

# INFRASTRUCTURE ELEMENT

## Element Overview

The City of Boca Raton operates and maintains systems for potable water service, wastewater service, and solid waste collection, and has adopted regulations for stormwater treatment and abeyance, and for the protection and conservation of groundwater supplies. This Element divides each of these five topic areas into a separate Sub-Element. Taken in turn, these Goals, Objectives and Policies define the City's commitment to the supply and distribution of public facilities.

### *Potable Water*

The City of Boca Raton owns and operates facilities to withdraw, treat, store and distribute potable water. The service area consists of 35 square miles and includes residential, commercial, hotel/motel and institutional uses, as well as some contiguous areas within unincorporated Palm Beach County. The Department distributes an average of 42 mgd treated water and provides a 334 gallons per capita per day finished water demand Level Of Service (LOS). The Department has a design storage capacity of 25.5 mg and provides a 215 gallons per capita per day storage LOS. The Department provides a water pressure LOS of 60 pounds per square inch (psi) in normal conditions and a minimum water pressure LOS of 20 psi under mechanical or drought conditions.

The City's larger potable water users include: Boca Raton Community Hospital, Boca Raton Resort and Club, Florida Atlantic University, Boca Technology Center and Town Center Mall. The City is permitted by the South Florida Water Management District (SFWMD) Water Use Permit (WUP) #50-00367-W to withdraw a maximum of 1760.02 million gallons a month (mgm), and 18,811 million gallons annually through July 10, 2028.

### *Wastewater*

The City of Boca Raton owns and operates a wastewater collection and treatment system. Regulatory control of wastewater effluents exists at the Federal, State, and local levels. Although most wastewater generation in the City is from residential uses, there are some non-residential generators. Those industrial, commercial, educational, and medical facilities which do contribute wastewaters are a relatively small portion of the total system load. The current level of service for wastewater is 128.5 gallons per capita per day, and the current wastewater treatment plant is not expected to need upgrades or to be replaced during the current planning period, although components of the facility (pumps, treatment equipment, etc.) may be replaced.

There are currently four unsewered areas within the City's sewer service area, which includes portions of unincorporated Palm Beach County. In the undeveloped areas, new wastewater collection lines are funded by developers and are sized to meet the anticipated needs of a project. The City's ongoing special assessment program is designed to include the unsewered areas on to the wastewater collection system by 2012. Additionally, existing regulations have been established so that no effluent wastes are discharged to any waters, including the Atlantic Ocean, without first being given the degree of treatment necessary to protect the beneficial uses of those waters.

### *Stormwater*

All the backbone stormwater facilities within the City of Boca Raton are in the public domain. The Lake Worth Drainage District (LWDD) operates and maintains the E-3 and E-4 Canals that were major north/south equalizing canals within the City limits. The SFWMD maintains and operates the Hillsboro Canal and the C-15 Canal. In addition the SFWMD reviews and permits all works within the City limits with a minimum of 10 acres of land area, or projects for which the impervious surface equals or exceeds two acres under the provisions of Chapter 40E of the Florida Administrative Code. The Army Corps of Engineers has permitting jurisdiction over the Intracoastal Waterway with their main concern being maintenance of navigation. The Department of Environmental Protection (FDEP) also reviews permit applications to ensure water quality requirements are maintained. The FDEP has jurisdiction over all waters of the state as defined by the F.A.C. and delegates its authority to the SFWMD. For the most part, the City does not provide a stormwater system for development. The stormwater systems owned and operated by the City primarily serve local streets and rights-of-way. The City does insure development and redevelopment meet runoff water quality and quantity standards established by the applicable agency(s) having jurisdiction through the development and inspection process.

