



CITY OF MELBOURNE

COMPREHENSIVE PLAN
CHAPTER V
INFRASTRUCTURE ELEMENT

Goals, Objectives and Policies

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CHAPTER V

**INFRASTRUCTURE ELEMENT
GOALS, OBJECTIVES AND POLICIES**

Each component of this element will be addressed by a separate component or sub-element. The sequence noted is noted in the Table of Contents

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A. Sanitary Sewer Sub-Element

~~**Goals, Objectives and Policies.**~~

GOAL 1. To develop, operate and maintain an environmentally sound, economically efficient wastewater collection, treatment and disposal system for meeting the current and future needs within the City's Urban Service Area of Melbourne Planning Area.

~~OBJECTIVES AND POLICIES:~~

Objective 1.1. To continue to maximize the use of existing facilities.

~~Policies:~~

- ~~a.~~Policy 1.1.1. Continue to operate and maintain the Grant Street, and D. B. Lee, wastewater reclamation ~~wastewater treatment~~ facilities (WRFs) at their permitted capacities, and continue to provide a level of treatment acceptable to the Florida DEP, ~~until the expansion and improvement program outlined by the master plan is completed.~~
- ~~b.~~Policy 1.1.2 Continue to maintain an adequate staff of qualified treatment plant operators, and ensure they receive at least quarterly training and instruction regarding state-of-the-art operation procedures and the latest state and federal guidelines and regulations.
- ~~e.~~Policy 1.1.3 Continue to operate and maintain existing collection lines and transmission mains at their present size and capacity in conjunction with the ongoing maintenance, upgrading and expansion program.
- ~~d.~~Policy 1.1.4 Continue to produce a treated effluent which meets all Florida DEP requirements for deep well injection, as well as for use in a non-restricted public access reuse system.
- ~~e.~~Policy 1.1.5 Continue to produce Class B, or better, bio-solids for land application to FDEP approved sites in accordance with present practices.

Objective 1.2. To correct existing facility deficiencies as needed and to prevent future facility deficiencies.

~~Policies:~~

- ~~a.~~Policy 1.2.1. Use the capital improvements program and annual work program to establish priorities for correcting any facility deficiencies.
- ~~b.~~Policy 1.2.2. Continue to maintain an adequate staff of qualified maintenance personnel to correct any immediate problems, deficiencies, or equipment failures, ensure that all equipment is properly serviced and maintained and ensure

that all maintenance personnel receive at least quarterly training and updating regarding state-of-the-art equipment and maintenance procedures.

- ~~e.~~Policy 1.2.3. If a sanitary sewer transmission line is located within 300 feet of a proposed development or redevelopment project, said project shall be required to connect to the public sanitary sewer system at the owner/developer's expense.
- ~~d.~~Policy 1.2.4. Existing development within the corporate city limits of Melbourne shall be required to connect to sanitary sewer as it becomes available and to pay a pro rata share of the cost of sanitary sewer installation through assessment. "Available" as used herein shall mean that the sanitary transmission line is located within 50 feet of an affected property.

Objective 1.3. ~~The City shall ensure that future demands can be met, while maintaining adequate capacity by designing and building the necessary wastewater facilities. To coordinate extension of, or increase the capacity of, any wastewater facilities required to meet future needs without contributing to urban sprawl, in compliance with the Future Land Use Element, the 201 Plan and Chapter 32 of the City Code.~~

Policies:

- ~~a.~~Policy 1.3.1. Ensure that the phased improvements as contained in the Wastewater ~~Facilities~~ Collection/Transmission Master Plan and any subsequent updates ~~for the D.B. Lee WWTP~~ are completed as scheduled.
- ~~b.~~Policy 1.3.2. ~~Ensure that the phased improvements as contained in the Wastewater Facilities Master Plan and subsequent updates for the Grant Street WWTP are completed as scheduled.~~
- ~~e.~~Policy 1.3.2. **Continue to produce and distribute reclaimed water as an alternative water source. The City shall ensure that current and proposed reuse practices meet or exceed the conditions of the City's Consumptive Use Permit (CUP). Specific details regarding the effluent reuse program are contained in the Water Supply Facilities Work Plan (Exhibit A).**
- ~~d.~~Policy 1.3.3. Secure appropriate treatment plant operators and maintenance personnel, as needed, to ensure continued acceptable levels of plant performance for meeting both interim and future demands.
- ~~e.~~Policy 1.3.4. Using the capital improvements program and annual work program, develop a program for upgrading and expanding collection lines and transmission mains that provide for controlled, orderly growth in the service area, without contributing to urban sprawl.

