust, a division of the Florida Department of Community Affairs; Alachua County Forever, a voter-approved program to acquire, improve and manage environmentally significant lands; and funds from the voter-approved referendum Wild Spaces-Public Places, to help acquire environmentally sensitive lands.</p>	<p>Update the policy to address acquisition of other environmentally sensitive lands.</p>
<p>New Policy</p>		<p>N/A</p>	<p>Add a policy that states that the City will adopt LID practices and standards as they are finalized by the Florida DEP and the water management districts.</p>

Stormwater Management Element Evaluation and Appraisal

Element Assessment

Key findings for the Stormwater Management Element

1. The City of Gainesville has substantially met the goals, objectives, and policies of the Stormwater Management Element.
2. The Depot Park Project is an effort to clean up and restore brownfield properties in the area of Depot Avenue and South Main Street. The City of Gainesville through Gainesville Regional Utilities (GRU) will clean up the environmental contamination, which was caused by a coal gasification plant that once operated on Depot Avenue across from the historic Depot building. The City will develop the site as a stormwater treatment facility to serve the downtown area, and as a public park to provide green space and recreation activities and that will provide an economic boost to this area of the community. The park is centrally located near the historic center of the community. The restoration and redevelopment of the area will provide more opportunities for economic development in the area.
3. The Duval Neighborhood Stormwater Park is located at 505 N.E. 21st Street. This is an urban stormwater retrofit project that is designed to improve water quality in Newnans Lake. Newnans Lake is an impaired water body with an established Total Maximum Daily Load (TMDL), which is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards. The 26.4-acre stormwater park site will provide a water quality treatment credit "bank" that the City may draw upon during implementation of revitalization projects in the Duval neighborhood to improve infrastructure deficiencies. The park will also provide passive recreational opportunities through nature and fitness trails that will be placed around the wetlands and the stormwater pond. Total funding for the project is over \$1.1 million and is expected to be completed this year.
4. The City continues to work on the Sweetwater Branch/Paynes Prairie Sheetflow Restoration Project. This proposal is intended to restore Sweetwater Branch sheetflow to Paynes Prairie and eliminate discharges of excess nitrogen and other pollutants from Sweetwater Branch into Alachua Sink. This will be done primarily by an enhanced stormwater management and water quality improvement wetland, which will reduce levels of nitrogen, phosphorus, total suspended solids and other pollutants from Sweetwater Branch and produce a high-quality, low-nutrient water source for Paynes Prairie. This project has an estimated cost of over \$22 million and will involve multiple organizations in its implementation

including the City of Gainesville, Alachua County, the Florida Department of Environmental Protection, St. Johns River Water Management District, and the Florida Department of Transportation. The Sweetwater Branch Restoration – Phase 1 is underway and will involve the construction of three regional stormwater management facilities, a trash trap, grade control structures and restoration of a severe stream bank erosion site.

5. As noted earlier, the Public Works Department completed a strategic plan in 2007. One of the challenges to be met in the coming years is the evaluation of the long-term capital improvement needs associated with meeting requirements of the National Pollutant Discharge Elimination System (NPDES) stormwater permitting program and TMDL programs and the revenue streams available to provide necessary funding. An additional 25 cents per Economic Residential Unit (ERU) per budget year has been added to help meet the funding demands to meet NPDES and TMDL programs. Other sources of funding including grants and earmarks through state and federal appropriations have been obtained and continue to be pursued.
6. The level of service, as implemented, provides sufficient management of stormwater runoff at each developed site to maintain system capacity and provide water quality treatment that meets the standards of the affected water management district through 2010.

Successes

1. The City's stormwater management utility continues to be an effective funding source for stormwater management needs.
2. As indicated above, the Depot Park Project and the Duval Neighborhood Stormwater Park continue to move forward. The development of regional stormwater management facilities in activity centers and especially in the downtown, will allow for a more compact development pattern while also accomplishing remediation of existing deficiencies related to the Depot Park Project. The Alachua County Criminal Court Facility Storm Sewer Connection project will add one block of storm sewer and two junction boxes at the court facility that will direct stormwater runoff from the court to the stormwater treatment facilities in Depot Park. Project construction is pending the reconstruction of S. Main Street by the Florida Department of Transportation (FDOT).
3. The S.E. 12th Street and Culvert project will be completed this year and includes the reconstruction and widening of S.E. 12th Street between University Avenue and S.W. 2nd Avenue. Curb and gutter was added to the street, as well as a storm drain system, sidewalks, accessible ramps and

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some resurfacing of S.E. 2nd Avenue. The project also involves building a stormwater basin, replacing a culvert headwall, and stream bank restoration for the nearby Rosewood Branch.