### *Groundwater Aquifer Recharge*

The sole source of the raw water is the Biscayne Aquifer. This aquifer consists of highly permeable limestone and less permeable sand and sandstone. In most places the aquifer water levels rise rapidly in response to rainfall. Water in the Biscayne Aquifer is unconfined and generally flows towards the Atlantic Ocean and the extensive system of canals in south Florida. Natural groundwater aquifer recharge is by local rainfall and surface water bodies (canals and lakes) whose water levels are higher than the local water table. During extended dry weather patterns, the City's wellfields are recharged by seepage from freshwater canals that extend north and south (E-2E, E-3 and E-4) and east and west (L-40 through L-50).

The aquifer is supplemented by water diversions controlled by the South Florida Water Management District (SFWMD), including Lake Okeechobee, Water Conservation Area No. 1, and the Hillsboro Canal. The levels of these canals are controlled by the South Florida Water Management District (SFWMD) and the Lake Worth Drainage District (LWDD). The City of Boca Raton owns and operates a series of wellfields from which groundwater is withdrawn from a Surficial Aquifer System (SAS). The wells are 90 to 140 feet deep. The Biscayne Aquifer is the most productive part of the SAS in Palm Beach County and is the primary source of drinking water for all of Dade and Broward counties and the southern portion of Palm Beach County.

### *Solid Waste*

The goal of the City of Boca Raton with regard to solid waste management is to maintain a level-of-service standard of collection of 7.13 pounds per capita per day, which is consistent with the needs of the City's expanding citizen population. In doing so, the City strives to continue to create measures which will reduce the amount of solid waste generated within the planning area of the City as mandated by the state legislation in the most cost effective means available. Additionally, the City coordinates with the Palm Beach County Solid Waste Authority (SWA) regarding the collection of recyclable materials, in order to reduce the waste stream headed toward Palm Beach County landfills. The City also coordinates with the SWA, as well as the FDEP and US Environmental Protection Agency, for the identification and management of hazardous wastes.

## Potable Water Sub-Element Goals, Objectives, and Policies

### GOAL INF.1.0.0

Provide water services to meet the demands of the existing and projected population of the service area, concurrent with the impacts of projected development, as identified in this plan.

(9J-5.011, (2)a; SCP 18(a))

### OBJECTIVE INF.1.1.0

The City will install or construct potable water facilities to meet projected demands and maintain potable water service infrastructure to meet the quality and quantity demands concurrent with the impacts of development.

(9J-5.011(2)(b)2)

#### POLICY INF.1.1.1

Potable water facilities will be provided concurrent with the impacts of development per the concurrency management plan identified in the Capital Improvements Element of this plan.

#### POLICY INF.1.1.2

New development or redevelopment, including residential development at densities of two units per acre or greater, shall only occur within areas where potable water services exist or will exist concurrent with development.

(9J-5.011(2)(c)4; 9J-5.011(2)(b)3; SRPP, Natural Resources of Regional Significance, 6.2.2.4; SCP 8(b)5)

#### POLICY INF.1.1.3

The City will maintain a five-year schedule of capital improvement needs for potable water facilities to be updated annually in conformance with the review process for the Capital Improvement Element of this plan.

(9J-5.011(2)(c)1)

#### POLICY INF.1.1.4

The City will continue to require on-site improvements to be installed or constructed at the land owner's expense.

(9J-5.011(2)(c)4; 9J-5.011(2)(b)2)

#### POLICY INF.1.1.5

The City will continue to collect applicable impact fees from land owners and developers for potable water services as set forth in the City's Code of Ordinances.

(9J-5.016(3)(b)4; 9J-5.016(3)(c)8)

**OBJECTIVE INF.1.2.0**

The City will continue to provide the following adopted levels of service (LOS) for potable water supply and facilities.

(9J-5.011(2)(b)1), 9J-5.011(2)(c)(2)d; SRPP, Future of the Region, 8.1.1 ; SCP8(a)

**POLICY INF.1.2.1**

The City shall maintain the following adopted potable water level of service standards:

- a. POTABLE WATER LOS STANDARD: 343 finished water gallons per capita per day (gpcpd).
- b. FACILITIES DESIGN LOS STANDARD:
  - Water Storage Facilities Design - 215 gpc
  - Water Pressure - 60 pounds per square inch (psi) leaving the plant under normal conditions and a minimum of 20 psi in the distribution system under drought conditions.

