TREASURE COAST REGIONAL PLANNING COUNCIL

MEMORANDUM

To: Council Members

From: Staff

Date: February 10, 2020

Subject: Local Government Comprehensive Plan Review
Draft Amendment to the City of South Bay Comprehensive Plan
Amendment No. 20-01ESR

Introduction

The Community Planning Act, Chapter 163, Florida Statutes, requires that the regional planning council review local government comprehensive plan amendments prior to their adoption. The regional planning council review and comments are limited to adverse effects on regional resources or facilities identified in the Strategic Regional Policy Plan (SRPP) and extrajurisdictional impacts that would be inconsistent with the comprehensive plan of any affected local government within the region. Council must provide any comments to the local government within 30 days of the receipt of the proposed amendments and must also send a copy of any comments to the state land planning agency.

The amendment package from the City of South Bay was received on January 17, 2020 and contains text amendments to the Sanitary Sewer, Solid Waste, Drainage Stormwater Management, Potable and Natural Groundwater Aquifer Recharge; and Intergovernmental Coordination elements of the comprehensive plan to update the City’s Ten Year Water Supply Facilities Work Plan (WSFWP). This report includes a summary of the proposed amendments and Council comments.

Summary of Proposed Amendments

The purpose of the text amendments is to address statutory requirements of Chapter 163.3177(6)(c)3, Florida Statutes, by providing coordination of the Town’s 10-Year WSFWP with the South Florida Water Management District’s (SFWMD) Lower East Coast Regional Water Supply Plan (LECWSP), which was approved on November 8, 2018. The statutes require that local governments update their plan within 18 months of the SFWMD approval. Work plans must cover a ten-year period; be updated every 5 years; and identify alternative and traditional water supply projects, conservation efforts, and reuse activities needed to meet projected future demands. The proposed amendments, shown in strikeout and underline format, are included as Exhibit 2. A summary of the proposed amendments follows:
Sanitary Sewer, Solid Waste, Drainage Stormwater Management, Potable and Natural Groundwater Aquifer Recharge Element

- Update the Level of Service Standards, including revising the average Central System consumption rate from 88 to 115 gallons/capita/day and adding a standard of 115 gallons/capita/day for individual wells.

- Revise language to address how existing and potential deficiencies will be addressed and require that any capital improvements projected to the central sewer system be listed and identified in the City’s Schedule of Improvements.

- Remove language that calls for determining the feasibility of an engineering study related to stormwater management.

- Remove language related to completion of programmed improvements to the sanitary sewer and potable water system and change references to Palm Beach County Water Utilities Department (PBCWUD).

- Remove Policy 5.3 that requires maintenance of the inspection programs for both sewer transmission lines and water distribution lines.

- Update language related to the utility provider and water supply demand projections and coordination with the PBCWUD, which now serves at the City’s central potable water provider, for scheduling capital projects within the City limits.

- Update the regional issues to be consistent with those identified in the 2018 SFWMD LECWSP.

- Revise Policy 7.4 to indicate Florida Friendly Landscaping practices shall be encouraged by the City when considering proposals for development and/or redevelopment.

- Revise Policy 7.6 to indicate that every 5 years, and not just at the time of the Evaluation and Appraisal Review process, the City shall incorporate necessary 10-Year Water Supply Plan updates and directives enacted by the PBCWUD and the SFWMD.

- Add Policy 7.8 to indicate the City will coordinate with the SFWMD to implement mandatory year-round landscape irrigation conservation measures identified in 40E-24 of the Florida Administrative Code.

Intergovernmental Element

- Revise Policy 1.11 to indicate that every 5 years the City will confirm the availability of potable water service consistent with the SFWMD Water Supply Plan and the PBCWUD 20-Year WSFWP.
Regional Impacts

No adverse effects on regional resources or facilities have been identified.

Extrajurisdictional Impacts

The proposed amendments were circulated by the Palm Beach County Intergovernmental Plan Amendment Review Committee Clearinghouse Coordinator on January 9, 2020. No extrajurisdictional impacts have been identified.

Conclusion

No adverse effects on regional resources or facilities and no extrajurisdictional impacts have been identified.

Recommendation

Council should approve this report and authorize its transmittal to the City of South Bay and the Florida Department of Economic Opportunity.

Council Action – March 13, 2020

Commissioner Smith from Martin County moved approval of the staff recommendation. Commissioner Adams from Indian River County seconded the motion, which carried unanimously.