- ~~f.~~Policy 1.3.5. Continue to investigate additional means of effluent reuse/disposal in order to provide additional system flexibility and to reduce dependence on the deep injection well.
- ~~g.~~Policy 1.3.6. Use monitoring to ensure that the effluent reuse/disposal systems will have no adverse impacts on adjacent natural resources.
- ~~h.~~Policy 1.3.7. Maintain the proper operation of the wastewater biosolids handling and disposal systems at the D.B. Lee and Grant Street WRFs ~~plants~~.
- ~~i.~~Policy 1.3.8. Continue to investigate those areas where septic tanks are in use within the planning area to determine the feasibility of providing collection/transmission lines for the central sewer system and encourage connection.
- ~~j.~~Policy 1.3.9. Continue to modify the capital improvements program, as needed, to provide for new and additional equipment/facilities as demands increase; and continue to monitor implementation of the program over the planning increments.
- ~~k.~~Policy 1.3.10. Use **100** gallons per capita per day as the adopted level of service standard for all current and future demand conditions.

***Policy language in bold print has been adopted as part of the City's implementation of its Water Facilities Work Plan**

B. Solid Waste Sub-Element

~~Goals, Objectives And Policies:~~

GOAL 1. To ensure that a safe, environmentally sound, and efficient solid waste management system will be provided for the Melbourne Planning Area, utilizing resource recovery, recycling and source reduction

Objective 1.1. The city desires the collection of solid waste within the city's jurisdiction in order that the health, safety, aesthetics, and general welfare of the citizens of the City of Melbourne be protected, as prescribed in the city's Solid Waste section of the City Code.

Policies:

- ~~a.~~Policy 1.1.1. Ensure that residential refuse/solid waste is collected at least twice each week and at least three days apart; that once a week curbside recycling collection is done; that once a week yard trash collection is done; that once a week bulk item pickup is done; and that commercial and industrial refuse/solid waste is collected no less than two times each week. The city has adopted the level of service standard adopted by the county which is 7.51 pounds per capita per day.

- ~~b.~~Policy 1.1.2. Monitor the performance of any private refuse collection companies through the use of customer surveys to ensure that residents and businesses are receiving proper service, in the safest, most efficient manner possible.
- ~~e.~~Policy 1.1.3. Take an active role in addressing solid waste reclamation.
- ~~d.~~Policy 1.1.4. Encourage safe disposal of hazardous waste.
- ~~e.~~Policy 1.1.5. Promote proper disposal of bio-hazardous waste.
- ~~f.~~Policy 1.1.6. Monitor and enforce Chapter 14 of the Melbourne City Code regarding Sanitation.

Objective 1.2. To continue to ensure that adequate landfill facilities are available for disposal of solid waste collected within the Melbourne Planning Area, through cooperative and supportive actions where appropriate.

Policies:

- ~~a.~~Policy 1.2.1. Continue to use Brevard County facilities for proper disposal of refuse/solid waste.
- ~~b.~~Policy 1.2.2. Using a task force or joint workshop, encourage Brevard County to develop a new landfill site in the southern part of the county in accordance with the schedule established in its Five-Year Plan.
- ~~e.~~Policy 1.2.3. The volume of solid waste disposed of in landfills shall be reduced through resource recovery programs, where environmentally sound and economically feasible.
- ~~d.~~Policy 1.2.4. Brevard County is encouraged to continue to monitor and assess resource recovery technology and to implement those programs determined to be the most effective and efficient. In 2008, the County initiated a public/private project that converts landfill gases to electricity at the Central Disposal Facility. It is estimated that the County will convert 6.2 billion standard cubic feet of landfill gas over the next five years. This equates to providing enough power to serve over 6,000 homes annually. Resource recovery feasibility assessments shall at a minimum include consideration of recycling, waste-to-energy conversion, composting and landfill mining.
- ~~e.~~Policy 1.2.5. Consumers will be educated and encouraged to reduce solid waste generated, participate in recycling programs and to avoid products that do not lend themselves to recycling.