**POLICY INF.1.2.2**

The City shall plan for capital improvements for water facilities to first correct existing facility deficiencies; secondly, to provide for future facility needs; and thirdly, to replace existing facilities.

(9J-5.011(2)(c)1)

**POLICY INF.1.2.3**

The City shall not extend potable water service to developments which would exceed either the adopted LOS or capacity standards of the City's potable water supply and facilities, unless adequate funding is provided for mitigation.

**POLICY INF.1.2.4**

The City shall continue to meet all limiting conditions of the SFWMD water use permit #50-00367-W, including those relating directly to water quantity and quality.

(9J-5.011(2)(c)3; SRPP, Natural Resources of Regional Significance, 6.2.2.4)

**POLICY INF.1.2.5**

The City shall develop strategies, as needed, to maintain adequate water flows and supply in case of plant or water main failure and to ensure required fire flows are provided.

**OBJECTIVE INF.1.3.0**

The City shall establish and maintain programs in coordination with appropriate local, regional, and State entities to ensure the protection, conservation, and sustainability of potable water resources.

(9J-5.011(2)(b)4, 9J-5.011(2)(c)3; SRPP Natural Resources of Regional Significance, 6.2.1.4; SCP 8(b)11)

**POLICY INF.1.3.1**

The City will continue to identify alternative water supply sources which includes the maintenance and capacity expansions to the "In-City Reclamation Irrigation System" (IRIS), as needed, to offset current and future demand for traditional potable water resources.

(9J-5.011(2)(c)3; SRPP, Natural Resources of Regional Significance, 6.2.1.4 ; SCP 8(b)11, 12, 13)

**POLICY INF.1.3.2**

The City shall incorporate those alternative water supply projects identified in the South Florida Water Management District's (SFWMD) *2005-2006 Lower East Coast Water Supply Plan* (LECWSP), adopted on February 15, 2007, and which occur within the City, into the annually adopted and financially feasible Five-Year Schedule of Capital Improvements in the Capital Improvements Element. Alternatively, the City may propose other alternative water supply projects not contained within the *LECWSP* update (pursuant to Section 373.0361(7)(b), F.S.) for implementation.

**POLICY INF.1.3.3**

The City shall review and update its adopted *10-Year Water Supply Facilities Work Plan* at a minimum of every five years, and within 18 months after the SFWMD governing board approves an update to the Lower East Coast Water Supply Plan.

**POLICY INF.1.3.4**

The City will continue to enforce its tiered water rate structure, which encourages water conservation with lower unit costs for lower rates of consumption, in order to achieve the adopted LOS standards.

(9J-5.011(2)(c)3; SCP 8(b)11; SRPP, Natural Resources of Regional Significance, 6.2.1.4)

**POLICY INF.1.3.5**

The City will implement the provisions of the Water Shortage Emergency Plan when requested to do so by the SFWMD.

(9J-5.011(2)(c)3; SRPP, Natural Resources of Regional Significance, 6.2.2.3)

**POLICY INF.1.3.6**

The City will continue its water conservation education program in order to maintain the adopted LOS standards.

(9J-5.011(2)(c)3; SCP 8(b)11; SRPP, Natural Resources of Regional Significance, 6.2.1.4)

**POLICY INF.1.3.7**

The City shall review and revise its Land Development Code to incorporate water conservation techniques. These shall include, but not be limited to, the requirement of low-flow plumbing fixtures as part of new development or redevelopment activities and the use of Florida Friendly Landscaping techniques which include native plants and/or drought-tolerant landscaping.

**POLICY INF.1.3.8**

The City will provide water conservation tips to customers utilizing multiple public outreach methods and upon request.

## **Wastewater Sub-Element Goals, Objectives, and Policies**

### **GOAL INF.2.0.0**

Provide wastewater services to meet the demands of the existing and projected population of the service area, concurrent with the impacts of projected development, as identified in this plan.