4. The Northeast Boulevard/Duck Pond Improvements project was completed in 2004. It is located between N.E. 10th Avenue and N.E. 5th Avenue. This project rebuilt the Duck Pond into a free-flowing stream by removing the concrete banks around the stream and planting nutrient removing vegetation along the banks. A system of alternating ponds/wetlands and stream segments was created in order to improve water management. Improvements to Northeast Boulevard, including traffic control devices, were also part of the project.
5. The Hogtown Creek Sediment project, located at N.W. 34th Street and Hogtown Creek was completed during the planning period. Sedimentation control facilities were constructed to reduce the amount of sediment that collects at this location. This also helps to reduce the incidences of flooding in the area.
6. The S.W. 5th Avenue Tumblin Creek regional stormwater park basin located in the 600 block of S.W. 5th Avenue was completed during the planning period. The basin will improve the water quality of Tumblin Creek and the receiving waters at Bivens Arm by reducing sediment load and nutrient loads. The basin has provided stormwater credits to commercial and residential developments within the Tumblin Creek watershed such as University Corners, The Lofts, The City's Parking Garage, Jefferson 2nd Avenue and The Sanctuary.
7. The Kirkwood Drainage project will construct a storm drain system to prevent flooding at S.W. 25th Place in the Kirkwood neighborhood. Funding for this project is through the Hazard Mitigation Grant Program from the Federal Emergency Management Agency (FEMA). FEMA has approved funding for construction and the project is expected to be completed this year. The Clear Lake Drainage project will improve the drainage between Clear Lake and the adjacent wetland by constructing a 24-inch reinforced concrete pipe cross drain. Construction is pending funding approval by FEMA and is expected to be completed this year.

Shortcomings

1. Funding opportunities will continue to be a challenge as government budgets at all levels continue to be restricted. This may delay several projects that have been identified and planned. State and federal appropriations through grants and earmarks will continue to be pursued.

2. The Westbrook Neighborhood Drainage Improvement project is underway. This involves the construction of a stormwater system in the 200 block of N.W. 22nd Drive to reduce neighborhood flooding and direct flows to a controlled drainage outfall system for over 15 acres in an older residential neighborhood. Some homeowners in the area were reluctant to grant the required drainage easements, resulting in project design and construction delays.

Impact of Rule Changes on the Stormwater Management Element

1. There are no changes to Chapter 163, Florida Statutes, Rule 9J-5, F.A.C., the State Comprehensive Plan, or the Strategic Regional Policy Plan that require amendments of the Stormwater Management Element.

Recommended Changes

The recommended changes that are needed to update the Stormwater Management Element and that are unrelated to Major Issues are:

- Policy 1.2.2 needs a revised list of the Level 1 capital improvements for 2010 through 2020.
- The date referring to the Master Flood Control Planning Maps in Policies 1.3.1, 1.3.5, and 1.3.8 needs to be amended or deleted.
- Policy 1.3.2 needs to change the date for completion of an inventory of all city-maintained retention/detention basins.
- Policy 1.3.4 needs to eliminate the date and state that the City shall continue to study existing deficiencies identified in the needs assessment and that proposed capital improvements shall be prioritized.
- Policy 1.4.1 needs revised language to say that the regular inspection program for all system components shall continue.
- Policy 1.7.3 needs to be updated for consistency with wetland requirements of the Conservation, Open Space and Groundwater Recharge Element.
- Amend Policy 1.9.1 to add trails as an example of the type of passive recreation that the City would like to promote for joint use with retention/detention basins.
- Policy 1.11.1 needs to eliminate the first date and indicate that the City shall continue to update the Master Flood Control Planning Maps to include all areas annexed on or before December 31, 2010.
- Policy 1.11.2 needs to eliminate the first date and indicate that the City shall continue to inventory all channels and culverts in the areas annexed on or before December 31, 2010.
- Policy 1.11.3 needs to revise the date to indicate that the City shall update the Master Flood Control Planning Maps and shall inventory all channels and culverts in all areas annexed after December 31, 2010, within two years of annexation.

