

VII - POTABLE WATER ELEMENT



Serving the Community

GOAL 7.1: The City shall plan for and assure an adequate supply of potable water to the citizens of Cocoa, municipalities and unincorporated areas within the franchise area granted by the State, Federal installations within the franchise area, and other customers in accordance with City of Cocoa agreements.

Objective 7.1.1: **Maintain Level of Service.** Based upon the adopted level of service (LOS) standards, the City shall adopt programs and activities as needed to correct existing deficiencies and maintain the public water system.

Policy 7.1.1.1: LOS standards are as follows:

<p>AVERAGE FLOW: 122 gallons per capita per day (gpcpd) per Equivalent Residential Connection (ERC), or 340 gallons per day per ERC</p>
<p>PEAK DAILY FLOW: 510 gallons per day per ERC</p>
<p>PEAK FLOW COEFFICIENT: 1.5</p>
<p>PRESSURE: Normal: 55-65 psi. Peak Hour: 40-50 psi. During Fire: 20 psi.</p>

Policy 7.1.1.2: The City shall update its LOS based on changes to the Regional and State Plans and the St. Johns River Water Management District (SJRWMD) Water Supply Facility Management Plan.

Policy 7.1.1.3: The City shall issue no development orders or permits without first determining whether adequate water supplies to serve the development will be available no later than the anticipated date of issuance by the City of a certificate of occupancy or its functional equivalent. The City will also ensure that adequate water supplies and facilities are available and in place prior to issuing a certificate of occupancy or its functional equivalent.

Objective 7.1.2: **Plant Capacity.** The City's Water Treatment Plant will continue to maintain sufficient design capacity to meet existing and projected flow rates based on annual summaries of capacity and demand information prepared by the City's Utilities Department.

Policy 7.1.2.1: Projected flow rates will be updated annually based on best available data.

Policy 7.1.2.2: Expansion of the design capacity of the Water Treatment Plants will be consistent with the goals, objectives and policies of the Plan and multi-jurisdictional water planning efforts in central Brevard County.

Objective 7.1.3: Service Area Development. The City will continue to provide potable water to its franchise area.

Policy 7.1.3.1: Potable water contractual agreements will include all necessary legal requirements, rates, service area specifications and relevant information pertinent to the provision of potable water service.

Policy 7.1.3.2: Development within the franchise area will be coordinated with the City specifications and requirements for provision of potable water service.

Policy 7.1.3.3: Expansion of the distribution system will continue to be funded by user fees and connection charges and supplemented with grant funds when appropriate.

Objective 7.1.4: Water Conservation. Water conservation will be ensured through standards established in the City's Consumptive Use Permit issued by the St. John's River Water Management District. All goals, objectives, and policies of the Conservation Element pertaining to use of potable water shall apply.

Policy 7.1.4.1: The City's land development regulations will include water conservation strategies. Conservation strategies may include, but are not limited to:

- A. Installation of water conserving plumbing fixtures in new or renovated building construction that is, at a minimum, consistent with the requirements of the State Water Conservation Act and the Brevard County Water Conservation Plan.
- B. Water reuse and/or reclamation, for irrigation, industrial use and other appropriate non-potable water use applications.
- C. Requesting new development to use natural vegetation and/or drought resistant plants.
- D. Continued utilization of escalating block rate water pricing for potable water use.
- E. The City shall require all new development and substantial redevelopment to connect to the reclaimed water system, if available. If not available, but availability is planned within five years, require installation of dry lines for future connection to the reclaim system.
- F. Continue requiring the installation of meters for reclaim service.
- G. Where feasible, the City shall require reuse water or some other non-potable source of water, such as stormwater, for irrigation of all public areas owned by the City.

- H. The City shall continue to implement best management practices for water conservation, including any new technology not yet developed.
- I. The City shall adopt a water conservation ordinance for the incorporated City requiring use of such water conservation methods as use of “Florida Friendly Landscape Techniques”, conduct landscape irrigation audits, conduct irrigation conservation presentations for local schools and organizations, and research and adopt low impact development techniques such as Florida’s Water Star program.
- J. The City shall evaluate offering incentives for increased water efficiency by giving a corresponding reduction in the standard water, sewer, and reuse water fees for new developments with proven water efficiency.
- K. Encourage the use of third party, sustainable building rating and certification systems, such as the United States Green Building Council’s Leadership in Energy and Environmental Design (LEED) rating system on all new developments as well as renovation projects including both private and public buildings.

Policy 7.1.4.2: The City will support water conservation through participation in existing county, state and federal programs, and by establishing its own programs, including but not limited to, developing a program to encourage retrofitting existing high volume flush toilets with low flow toilets.