(9J-5.011(2)a)

### **OBJECTIVE INF.2.1.0**

The City will install or construct potable water facilities to meet projected demands and maintain wastewater service and infrastructure to meet the demands infrastructure concurrent with the impacts of development.

(9J-5.011(2)(b)2; SCP 8(b)12)

#### **POLICY INF.2.1.1**

The City will maintain a five-year schedule of capital improvement needs for sanitary sewer facilities to be updated annually in conformance with the review process for the Capital Improvement Element of this plan.

(9J-5.011(2)(c)1)

#### **POLICY INF.2.1.2**

Sanitary sewer facilities will be provided concurrent with the impacts of development per the concurrency management plan identified in the Capital Improvements Element of this plan.

(9J-5.011(2)(b)2; SRPP, Future of the Region, 8.1.1.1)

#### **POLICY INF.2.1.3**

The City will continue to enforce the Land Development Code requirement that all on-site wastewater system improvements be installed or constructed at the land owner's expense, as indicated in the City of Boca Raton Code of Ordinances.

(9J-5.011(2)(c)4)

#### **POLICY INF.2.1.4**

The City will continue to collect applicable impact fees from land owners and developers for wastewater services as set forth in the City's Code of Ordinances.

(9J-5.016(3)(b)4; 9J-5.016(3)(c)8; SRPP, Future of the Region, 15.1.3.9)

#### **POLICY INF.2.1.5**

New development or redevelopment, including residential development at densities of two units per acre or greater, shall only occur within areas where central wastewater services exist or will exist concurrent with development. Septic tanks may be installed to serve new structures in previously developed, unsewered areas only if a gravity sewer connection is not available within 200 feet, and all other applicable requirements are met.

(9J-5.011(2)(c)4; 9J-5.011(2)(b)3; SRPP, Natural Resources of Regional Significance, 6.3.3; SCP 8(b)12)

**OBJECTIVE INF.2.2.0**

The City will continue to provide the adopted level of service standard and will correct existing wastewater facilities deficiencies through programmed improvements in the Five-Year Schedule of Capital Improvements.

(9J-5.011(2)(b)1, 9J-5.011(2)(c)(2)a; SRPP, Future of the Region, 8.1.1; SCP8(b), 12)

**POLICY INF.2.2.1**

The City shall maintain the following adopted wastewater level of service standards:

- a. Wastewater Treatment - 128.5 gpcpd and
- b. Effluent Disposal - 26 mgd

**POLICY INF.2.2.2**

The City shall plan for capital improvements for wastewater facilities to first correct existing facility deficiencies; secondly, to provide for future facility needs; and third, to replace existing facilities as identified in the Five-Year Schedule of Capital Improvements.

(9J-5.011(2)(c)1)

**POLICY INF.2.2.3**

The City will continue its Special Assessment Program for installation of wastewater facilities in currently unsewered areas.

(SCP 8(b)12)

**POLICY INF.2.2.4**

The City shall continue to apply at least a secondary level of treatment to wastewater effluent prior to discharge through the ocean outfall by operating the activated sludge treatment plant with chlorination.

(9J-5.011(2)(c)1); SCP 8(b)12)

**POLICY INF.2.2.5**

The City will construct and install an outfall dechlorination system, if required by Florida's Department of Environmental Protection, or the U.S. Environmental Protection Agency.

(9J-5.011(2)(c)1)

**OBJECTIVE INF.2.3.0**

The City shall maintain and expand, as necessary, the "In-City Reclamation Irrigation System" (IRIS) in order to reduce wastewater effluent discharges, reduce potable water consumption for non-potable uses, and recharge wetlands and groundwater supplies.

**POLICY INF.2.3.1**

The City shall maintain regulations in the Land Development Code for mandatory connection to the IRIS for all new development and redevelopment within 90 days of IRIS service availability.