Table 2

Evaluation Matrix – Stormwater Management Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>Objective 1.1: The City shall implement Level of Service (LOS) standards to diminish the occurrence of new flooding and to protect or improve water quality. The LOS standards for Stormwater Management are in the Concurrency Management Element.</p>	<p>Implementation of policies 1.1.1 through 1.1.3.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.1.1 The LOS standards for off-site stormwater discharge of all stormwater management facilities shall be the 100-year, critical duration storm. The LOS for water quality treatment shall be treatment of “first one inch” of runoff, and compliance with the design and performance standards established in Chapter 40C-42.025 F.A.C. and 42.035 F.A.C. to ensure that the receiving water quality standards of Chapter 62-302-500 F.A.C. are met and to ensure their water quality is not degraded below the minimum conditions necessary to maintain their F.A.C. These standards shall apply to all new development and redevelopment and any exemptions, exceptions, or thresholds in these citations are not applicable. Infill residential development within improved residential areas or subdivisions existing prior to the adoption of this comprehensive plan, must ensure that its post-development stormwater runoff will not contribute pollutants which will cause the runoff from the entire improved area or subdivision to degrade receiving water bodies and their water quality as</p>	<p>The establishment of the 100-year, critical duration storm as the LOS standard for off-site stormwater discharge of all stormwater management facilities; the LOS for water quality treatment shall be treatment of “first one inch” of runoff, and compliance with the design and performance standards established in Chapter 40C-42.025 F.A.C. and 42.035 F.A.C. to ensure that the receiving water quality standards of Chapter 62-302.500 F.A.C. are met and to ensure their water quality is not degraded below the minimum conditions necessary to</p>	<p>Yes, and ongoing.</p>	<p>None.</p>

Table 2			
Evaluation Matrix – Stormwater Management Element			
Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
stated above.	maintain their classifications as established in Chapter 62-302 F.A.C.		
1.1.2 The City shall continue to comply with the adopted Land Development Regulations that establish and apply uniform design standards and procedures to the development of water quantity and quality control facilities.	Continued compliance with adopted Land Development Regulations that establish and apply uniform design standards and procedures to the development of water quantity and quality control facilities.	Yes, and ongoing.	None.
1.1.3 The City shall continue to comply with the adopted Land Development Regulations that provide standards for the design of facilities in volume sensitive drainage basins.	Continued compliance with adopted Land Development Regulations that provide standards for the design of facilities in volume sensitive drainage basins.	Yes, and ongoing.	None.
Objective 1.2: The City shall continue to comply with its stormwater management plan that addresses existing deficiencies and identified needs.	Implementation of policies 1.2.1 and 1.2.2.	Yes, and ongoing.	None.

Table 2

Evaluation Matrix – Stormwater Management Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>1.2.1 Master stormwater basin plans shall be prepared and finalized for each creek watershed. Such plans shall address:</p> <ul style="list-style-type: none"> a. The potential for infill development within each basin; b. The encroachment of existing developed areas in the 100-year floodplain; c. The efficacy of regional stormwater basins and potential locations; d. An assessment of stormwater management facilities with regard to excess and deficiencies in stormwater storage and rate capacity; e. An assessment of stormwater treatment facilities; f. Removal of invasive vegetation from city-owned facilities; and g. Recreating/restoring the natural drainage patterns of watercourses and wetland areas. 	<p>The creation of master stormwater basin plans for each creek watershed.</p>	<p>Partially. Stormwater Management Master Plans were drafted for all watersheds in 1993. Revisions include the Sweetwater Branch Watershed Management Plan completed in 2004 and the Tumblin Creek Watershed Management Plan completed in 2006. Further updates will occur on an as-needed basis, when a master stormwater basin is proposed for a watershed area that has not been revised.</p>	<p>None.</p>