- ~~f.~~Policy 1.2.6. Annually, the capital improvements program of the county and the city will be reviewed to insure that any needed city capital improvements are scheduled as needed.

C. Drainage Sub-Element

Goals, Objectives And Policies.

GOAL 1. To provide a safe, environmentally sound stormwater management and drainage system within the Melbourne Planning Area.

OBJECTIVES AND POLICIES:

Objective 1.1. To continue to provide stormwater management and drainage facilities to accommodate runoff from frequently occurring and seldom occurring storm events; the city's annual work program and development regulations will be used to accomplish this objective.

Policies:

- ~~a.~~Policy 1.1.1. Maintain and enhance existing and develop new minor drainage systems for handling runoff from frequently occurring (e.g., two-, five- and ten-year) storm events consistent with the Future Land Use Element.
- ~~b.~~Policy 1.1.2. Similarly maintain existing and develop new major drainage systems and regulated floodways for handling seldom occurring (e.g., 25- and 100-year) storm events.
- ~~c.~~Policy 1.1.3. Ensure that all stormwater management and drainage facilities comply with existing city, state and federal stormwater management ordinances and regulations.
- ~~d.~~Policy 1.1.4. Establish design and operational criteria for all drainage facilities, based on the Engineering Design Standards and Procedures Manual.
- ~~e.~~Policy 1.1.5. The level of service (LOS) standards for the *Drainage* system facilities developed within the City of Melbourne's USB shall be as follows:
- Ensure that all new detention facilities are designed to handle at least the ~~40~~ 25-year/24-hour storm event as a minimum requirement in accordance with the city's Stormwater Ordinance.
 - Using the development approval process, ensure that all retention facilities are designed to handle at least the first inch of runoff from impervious surfaces and the runoff from the first inch of rainfall over natural surfaces, as a minimum.

- ~~g.~~Policy 1.1.6. Via the land development regulations, require design of drainage systems which protect the functions of natural groundwater recharge areas and natural drainage features, and which maintain or enhance groundwater quality.
- ~~h.~~Policy 1.1.7. Acquire property or easements to ensure continued proper maintenance of systemwide drainage facilities located on privately owned lands.
- Policy 1.1.8. When adopted, the City shall coordinate with the Florida Department of Environmental Protection (FDEP) to implement the Basin Management Action Plan (BMAP) for the Indian River Lagoon Basin. The BMAP is the “blueprint for restoring the impaired waters of the Indian River Lagoon by reducing pollutant loadings to meet allowable loadings established in a Total Maximum Daily Load (TMDL). The city will continue to coordinate with the Florida Department of Environmental Protection and St Johns River Water Management District to implement the (TMDL) program.

Objective 1.2. To determine the most cost-effective and cost-beneficial approach to address the stormwater management issues including those raised by the IRLCCMP, and County drainage studies, ~~and wherever~~ When possible, the City should ~~to~~ divert stormwater to the St. Johns River rather than the Indian River Lagoon, on the premise that the area west of the Atlantic ridge had historically drained to the west and should be diverted from the Lagoon ~~as the Melbourne Tillman Drainage District is presently conceptually approved to do.~~

Policies:

- ~~a.~~Policy 1.2.1. Adopt interlocal agreements or take other multi-jurisdictional initiatives to evaluate proposals addressing drainage areas that extend across jurisdictional boundaries.
- ~~b.~~Policy 1.2.2. Review and examine all options available to reduce stormwater impacts to the Indian River Lagoon working with the various agencies responsible for drainage to develop solutions.

Objective 1.3. Retrofit small projects which terminate at and drain to the Indian River Lagoon, to minimize stormwater intrusion.

Policies:

- ~~a.~~Policy 1.3.1. Execute at least one such project per year for the coming five years to secure the benefits of stormwater flow minimization and siltation reduction.
- ~~b.~~Policy 1.3.2. Redevelopment projects will be required to provide stormwater ponds for water quality treatment on a case by case basis.