**POLICY INF.2.3.2**

By 2018, the City will reuse 100 percent of the available effluent (annual average daily basis) by providing reclaimed water to the IRIS service area.

(9J-5.011(2)(c)1, 3; SCP 8(b)13)

**Stormwater Management Sub-Element Goals, Objectives, and Policies****GOAL INF.3.0.0**

Provide an economically feasible stormwater system and provide flood protection to minimize damage from severe storm events, while maintaining an acceptable quality of stormwater runoff.

**OBJECTIVE INF.3.1.0**

The City of Boca Raton shall adopt stormwater quantity levels of service for specific land use facilities. The level of protection provided will be consistent with the potential threat to the health, safety and welfare of residents. These established levels of service will provide a runoff rate that can safely be conveyed by the receiving waters.

(9J-5.011(2)(b)2; SRPP 8.1.1)

**POLICY INF.3.1.1**

The City shall maintain an adopted stormwater quantity level of service (LOS) for the lowest floor elevation for residential and non-residential uses of zero discharge for a 100-year, 3-day storm event, or Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) requirements for 100-year flood elevations, whichever is more restrictive.

**POLICY INF.3.1.2**

The City shall maintain an adopted LOS for local streets of a 3 -year, 24-hour storm event.

**POLICY INF.3.1.3**

The City shall maintain an adopted LOS for on-site parking facilities of a 3-year, 24-hour storm event.

**POLICY INF.3.1.4**

New development or redevelopment projects shall retain onsite the equivalent of a minimum 3-year, 1 hour storm prior to any discharge. Beyond that quantity, post development discharge shall not exceed pre-development discharge based on a 25-year,

3-day storm event, or the required retention/detention and discharge volumes as specified by the South Florida Water Management District and the agency having jurisdiction over the receiving waters at the point of discharge, whichever is more restrictive.

(9J-5.011(2)(c)2,c; SRPP 8.1.1.3; SCP(b)12)

**OBJECTIVE INF.3.2.0**

Ensure that stormwater runoff shall be sufficiently entrained through natural drainage features, impoundments, lakes, swales and other methods to reduce to a minimum the amount of non-point source pollutants, and to retain volumes sufficient to meet adopted stormwater quality standards.

(9J-5.011(2)(b)5; SRPP 8.1.1.1; SCP 8(b) 12)

**POLICY INF.3.2.1**

The City shall maintain an adopted stormwater Level of Service (LOS) for new development and redevelopment that shall, at a minimum, be the first one-inch of runoff from the site or the total of 2.5 inches times the percent of impervious area to meet minimum water quality criteria, or shall meet the minimum requirements of the South Florida Water Management District criteria.

**POLICY INF.3.2.2**

The City shall, through the site plan review process, including building permit and Public Works Review, ensure that private development does not degrade the function of natural stormwater features.

(9J-5.011(2)(b)5; SRPP 8.1.1.3; SCP 8(b)4)

**POLICY INF.3.2.3**

The City shall not permit changes in land use designations harmful to natural stormwater function unless capital or other improvements to restore that function are budgeted for in the current fiscal year.

(9J-5.011(2)(c)4; SCP 8(b)4)

**POLICY INF.3.2.4**

The City shall not permit the drainage of areas identified as wetlands on the Wetlands Map as part of the adopted map series of this Plan, unless the Florida Department of Environmental Protection determines jurisdiction and issues all necessary permits.

(9J-5.011(2)(b)5, (2)(c)4; SRPP 8.3.1.1; SCP 8(b)2, 4)

**POLICY INF.3.2.5**

The City shall employ Best Management Practices (BMPs) for control of erosion and sedimentation for all construction activities in order to protect natural waterbodies, watercourses, and wetlands from off-site pollutants.

**POLICY INF.3.2.6**

The City shall incorporate and adopt new rules and regulations of those Federal, State and local government entities whose jurisdiction incorporates the stormwater facilities within the city limits including, but not limited to, South Florida Water Management District,

the State of Florida, Department of Environmental Protection, and the conditions of the City's National Pollutant Discharge Elimination System permit.