Table 2

Evaluation Matrix – Stormwater Management Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>1.2.2 The Level 1 capital improvements for 2000 through 2010 shall be as follows:</p> <ol style="list-style-type: none"> 1. Northeast Boulevard/Duck Pond Improvements as shown in the 5-Year Schedule of Capital Improvements. Located between NE 10th Avenue and NE 5th Avenue. 2. Brownfield Project. Located south of SE Depot Avenue as shown in the 5-Year Schedule of Capital Improvements. 3. Sweetwater Branch-Paynes Prairie Outfall Facilities as shown in the 5-Year Schedule of Capital Improvements. Located on Sweetwater Branch at Paynes Prairie; and 4. Hogtown Creek Sedimentation Project as shown in the 5-Year Schedule of Capital Improvements. Located at NW 34th Street and Hogtown Creek. 	<p>Commencement of and /or the completion of each project by 2010.</p>	<p>Yes. The Hogtown Creek Sedimentation Project has been completed and the Northeast Boulevard/Duck Pond Improvements were completed in 2004. The Brownfield Project is the Depot Park Project and is now underway. The Sweetwater Branch-Paynes Prairie Outfall Facilities is the Sweetwater Branch/Paynes Prairie Sheetflow Restoration Project, and it is now underway.</p>	<p>List the Level 1 capital improvements for 2010 through 2020.</p>

Table 2 Evaluation Matrix -- Stormwater Management Element			
Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>Objective 1.3: The City shall ensure that proper and adequate stormwater management facilities are provided to meet future needs.</p>	<p>Implementation of policies 1.3.1 through 1.3.9.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.3.1 The City shall continue to conduct assessments at five-year intervals, to determine the performance of design standards and stormwater management projects with regard to maintaining and/or reducing the elevation of the 10-year flood channel and 100-year floodplain as established in the Master Flood Control Planning Maps (1990), especially where such elevations would indicate inundation of existing developed areas. If the assessment indicates that the flood potential has increased, new development shall be restricted until such time as additional standards are implemented and/or stormwater management improvements are provided to meet the impact of such development.</p>	<p>Continued assessments of design standards and stormwater management projects at five-year intervals to determine their performance in maintaining and/or reducing the elevation of the 10-year flood channel and 100-year floodplain as established in the Master Flood Control Planning Maps (1990), especially where such elevations would indicate inundation of existing developed areas.</p>	<p>Yes, and ongoing.</p>	<p>Amend or delete the date.</p>
<p>1.3.2 By 2003, the City shall complete an inventory of all city-maintained retention/detention basins.</p>	<p>Completion of an inventory of all city-maintained retention/detention basins.</p>	<p>Yes, the City has completed an inventory of all city-maintained retention/detention basins.</p>	<p>Indicate that the City will continue to compile an inventory of all city-maintained retention/detention basins.</p>
<p>1.3.3 Stormwater projects identified in the Stormwater Element shall be included in the Capital Improvements Element of this plan.</p>	<p>The Capital Improvements Element includes stormwater projects identified in the Stormwater Element.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>

Table 2
Evaluation Matrix – Stormwater Management Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>1.3.4 By October 2000, studies of existing deficiencies identified in the needs assessment shall be completed and proposed capital improvements shall be prioritized.</p>	<p>The completion of the studies and prioritization of capital improvements identified in the needs assessment.</p>	<p>Yes, and ongoing. A review of infrastructure needs is done during the bi-annual budget cycle to identify, prioritize, and place in the capital improvements budget.</p>	<p>Eliminate the date and state that the City shall continue to study existing deficiencies identified in the needs assessment and that proposed capital improvements shall be prioritized.</p>
<p>1.3.5 The City shall continue to coordinate with Alachua County and other governmental entities to maintain the existing capacity and function of shared watersheds and to design floodplain elevation standards at or below the 10-year flood channel and 100-year floodplain as established in the Master Flood Control Planning Maps (1990).</p>	<p>Continued coordination with Alachua County and other governmental entities to maintain the existing capacity and function of shared watersheds and to design floodplain elevation standards at or below the 10-year flood channel and 100-year floodplain as established in the Master Flood Control Planning Maps (1990).</p>	<p>Yes, and ongoing.</p>	<p>Amend or delete the date.</p>
<p>1.3.6 The City shall continue to comply with adopted stormwater quantity and quality design standards for the redevelopment of existing sites that have substandard or no on-site stormwater management facilities.</p>	<p>Compliance with adopted stormwater quantity and quality design standards for the redevelopment of existing sites that have substandard or no on-site stormwater management facilities.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>