Attachments
List of Exhibits

<table>
<thead>
<tr>
<th>Exhibit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>General Location Map</td>
</tr>
<tr>
<td>2</td>
<td>Text Amendments Shown in Strikeout and Underline Format</td>
</tr>
</tbody>
</table>
Exhibit 1
General Location Map
### TABLE 6.6-1

**South Bay Public Facility**  
**Level of Service Standards**

<table>
<thead>
<tr>
<th>PUBLIC FACILITY</th>
<th>LEVEL OF SERVICE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STANDARD POTABLE WATER</strong></td>
<td></td>
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<tr>
<td>Central System</td>
<td>Average Day Water Consumption Rate -88</td>
</tr>
<tr>
<td></td>
<td>115 gallons/capita/day</td>
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<tr>
<td></td>
<td>Maximum Day Water Consumption Rate</td>
</tr>
<tr>
<td></td>
<td>140 gallons/capita/day</td>
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<tr>
<td>Individual Wells</td>
<td>115 gpcd per one individual potable well per platted lot.</td>
</tr>
</tbody>
</table>

**SANITARY SEWER**

| Central System           | Average Day Sewage Generation Rate -     |
|                          | 180 gallons/capita/day                  |
|                          | Maximum Day Sewage Generation Rate      |
|                          | 260 gallons/capita/day                  |
| Individual System        | Average Day Sewage Generation Rate -     |
|                          | One (1) septic tank per lot based on minimum lot criteria established in Palm Beach County Environmental Rule #3. |

The use of existing properly constructed and functioning septic tank systems within the City is acceptable; however, when analysis indicates that septic tank systems are adversely impacting the environment according to State Water Quality Standards (Ch. 62-302, FAC for surface water, Ch. 62-520, FAC for groundwater and Ch. 100-6, FAC for bathing purposes) and that public health standards are endangered, septic tank systems causing the situation will be repaired or replaced.

When a sanitary sewer system becomes available to currently unsewered areas, and the current septic tank systems fail to meet State Water Quality Standards and endanger the  

6.2
public health, hook-up to the central system shall be required; and the Palm Beach County LOS Standard of 100 gallons/capita/day shall be the standard implemented.

**STORMWATER MANAGEMENT**

**DESIGN STORM**

Three year frequency, 24 hour duration (one day); Rainfall intensity curve, as established by the Lake

**TRANSPORTATION (Roads)**

Urban Major Arterials - LOS Standard C
Collectors - LOS Standard C

**RECREATION AND OPEN SPACE**

**STANDARD**

<table>
<thead>
<tr>
<th>Neighborhood Park</th>
<th>2.5 acres/1000 pop.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Park</td>
<td>2.5 acres/1000 pop.</td>
</tr>
</tbody>
</table>

**SOURCE:** City of South Bay Comprehensive Plan, as amended, 1998 2011.

**OBJECTIVE 2:** The City shall maintain a five-year schedule of capital improvements needs, to be updated annually, in conformance with the CAPITAL IMPROVEMENTS element. Capital improvements needs are defined as: (1) those improvements necessary to correct existing deficiencies in order to maximize the use of existing facilities; or (2) those improvements necessary to meet projected future needs without encouraging urban sprawl.

**Policy 2.1:** Existing and potential deficiencies will be addressed by undertaking the following activities:

**Sanitary Sewer** - Continue to complete programmed improvements to the collection system, on an annual basis, as a part of the Capital Expenditures Program within the Utility Fund. Upgrade and/or replace existing lines and components as necessary to maintain the sewer system in good operating order. Any capital improvements projected to the Palm Beach County central sewer system shall be listed and identified in the City's Schedule of Improvements contained within Capital Improvements Element of the Comprehensive Plan.

**Solid Waste** - Consider a program for centralized collection of recyclable wastes and toxic household and commercial wastes that are not currently being collected.

**Drainage-Stormwater Management** - Determine the feasibility of initiating an engineering study oriented to refilling level of service (LOS) standards and defining needed improvements; means of monitoring the efficiency of the system. As Institute a program of annual inspections of the drainage system as a means of monitoring the efficiency of the system. Results of the inspections and other general assessments of the drainage system serving, South Bay shall be identified as required in its Annual NPDES Report. Any deficiencies requiring upgrades or new capital improvements shall be reflected, as appropriate, in the 5-Year Schedule of Improvements.
Potable Water - Continue to complete programmed improvements to the potable water system, on an as needed basis, as part of the Capital Expenditures Program within the Utility Fund. Any capital improvements projected to the City of South Bay Palm Beach County central potable water system shall be listed and identified in the City’s Schedules of Improvements contained within this CIE.