(9J-5.011(2)(c)4; SCP 8(b)10)

**POLICY INF.3.2.7**

All new development and redevelopment projects shall meet or exceed the following minimum State water quality standards; Chapter 62-40 F.A.C., Chapter 62-302 F.A.C., and Chapter 40C-42 F.A.C. All new development or redevelopment projects shall also meet or exceed minimum environmental protection standards of Palm Beach County and this Comprehensive Plan. Stormwater discharges from all new development and redevelopment projects shall also meet or exceed State water quality standards for Class III Waters as stated in Chapter 62-302 F.A.C. The City shall not be required to conduct water quality sampling or testing of stormwater discharge to receiving waterbodies in order to implement the above standards.

**OBJECTIVE INF.3.3.0**

The City will maintain stormwater facilities, reduce deficiencies, and add new drainage facilities necessary to meet current and future demand.

(9J-5.011(2)(b)1, 2)

**POLICY INF.3.3.1**

New stormwater features shall be designed to maximize retention capability, subject to flood control constraints.

(9J-5.011(2)(b)5; SCP 8(b)10)

**POLICY INF.3.3.2**

Existing or new stormwater facilities shall be maintained by the property owner or property owner associations. The City will require lake maintenance agreements for the construction of surface water management facilities to allow the City to perform all maintenance functions should the property owner or association fail to adequately maintain the stormwater facility.

(9J-5.011(2)(c)2,c; SCP 8(b) 1 2)

**POLICY INF.3.3.3**

Existing land development regulations which require new development or redevelopment to not impact existing development with any off-site stormwater shall remain in effect, and if needed, strengthened consistent with this policy.

9J-5.011(2)(c)4

**POLICY INF.3.3.4**

The City's Stormwater Utility shall continue to provide funding for the operations and maintenance of city owned stormwater facilities and to fund stormwater system improvements that enhance levels of service.

(9J-5.011(2)(c)1)

**POLICY INF.3.3.5**

Stormwater facility improvements, necessary to achieve or maintain the adopted Levels of Service and comply with the City's National Pollutant Discharge Elimination System permit conditions should be prioritized, as identified in the Capital Improvements Element.

(9J-5.011(2)(b)l, 2)

**OBJECTIVE INF.3.4.0**

As conditioned by the City's National Pollutant Discharge Elimination System (NPDES) permit, the City will ensure the Master Drainage Plan is maintained. The Drainage Plan and the Future Land Use Element will continue to be coordinated so that development is consistent with stormwater facility capacity and adopted quantity and quality level of service standards. This will be accomplished through a cooperative effort between the city, County, and local drainage districts, and the South Florida Water Management District.

(9J-5.011(2)(c)2.c)

**POLICY INF.3.4.1**

The City has completed Parts 1 and 2 of the Municipal Separate Storm Sewer System (MS4) permit applications for the Environmental Protection Agency's National Pollutant Discharge Elimination System (NPDES) which included a Water Quality Study of existing development stormwater discharge to primary and secondary drainage facilities located in and operated by the City. The City will continue its annual monitoring for water quality, implementation of Best Management Practices, and development and implementation of stormwater pollution prevention and management programs.

(9J-5.011(2)(c)2,c; 9J-5.011(2)(b)5)

**POLICY INF.3.4.2**

The City will continue to utilize the facilities reports prepared by the local drainage districts and the South Florida Water Management District, pursuant to Chapter 189.415(2), F.S., for updates to the Master Drainage Plan. The Master Drainage Plan will continue to include: (1) a facility capacity analysis, as required by 9J-5.01 1, F.A.C.; (2) level of service standards for sub-basins within the City.

(9J-5.011(2)(c)2.c)

**POLICY INF.3.4.3**

The City shall evaluate the results of the facilities reports prepared by the local drainage districts and the SFWMD, and pursue interlocal agreements with the appropriate agencies to ensure the correction of localized stormwater drainage system deficiencies.