D. Potable Water Sub-Element

~~Goals, Objectives And Policies.~~

GOAL 1. To develop, operate and maintain an environmentally sound, economically efficient potable water treatment and distribution system for meeting both existing and future needs of the City of Melbourne Potable Water Service Area.

~~OBJECTIVES AND POLICIES:~~

Objective 1.1. To identify the most economical water sources that can meet both current and future water quantity and quality demands. **The City will maintain its Water Supply Facilities Work Plan for at least a ten-year planning period, addressing water supply facilities necessary to serve existing and future development within the City’s potable water service area.**

~~Policies:~~

~~a.~~Policy 1.1.1. **The City hereby adopts by reference its Ten-Year Water Supply Facilities Work Plan (WSFWP) as approved by City Council on March 24, 2009. The WSFWP is hereby incorporated into the Comprehensive Plan as Exhibit A of the Infrastructure Element. In addition, the City will review and update the WSFWP Plan based upon the following conditions:**

In addition, the City will review and update the WSFWP Plan based upon the following conditions:

- (1) Within 18 months of any update to the SJRWMD’s Regional Water Supply Plan.**
- (2) Upon approval by the SJRWMD of any update to the City’s existing Consumptive Use Permit (CUP) or upon issuance of a new CUP by the SJRWMD, the City shall revise the WSFWP to include updated population and water demand projections, updated conservation and reuse requirements, updated capital project schedules, and any other applicable updates.**

~~b.~~Policy 1.1.2. **The City shall maintain a wellhead protection program that includes the establishment of primary and secondary wellhead protection areas (WPA). The primary WPA includes all land within a 250 foot radius of any existing wellhead and the secondary WPA shall extend to all properties within a 500 foot radius of any existing wellhead. Within the primary wellhead protection area no uses other than those expressly permitted by DEP and incidental to the operation of a water production facility will be allowed. In the secondary WPA, the City shall prohibit mining, the storage of hazardous materials, landfills, feedlots, petroleum distribution facilities, and wastewater treatment**

facilities. Any new residential development within the secondary WPA shall have a minimum lot size of 2.5 acres.

- ~~e.~~Policy 1.1.3. **Per the Joint Planning Agreement between Melbourne and Brevard County, the City will continue to review all development orders within the Joint Planning and Review Area, which includes the unincorporated areas adjacent to the WPAs.**
- ~~d.~~Policy 1.1.4. **The Water Supply Facilities Work Plan shall be used to prioritize and coordinate the development of future improvements to water supply facilities, and to identify alternative sources of water.**

Objective 1.2. To continue to maximize the use of existing facilities, in accordance with the Water Supply Facilities Work Plan.

Policies:

- ~~a.~~Policy 1.2.1. Continue to maintain a staff of qualified treatment plant operators, and ensure they receive at least quarterly training and instruction regarding operation procedures and the latest state and federal guidelines and regulations.
- ~~b.~~Policy 1.2.2. Develop, operate and maintain distribution lines at their proper size and capacity. Also, continue to provide sufficient water pressure to service area customers.
- ~~e.~~Policy 1.2.3. Make water distribution system improvements to the extent possible to allow governmental jurisdictions within the city's water service area to maintain current ISO (Insurance Service Organization) fire ratings.
- ~~d.~~Policy 1.2.4. **The Water Supply Facilities Work Plan will be consistent with the regulations and standards established by the SJRWMD, FDEP and other agencies with jurisdiction over water supply matters.**
- ~~e.~~Policy 1.2.5. **Conservation measures such as the utilization of reclaimed water, leak detection and repair programs, fixture exchanges, and public education shall continue to be utilized by the City.**
- ~~f.~~Policy 1.2.6. **Effluent reuse practices shall be consistent with the SJRWMD Regional Water supply Plan.**
- ~~g.~~Policy 1.2.7. **New developments shall include drought tolerant vegetation as part of their landscaping plan, as specified in Sec. 9.273 (Landscaping Plans and designs) of the City Code. Appropriate drought tolerant species are listed in Sec. 9.273.**

Objective 1.3. To identify and correct facility deficiencies on a continuing basis.