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Table 2

Evaluation Matrix – Stormwater Management Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>1.3.7 The City shall continue to review information required for site plan submittal for completeness and revise these requirements to reflect current engineering practice.</p>	<p>Reviewing information required for site plan submittal for completeness and revising these requirements to reflect current engineering practice.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.3.8 The City shall continue to comply with the procedure for amending the Master Flood Control Planning Maps (1990) in order to establish 10-year flood-channel elevations and 100-year floodplain elevations as may be determined by site specific engineering studies.</p>	<p>Continued compliance with the procedure for amending the Master Flood Control Planning Maps (1990) in order to establish 10-year flood-channel elevations and 100-year floodplain elevations as may be determined by site specific engineering studies.</p>	<p>Yes, and ongoing.</p>	<p>Amend or delete the date.</p>
<p>1.3.9 The rate of stormwater runoff from any development shall be limited to the pre-development (conditions existing at the point of adoption of this Plan) rate for a site, and shall not degrade the capacity of existing stormwater facilities.</p>	<p>The limitation of stormwater runoff from any development to the pre-development (conditions existing at the point of adoption of this Plan) rate, with no degradation of the capacity of existing stormwater facilities.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>

Table 2 Evaluation Matrix -- Stormwater Management Element			
Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>Objective 1.4: The City shall continue the implementation of a maintenance program for all surface drainage systems, that are the responsibility of the City, for the continued effective operation of the stormwater management system.</p>	<p>Implementation of policies 1.4.1 through 1.4.3.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.4.1 A regular inspection program for all system components shall be initiated.</p>	<p>A program for regular inspection for all system components.</p>	<p>Yes, and ongoing.</p>	<p>Revise language to say that the regular inspection program for all system components shall continue.</p>
<p>1.4.2 The Stormwater Management Utility Program shall include a maintenance schedule for the regular repair and/or replacement of stormwater facilities for which the City has responsibility.</p>	<p>A maintenance schedule for the regular repair and/or replacement of stormwater facilities for which the City has responsibility.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.4.3 Projects to correct existing deficiencies shall be reviewed in accordance with the following priorities in the development of the Stormwater Management Utility Capital Improvement Program:</p> <ul style="list-style-type: none"> a. Projects designed to reduce or eliminate structure flooding in known problem areas; b. Projects designed to improve the quality of water flowing into receiving creeks, lakes and sinkholes; 	<p>The use of these priorities in reviewing projects to correct existing deficiencies.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>

Table 2

Evaluation Matrix – Stormwater Management Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>c. Projects designed to reduce street flooding during storm events ranging up to the 25-year storm;</p> <p>d. Projects designed to reduce or eliminate flooding potential of structures in the 100-year floodplain;</p> <p>e. Projects designed to reduce the channelization of creeks, and to restore habitat and wetlands;</p> <p>f. Projects designed to reduce maintenance costs.</p>			
<p>Objective 1.5: The City shall continue to implement an integrated stormwater management program for redevelopment.</p>	<p>Implementation of policies 1.5.1 and 1.5.2.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.5.1 The City shall implement Land Development Regulations that allow shared or joint-use stormwater facilities, including public or private master stormwater basins.</p>	<p>Land Development Regulations that allow shared or joint-use stormwater facilities, including public or private master stormwater basins.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>

Table 2

Evaluation Matrix – Stormwater Management Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>1.5.2 Within the Enterprise Zone Area 3 (Downtown/Central City Business District) the City will allow an alternative means of stormwater treatment. If a project is to use an off site stormwater management facility, applicable provisions of the Code of Ordinances will be considered satisfied upon issuance of a Water Management District permit for the project.</p>	<p>Allowance of an alternative means of stormwater treatment within the Enterprise Zone Area 3 (Downtown/Central City Business District).</p>	<p>See Table 1, Major Issue 6</p>	
<p>Objective 1.6: The City shall continue to comply with adopted Land Development Regulations that improve inspection procedures and improve coordination with other agencies to protect, and preserve or improve the quality of discharges from stormwater management facilities to natural surface waters and aquifers. Additionally, all new stormwater management facilities shall meet the applicable Water Management District's regulations.</p>	<p>Implementation of policies 1.6.1 through 1.6.5.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.6.1 Except as otherwise stipulated in the Stormwater Management Element, water quality LOS standards in all stream to sink basins, river basins and depression basins shall be consistent with the standards of the applicable Water Management District or shall receive treatment of the first "one inch" of runoff, whichever results in greater water quality improvement.</p>	<p>LOS standards in the various basins shall be consistent with the standards of the applicable Water Management District or shall receive treatment of the first "one inch" of runoff, whichever results in greater water quality improvement.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>

