



Potable Water & Wastewater Element Evaluation and Appraisal

Major Issues Assessment

Issue 8: Strengthen Natural Resource Protection.

Analysis of Existing Objectives and Policies

There are currently no policies in the Potable Water/Wastewater Element that address the statutory water supply level of service (LOS) requirements. Also, there are no existing policies that require the City to adopt into its comprehensive plan alternative water supply projects within 18 months of adoption by either the Suwannee River Water Management District or St. Johns Water Management District. Amendments are needed for some existing water conservation policies.

Unforeseen or Unanticipated Changes in Circumstances

During the previous planning period it was not anticipated that the City of Gainesville would be placed in a Priority Water Resource Caution Area. It is now widely anticipated that this will occur by summer 2011. Gainesville Regional Utilities (GRU) and the City have been following the relevant water management district process meetings and are prepared to respond within the 18 month period allowed by State law. In addition, the State mandated new water supply LOS and concurrency requirements in 2005.

Recommended Changes

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

- Add a new policy to address water supply level of service. As a cross-reference, this will also require a new policy in the Capital Improvements Element concerning water supply concurrency.
- Add a new policy stating that within 18 months of adoption of water supply plans by the relevant water management districts, the City will adopt the alternative water supply project(s) into its comprehensive plan.
- Add additional water conservation policies.

Table 1
Major Issues Evaluation Matrix – Potable Water & Wastewater Element
Issue 8 – Strengthen Natural Resource Protection

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
New Policy		N/A	Add a new policy under Objective 1.1 concerning level of service requirements that adequate water supplies be available to serve new development no later than the certificate of occupancy issuance date per Ch. 163.3180(2)(a), F.S.
New Objective and Policies		N/A	Add a new objective and policies concerning any regional water supply plan(s) adopted by the Suwannee River and St. Johns Water Management Districts. Within 18 months of adoption by the water management districts, the City must adopt into its Comprehensive Plan the alternative water supply project or projects from the regional water supply plan(s).
New Policies		NA	Add additional water conservation policies under Objective 1.5

Potable Water & Wastewater Element Evaluation and Appraisal

Element Assessment

Key findings for the Potable Water & Wastewater Element

1. The City of Gainesville has substantially met the goals, objectives, and policies of the Potable Water & Wastewater Element, and it continues to do so on an ongoing basis.
2. The element must be updated to reflect Ch.163.3180 concurrency changes related to water supply level of service and concurrency.
3. Establish revised LOS standards for potable water and wastewater treatment plant capacity based on updated information.
4. Amend Policy 1.5.3 to reflect that the inverted block rate structure for potable water charges has changed to a conservation rate structure that is applicable year round.
5. Delete the term xeriscaping and change it to Florida Friendly landscape.
6. Add policies concerning required use of reclaimed water.
7. After the regulating water management districts approve a regional water supply plan, the City must update the Potable Water & Wastewater Element within 18 months to incorporate alternative water supply projects. The element will have to identify alternative water supply projects and traditional water supply projects and conservation and reuse necessary to meet the water needs identified and include a work plan, covering at least a 10-year planning period for building public, private, and regional water supply facilities, including development of alternative water supplies to serve existing and new development.
8. Additional water conservation policies are needed.

Successes

1. The treatment plant capacity increase to 14.9 mgd at the Kanapaha Water Reclamation Facility was completed during the planning period.
2. Gainesville Regional Utilities (GRU) has been able to provide potable water and wastewater services in the urban service area at adopted LOS standards during the planning period.

3. Scheduled Potable Water and Wastewater capital improvements identified over the years in the 5-Year Schedule of Capital Improvements have been fully funded and completed such that no deficiencies in LOS have occurred.
4. GRU has maintained its utility bond ratings successfully during the planning period.

Shortcomings

1. The element does not reflect the required water supply level of service standard.
2. The element does not reflect that within 18 months of adoption of regional water supply plan(s) by the Suwanee River and St. Johns Water Management Districts, the City must adopt the alternative water supply project or projects from the regional water supply plan(s).
3. Additional water conservation policies are needed.