Groundwater Recharge - Support, cooperate and coordinate with the Palm Beach County Environmental Resource Management Department in their efforts to protect the quality of the County’s groundwater supply.

Policy 2.2: The City Commission shall evaluate and rank capital improvement projects proposed for inclusion in the five-year schedule of needs during the City’s annual budgetary process, and shall update the five-year Schedule of Capital Improvements accordingly.

Policy 2.3: Proposed capital improvement projects will be evaluated and ranked according to the following suggested priority level guidelines:

Level One - whether the project is needed to protect public health and safety in order to fulfill the City's legal commitment to provide facilities and services, or to preserve or achieve full use of existing facilities.

Level Two - whether the project increases the efficiency of use of existing facilities, prevents or reduces future improvement costs, provides services to developed areas currently lacking service or promotes in-fill development.

Level Three - whether the project represents a logical extension of facilities and services within a designated City Planning Area.

OBJECTIVE 3: The City of South Bay shall continue to provide solid waste collection services and drainage services to meet existing and projected future demands.

Policy 3.1: The basic solid waste collection service policy shall consist of the following components:

1. Maintain the existing level of collection service for the residents of the City with a system that ensures the lowest possible cost to South Bay's residents relative to the highest level of service.

2. Oversee the collection of wastes of commercial and industrial establishments presently collected by private haulers in order to assure uninterrupted services and the maintenance of sanitary conditions at all times.

3. Continue to coordinate with the Solid Waste Authority of Palm Beach County in analyzing the efficiency of collection routes in the South Bay area.

4. Maintain a public information service in order to keep citizens of the City aware of collection schedules and placement of refuse containers, yard clippings and other special wastes for collection.
5. Maintain regulations which should address, but not be limited to, the location of containers and other solid waste to be collected, requirements for residents to place solid waste for collection at a reasonably determined time prior to collection, and the enforcement of said regulations to avoid health hazards from solid waste being scattered about.

6. Maintain a regular service program for all vehicles and equipment used in the collection service in order to minimize breakdown which may result in interruption of service schedules.

OBJECTIVE 4: The Palm Beach County Solid Waste Authority shall continue to provide waste disposal services to the City of South Bay to meet existing and projected demands.

Policy 4.1: Maintain a liaison with the Solid Waste Authority of Palm Beach County in order to ensure the City's input to the management of established landfill sites and the purchase/development of any future landfill sites, or other alternative manner of solid waste disposal.

Policy 4.2: Continue to participate in the Palm Beach County Solid Waste Authority's resource recovery program.

OBJECTIVE 5: The City of South Bay shall continue to operate sanitary sewer transmission services, and complete potable water distribution services to meet existing and projected future demands within the corporate limits.

Policy 5.1: Maintain the adopted level of service for the residents of the City.

Policy 5.2: Perform periodic monitoring of rate structure so that the lowest possible cost results to City residents.

Policy 5.3: Maintain the established inspection program of both the sewer transmission lines and water distribution lines in order to monitor and correct leaks due to the tendency of the underground lines to float as a result of the instability of the organic soils.

OBJECTIVE 6: City stormwater drainage regulations, incorporated within the Land Development Code shall provide for protection of natural drainage features and ensure that future development utilizes functions of said features.

Policy 6.1: The City shall remain abreast of new stormwater requirements as promulgated by the State and the South Florida Water Management District and shall revise local policies and regulations to remain consistent with new requirements.

Policy 6.2: Protect and preserve water quality by use of construction Best Management Practices (BMPs) and the incorporation of techniques such as on-site retention, use of pervious surface and native vegetation.
Policy 6.3: The City shall comply with the rules adopted to implement the Lake
Okeechobee SWIM Plan and shall revise local policies and regulations
accordingly.

Policy 6.4: The City shall cooperate with the South Shore Drainage District, the
South Florida Conservancy, the South Florida Water Management District
and the Everglades Agricultural Area Taxing District in the assessment of
water quality and quantity impacts associated with the City's drainage
system. The City shall also formally consider all recommendations
provided to it by either of the above entities or other local and State
agencies for the improvement of drainage operations and regulations.

OBJECTIVE 7: The City shall actively participate in potable water supply, water con-
servation and water reuse programs of the Palm Beach Water Utilities Department (PBCWUD)
and the South Florida Water Management District, both on an on-going and an emergency basis.