Table 2

Evaluation Matrix – Stormwater Management Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>1.6.2</p> <p>The City shall continue to comply with adopted Land Development Regulations that restrict activities known to adversely affect water quality within the Murphree Wellfield Protection Zones.</p>	<p>Continued compliance with adopted Land Development Regulations that restrict activities known to adversely affect water quality within the Murphree Wellfield Protection Zones.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.6.3</p> <p>The City shall continue to comply with adopted Land Development Regulations that regulate erosion and sedimentation both during and after construction.</p>	<p>Continued compliance with adopted Land Development Regulations that regulate erosion and sedimentation both during and after construction.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.6.4</p> <p>The City shall continue to comply with code enforcement procedures and penalties that help obtain compliance with the approved facility design and function.</p>	<p>Continued compliance with code enforcement procedures and penalties that help obtain compliance with the approved facility design and function.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.6.5</p> <p>Stormwater management facilities shall be inspected during construction and periodically after construction to determine that proper construction, operation and maintenance are ongoing.</p>	<p>Inspection of stormwater management facilities during construction and periodically after construction to determine that proper construction, operation and maintenance are ongoing.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>

Table 2

Evaluation Matrix – Stormwater Management Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>Objective 1.7: The City shall continue to encourage the preservation and protection of existing drainage features.</p>	<p>Implementation of policies 1.7.1 through 1.7.4.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.7.1 The City shall continue to comply with adopted Land Development Regulations that protect the intrinsic functions of wetlands and accommodate a variety of wetland conditions, such as size of wetland areas, maintenance or restoration of natural hydroperiods, and diversity of vegetation.</p>	<p>Continued compliance with adopted Land Development Regulations that protect the intrinsic functions of wetlands and accommodate a variety of wetland conditions, such as size of wetland areas, maintenance or restoration of natural hydroperiods, and diversity of vegetation.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.7.2 The City shall acquire rights to wetland areas in order to further the open space objectives of the Conservation, Open Space and Groundwater Recharge Element of this Plan, and to retain the intrinsic stormwater management functions of wetland areas. The hydrological and ecological functions of related wetland areas should be preserved, restored, enhanced or created where appropriate.</p>	<p>The acquisition of rights to wetland areas in order to further the open space objectives of the Conservation, Open Space and Groundwater Recharge Element of this Plan, and to retain the intrinsic stormwater management functions of wetland areas.</p>	<p>See Table 1, Major Issue 8</p>	

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Table 2

Evaluation Matrix – Stormwater Management Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>1.7.3 The City shall maintain the existing level of wetland acreage and function.</p>	<p>Maintenance of the existing level of wetland acreage and function.</p>	<p>N/A. This policy preceded revisions to wetlands policies in the Conservation, Open Space and Groundwater Recharge Element, and needs to be updated.</p>	<p>Policy needs to be updated for consistency with wetland requirements of the Conservation, Open Space and Groundwater Recharge Element.</p>
<p>1.7.4 There shall not be any decrease in the capacity of floodplains nor any destruction of creeks regulated by the "Regulation of Development Near Creeks" ordinance.</p>	<p>No decrease in the capacity of floodplains nor any destruction of creeks regulated by the "Regulation of Development Near Creeks" ordinance.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>Objective 1.8: Effective groundwater recharge shall continue to be required where soil conditions permit.</p>	<p>Implementation of policy 1.8.1.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.8.1 The City shall continue to comply with adopted Land Development Regulations that promote increased volumes of groundwater recharge, for all new development, where soil conditions permit.</p>	<p>Continued compliance with adopted Land Development Regulations that promote increased volumes of groundwater recharge, for all new development, where soil conditions permit.</p>	<p>Yes, and ongoing. The Land Development Regulations continue to have provisions for swale systems, which is a method for increased groundwater recharge.</p>	<p>None.</p>