Recommended Changes

The recommended changes that are needed to update the Potable Water & Wastewater Element and that are unrelated to Major Issues are:

1. Amend Policy 1.1.1 concerning LOS for treatment plant capacity based on updated data and analysis.
2. Delete Policy 1.2.1 because that capital improvement has been completed.
3. Add new policies, as needed, under Objective 1.2 to reflect water/wastewater capital improvements.
4. Amend Policy 1.5.3 to change the reference from “inverted block rate” to “conservation rate structure” and indicate that this now applies year round.
5. Delete Policy 1.5.4 because UF/IFAS is providing this information now.
6. Amend Policy 1.5.5 to change the term “xeriscaping” to “Florida Friendly landscaping.”
7. Amend Policy 1.5.7 to require use of reclaimed water in reclaimed water service areas.
8. Delete Policy 1.5.8 because the guide has been completed.

Table 2
Evaluation Matrix – Potable Water & Wastewater Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>Objective 1.1: Water and wastewater services shall be provided at adequate levels of service (LOS) to meet the needs of existing and future populations.</p>	<p>Implementation of policies 1.1.1 through 1.1.6.</p>	<p>Partially, and ongoing.</p>	<p>See also Table 1, Major Issue 8.</p>
<p>1.1.1 The following LOS standards shall be adopted for potable water:</p> <ul style="list-style-type: none"> a. Maximum Day (Peak) Design Flow: 200 gallons daily demand per capita; b. Storage Capacity: 1/2 of peak day volume in gallons. This requirement may be met by a combination of storage and auxiliary power; c. Pressure: The system shall be designed for a minimum pressure of 40 psig under forecasted peak hourly demands to assure 20 psig under extreme and unforeseen conditions; d. The City shall reserve potable water capacity for the annual water demand projected by the City for the University of Florida and the power plants. 	<p>Listing of potable water LOS standards.</p>	<p>Yes, but the City is missing a LOS standard for water supply. See also Table 1, Major Issue 8.</p>	<p>Amendments to water treatment plant capacity LOS based on updated data and analysis.</p>

Table 2
Evaluation Matrix – Potable Water & Wastewater Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>1.1.2 The following LOS standards shall be adopted for wastewater services: Average Day Standard: 113 gallons daily flow per capita. Peak Standard: 123 gallons daily flow per capita;</p>	<p>LOS for wastewater</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.1.3 The City shall maintain forecasts of plant flow requirements and provide for plant capacity and other facility expansions in GRU's annually-updated, five-year capital budget to meet the LOS standards.</p>	<p>Forecasts of plant flows for potable water and wastewater and funding of related capital improvements needs in the capital budget.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.1.4 The City shall perform ongoing evaluations and studies to determine the water and wastewater systems' needs to meet the requirements of existing and future customers, with the LOS standards to be employed as minimum criteria. The City shall provide financial resources in GRU's operating and annually-updated, five-year capital budgets to renew, replace, improve and maintain the systems in accordance with prudent utility practice as defined in the Utilities System Revenue Bond Resolution (adopted June 6, 1983).</p>	<p>Ongoing evaluation and studies by GRU to determine water/wastewater needs based on LOS standards.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>

Table 2
Evaluation Matrix – Potable Water & Wastewater Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>1.1.5 The City shall not commit to provide water or wastewater service if sufficient capacities or facilities to serve the proposed project cannot be made available at the time that the system impacts of the project will occur. The City shall maintain, as part of its Concurrency Management System, records of the expected amount of system demand from projects to which commitments are made and expected project lead and completion times in order to monitor capacity and facility requirements.</p>	<p>Expected demand for water/wastewater capacity and facility needs maintained in the Concurrency Management System.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.1.6 Every five years, the City shall hire independent and qualified consulting firms to evaluate the condition of the water and wastewater systems and the adequacy of the financial and facilities planning performed to maintain the system.</p>		<p>Yes, and ongoing.</p>	<p>None.</p>
<p>Objective 1.2: The City shall continue to upgrade and expand water/wastewater facilities, as shown in the policies below and in the 5-Year Schedule of Capital Improvements, to meet established LOS standards. The City shall give priority to correcting existing deficiencies in levels of service prior to expanding facilities to new, unserved areas.</p>	<p>Upgrade and expand water/wastewater facilities to meet established LOS standards as shown in the 5-Year Schedule of Capital Improvements.</p>	<p>Yes, and ongoing.</p>	<p>Add new policies under the objective, as needed, to reflect water/wastewater capital improvements projects.</p>