(9J-5.011(2)(c)2.c)

**POLICY INF.3.4.4**

The City, as part of its National Pollutant Discharge Elimination System permit, will continue periodic testing throughout the life of the permit to identify and correct deficiencies.

## **Groundwater Aquifer Sub-Element Goals, Objectives, and Policies**

### **GOAL INF.4.0.0**

#### **Maintain the quality and quantity of groundwater recharge areas.**

(9J-5.011(2)(a); SCP 8(a))

#### **OBJECTIVE INF.4.1.0**

The City shall protect all wellfields, areas of high groundwater recharge, and water supplies from degradation through the regulation of land use and development.

(9J-5.011(2)(b)5; SRPP, Natural Resources of Regional Significance, 6.2.3)

#### **POLICY INF.4.1.1**

The City shall protect the functions of natural groundwater aquifer recharge areas by continuing to implement, abide by, and enforce the provisions of the Palm Beach County Wellfield Protection Ordinance to protect water quality. However, the City can assume responsibility for environmental conditions only to the degree that they are impacted by land uses within the City of Boca Raton, and the City will make no attempt to regulate activities outside of its municipal boundaries.

(9J- 5.011(2)(c)4; SRPP, Natural Resources of Regional Significance, 6.3.2 ; SCP 8(b)2)

#### **POLICY INF.4.1.2**

The City shall continue to meet all limiting conditions of the South Florida Water Management District (SFWMD) water use permit #50-00367-W; including those relating directly to groundwater quality.

(9J-5.011(2)(c)3; SRPP, Natural Resources of Regional Significance, 6.3.2 ; SCP 8(b)9,10)

#### **POLICY INF.4.1.3**

The City shall ensure that high and prime groundwater recharge areas receive a level of protection commensurate with their significance to natural systems or their status as current or future sources of potable water.

#### **POLICY INF.4.1.4**

Any new wellfields shall be located west of the El Rio Canal so that the potential for saltwater intrusion is reduced.

(9J-5.011(2)(c)4; SRPP, Natural Resources of Regional Significance, 6.3.2.3 ; SCP 8(b)9)

#### **POLICY INF.4.1.5**

The City shall continue to implement the existing saline water intrusion monitoring program as required by the SFWMD.

(9J-5.011(2)(c)4; SRPP, Natural Resources of Regional Significance, 6.3.2.3; SCP 8(b)9)

**POLICY INF.4.1.6**

The City shall coordinate with appropriate local governments, FDEP, SFWMD, U.S. Army Corp of Engineers, and other appropriate regional, State or federal agencies in the protection of groundwater quality.

**OBJECTIVE INF.4.2.0**

The City shall identify alternative and conserve water resources for potable and non-potable uses.

(9J-5.011(2)(b)4); SRPP, Natural Resources of Regional Significance, 6.2.1.4)

**POLICY INF.4.2.1**

The City shall continue to utilize, and encourage connection to, the IRIS reclaimed water system in order to offset the use of potable water resources for irrigation and other non-potable uses.

**POLICY INF.4.2.2**

The City shall continue to work in cooperation with the Lake Worth Drainage District (LWDD) and comply with the South Florida Water Management District (SFWMD) Diversion and Impoundment Permit #50-01568-W requirements to maintain adequate water levels in the City's canals, which provide aquifer recharge functions and replenish groundwater supplies.

(SRPP, Natural Resources of Regional Significance, 6.2.2; SCP 8(b)6)

**POLICY INF.4.2.3**

The City shall continue to meet all limiting conditions of the SFWMD Water Use Permit #50-00367W, including those relating directly to water quantity and conservation.

(9J-5.011(2)(c)3; SRPP, Natural Resources of Regional Significance, 6.2.1, 6.2.2.4)

**POLICY INF.4.2.4**

Any new wellfields shall be located within the boundaries of the City's water and sewer service area and shall be metered in order to track water consumption rates.