Policies:

- ~~a.~~Policy 1.3.1. **Capital projects scheduled in the first five years of the Water Supply Facilities Work Plan shall be included within the Capital Improvements Element (CIE). The CIE schedule shall be updated annually to maintain consistency with the Plan.**
- ~~b.~~Policy 1.3.2. Use the capital improvements program and annual work program as an on-going means for correcting facility deficiencies.
- ~~c.~~Policy 1.3.3. Continue to maintain a staff of qualified maintenance personnel to correct any immediate problems, deficiencies, or equipment failures, and to ensure that all equipment is properly serviced and maintained and ensure that all maintenance personnel receive periodic training and updating regarding equipment and maintenance procedures.
- ~~d.~~Policy 1.3.4. New development and redevelopment projects shall be required to provide public potable water to the site.
- ~~e.~~Policy 1.3.5. Existing development shall be required to connect to a potable water line as it becomes available and pay a pro rata share of the cost of potable water installation through assessment. “Available”, as used herein shall mean that a water main is located within 50 feet of an affected property.

Objective 1.4. To coordinate expansion of potable water facilities to meet future needs without contributing to urban sprawl.

Policies:

- ~~a.~~Policy 1.4.1. Use **the Water Supply Facilities Work Plan** to ensure that adequate storage capacity is available to meet interim and future needs consistent with the Future Land Use Element.
- ~~b.~~Policy 1.4.2. Secure appropriate treatment plant operators and maintenance personnel, as needed, to ensure continued acceptable levels of plant performance for meeting both interim and future demands.
- ~~c.~~Policy 1.4.3. Ensure that any extension of the distribution system does not contribute to urban sprawl.
- ~~d.~~Policy 1.4.4. Ensure that all future improvements comply with state and federal guidelines and regulations, and that such improvements do not substantially impact adjacent natural resources.
- ~~e.~~Policy 1.4.5. Annually modify the capital improvements program, as needed, to provide for new and additional equipment/facilities as demands increase

and as technology and energy efficiency improve; continue to monitor implementation of recommended system improvements over the planning increments.

~~f.~~Policy 1.4.6. **The City will ensure adequate water supplies are available to serve new projects prior to the issuance of a development order.**

~~g.~~Policy 1.4.7. **The City shall coordinate the Water Supply Facilities Work Plan with the adopted Future Land Use Map and the adopted socio-economic data projections within the Comprehensive Plan. The socio-economic data projections will be updated every seven years as part of the Evaluation and Appraisal Report (EAR).**

~~h.~~Policy 1.4.8. Continue to staff, fund and operate the successful water conservation program as described in the Conservation Element; update the program as necessary to ensure its continued success.

~~i.~~Policy 1.4.9. The adopted level of service standard is **100** gallons per day per person.

***Policy language in bold print has been adopted as part of the City's implementation of its Water Facilities Work Plan.**

E. Recharge Sub-Element

~~3. Goals, Objectives And Policies.~~

GOAL 1. To protect the function of natural groundwater aquifer recharge areas.

~~OBJECTIVES AND POLICIES:~~

Objective 1.1. To continue to regulate land development in aquifer recharge areas in such a manner as to protect and maintain the natural function of such areas.

Policies:

~~a.~~Policy 1.1.1. Prohibit uses that would be detrimental to the recharge area. Prohibited uses include: disposal of liquefied petroleum products or hazardous substances, underground storage of liquefied petroleum products or hazardous substances, automotive and marine repair facilities, automotive impounding yards, automotive and marine paint and body shops, solid waste disposal activities, new sanitary sewage treatment plants, including privately owned package plants and septic systems. .

~~b.~~Policy 1.1.2. Using the development review process, the City will continue to enforce existing ordinances dealing with planned unit developments, subdivisions, landscaping, trees, and soil erosion/conservation.

- ~~e~~Policy 1.1.3. Maintain current regulations and programs which provide for protection and preservation of surficial aquifer recharge areas, as further described in the Environmental Standards of Appendix D, Article IV, Section 9.60, Melbourne Code.
- ~~d~~Policy 1.1.4. Limit the amount of lot coverage in surficial aquifer recharge areas to ensure an adequate quantity of water for recharge. The maximum allowable impervious surfaces in these areas shall be sixty-five (65) percent.
- ~~e~~Policy 1.1.5. The City will continue to protect its public water supply by implementing the wellhead protection policies identified in the Conservation Element.