Table 2
Evaluation Matrix -- Potable Water & Wastewater Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>1.2.1 The Kanapaha Water Reclamation Facility capacity shall be increased to 14.9 mgd by the end of FY 2002/2003, as shown in the 5-Year Schedule of Capital Improvements.</p>	<p>Increase Kanapaha Water Reclamation Facility capacity to 14.9 mgd by end of FY 2002/2003</p>	<p>Yes.</p>	<p>Delete policy because the capacity has been increased.</p>
<p>Objective 1.3: The City shall provide potable water and wastewater services throughout the urban area in an efficient and economical manner, with the cost of service expansion being borne by those requiring such expansion. Upon Plan adoption, the City of Gainesville, as the urban area service provider of potable water and wastewater through Gainesville Regional Utilities, shall coordinate the extension and increases in capacity of potable water and wastewater facilities outside of city limits through policies established in the Alachua County Comprehensive Plan.</p>	<p>Implementation of policies 1.3.1 through 1.3.3.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.3.1 In order to discourage urban sprawl, Gainesville Regional Utilities shall extend potable water and wastewater facilities outside city limits in accordance with policies in the Alachua County Comprehensive Plan.</p>	<p>Extension of water/wastewater facilities in accordance with Alachua County Comprehensive Plan policies.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>

Table 2

Evaluation Matrix – Potable Water & Wastewater Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>1.3.2</p> <p>The City shall encourage development of property in close proximity to existing service areas through the continued use of appropriate economic incentives concerning the extension of water and wastewater services as listed below:</p> <p>a. The City shall continue its policy of having all new water and wastewater service connections pay the fully allocated cost of the treatment facilities required to serve them in the form of plant connection fees, and the cost of distribution or collection facilities, unless the service is on a developer-installed system;</p> <p>b. The City shall continue its policy of having development contribute the water and wastewater distribution and collection system internal to a development. Contributions in aid of construction are paid if the City does not project an adequate return on investment for water distribution or wastewater collection system extensions;</p> <p>c. The City shall continue its policy that all facilities constructed and contributed to the utility system must be approved, inspected and built to City standards.</p>	<p>Listing of water/wastewater extension policies to provide incentives for property development in close proximity to existing service areas.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>

Table 2
Evaluation Matrix – Potable Water & Wastewater Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>1.3.3 The City shall not reserve potable water or wastewater capacity outside of city limits without a determination that the development order is consistent with the Future Land Use Element of Atachua County.</p>	<p>Reservation of potable water capacity outside city limits must be based on a determination that the development order is consistent with Atachua County FLUE</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>Objective 1.4: The use of existing water and wastewater facilities shall be maximized by adopting the following policies:</p>	<p>Implementation of policies 1.4.1 through 1.4.6.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.4.1 All new developments at equivalent residential densities greater than 2 units per acre that require potable water, within the City of Gainesville, shall be required to connect to the centralized potable water system except as specified in Policy 1.4.5. Equivalent development densities shall be determined as estimated by Gainesville Regional Utilities.</p>	<p>New development must hook to centralized potable water system if greater than equivalent residential density of 2 units per acre except for the exception in Policy 1.4.5.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>

Table 2
Evaluation Matrix – Potable Water & Wastewater Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>1.4.2 All new developments at equivalent residential densities greater than 2 units per acre that require wastewater treatment, within the City of Gainesville, shall be required to connect to the centralized wastewater system except as specified in Policies 1.4.4 and 1.4.5. Equivalent development densities shall be determined as estimated by Gainesville Regional Utilities. Non-residential development proposed to be on septic tanks must demonstrate that it will not dispose of toxic, hazardous, or industrial waste in the septic tank.</p>	<p>Required connection to the centralized wastewater system for all new developments at equivalent residential densities greater than 2 units/acre.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.4.3 Industrial pre-treatment plants shall be allowed.</p>	<p>Industrial pre-treatment plants are allowed.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.4.4 New construction of package wastewater plants must meet the relevant standards established by the State of Florida and the Federal government and must connect to central wastewater treatment facilities within 5 years of central wastewater facilities becoming available. New package plants shall be permitted only when:</p>	<p>Conditions for when new package wastewater plants will be permitted.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>