(9J-5.011(2)(c)4; SRPP, Natural Resources of Regional Significance, 6.2.3.6 ; SCP 8(b)3)

**POLICY INF.4.2.5**

The City shall continue to develop and implement water conservation programs including: the "In-City Reclamation Irrigation System" (IRIS) program; the implementation of water rates that encourage water conservation; and public education and information outreach activities.

(9J-5.011(2)(c)3; SRPP, Natural Resources of Regional Significance, 6.2.1.4; SCP 8(b)11,13)

**POLICY INF.4.2.6**

The City will implement the provisions of the Water Shortage Emergency Plan when requested by the SFWMD.

(9J-5.011(2)(c)4; SRPP, Natural Resources of Regional Significance, 6.2.2.3)

## **Solid Waste Sub-Element Goals, Objectives, and Policies**

### **GOAL INF.5.0.0**

Provide solid waste management and disposal facilities through coordination with local, regional, state and federal entities for the City of Boca Raton and the needs of the citizens.

#### **OBJECTIVE INF.5.1.0**

Maintain the availability of solid waste disposal facilities and reduce the waste stream in order to meet the adopted level of service standard, while protecting and enhancing the quality of life, reducing the potential for deficiencies, and meeting future growth needs.

(9J-5.011(2)(c)(2)(b))

#### **POLICY INF.5.1.1**

The City shall maintain a level of service (LOS) standard for solid waste collection and disposal facilities of: 7.13 pounds (lbs.) per capita per day (as formulated by the SWA of Palm Beach County). This level of service shall be adjusted periodically to address the proposed reduction of solid waste through recycling programs.

#### **POLICY INF.5.1.2**

The City shall coordinate with the Palm Beach County Solid Waste Authority to provide an efficient and environmentally sound means of the removal of 30% recyclable materials from the solid waste stream within the City limits.

(9J-5.011(2)(b)3, 5; SCP 13(b)1)

#### **POLICY INF.5.1.3**

After adoption of this Comprehensive Plan, the City will not issue any development orders unless the Palm Beach County Solid Waste Authority has available, or will have available, adequate solid waste disposal facility capacity to serve development.

#### **POLICY INF.5.1.4**

The City will continue to provide solid waste service and facilities within areas where necessary urban services and facilities exist, or will exist, concurrent with the impact of development.

(9J-5.011(2)(b)3)

#### **POLICY INF.5.1.5**

The City will continue to analyze solid waste collection and disposal techniques to provide quality service at the lowest possible cost to City residents and businesses.

(9J-5.011(2)(b)3)

#### **POLICY INF.5.1.6**

The City will continue to protect the property values of sites within the City limits through timely collection, recycling, and disposal of solid waste.

**OBJECTIVE INF.5.2.0**

Ensure that the availability and quality of hazardous waste collection facilities meet public needs, conform to State and federal standards, are managed properly, and are provided for in an efficient and coordinated manner for the City.

**POLICY INF.5.2.1**

The City, through the yearly sanitation brochure and the City's cable access channel, will inform the City residents of the Solid Waste Authority of Palm Beach County's facility, which is available for disposal of household and small quantity generator hazardous materials.

**POLICY INF.5.2.2**

The City shall coordinate with appropriate local, State, and federal agencies in the event a site meeting the criteria within the Superfund Amendments and Reauthorization Act (SARA), Title III, 40 CFR Part 370 is identified within the City.

**POLICY INF.5.2.3**

The City will utilize data updates from the Palm Beach County Solid Waste Authority, Palm Beach County, the Florida Department of Environmental Protection, and other appropriate State or federal agencies, along with building permits and occupational license data collected by the City to identify the locations, and maintain an inventory, of hazardous materials or hazardous wastes within the City.

**POLICY INF.5.2.4**

The City shall coordinate with Palm Beach County and the signatories of the County's Comprehensive Emergency Management Plan in the event an emergency involving hazardous wastes occurs within the City.