Objective 7.1.5: Water Supply Facilities Work Plan (Work Plan). The City shall maintain a Water Supply Facilities Work Plan that covers a minimum ten-year planning period addressing water supply facilities necessary to serve existing and future development within the City’s water service area.

Policy 7.1.5.1: The City hereby adopts into the Comprehensive Plan by reference, its Water Supply Facilities Work Plan. To ensure ongoing consistency and compliance with the SJRWMD Water Supply Management Plan as it may be amended from time-to-time, this plan will be updated through amendments to the Comprehensive Plan.

Policy 7.1.5.2: On an annual basis, the City shall update the Capital Improvements Statement attached to the Water Supply Facilities Work Plan as an appendix to update the listing of projects needed to support the Work Plan.

Policy 7.1.5.3: Within 18 months of the SJRWMD updating its Water Supply Management Plan, the City shall adopt changes to its Water Supply Facilities Work Plan as needed to keep said plan current and

consistent with the SJRWMD's plan, including population and capacity projections.

Policy 7.1.5.4: In conjunction with the SJRWMD, the City shall develop a plan to increase its use of alternative water sources. The City shall continue to participate in the Cocoa / Rockledge Interconnect and the St Johns River / Taylor Creek Reservoir alternative water supply projects.

Policy 7.1.5.5: As required by State Statute and law, the City shall maintain an annually updated Capital Improvements Plan in conjunction with updates to the Capital Improvements Element of the City of Cocoa Comprehensive Plan.

Policy 7.1.5.6: The Water Supply Facilities Work Plan will be consistent with the potable water level of service standards established in Policy 7.1.1.1.

Policy 7.1.5.7: The Water Supply Facilities Work Plan will be updated within 18 months of any District Water Supply Plan SJRWMD updates that affects the City.

Policy 7.1.5.8: When updating the Water Supply Facilities Work Plan the City will seek alternative sources of water in order to meet projected demand increases.

Policy 7.1.5.9: The Water Supply Facilities Work Plan will be used to prioritize and coordinate the expansion and upgrade of facilities used to withdraw, transmit, treat, store and distribute potable water to meet future needs.

Policy 7.1.5.10: The City will establish and maintain at a minimum a current five year schedule of capital improvements for the improvement, extension, and / or increase in capacity of water facilities.

Policy 7.1.5.11: The City will compare the CIP with the CIE of the Comprehensive Plan annually to ensure compatibility and consistency between the two documents.

Policy 7.1.5.12: The City shall develop and maintain a water quality calibrated hydraulic model and accurate GIS maps for the potable water system.

Policy 7.1.5.13: The City shall develop and maintain a 20-year master plan for the potable water system with comprehensive updates conducted not less frequently than once every five years.

Objective 7.1.6: Alternative Water Supply. The City shall identify and use water supply sources that are consistent with the Water Supply Facilities Work Plan and the SJRWMD Water Supply Management Plan.

Policy 7.1.6.1: The City shall develop feasible alternative sources of water, while avoiding adverse impacts on the natural environment.

Policy 7.1.6.2: The City shall maximize the use of alternative water supplies and implement management techniques in order to sustain water resources, and enhance existing supplies.

Objective 7.1.7: Water Supply Sources. The City will identify and utilize sources of water that can be used to meet existing and future needs when maintaining and updating the Water Supply Facilities Work Plan.

Policy 7.1.7.1: In conjunction with the SJRWMD and other local governments the City will seek the development of efficient cost effective and technically feasible water sources that will supplement future demands without causing adverse impacts to water quality wetlands and aquatic systems. These sources may include but are not limited to brackish groundwater, surface water, and seawater.

Policy 7.1.7.2: The City will maximize the use of existing potable water facilities through the implementation of management techniques that can enhance a source of supply, sustain water resources, and related natural systems and/or optimize water supply. These techniques may include but are not limited to aquifer storage recovery; reclaimed water system interconnects, and water conservation.

Policy 7.1.7.3: The City's annual water consumption will be equal to or less than the amount allocated under the District issued consumptive use permit.

Policy 7.1.7.4: The City will participate in updates of the SJRWMD's water supply assessments and updates of the District Water Supply Plan to enable the City to effectively update design and implementation aspects of the City's water supply plan.

Objective 7.1.8: Provision of Potable Water on a Wholesale Basis. When feasible, the City will enter into agreements to provide potable water on a wholesale basis to other potable water suppliers in need of potable water outside of the City's franchise area.

Policy 7.1.8.1: Any wholesale water agreements will include all necessary legal requirements, rates, financing specifications, and relevant information pertinent to the provision of potable water on a wholesale basis.

Policy 7.1.8.2: All wholesale water agreements will be consistent with the standards and requirements established in the City's Consumptive Use Permit(s) issued by the St. Johns River Water Management District.