Table 2

Evaluation Matrix – Potable Water & Wastewater Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>a. The developer of such temporary package treatment plant is required to enter into a legally binding agreement that dedicates and assigns responsibility for the proper maintenance and operation of the plant to an appropriate agency of local government; and</p> <p>b. Such agreement shall provide adequate compensation by the developer to the local government agency for the proper operation and maintenance of the plant; and</p> <p>c. The package plant is approved by the appropriate government agency assigned plant operation and maintenance as meeting standards for design, operation and maintenance.</p>			
<p>1.4.5 New development of existing lots in platted subdivisions and other existing legal lots of record shall be excluded from the requirements stated in Policies 1.4.1 and 1.4.2 unless there are existing distribution or collection facilities in the right-of-way or easements abutting the property.</p>	<p>Exception to Policy 1.4.5 for existing lots in platted subdivisions and other legal lots of record.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>

Table 2

Evaluation Matrix – Potable Water & Wastewater Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>1.4.6 The City shall continue its connection charge installment program, as outlined in the Code of Ordinances, to encourage users to abandon wells and/or package or on-site wastewater treatment systems and to connect to the centralized potable water and wastewater systems.</p>	<p>Continuation of the connection charge installment program.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>Objective 1.5: Recognizing the importance of potable water supplies, the City shall encourage water conservation through the programs and methods listed below:</p>	<p>Implementation of policies 1.5.1 through 1.5.8.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.5.1 The City shall continue to offer water conservation education and information to residential and non-residential customers through its Energy/Water Survey Program.</p>	<p>Water conservation education and information through the Energy/Water Survey Program at GRU</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.5.2 The City shall continue to minimize water losses from unaccounted sources through its ongoing water loss reduction program.</p>	<p>Continuation of ongoing GRU water loss reduction program.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.5.3 The City shall continue its policy of inverted block rate residential water charges during the peak irrigation months of April through October, as an economic means of promoting water conservation.</p>	<p>Continue policy of inverted block residential water charges during April through October.</p>	<p>Yes, partially. Inverted block rate has been changed to conservation rate structure and applies year round.</p>	<p>Amend the policy to reflect that the “inverted block rate” has been renamed “conservation rate structure” and that it is applicable year round.</p>

Table 2

Evaluation Matrix – Potable Water & Wastewater Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>1.5.4 The City shall continue its policy of providing lists of vegetation classified by water demand to public agencies, residents and developers.</p>	<p>Continued provision of vegetation lists classified by water demand.</p>	<p>No. In recent years the City has relied upon the UF/IFAS Extension Office to provide this information via pamphlets and their web site.</p>	<p>Delete policy because the UF/IFAS Extension Office is providing this information and service via pamphlets and their web site.</p>
<p>1.5.5 The City shall continue to include water conservation techniques, including xeriscaping, in the City's landscape ordinance.</p>	<p>Continue to have City's landscape ordinance include water conservation techniques.</p>	<p>Yes, and ongoing.</p>	<p>Amend the policy to change the term "xeriscaping" to "Florida Friendly landscaping" to more correctly reflect water conservation related to landscaping.</p>
<p>1.5.6 The City shall continue to offer free water conservation information as part of at least one utility billing statement per year.</p>	<p>Continue providing water conservation information free in utility billing statements at least one time per year.</p>	<p>Yes, and ongoing.</p>	<p>None.</p>
<p>1.5.7 The City shall encourage the use of reclaimed water where it is economically feasible.</p>	<p>Encourage use of reclaimed water where economically feasible.</p>	<p>Yes, and ongoing.</p>	<p>Amend policy to require use of reclaimed water in reclaimed water service areas.</p>

Table 2

Evaluation Matrix – Potable Water & Wastewater Element

Objective or Policy	Measurable Target	Objective or Policy Achieved?	Recommended Changes
<p>1.5.8 By September 2000, Gainesville Regional Utilities shall create a guide to reclaimed water use that includes information about how to plan and design for reclaimed water distribution systems.</p>	<p>Completion of guide to reclaimed water use.</p>	<p>Yes.</p>	<p>Delete. This has been accomplished.</p>

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