Table 2

Evaluation Matrix – Stormwater Management Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>Objective 1.9: The City shall continue to implement stormwater management facility design guidelines that promote dual use and aesthetically pleasing facilities.</p> <p>1.9.1 The City shall develop guidelines that promote the following:</p> <ul style="list-style-type: none"> a. Encourage the joint use of retention and detention basins for passive recreation, habitat and open space; b. Promote the use of vegetation, such as cypress and river birch, in retention and detention basins to enhance stormwater management objectives; c. On-site retention and detention facilities shall be integrated with other elements of the proposed development through aesthetically sensitive design and the use of landscaping; d. Where possible, maintain and enhance the existing hydrological and ecological function of stream or drainage corridors or wetland areas which serve stormwater facilities; and e. Removal of invasive vegetation. 	<p>Implementation of policy 1.9.1 and 1.9.2.</p> <p>The development of guidelines that promote the listed items.</p>	<p>Yes, and ongoing.</p> <p>Yes, and ongoing. Provisions in the landscape section (Sec. 30-251) of the land development regulations require stormwater management areas to be landscaped and integrated with the entire landscape plan for the site; planted with material appropriate to the function of the basin; providing or establishing habitat for native plants, animals or insects; requires the maintenance of an existing wetland function; and the removal of invasive nonnative plant species for new development or redevelopment.</p>	<p>None.</p> <p>Amend the policy to add trails as an example of the type of passive recreation that the City would like to promote for joint use with retention and detention basins.</p>

Table 2

Evaluation Matrix – Stormwater Management Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>1.9.2 Stormwater management facilities shall be designed to minimize the need for maintenance.</p>	<p>The design of stormwater management facilities that minimize the need for maintenance.</p>	<p>Yes, maintenance issues with a specific stormwater management facility are addressed during development plan review.</p>	<p>None.</p>
<p>Objective 1.10: The City shall have funds available to pay for the Stormwater Projects listed in the 5-year Schedule of Capital Improvements identified in the Stormwater Management Element.</p>	<p>Implementation of policy 1.10.1.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.10.1 The City shall provide at least \$200,000 annually for Stormwater Projects.</p>	<p>The City providing at least \$200,000 annually for Stormwater Projects</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>Objective 1.11: The City shall continue to develop and update baseline data and shall inventory stormwater facilities for the areas annexed into the City since 1991.</p>	<p>Implementation of policies 1.11.1 through 1.11.3.</p>	<p>Yes, and ongoing.</p>	<p>Change the timeframes to reflect the upcoming planning period.</p>

Table 2

Evaluation Matrix -- Stormwater Management Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>1.11.1 By 2001, the City shall update the Master Flood Control Planning Maps to include all areas annexed on or before December 31, 2000.</p>	<p>The update of the Master Flood Control Planning Maps to include all areas annexed on or before December 31, 2000.</p>	<p>Yes, the Master Flood Control Planning Maps were used to update the FEMA & FIRM maps, which show those areas annexed into the City prior to December 31, 2000.</p>	<p>Change the date by which the maps will be updated to include all areas annexed on or before December 31, 2010.</p>
<p>1.11.2 By 2001, the City shall complete an inventory of all channels and culverts in the areas annexed on or before December 31, 2000.</p>	<p>An inventory of all channels and culverts in the areas annexed on or before December 31, 2000.</p>	<p>Yes, the City has completed an inventory of all channels and culverts in the areas annexed on or before December 31, 2000.</p>	<p>Change the date by which the inventory will be completed in the areas annexed on or before December 31, 2010.</p>
<p>1.11.3 The City shall update the Master Flood Control Planning Maps and shall inventory all channels and culverts in all areas annexed after December 31, 2000, within two years of annexation.</p>	<p>The update of the Master Flood Control Planning Maps and the inventory of all channels and culverts in all areas annexed after December 31, 2000, within two years of annexation.</p>	<p>Yes, the City has updated the Master Flood Control Planning Maps and has inventoried all channels and culverts in areas annexed after December 31, 2000, within two years of annexation.</p>	<p>Change the date to December 31, 2010.</p>

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