Policy 7.1: The City shall coordinate with the SFWMD and SSDD to insure that
adequate access to drainage canals is provided during review of applica-
tions for new development. No structure that would obstruct rea-
sonable access to canals shall be constructed.

Policy 7.2: In accordance with Section 163.3202, F.S., the City shall adopt new or
amended plats to dedicate to drainage districts or water management
district right-of-way or easements as may be necessary to facilitate
reasonable access, or over, drainage control banks that may be present
within the area to be platted. Prior to new or amended plat approval,
the City shall request the drainage districts or water management
district, as appropriate, to review the plats for additional easements as
deemed necessary for the efficient operation and maintenance of the
district drainage system.

Policy 7.43: The City shall implement and enforce Water Shortage Emergency
Provisions established under Chapter 40E-21, Florida Administrative
Code upon declaration of a water shortage emergency by the South
Florida Water Management District.

Policy 7.54: SFWMD xeriscape Florida Friendly Landscaping practices shall be
encouraged by the City when considering all proposals for develop-
ment/re-development.

Policy 7.65: Cooperate and coordinate with PBCWUD and the SFWMD in the
preparation and updates to their Water Supply Plans to ensure appro-
priate input of data and information pertinent to those Plans.

Policy 7.76: At the time of each required Evaluation and Appraisal Report Every
5 years, the City shall incorporate necessary 10-Year Water Supply
Plan updates and directives enacted by the SFWMD.
Policy 7.7: Consider revising potable water level of service (LOS) standards to include residential and non-residential categories.

Policy 7.8: Coordinate with SFWMD toward implementation to implement the Mandatory Year-Round Landscape Irrigation Conservation Measures as identified in 40E-24, Florida Administrative Code; particularly, those measures and issues pertaining to local governments and the requirements of Palm Beach County Water Utility Department.

OBJECTIVE 8: The City shall continue to support the implementation of existing recycling programs and investigate alternative programs that may be implemented in order to reduce the solid waste disposed in sanitary landfills.

Policy 8.1: Continue to participate in the preparation and implementation of a County-wide solid waste reduction and recycling program.

OBJECTIVE 9: Coordinate the provisions of drainage facilities with the, the South Shore Drainage District, South Florida Conservancy District, South Florida Water Management District which comply with all applicable regulations and which meet the needs of current and future residents of South Bay.

Policy 9.1: The basic drainage policy consists of the following components:

1. Continue routing maintenance of catch basins and outfalls as a means of maximizing drainage capacity.

2. Adopt and maintain Land Development Regulations to regulate swale plantings and sodding.

3. Continue to budget for and complete improvements to the local drainage system on an annual basis.

4. Protect environmentally sensitive areas by controlling adjacent activities.

5. Require use of vegetation, mulches and berms for control of pollutants from construction sites.

6. Prepare and update annually a schedule plan to be used as a basis for defining necessary maintenance operations for incorporation into the 5-Year Schedule of Capital Improvements as adopted annually during the City's budgetary review process.

7. The City shall utilize all monitoring, reporting and maintenance activities required by the NPDES, permit as one basis for evaluating needed stormwater management improvements during annual review of the Capital Improvements Element.
OBJECTIVE 10: The City shall adopt and maintain a ten (10) Year Water Supply Facilities Work Plan.

Policy 10.1: The "Ten (10) Year Water Supply Facilities Work Plan" shall be adopted as part of this SANITARY SEWER, SOLID WASTE, STORMWATER MANAGEMENT, POTABLE WATER AND NATURAL GROUNDWATER AQUIFER RECHARGE element of the City of South Bay Comprehensive Plan. The City shall amend this Comprehensive Plan and 10-Year Water Supply Facilities Work Plan within eighteen (18) months of a South Florida Water Management District regional water plan update when approved by their governing board.

City of South Bay "Ten (10) Year Water Supply Facilities Work Plan"

This section of the SANITARY SEWER, SOLID WASTE, STORMWATER MANAGEMENT, POTABLE WATER AND NATURAL GROUNDWATER AQUIFER RECHARGE element represents the "Ten (10) Year Water Supply Facilities Work Plan (WSFWP)" for the City of South Bay.

As previously stated, the South Florida Water Management District (SFWMD) adopted the Lower East Coast Regional Water Supply Plan update on November 8, 2018 February 15, 2007. Per Section 163.3117 (c), Florida Statutes., municipalities and water suppliers must adopt a related Water Supply Facilities Work Plan (WSFWP) and supportive amendments to their comprehensive plans by May 8, 2020 August 15, 2008.

Municipalities and local suppliers are required to coordinate with the SFWMD in the preparation of their WSFWP, in order to identify needed facilities for at least the ten (10) year planning period, confirming, that (1) adequate water supply is available, considering the regional water supply plan; and, (2) infrastructure plans necessary to serve projected need have been prepared.

Specifically, WSFWP comprehensive plan, amendments must:

- Demonstrate that the local government has coordinated with the appropriate water management district's regional water supply plan.

- Ensure that the local government's future land use plan is based upon the availability of adequate water supplies and public facilities and services.

- Ensure that adequate water supplies and facilities are available to serve new development no later than the date on which the local government issues a certificate of occupancy and consult with the applicable water supplier prior to approving a building permit to determine whether adequate water supplies will be available to serve new development by the anticipated issuance date of the certificate of occupancy.

- Revise the five-year schedule of capital improvements to include any water supply, reuse and conservation projects and programs to be implemented during the five (5)year period.

- Revise the Conservation Element to assess projected water needs and sources for at least a ten (10) year planning period considering the appropriate regional water supply plan.

- To maintain internal consistency, revise the Intergovernmental Coordination Element to ensure coordination of the comprehensive plan with the regional water supply plan and regional water supply authorities.

- Clearly define responsibilities for planning, financing, construction and/or operation of the water supply facilities by all entities providing service within its jurisdiction, regardless of ownership responsibility for the individual facilities, including: (1) water supply source, service areas, estimating demands and future projects: (2) treatment types and losses: (3) distribution facilities: and, (4) bulk sales agreements.
The City of South Bay owns, operates and maintains its central potable water distribution system—lines. However, water treatment is provided by PBCWUD at the Lake Region Water Treatment Plant, a regional water treatment facility located in Belle Glade. This regional facility also serves the Cities of Belle Glade and Pahokee. Potable water supply and service are provided to South Bay by PBCWUD officially via the "Agreement Between Palm Beach County and the City of South Bay for the Provision of Bulk Water Service" (Agreement attached to this Comprehensive Plan as an Appendix). Per Section 10. Agreement to Serve of this Agreement, the "County agrees to continuously provide Potable Water service to BUYER from the Commencement of Permanent Service through the term of this Agreement in an amount not to exceed one and one-half (1.5) million gallons per day Peak Instantaneous Flow..." Instantaneous flow reservations in the LRVWTP for the Cities of Belle Glade and Pahokee are seven and one-half (7.5) million gallons per day, respectively, resulting in an initial LRVWTP capacity sizing of ten (10) million gallons per day. The City of South Bay continues to assume the responsibility of direct billing to customers.

There are no bulk water agreements between the City and PBCWUD. The City, by Ordinance, authorizes and consents that the PBCWUD shall be the service provider and that the Utility shall undertake water improvement projects within the municipal boundaries of South Bay. It is agreed in this Ordinance that all water supply projects shall be funded through special assessments and services provided according to the fee schedule imposed by Palm Beach County. In the accomplishment of said projects, the City shall render no financial or technical assistance. Local distribution systems in new projects are initially installed by individual developers who, upon completion, relinquish them to the PBCWUD for ownership, operation and maintenance purposes.

There are no public water wellfields, or treatment and/or storage facilities located within the City of South Bay municipal boundaries. Therefore, there are no "cones of influence" from public water wellfields that must be considered by the City in the distribution and types of land use applied in South Bay.

As part of the site plan review and land development processes, the City requires developers to coordinate with the PBCWUD City central potable water system being proposed for new developments. This is required to provide assurance that minimum level of service for potable water is maintained.

All of South Bay's population is currently served by the PBCWUD City central potable water distribution system. All of the City's population utilizes the central potable water system. The entire City of South Bay lies within the PBCWUD service area. Maps of the PBCWUD service area are contained within the County's 2-Year Water Supply Plan.

The following regional issues are identified in the 2018 SPWMD Lower East Coast Water Supply Facilities Work Plan: 1) Fresh water and groundwater are limited; further withdrawals could have impacts on the regional wetlands, existing legal issues and salt water intrusion. As a result, additional alternative water supplies need to be developed; 2) Surface water allocations from Lake Okeechobee and the Water Conservation Areas are limited in accordance with the Lake Okeechobee Area RAA criteria; 3) Construction of additional storage systems (e.g. reservoirs, aquifer storage and recovery systems) to capture wet season flow volumes will be necessary to increase water availability during dry conditions and attenuate damaging peak flow events from Lake Okeechobee; 4) Expand use of reclaimed water is necessary to meet future water supply demands and the Ocean Outfall Law; and, 5) Expand use of brackish groundwater from the Floridan aquifer system that requires careful planning and wellfield management to prevent undesirable changes in water quality. These issues are primarily relevant to the Palm Beach Water Utility Department as the Town’s water supplier. Various conservation techniques are implemented by the Town through Policies adopted in this Comprehensive Plan and through land development regulations.
Water Supply Demand Projections

The City's potable water Level of Service (LOS) standard adopted in its Comprehensive Plan is 88 115 gallons/capita/day (gpcd) for Average Day Water Consumption and 140 gpcd for Maximum Day Water Consumption. Both the Average Day and Maximum Day Water Consumption LOS standards are analyzed to estimate current demands and to project future potable water demands within the corporate limits of South Bay. Since the City has adopted the same LOS standard as PBCWUD, it is the appropriate standard for projecting water demand within the corporate limits of South Bay, including the self-served population. The City of South Bay should work with PBCWUD in developing residential and non-residential LOS standards in the future to more accurately estimate and project potable water use and needs. The current and projected water needs of South Bay are based on a couple of assumptions: (1) Both the Average Day Water Consumption and Maximum Day Water Consumption LOS standards adopted in the City of South Bay Comprehensive Plan will be maintained throughout the 10-Year planning period; and, (2) all properties in South Bay will continue utilizing the PBCWUD central potable water supply system.

Current potable water demand for the City of South Bay is based on the University of Florida Bureau of Economic and Business Research (BEBR) population estimates 2018 estimated resident population utilized by PBCWUD, which is accepted by the City for their current estimates. The 2008 BEBR resident population for the City of South Bay is estimated at 4702. The City's current potable water demand, then, based on the Average Day Water Consumption LOS standard is calculated at 413,776 gallons per day (4702 resident population X 88 gpcd = 413,776 gpcd). Therefore, the current total potable water demand generated in South Bay is calculated at 595,010 gallons per day (5174 total resident population X 115 gpcd = 595,010 gpcd); all of which will be demanded of the PBCWUD central system.

The City of South Bay future potable water needs are calculated using population projections prepared for the updated PBC Water Supply Plan. The population projected for South Bay in 2030, as established in the PBC Water Supply Plan, is estimated at 5951. Projected potable water needs in South Bay is based on the assumption that the 115 gpcd LOS adopted in the Palm Beach County Comprehensive Plan and the City of South Bay Comprehensive Plan will be maintained throughout the 10-Year planning period.

Based on the City's population projections and on the assumptions stated above, the projected potable water needs for the 10-Year planning period will be 684,365 gpd (5951 resident population X 115 gpcd projected population = 684,365 gpd); all of which will be demanded of the PBCWUD central system.

Through Interlocal Agreement with PBCWUD, the City of South Bay is allocated 1.5 MGD (million gallons per day) from the County's total water supply per its most current 20-Year Consumptive Use Permit. Therefore, the City's potable water demands will meet today's demand as well as the City's demand in 2030.

(TABLE 6.6-2 and 6.6-3 are Deleted in this update)

The City uses the 2008 BEBR population estimate as a baseline for calculating its 10 year population projection. The City assumes a 1% average annual increase to its population in the short term (5-year) planning period and a 2% average annual population increase in the second 5-year resulting in a projected resident population of 5402 in 2018. By utilizing the same Average Day Water Consumption LOS standard of 88 gpcd, the projected City potable water demand in 2018 is calculated at 475,376 gpd (5402 resident population X 88 gpcd = 475,376 gpd). Both the current and 10 year projected City of South Bay potable water demands, based on Average Day Water Consumption, are well within the 1.5 MGD allocated to the City per the Interlocal Agreement with Palm Beach County cited above. Even when analyzing the Maximum Day Water Consumption demands of the City, it is revealed that both current and 10 year projected demand will be met. 2008 Maximum Day Water Consumption = 658,280 gpd (4702 resident population X 140 gpcd = 658,280 gpd); and, 2018 Maximum Day Water Consumption = 756,280 gpd (5402 resident population X 140 gpcd = 756,280 gpd).

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The resident population estimate utilized by PBCWUD for 2008 in its 20-Year Water Supply Facilities Work Plan is higher than that used by the City (BEBR’s 2008 estimate). Palm Beach County estimates South Bay’s 2008 resident population at 4844. The current total potable water demand for South Bay, as calculated by the County, and as based on the Average Day Water Consumption LOS standards, is calculated at 426,272 gallons per day (e.g. 4844 resident population × 88 gpd = 426,272 gpd). The County population projections only extend to year 2017, whereas the resident population of South Bay is projected at 5800. The projected water demand for 2017 is estimated at 510,400 gpd (5800 resident population × 88 gpd = 510,400 gpd). The 2018 resident population estimate is not expected to be significantly higher than the 2017 estimate. Both the current and 10-year projected City of South Bay Average Day Water Consumption potable water demands, as calculated from the County estimates and projections, are also well within the 1.5 MGD allocated to South Bay per the Interlocal Agreement. When analyzing the Maximum Day Water Consumption demands of the City by using the County’s estimates, it is also revealed that both the current and 10-year projected water demands will be met: 2008 Maximum Day Water Consumption = 678,160 gpd (4844 resident population × 140 gpd = 678,160 gpd); and, 2017 Maximum Day Water Consumption = 812,000 gpd (5800 resident population × 140 gpd = 812,000 gpd). TABLE 6.6-2 identifies population estimates and projections from the Palm Beach County 20-Year Water Supply Facilities Work Plan for South Bay and the Glades area.

**Water Supply Source and Project Identification**

As previously identified, central potable water supply is provided to the City of South Bay by PBCWUD. The City has no financial responsibility for maintaining the distribution lines and system serving South Bay. Therefore, the City has no scheduled capital improvements to the central water system projected in either the short term (5-Year) or long term (10-Year) planning periods; however, the PBCWUD should keep the City informed of capital projects scheduled within the City limits. This situation will be monitored annually and reported in its Comprehensive Plan as part of the annual Capital Improvements Element (CIE) update requirements of State planning law. As reflected in the Palm Beach County’s current 20 Year Water Supply Plan and under their current Consumptive Use Permit (CUP), all traditional alternative, conservation and re-use projects are identified. TABLES 6.6-3 and 6.6-4 presented herein contain information extracted from the County’s 20-Year Plan that identifies water supply, sources and projects.

Since the City of South Bay is part of the PBCWUD service area and is guaranteed 1.5 MGD from PBCWUD by Interlocal Agreement, it is concluded that the water supply allocations granted by Palm Beach County to South Bay will be adequate to serve the projected demands of the City. It is further concluded from these water supply projections and projected water supply needs that the City’s future land use mix is feasible. The City should continue to coordinate with PBCWUD in preparing population estimates and forecasts, as well as coordinating water-related issues and/or land use changes.

(TABLE 6.6-4 is Deleted in the update).

**Comprehensive Plan Element Updates**

Potable water supply, urban water conservation and reuse are all stressed as important issues of the SFWMD Lower East Coast Water Supply Plan and individual Water Supply Facilities Plans. The following OBJECTIVES and Policies are either contained in or proposed for inclusion in this Comprehensive Plan. They are pertinent to, and directly relate to, the water supply, conservation and reuse issues. They are identified by Comprehensive Plan element herein.

**FUTURE LAND USE**

Policy 4.2: The City shall coordinate with Palm Beach County Water Utilities Department (PBCWUD) to review all future proposed land use change applications to ensure the availability of adequate water supplies.
Policy 4.3: The City shall include PBCWUD in the site plan review and land development process of all proposed development subject to these processes to ensure that water supplies are available to service that development.

SANITARY, SEWER, SOLID WASTE, STORMWATER MANAGEMENT, POTABLE WATER AND NATURAL GROUNDWATER AQUIFER RECHARGE

Policy 1.4: Consistent with public health and safety, sanitary sewer, solid waste, drainage, adequate water supplies, and potable water facilities shall be in place and available to serve new development no later than the issuance by the City of a Certificate of Occupancy or its functional equivalent. Prior to approval of a building permit or its functional equivalent, the City shall consult with PBCWUD to determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of issuance of the City's Certificate of Occupancy or its functional equivalent. The City may meet the concurrency requirement for sanitary sewer through the use of on-site sewage treatment and disposal systems approved by the Department of Health to serve new development.

OBJECTIVE 7: The City shall actively participate in potable water supply, water conservation and water reuse programs of the Palm Beach County Water Utilities Department (PBCWUD) and South Florida Water Management District, both on an on-going and an emergency basis.

Policy 7.2: The City shall promote the use of low volume fixtures when reviewing all building permit applications.

Policy 7.3: The City shall implement and enforce Water Shortage Emergency Provisions, established under Chapter 40E-21, Florida Administrative Code, upon declaration of a water shortage emergency by the South Florida Water Management District.

Policy 7.4: SFWMD xeriscape Florida Friendly Landscaping practices shall be encouraged by the City when considering all proposals for development and/or redevelopment.

Policy 7.5: Cooperate and coordinate with PBCWUD and the SFWMD in the preparation and updates to their Water Supply Plans to ensure appropriate input of data and information pertinent to those Plans.

Policy 7.6: At the time of each required evaluation and Appraisal Report (EAR) Every 5 years the City shall incorporate necessary 10-Year Water Supply Plan directives enacted by PBCWUD and the SFWMD.

Policy 7.7: Consider revising potable water level of service (LOS) standard to include residential and non-residential categories.

Policy 7.8: Adopt by reference the County’s implementation of the Mandatory Year-Round Landscape Irrigation Conservation Measures (Section 3.7) as identified in 40E-24, Florida Administrative Code.

OBJECTIVE 10: The City shall adopt and maintain a Ten (10) Year Water Supply Facilities Work Plan.

Policy 10.1: The "Ten (10) Year Water Supply Facilities Work Plan" shall be adopted and included as a part of this SANITARY SEWER, SOLID WASTE, STORMWATER, MANAGEMENT, POTABLE WATER AND NATURAL GROUNDWATER AQUIFER RECHARGE element of the City of South Bay Comprehensive Plan. The Town shall amend this Comprehensive Plan and 10-year water supply plan within eighteen (18) months of a South Florida Water Management District regional water plan update when approved by their governing board.
CONSERVATION

OBJECTIVE 2: Preserve potable water supplies.

Policy 2.1: Support programs developed by the South Florida Water Management District oriented to reducing nutrient levels in Lake Okeechobee.

Policy 2.2: Participate in the formulation and coordinate the implementation of potable water conservation programs developed by PBCWUD as part of its 20-Year Water Supply Plan and Consumptive Use Permit.

Policy 2.3: Promote and institute, where practical, water conservation techniques and programs in cooperation with the SFWMD and other appropriate agencies.

Policy 2.4: Continue to coordinate with the SFWMD in the conservation of potable water supplies during times of declared water shortages, or water shortage emergencies, by participating in the District’s Water Shortage Plan.

Policy 2.5: Cooperate with PBCWUD in the development and implementation of water re-use programs, to the extent that they are applicable to South Bay.

INTERGOVERNMENTAL COORDINATION

OBJECTIVE 1: Maintain planning coordination with adjacent municipalities, Palm Beach County, the Palm Beach County School Board and current service providers.

Policy 1.10: Require all applicants for development approval to procure written confirmation of availability of potable water service prior to the issuance of a building permit.

Policy 1.11: At the time of each required EAR, Every 5 years confirm the availability of potable water service consistent with the SFWMD Water Supply Plan and the PBCWUD 20-Year Water Supply Facilities Plan.

Policy 1.12: The City shall request PBCWUD to provide assurances that there will be adequate potable water supply allocations available to meet future projected growth and development in South Bay either through interlocal agreement, Ordinance, or other effective means.

Policy 1.13: Require coordination of the City of South Bay "10-Year Water Supply Facilities Work Plan" with the Palm Beach County 20-Year Water Supply Plan and the South Florida Water Management District’s Lower East Coast Regional Water Supply Plan and future updates to these Plans.

CAPITAL IMPROVEMENTS

The purpose of the Capital Improvements element and the short range (5-Year) and long range (10-Year) Schedules of Improvements are to identify the capital improvements necessary to implement the Comprehensive Plan and ensure that adopted LOS standards are achieved and maintained for concurrency-related facilities (e.g. sanitary, solid waste, stormwater management, potable water, transportation, recreation and open space and schools). If LOS standards cannot be met, the local government must deny applications for development orders and permits until the deficiency is addressed. The Schedules of 6.13
Improvements must address deficiencies and be financially feasible. As previously revealed, there are no capital improvements to the potable water distribution system identified within the short (5-Year) and long range (10-Year) planning periods; therefore, none appear in the short and long range CIE Schedules of Improvements.

The City of South Bay Comprehensive Plan Capital Improvements Element (CIE) must be updated annually per state planning requirements. If the City identifies any notable water supply capital improvements projects in the future which are located within South Bay, the appropriate Schedule of Improvements must be updated to reflect those improvements; even if there is no cost to be borne by the City.